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Lessons from Luangwa
The Story of the Luangwa Integrated
Resource Development Project, Zambia

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DEDICATIONS

This report is dedicated to the memory of four dear departed friends who were dedicated servants of the LIRD/SLAMU project and played key roles in its evolution:

Gudbrand Stuve was tragically killed in The Yemen on his return journey to Norway after a four year tour of duty at the Norwegian Embassy in Lusaka. During this time, Gudbrand was responsible for Norwegian support to LIRD/SLAMU and was instrumental in securing financial support and encouragement for this work.

Fidelis Lungu and Richard Bell were co-Directors of LIRD during its initial stages. They pioneered the project through its birth and faced the difficult political and institutional challenges that characterized the introduction of this experimental new approach

Flywell Munyenembe was project Director through Phases 3 and 4 and steered LIRD/SLAMU through the huge task of re-structuring and refocusing.

Wherever they are now, we hope they will remember the 'Valley' through this poem.

THE LUANGWA RIVER

Look over there. What can you see?

Luangwa River, flowing from the north east to the south of our lovely Luangwa Valley.

Look at its beauty, the grass and trees which grow so lush. Buffaloes will graze, birds will swim, feed and bathe.

But what do I see or hear? People disturb the catchment area.

Please, please man. Stop doing that and live as one forever.

Gabriel Masaku
PR Scout, Mfuwe
1997

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Section 1.2 draws from unpublished notes entitled *History of the Development of Luangwa Valley*, believed to have been prepared by Phil Berry of Chinzombo Camp, and available to visitors to Kapani camp. Sections 5.8 and 5.9 have been provided by Dr Cheryl Butler, Centre for Tourism and Leisure Studies, Canterbury Christ Church University College, Canterbury, Kent, England, based on research carried out in Luangwa Valley in 1996 and 1998. Chapter 8 is based on a report by Child *et al.* (1999) presented at a workshop on local participation in natural resource management held at NORAD/NIBR on 21 June 1997. Appendix 5 has been prepared by Elias Phiri, CBNRM Coordinator, SLAMU, based on research carried out in 1999 in fulfillment of an MSc dissertation at the University of Greenwich, UK.

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ABBREVIATIONS

ADC	Area Development Committee
ADMADE	Administrative Management Design for Game Management Areas programme
CAMPFIRE	Communal areas management programme for indigenous areas (in Zimbabwe)
CBNRM	Community based natural resource management
CITES	Convention on Trade in Endangered Species
CLA	Community Liaison Assistant
CWM	Community wildlife management
EC	European Commission
FAO	Food and Agriculture Organisation of the United Nations
GMA	Game management area
IIED	International Institute for Environment and Development
IRDA	Integrated Resource Development Authority
IRDC	Integrated Resource Development Committee
IUCN	World Conservation Union
KNRMB	Kakumbi Natural Resources Management Business
LDP	Luangwa Development Project
LFA	Logical framework approach
LSA	Luangwa Safaris Association
LIRDP	Luangwa Integrated Resource Development Project (became SLAMU on 1st Jan 1999)
NCDP	National Commission for Development Planning
NFA	Nsefu Fishing Association
LLSC	Local Leadership Sub-Committee
MMD	Movement for Multiparty Democracy (political party)
NGO	Non-governmental organisation
NORAD	Norwegian Agency for International Development
NPWS	Department of National Parks and Wildlife Services
POMS	Process orientated monitoring system
RM	Review mission
RPS	Revised project submission
SLAMU	South Luangwa Area Management Unit
SLNP	South Luangwa National Park
SRT	Save the Rhino Trust
UNDP	United Nations Development Programme
VAG	Village Action Group
WMA	Wildlife Management Authority
WMSA	Wildlife Management Sub-Authority
WWF	Worldwide Fund for Nature
ZAWA	Zambia Wildlife Authority
ZK	Zambian Kwacha (currency)

PREFACE

“Lessons from Luangwa” tells the story of a donor-funded conservation project concerned both with a national park and people living near it. It provides a history of the project from pre-conception to its current status. It shows how the project has evolved and where it has failed to do so during a period when considerable changes were occurring in Zambia in both the political and economic structures and in conservation thinking. When the project started, community conservation and the links between conservation and development were infant concepts. Today, they dominate the literature though the management of parks is increasingly neglected.

This review provides a case study of the Luangwa Integrated Resource Development Project (LIRDP) in Zambia. It is a contribution to “Evaluating Eden”, an international collaborative research programme (1996-2000) coordinated by IIED and focusing on community-based wildlife management initiatives all over the world. Evaluating Eden has investigated whether and how initiatives have contributed to more effective conservation and environmental management, and to improved social and economic conditions for the communities involved.

We are conscious that this review is long and detailed. But this has been necessary to fully unpack the twists and turns in the evolution of LIRDP and to provide the evidence that underpins many of the important lessons that emerge and to substantiate the conclusions that we draw. We are not aware of any other similar CBNRM project that has been analysed so comprehensively or in such detail. All too frequently, academic papers and broader review studies present aspects of such projects as case studies or make generic conclusions (often for understandable reasons – i.e. space is limited) without sufficient background and without an adequate analytical base. We hope that in presenting this ‘full’ story of LIRDP, this will serve several functions. First, it draws together all of the key historical information about the project in one document and explains how and why changes were made in scope, aims and construct, discussing constraints and challenges. Second, it synthesises key data from the different sub-sections LIRDP, particularly on the project’s impacts. Third, it makes comparisons with other similar programmes in Zambia and elsewhere in Southern Africa and draws important lessons that have value to CBNRM throughout the region as well as internationally. Rarely, if ever, is such a stocktaking for an individual project ever undertaken. We hope that this, in itself, will provide an invaluable management and monitoring tool for the project and donors, as well as for others interested in and concerned with planning and implementing development projects. This review therefore provides a substrate for further work. It is also our intention to prepare shorter, more focused papers and others materials for targeted audiences.

Scope of the review

Chapter One provides background about the historical and natural characteristics of the Luangwa Valley.

Chapter Two describes the origins of LIRDP which arose from an attempt to deal with massive elephant and rhino poaching by dealing with its underlying causes – weak law enforcement, and poverty in rural areas. At this time, this was a far-sighted concept. The project was designed as an Integrated Resource Development Project.

Chapter Three describes how this concept was operationalised between 1986 and 1992. Its greatest success was the control of poaching, an achievement which on its own would justify the entire expenditure of the project. However, the project was less successful in achieving its broader developmental goals.

The difficulties of using a project in the role of a mini-government emerged. Consequently, from 1993, the project was restructured. It was simplified, with a focus on managing the primary resource of the area - wildlife. This included the management of South Luangwa National Park, and a CBNRM programme for the 40-50,000 people in the Lupande Game Management Area. This transition is described in Chapter Four, and its implementation in Chapter Five, especially the transition from a first generation community wildlife project (managing wildlife *for* the people) to a second generation project (managing wildlife *by* the people, driven by fiscal empowerment and democracy).

Picking up the bad habits of many donor-funded projects, LIRDPA did little to assure its long-term financial sustainability, and relatively little to implement sound management practices. This changed in the late 1990s, when performance management and clear targets and objectives were introduced. The improvements and the focus on project outputs led to a more productive and coordinated project. That this was coupled with very considerable budget cuts, provides important lesson for many other projects. The introduction of these more sound management practices is described in Chapter Six.

Given the importance on the project's community programme, Chapter Seven describes and analyses its evolution and the emerging lessons. This chapter should help CBNRM practitioners because it describes how LIRDPA has accepted and incorporated the concepts of CBNRM that are now well espoused in the literature. But it also discusses the process of implementing these concepts, and then analyses what impact the programme had on communities.

The final chapter is the one of most interest to academics and policy-makers. It draws out some of the key issues and lessons from the LIRDPA experience, with comments on the integrated development of a district, the role of national parks in a rural African setting, and the linked issues of donor projects and management and whether and how such aid money can be used productively.

There are a number of appendices including a brief description of ADMADE – another CBNRM programme in Zambia, and interesting (sometimes conflicting) comments from stakeholders on issues concerning the project.

LIRDPA has been a long project. The purpose of this review is to outline its history, and then to use it as an example for understanding the management of IRDPs, parks and CBNRM programmes. There is a huge amount of literature accumulating on this subject. This review offers an assessment of real experiences of one such initiative by two people who have been involved on-the-ground in their planning, design and implementation and in analysing the policy arena in which they operate.

We hope that this review will be of value to a wide range of interests: NORAD as it considers how to support the project during the balance of Phase 4 and possibly in the future; CBNRM practitioners and academics concerned with conservation and people-centred approaches to resource use and management; policy-makers and planners concerned with rural development; individuals in the aid business who are managing or planning projects; and NGOs involved with community development, wildlife management and conservation.

Postscript

In the two years since this manuscript was prepared, there have been major changes in Zambia's wildlife sector. During the period 1999-2002, the National Parks and Wildlife Service (NPWS) was transformed into the Zambia Wildlife Authority (ZAWA) - a statutory Board established by the Zambia Wildlife Authority Act 1998, but the process was anything but smooth and orderly.

Given that wildlife has a high patronage value (Gibson, 1999), securing the launch of ZAWA was a hard fought battle, which involved the upper echelons of Zambian political circles. A project funded by the European Development Fund (EDF) project to assist the development of the new Act came and went with little formal change. The transition was eventually funded by the Norwegian and Danish governments which were able to be much more flexible than the EDF. Their support enabled the Ministry of Tourism to contract a consultancy company, Deloitte and Touche, to undertake change management in 2001. In a highly charged atmosphere, Deloitte and Touche were able to break the political inertia, but never got to the stage of putting real management systems in place. Staff levels were reduced from some 3,500 to just over 1,000. However, this process was more traumatic than was necessary. In the period when the new organisation should have been building on the opportunities opened by the transformation, it was undermined because it often had no money even to pay staff.

Political battles continued over the appointment of Directorate staff, and junior staff were therefore recruited first. Senior positions were eventually filled in late 2001. Deloitte and Touche were not retained by the Ministry to complete the transformation process. For at least a year only part of the staff were transferred to ZAWA. Many remained in towns while most field stations and parks were undermanned. Heavy poaching took its toll in this two-year gap.

During this process, the top management of SLAMU was devastated, and the project lost all four managers and both technical assistants. Despite the rhetoric of decentralisation, there was a deliberate effort to break SLAMU's autonomy. For nearly two years, the project leader changed regularly. What probably kept the project going was the combination of a clear budget, workplan and project document, and regular oversight through the bi-annual meetings. Nevertheless, much was lost by breaking up the highly promising team that envisioned the major changes in Phase IV. At the national level, however, ZAWA is now a far more open and transparent organisation than NPWS ever was. It is gradually gaining the confidence of the donors, at least as far as intent is concerned. But concerns about its managerial delivery capacity remain.

In late 2002, SLAMU hired consultants to assist it through the process of developing a Phase V project document, which was submitted to NORAD by ZAWA. While taking the same format as Phase IV in terms of setting clear objectives and indicators, the financial aspects of the proposal were even tougher, cutting managerial costs and positions to levels that could be sustained by income from tourism. It proposed a major investment in road access to the southern portion of the park in order to open up 200-300 more beds and raise revenues by US\$ 200-300,000 annually. It proposed that clear managerial authority be defined, building on the strength and lessons of SLAMU's managerial autonomy as a cost and profit center. It also proposed that several key functions be outsourced, namely technical and air support to law enforcement, road maintenance and CBNRM capacity-building. Regarding the latter, ZAWA was extremely reluctant to be limited to a regulatory and monitoring role, despite strong arguments that it had little capacity to build community capacity. In February 2003, these key issues were still being negotiated. In addition, NORAD has hinted that it might be prepared to provide substantial funding for a second large park (probably Kafue National Park) along the lines of SLAMU if ZAWA submits a similarly principled proposal.

In 2001 and 2002, there was no high-income safari hunting in Zambia. Hunting was banned by President Chiluba in 2001. It was rumoured that he did not want his competitors, who were heavily involved in the sector, to profit in the run-up to the 2001/02 elections. In 2002, concessions were re-advertised (Zambia sells all concessions at the same time every five years!) and political wrangling prevented these being allocated until early 2003. ZAWA's decisions were over-riden (illegally) by the Minister, but then reinstated through the courts. High level political interference and manipulation of hunting concessions almost derailed all funding to the wildlife sector, and has certainly cost ZAWA many millions of dollars.

Two years of no hunting had a devastating effect on SLAMU's community programme, depriving it of income and severely disrupting momentum. What kept it going was village-based land use planning, initiated by SLAMU in collaboration with WWF (Southern African Regional Office) and the Sand County Foundation. Interestingly, it was only once village-level community institutions and organisations were in place that land use planning could proceed with any meaning and a high level of real participation¹. It is hoped that a significant investment in infrastructure, in particular housing for SLAMU junior staff, can be used to move the economic center of gravity in the district away from the immediate vicinity of the main gate to the South Luangwa National Park at Mfuwe. Funding for these investments by NORAD is likely to hinge on the CBNRM programme being able to continue.

In early 2003, the new Director General of ZAWA (Hapenga Kabeta) was arbitrarily fired by the Minister. This again threatened to derail ZAWA, as donors withdrew their support pending the reinstatement of proper governance. The Board had strongly endorsed the DG's performance in ZAWA, which went some way to building a credible organization in extremely difficult circumstances - when funding was often not available for salaries and the political hierarchy was split over the fairness or unfairness of the 2002 Presidential elections. At the time of writing (February 2003), the Director General has been reinstated by court order, and prospects for the sector are, for the moment, looking hopeful.

¹ The land use planning methodology is highly participatory. Ten villagers are elected to represent different interest groups. They map resource availability and usage etc. This is then used to inform a process of problem analysis, which is the basis for a village action/work plan. While a small group collects and analyses the data, it is always reported back to the full community, and decisions are taken in public meetings.

ABOUT THE AUTHORS

Authors involvement in LIRDP

The two authors of this report have been closely involved in different stages of the project. In the early 1980s, Barry Dalal-Clayton worked with NORAD in Eastern Province, Zambia, as a Provincial Soil Surveyor. He was centrally involved in organising the Lupande Development Workshop, which gave rise to the initial impetus for the project, and he catalysed the ideas that were incorporated in the original project concept paper. These led NORAD to fund the project. He has kept in regular contact with LIRDP through the years while with IIED, and has been involved in analysing the experiences of similar projects in different areas of the world. Brian Child reviewed the project in 1993 and was then recruited as a Technical Assistant from 1996 to the present. He was responsible for initiating the current CBNRM programme and for restructuring LIRDP into SLAMU. In his contribution to this review, Brian Child attempts to bring together his experiences of a very stimulating four years, when there has been much to do, and little time to write.

Barry Dalal-Clayton

Dr Barry Dalal-Clayton has 28 years post-graduate experience in rural development, natural resource management and surveys, environmental assessment, and planning (at national to local levels). He was based in Zambia for 10 years (1972-76, and 1980-86) working for UK ODA and NORAD. A qualified botanist and soil scientist, he has specialised in the environmental interactions between natural resources, their use and management, and their relevance to development.

During the last 12 years, Dr Dalal-Clayton has worked with the International Institute for Environment and Development (IIED), concentrating on broad issues of sustainable development. He has directed research on the environmental assessment of the development projects, programmes and policies of aid agencies and has been involved in a range of major project feasibility and appraisal studies. In addition, he has been deeply involved in analysing approaches to national sustainable development strategies, and in advising governments and aid agencies on the development and implementation of such strategies. His other major research interests cover community-based wildlife management, developing more effective approaches to EIA, resource assessment, environmental management and rural planning.

He is currently Director for Strategies, Planning and Assessment at IIED, London, and is an environmental advisor to UK ODA. He is also author of *Blacks Agricultural Dictionary* and has written several books on aspects of sustainable development and published over 70 journal papers, survey and technical reports.

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Brian Child

Brian Child is a fifth generation African who was born in Zimbabwe. He has a BSc (Hons) in agricultural economics from the University of Zimbabwe and a D.Phil in environmental economics from the University of Oxford. His doctorate thesis was an investigation of the relative ecology and economics of wildlife and livestock in the sustainable economic development of semi-arid rangelands in Zimbabwe.

Brian Child began his working career in 1984 with Zimbabwe's Wildlife Department. Here, he spearheaded the drive to develop wildlife management as a form of land use. Initially, he researched and supported the development of game ranching on private land in Zimbabwe. Subsequently, Dr Child coordinated the CAMPFIRE programme for the government and was involved in developing CBNRM principles through CAMPFIRE and other similar programmes in southern Africa. He was also the Department's Chief Ecologist responsible for terrestrial research. In 1996, Dr Child moved to the Luangwa Valley in Zambia, where he developed LIRDPA's community wildlife programme, facilitated the organisational transformation of LIRDPA, and became responsible for the commercial development of the South Luangwa National Park. He is now a consultant based in Lusaka and continues to work with the Zambia Wildlife Authority.

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EXECUTIVE SUMMARY

This review provides a case study of the Luangwa Integrated Resource Development Project (LIRD) in Zambia. This executive summary provides a quick overview of the scope and content of this document. A more thorough discussion of the project and our main findings is contained in the *Synopsis of Events and Issues*. We expand in considerable detail in Chapters 1-8.

First proposed in 1983, LIRD was officially initiated in May 1986. It covers an area of some 15,000 sq. km incorporating the South Luangwa National Park (SLNP) and the adjacent Lupande Game Management Area (GMA) (Figure 1.1). Funded mainly by NORAD, LIRD was one of a number of pioneering community wildlife management initiatives that emerged in the 1980s. At its core, LIRD has been concerned with the survival of the SLNP and the wildlife in the buffer Lupande GMA, and especially the harnessing of this wildlife to improve the livelihoods of the Kunda people who inhabit Lupande GMA.

LIRD has been experimental in nature and has evolved significantly – out of necessity - over the past decade, shifting from the catchall integrated resource development project to a core-business around wildlife, enjoying considerable successes as well as a range of difficulties.

1. Evolution through several phases

Planning was initiated after the Lupande Development Workshop in 1983 and continued until 1985. Subsequently, the project has progressed through various operational and funding phases and has been reviewed and evaluated several times.

Phase 1 (1986 – 1987)

In this phase, the organization of LIRD was established and the project defined its activities, inputs and work programmes.

Phase 2 (1987 – 1992)

This was the main investment and development phase under a five-year agreement between NORAD and the Zambian government with an annual budget of about US \$ 2.5 million. There was large expenditure on administering an expanding organisation and on trying to integrate and co-ordinate a wide range of objectives and functions with the provision of services to the district including, for example: wildlife management, road development, agricultural research , extension and credit, co-operative development, a women's programme, forestry, fisheries, water development, milling and a bus service, etc. The project was managed under the National Commission for Development Planning (NCDP) by strong-willed co-directors with the patronage of President Kaunda. The main success was effective law-enforcement which secured the protection of elephants in the project area.

For several reasons this integrated resource development project (IRD) approach did not prove workable. Much of LIRD's money was spent covering the recurrent costs of administration and providing services. Funds were also spent on infrastructure (e.g. maintaining and developing roads, and developing water supplies). But the project never seriously developed the wildlife economy that was needed to sustain these services. It was inevitable that when donor funding was withdrawn, these services would collapse in the area. This is exactly what happened when responsibility for delivering these services was

subsequently passed back to line ministries. Financial prioritisation, while responsive to the need for services and the political imperative to build a wide constituency, was never targeted to ensure sustainability. Part of the problem was the difficult political and economic environment in which the project operated. The economy was almost completely dominated by the state, so political rather than market forces were influential.

The project was strongly supported by former President Kenneth Kaunda, without which it would never have got of the ground. But when he lost power in 1991 it suffered from this association and barely survived. Its separation from the National Parks and Wildlife Service (NPWS) created long-lasting and damaging enmity. Criticism was voiced about the project being overly reliant in Phases 1 and 2 on its two co-Directors.

Bridging phase (1993-94)

This bridging phase continued the status quo but at reduced levels after the departure of the founding co-directors.

Phase 3 (1995-98)

In this phase, the project was redesigned and restructured to concentrate on wildlife management through community-based natural resource management in the Lupande GMA and park management in the South Luangwa National Park. It also involved the formal transfer of functions back to line ministries (although, in practice, the latter failed to assume their responsibilities), with reduction in NORAD's annual contribution to under US \$1.5m annually. The project was officially transferred from the Ministry of Finance (NCDP) to the National Parks and Wildlife Service (NPWS) under the Ministry of Tourism. However, in practice, LIRDPA retained a dual structure acting as both a project and a wildlife agency which split loyalties between the project and NPWS.

With LIRDPA pulling out of its role as a mini-government, a governance vacuum was left in the area. This was filled with the emergence of a comprehensive set of democratic sub-district structures (Village Action Groups and Area Development Committees) established through the work of the project's Community Programme (introduced in 1996) - as advanced (in our view) as any such programme in Africa (and possibly elsewhere).

Phase 4 (1999 – 2002):

On 1st January 1999, LIRDPA was renamed as the South Luangwa Area Management Unit (SLAMU) and re-organised as a unified institution in an attempt to bring the project and NPWS staff together in preparation for the transformation of the civil service NPWS to the more autonomous Zambia Wildlife Authority (ZAWA). This phase is seeking to improve performance with the introduction of clear objectives, a leaner structure, performance management and devolved financial and managerial authority. It also seriously trying to address the issue of long-term financial self-sustainability for the first time. A Commercial Section has been created and there are specific plans to increase tourism revenues to over \$1.3m. Simultaneously, the organisation has been simplified and rationalised and measures agreed to cut operational costs from some \$1.8m to \$1.3m annually.

2. Content and structure of the review

LIRDPA is an interesting project to review. The community wildlife management aspect of the project temporarily lost its way in phase 2, but it now has a strongly devolved CBNRM component and is one of the few such initiatives that is directly linked to the management of a

large national park. Moreover, the contrast between a centrally managed IRDP and the emerging community institutions provides useful lessons about rural governance.

This review charts the events and circumstances that have characterised the evolution of LIRD, and particularly the findings of various project review/evaluation missions. The latter reveal clearly the inter-institutional tensions and personal rivalries which dominated the launch and implementation of LIRD, which conspired at times to inhibit the project and frustrate its ability to meet its original objectives - particularly in providing effective coordination and integrated planning in the project area.

The review is presented in eight chapters that track the phased evolution of LIRD. The first is an introduction, and describes the key characteristics of the Luangwa Valley and gives a short history of conservation efforts in the area.

Chapter Two describes the origins of LIRD, tracing the project from the floating of the original concept, through the development of a funding proposal in 1983, to its initiation in 1986.

Chapter Three describes the early directions of the project through Phases 1 and 2 (1986 – 1992), the period with the heaviest funding and when the project attempted to integrate and coordinate a wide range of functions and objectives. The main sources of reference are a series of review and evaluation missions, which eventually led to a narrowing and restructuring of the project.

The next three chapters describe the transition from an integrated resource development project to defining the project's core business as wildlife management. Chapter Four covers the bridging phase (1993-1994) during which period the potential for a new approach was assessed. In Phase 3 (1995-1997), covered in Chapter Five, much effort was devoted to analysing and re-planning the project. Some progress was made towards re-orientating and re-focusing the project to concentrate strictly on community-based natural resource management in the Lupande GMA and park management in the South Luangwa National Park. While the project began to change its focus during Phase 3, the crucial restructuring of the management organisation and culture happened in Phase 4, when these changes began to bear fruit.

Chapter Six deals with the serious efforts of the project in Phase 4 (1999-2002) to become sustainable and achieve a technically and financially sound institution. Reflecting these changes, it is the first place in the review that we emphasise financial assessments and performance management. The project introduced improved management systems, including cost cutting approaches and a commercial drive to increase tourism revenue to US \$1m to reach the target of reducing donor support to less than 50% of 1998 levels.

Chapter Seven provides a more in-depth assessment of the progress and management of the community programme. Chapter Eight similarly draws together lessons on the other aspects of the project, most notably law enforcement, financial and management planning, tourism, political and other external influences, and the role played by the major donor (NORAD).

3. Conclusions

LIRD has been a learning experience for those involved including project staff, government institutions, local communities, donors, observers, etc. Many lessons - practical, institutional, political, etc. - have been captured and acted upon internally, assisting the continuous re-shaping of operational modalities, and also of aims and objectives. The experiences of LIRD therefore offer valuable insights to others involved in or interested in community

wildlife management, park management and the planning and implementation of donor-funded projects.

LIRDPA started as a blunt instrument, with rough and ready management systems. While often inefficient and wasteful in this early period, it was nonetheless effective in conserving SLNP and Lupande GMA and the elephants in the area that were severely threatened by commercial poaching. Keeping these options open was a key contribution, and laid the foundation for the recent progress towards project sustainability, improved management and community wildlife management.

The project has developed management and commercial systems that will allow the park to sustain itself, and that provide a valuable model for protected areas in Africa. Here, an important conclusion is that, provided the external environment becomes more certain and constraints (especially political and bureaucratic ones) are removed, the project can be efficiently and effectively managed and sustained entirely by Zambians.

There were difficult problems with the early planning and management of the project, but it was a considerable achievement merely to survive the animosity of a piqued wildlife department, political changes which removed its patron (former President Kenneth Kaunda) and general economic decline. The project has now reached a stage where it has turned the initial motherhood goals into clear, measurable and manageable objectives. It is now in the process of implementing a management-by-objectives and performance-management system (based on the logical framework approach).

The project has also advanced the cause and understanding of community development and conservation, validating the underlying principles of CBNRM and providing important lessons for how the process of implementing such systems can be managed effectively. As with park management, this has provided Zambia with a cutting-edge example of how things can be done.

With the transformation of the National Parks and Wildlife Service into the Zambia Wildlife Authority, there is now the possibility of a fresh start for the Zambian wildlife sector. The examples of sound park management and truly participatory community wildlife management provided by LIRDPA will be important models. While the project has been effective in conserving wildlife and innovative in community wildlife management, operational inefficiencies, especially in the earlier and over-funded¹ phases, gave its detractors ammunition. This however should be seen in context. The project has developed in an environment where good management has been almost entirely lacking and where the majority of rural development projects have failed.

This review has several important lessons.

- It illustrates the difficulties of integrated resource development programmes, even at a district level, but shows that once grass-roots institutions have been developed, an integrated approach then becomes possible.
- It shows the importance of law enforcement to protect parks.
- It demonstrates that the CBNRM concepts developed in southern Africa can be implemented in a managed way, and that the first successes such as democratisation can come relatively quickly - even in difficult circumstances such as those faced by the

¹ While there was certainly much work to do, the level of funding exceeded the project's capacity to manage it well.

project when Chiefs were first empowered and this power had later to be devolved further.

- This conclusion that a well-structured CBNRM programme has a high likelihood of progress is important. It suggests that CBNRM programmes can be repeated consistently since the requisite principles and implementational design have now been developed and tested. Consequently, the limiting factor now becomes the political will to implement devolved community-based wildlife management.
- Finally, the review has lessons for managing projects, the most important of which is that the adoption of sound management principles and practices. In the case of LIRD, this involved a combination of more devolved and participatory decision-making, but within a tight framework of objective-orientated and performance-based management - often using the logical framework approach. The latter approach proved an invaluable tool both for planning and monitoring feedback when used with a high level of participation using visualisation techniques.

Thus the project has succeeded in conserving the wildlife resource and in developing new approaches to conservation in difficult political economic circumstances. If it were to replicate these successes, Zambia could develop a tourism industry to rival that of Zimbabwe and Kenya, simultaneously promoting rural development and conserving wildlife. However, there are real questions over whether these opportunities will be taken. The tortuous and intrigue-filled eight year process of transforming NPWS to ZAWA reflects the underlying tension between economic and social progress on the one hand, and the entrenched interests of a powerful elite and the status quo on the other. Only time, and the interactions between culture, politics, economics and donors, will tell if these symptoms of “state failure” will be overcome by the enlightened self-interests of society. The future of LIRD thus rests in processes much larger than itself.

A SYNOPSIS OF EVENTS AND ISSUES

1. An introductory perspective

In a time when there are many quick solutions to conservation and development, and many failures, this review tells the long, untidy and unfinished story of a tenacious project to help the wildlife and people living in the harsh and wild ecosystems of Zambia's Luangwa Valley. The story of the Luangwa Integrated Resource Development Project (LIRD) can be read from many angles, but the project has now reached a positive position and our analysis provides many useful lessons. These lessons will be important to individuals and organisations planning similar projects or developing development policies, whether in capital cities for donor agencies. At its core, LIRD has been concerned with the survival of the South Luangwa National Park and the wildlife in the buffer Lupande Game Management Area (GMA), and especially the harnessing of this wildlife to improve the livelihoods of the Kunda people who inhabit and dominate the ecosystems of the Lupande GMA. Although the project set out to serve people and conserve wildlife, it could only become effective (and similarly this review) if it addressed the deeper issues of people's rights (including access to and ownership of resources), governance and political economics.

1.1 The early approach

The project has been a pioneering one in that it recognised the linkages between poverty and wildlife conservation, and because it was amongst the first few such projects to use wildlife revenues to benefit communities directly. It set out to solve the problem of serious elephant and rhino poaching by addressing the long neglect of the Kunda people in Mambwe District in the Luangwa Valley, with the assumption that the local economy could be built around the wildlife sector. The aim was to achieve this through an integrated resource development approach, which, on the one hand supported park management and law-enforcement and, on the other, assumed the responsibilities of ineffective line ministries and functioned as a mini-government to provide a range of services to the district.

For several reasons this did not prove workable. Much of LIRD's money was spent covering the recurrent costs of administration and providing services (e.g. agricultural extension, a women's programme, a bus service, helping support food security). Funds were also spent on infrastructure (e.g. maintaining roads and developing a few new ones, and developing water supplies). But the project never seriously developed the wildlife economy that was needed to sustain these services. It was inevitable that when donor funding was withdrawn, these services would collapse in the area. This is exactly what happened when responsibility for delivering these services was subsequently passed back to line ministries. Financial prioritisation, while responsive to the need for services and the political imperative to build a wide constituency, was never targeted to ensure sustainability. Part of the problem was the difficult political and economic environment in which the project operated. The economy was almost completely dominated by the state, so political rather than market forces were influential.

1.2 The Kaunda factor

The project was strongly supported by former President Kenneth Kaunda, and its separation from the National Parks and Wildlife Service (NPWS) created long-lasting enmity and problems that exist to this day. It has since had to negotiate both the loss of its patron (in the 1991 elections) and a re-integration into the NPWS. With such a perverse external environment, it is hardly surprising that internal management of the project also suffered. It became overly reliant in Phases 1 and 2 on its two strong-willed co-Directors, and failed to capture the energy and insight of middle management.

This command-and-control management style exacerbated the inconsistencies in the planning framework and the overly broad and reactive approach to rural coordination. With the replacement of the co-Directors when Kaunda lost power in 1991, the internal weaknesses and inefficiencies of the project came starkly into focus. For instance, it never had a consistent and hierarchical set of objectives, and its administrative structure never provided clear lines of responsibility. The project's Wildlife Section remained confused about whether it reported to the project or to NPWS, or to both. The budget was highly centralised, and not linked to priorities and performance. It was a good example of a well-meaning and over-funded project that had lost its way.

1.3 *A changed approach*

Over the next five years the objectives, organisational structure and management culture were slowly re-engineered and, today, the project is considered to be successful with a strong likelihood of achieving financial sustainability. Core business was defined as wildlife and most services were returned to parent ministries as the project focused on developing the park and converting the community programme from top-down handouts to grass-roots governance. In this review, we tell how this was done and discuss some of the key results and lessons. In the community programme, as well as across the broader project, budgets and authority have been devolved, and objectives have been clarified. These changes reaped rich dividends and demonstrated how ordinary Zambians have been able to become reasonable managers given the right authority and incentive structures. The experience of LIRDOP lends support to those who believe that aid money can work where it is applied with discipline, accountability and integrity. It is right that people plan for themselves, but it is equally right that they should be held accountable for their plans. Too often progress is undermined by the soft bigotry of low expectations, and loose donor money allows bureaucracies that add no value to perpetuate themselves and to prosper by rent seeking. The net result is unhealthy and ineffective governance, and a general decline in social confidence and well being.

The project is also a useful study of the challenge of developing a disadvantaged rural area. Operating much in the manner of a mini-government, it set out to use large amounts of grant money to provide local people with roads, food, credit and advice on farming. As we have mentioned, this was unsustainable and the project changed its orientation, and began to use wildlife revenues to empower communities. It pulled out of its role as a mini-government, leaving a governance vacuum in the area. This was filled with the emergence of a comprehensive set of democratic sub-district structures (Village Action Groups and Area Development Committees) established through the work of the project's new community programme (introduced in 1996). Paradoxically, these structures provided the institutional mechanisms that the project needed in the first place (in Phases 1 and 2) to promote district development. But, by this time, even the tenacious and patient donor (NORAD) had lost interest in the project's initial aims. A rare opportunity now exists to test a new form of district governance in a continent that desperately needs some pilot examples, but it appears unlikely that this opportunity will be taken.

1.4 *A people-centred approach*

One theme that threads its way through the story is the relationship between people and wildlife. The project is a microcosm of the changing conservation paradigms of the past three decades. It has passed through the same phases: from the acceptance of humans in the conservation equation to, rather paternalistically, giving them their first (legal) tangible benefits, to devolving responsibility for managing wildlife to empower and catalyse new systems of community governance, and (in the particular case) introducing democracy where it was unknown before. The present community wildlife programme is, we believe, as advanced as any in Africa (and possibly elsewhere), and therefore provides many important lessons. Its success, and the rapid progress made in the past four years, validate the claims of the community wildlife movement that such community-based approaches are the way forward in wildlife management, and support its principles. To this

movement, the project contributes management systems and techniques that increase the likelihood of the successful implementation of such community programmes. We are led to the conclusion that if small communities have strong rights, many of the problems which currently face community-based approaches would be solved, making it possible to move on to the next set of challenges. However, we are fully aware that many institutions, and particularly those responsible for natural resources such as wildlife, tend to operate in a highly centralising way and are tenacious in defending these ways. As such they have the ability to prevent the emergence of institutional solutions which provide higher net benefits to society. We make some preliminary suggestions about where the impetus to change could emerge from, and hope the development community will rise to some of the challenges it faces.

1.5 The problem of parks

This project is about far more than the community programme. After a golden age in the 1960s, many of Africa's national parks have deteriorated, partly because of their association with failing centralised wildlife departments, and partly because they are not appropriate to African circumstances. The protected area concept, emerging as it did in rich urban northern countries, was never adapted to survive or contribute in rural areas characterised by poverty. This concept demands fundamental changes in human nature by asking people to sacrifice their present well being for the global future. It finds it politically incorrect to talk of incentives (especially money) and the importance of finances. Yet, for the sake of our global inheritance (as seen by its proponents), it often imposes its will with methods reminiscent of state command-and-control that failed in communist countries. Not only is this inequitable and socially unsustainable, but relying on the *de jure* imposition of external ambitions is unlikely to work where the strongest law is that of *de facto* incentive. A parallel feature of this approach is that incentives are emasculated.

1.6 Battles for survival

The recent story of the South Luangwa National Park (SLNP) tells of three great battles for survival, and of the slow emergence of a paradigm where parks can be self-sustaining and have an important role in contributing to the local economy. The first battle was to control the rampant poaching that had reduced elephant numbers in the project area from 35,000 in the mid 1970s to 5,000 in the mid 1980s. The experience of LIRDPA shows clearly that protecting wildlife unavoidably takes money and resources for which international conventions and proclamations are no substitute. It also provides some lessons for managing law enforcement and some rules of thumb for planning parks, i.e. effective wildlife protection costs some US \$40-50 per sq km.

The second battle has been against the financial neglect of the SLNP – like so many others in Africa. Wildlife managers have been reluctant to accept that the financial survival of parks lies largely in their own hands and that taking steps to deal with this does not somehow despoil nature. Park budgets have fallen inexorably, partly because of the financial priority given to other sectors (e.g. education and health care), and partly because of resistance to raising entry fees. While progress has been made in raising fees, the stage has been reached where further increases are likely to make the SLNP too expensive (the average visitor pays some US\$30 per day to use the park). The main user groups that are not paying are those deriving benefits from the park's existence value and they exert significant international pressure to maintain global diversity – this free-riding mentality cannot continue if parks are to be sustainable¹.

¹ There appears to be a willingness to pay on the part of many wealthy elites in developed countries and, as a result, many donate money to conservation NGOs. However, there also appears to be a market imperfection in the delivering and using such donations. The majority of this finance seems not to reach the conservation ends for which it is given. A case in point is elephants. Despite massive fund-raising, very little money has been made available for elephant conservation. Perhaps most has been used to fund political battles in the meeting halls of CITES and other such fora. The South Luangwa National Park may be an exception, with NORAD

The third battle concerns the financial self-sufficiency of parks. A concerted effort has been made by LIRDPA to enable the SLNP to become self-funding – its financial sustainability has risen from 7% to 60% in the last four years. It is incredible that it is still one of the few parks to do so. Park managers have been clinging naïvely to a belief that they have a right to receive government funding despite clearly diminishing levels of state support. The progress achieved by SLNP provides several lessons and raises some questions about the conventional philosophy underlying protected areas. Most importantly, no trade-off between financial progress and biodiversity conservation has been necessary. Indeed, the better management required for improved financial performance has resulted in similar gains in biodiversity management. In recent years, SLNP has been subjected to two long, bio-centric planning exercises, neither of which has been implemented or influenced park management. Such conventional approaches are in urgent need of overhaul.

1.7 The challenge of managing a park

Like park planning, the management of many of Africa's parks has not evolved to meet modern challenges. Park managers have much to learn from the experience of LIRDPA which, in improving its planning approaches (as a requirement of the donor), has employed business-type methods to manage the SLNP. It has introduced a management-by-objectives approach, with clearly defined objectives and trade-offs (a rare thing in conservation), and performance management systems. These have enabled a staff of 300 to manage this large park with increasing success. This success can be measured in terms of a number of indicators: rising income, falling costs, and improvements in employee productivity, the status of the roads, the success of anti-poaching operations, bio-diversity conservation and tourism. The project's experience provides lessons for structuring and costing conservation organisations as well as for changing management cultures. These lessons can also be extended to project management in general.

For many parks, conservation approaches are neither well thought through nor appropriate. LIRDPA's use of objective-setting techniques significantly improved the way wildlife conservation was managed. It led to a new understanding of conservation priorities and trade-offs and, by defining goals and management processes, enabled managers to reach these end-points. The use of such techniques elsewhere could significantly change (and, we predict, improve) the way wildlife conservation is pursued.

The project's park and community programme both present a similar challenge – how to manage complex processes? But this is no coincidence. Without the discipline of profit, and with many and often contradictory objectives, grant-funded organisations and operations all too frequently lack direction. More often than not, they are ineffective and flounder. In this review, we argue how this particular problem – unfocussed and undisciplined management - pervades both conservation organisations and development aid. But LIRDPA was forced to define its business and set about getting to its goals, and the lessons, which emerge, are valuable to those facing this challenge.

1.8 Strong management and leadership

In this introduction, we have placed considerable emphasis on management because we perceive this as an important gap in managing community programmes and parks as well as development aid. But it is also important to recognise the strong influence of politics and political economics on the progress of the project, and we might wonder why such factors are so seldom expressed openly. Likewise, in this review, we emphasise the role of leadership, and therefore the contribution of

money being made available for both conservation and the development of communities. However, the delivery system is again rather inefficient, multi-layered and disempowering compared to in which communities or parks could directly 'trade' their resources.

individuals. This is another subject that usually appears to be taboo. It is informative to note that these three neglected fields (management, relationship-building (politics), and the importance of individuals and their knowledge) are those which are now emphasised in corporate management. In conservation and development, we are failing to heed the lessons about how better to achieve goals. As a consequence, our efforts tend to meander in the wrong directions. And here, we must ask a serious question: why are young and talented people not entering these professions, and how will we progress if this trend continues?

1.9 *Many lessons*

In whetting appetites to read this review, we should note a few other fields to which the experience of LIRDIP can contribute. The project's community programme supports and contributes to thinking about property rights, and provides additional lessons for democracy and governance in rural areas. The park programme has much to tell us about approaches to anti-poaching, planning, and tourism development. In this review, we return regularly to some of the political conflicts and compromises, which the project has had to negotiate, and to questions of the weak systems used to govern conservation. We also explore the parts played by donors as they negotiate between a different objectives and confront various constraints: an imperative to spend aid funds; a desire for the recipient to be responsible; a need to be diplomatic and mindful of the flow of politics (institutional and public); their own technical incapacity; and their quasi-political role in defending progress and the poor (who, have suffered at the hands of an avaricious and weakly accountable, but economically dominant, government).

2 Content and structure of the review

LIRDIP is an interesting project to review. It was one of a number of pioneering community wildlife management (CWM) initiatives that emerged in the 1980s. Although this aspect temporarily lost its way, it now has a strongly devolved CBNRM component and is one of the few such initiatives that are directly linked to the management of a large national park. Moreover, the contrast between a centrally managed IRDP and the emerging community institutions provides useful lessons about rural governance. The project, of necessity, has been experimental in nature and has evolved significantly over the past decade.

This review charts the events and circumstances that have characterised the evolution of LIRDIP, and particularly the findings of various project review/evaluation missions. The latter reveal clearly the inter-institutional tensions and personal rivalries which dominated the launch and implementation of LIRDIP, which conspired at times to inhibit the project and frustrate its ability to meet its original objectives - particularly in providing effective coordination and integrated planning in the project area.

LIRDIP has been a learning experience for all those involved (project staff, government institutions, local communities, donors, observers, etc.) and many lessons - practical, institutional, political, etc. - have been captured and acted upon internally, assisting the continuous re-shaping of aims, objectives and operational modalities. The experiences of LIRDIP offers valuable insights to others interested in the management of community wildlife programmes, parks and donor projects.

LIRDIP started as a blunt instrument, with rough and ready management systems. While often inefficient and wasteful in this early period, it was nonetheless effective in conserving SLNP and Lupande GMA. Keeping these options open was a key contribution, and laid the foundation for the recent progress towards project sustainability, improved management and community wildlife management. There were difficult problems with the early planning and management of the project, but it was a considerable achievement merely to survive the animosity of a piqued wildlife

department, political changes which removed its patron (former President Kenneth Kaunda) and general economic decline. The project has now reached a stage where it has turned the initial motherhood goals into clear, measurable and manageable objectives. It is now in the process of implementing a management-by-objectives and performance-management system (based on the logical framework approach). With the transformation of the National Parks and Wildlife Service into the Zambia Wildlife Authority, there is now the possibility of a fresh start for the Zambian wildlife sector. The examples of sound park management and truly participatory community wildlife management provided by LIRDPA will be important models. While the project has been effective in conserving wildlife and innovative in community wildlife management, operational inefficiencies, especially in the earlier and over-funded² phases, gave its detractors ammunition. This however should be seen in context. The project has developed in an environment where good management has been almost entirely lacking and where the majority of rural development projects have failed.

2.1 Structure

This review is presented in eight chapters that track the phased evolution of LIRDPA (Box S.1). The first is an introduction, and describes the key characteristics of the Luangwa Valley and gives a short history of conservation efforts in the area.

Box S.1: Summary of LIRDPA Phases

- Planning was initiated after the Lupande Workshop in 1983 and continued until 1985.
- *Phase 1 (1986 – 1987)*: establishment of the organization and definition of activities, inputs and work programs.
- *Phase 2 (1987 – 1992)*: investment and development phase. Five-year agreement between NORAD and Zambian government, to implement all necessary programmes and to attempt to attain sustainability. Annual budget: c.US \$ 2.5 million. The main success was effective law-enforcement. Large expenditure on administering an expanding organisation and on providing services to the district including roads; agricultural research, extension, and credit; a woman's programme; water supplies; milling and bus services, etc. Managed under National Commission for Development Planning (NCDP) by strong-willed co-directors, Richard Bell and Fidelis Lungu, with patronage of President Kaunda.
- *Bridging phase (1993-94)*: a continuation of the status quo but at reduced levels after the loss of the founding co-directors.
- *Phase 3 (1995-98)*: restructuring and focus on wildlife management as a core function and transfer of functions back to line ministries, with reduction in NORAD's annual contribution to under US \$1.5m annually. Transferred from Ministry of Finance (NCDP) to Tourism and the National Parks and Wildlife Service (NPWS).
- *Phase 4 (1999 – 2002)*: On 1st January 1999, LIRDPA became the South Luangwa Area Management Unit (SLAMU) in preparation for the proposed transformation of the NPWS to the Zambia Wildlife Authority (ZAWA). This phase is characterised by improving performance related to the introduction of clear objectives, a leaner structure, performance management and devolved financial and managerial authority.

² While there was certainly much work to do, the level of funding exceeded the project's capacity to manage it well.

Chapter Two describes the origins of LIRD, tracing the project from the floating of the original concept, through the development of a funding proposal in 1983, to its initiation in 1986.

Chapter Three describes the early directions of the project through Phases 1 and 2 (1986 – 1992), the period with the heaviest funding. The project attempted to integrate and coordinate a wide range of functions and objectives, including wildlife management, road development, agricultural research and extension, co-operative development, forestry, fisheries, water development and others. The main sources of reference are a series of review and evaluation missions, which eventually led to a narrowing and restructuring of the project.

The next three chapters describe the transition from an integrated resource development project to defining the project's core business as wildlife management. Chapter Four covers the bridging phase (1993-1994) during which period the potential for a new approach was assessed. In Phase 3 (1995-1997), covered in Chapter Five, much effort was devoted to analysing and re-planning the project. Some progress was made towards re-orientating and re-focusing the project to concentrate strictly on community-based natural resource management in the Lupande GMA and park management in the South Luangwa National Park. Responsibilities for the other functions managed in Phase 2 were returned to the responsible line ministries although, in practice, the latter failed to assume these responsibilities. The project was also transferred from the Ministry of Finances to the Ministry of Tourism. While the project began to change its focus during Phase 3, the crucial restructuring of the management organisation and culture happened in Phase 4, when these changes began to bear fruit. Chapter Six deals with the serious efforts of the project to become sustainable in Phase 4 (1999-2002). Reflecting these changes, it is the first place in the review that we emphasise financial assessments and performance management. In January 1999, LIRD was renamed the South Luangwa Area Management Unit (SLAMU). Phase 4 aims to restructure the project as a single organisation under the newly formulated Zambia Wildlife Authority (ZAWA), with its purpose to achieve a technically and financially sound institution. This requires improved management systems, including cost cutting approaches and a commercial drive to increase tourism revenue to US \$1m to reach the target of reducing donor support to less than 50% of 1998 levels.

Chapter Seven provides a more in-depth assessment of the progress and management of the community programme. Chapter Eight similarly draws together lessons on the other aspects of the project, most notably law enforcement, financial and management planning, tourism, political and other external influences, and the role played by the major donor (NORAD).

3 Key characteristics and history of the Luangwa Valley

The project area covers some 15,000 sq km in eastern Zambia incorporating the South Luangwa National Park (SLNP) and the adjacent Lupande Game Management Area (GMA) (Figure 1.1) with an estimated human population of 45,000. The SLNP is Zambia's premier wildlife tourism attraction and is known internationally for its abundant wildlife and charismatic large animals such as elephants, leopard, lions, hippos, buffaloes, giraffe, and antelope. Soils are generally infertile and the majority of people live on fertile alluvial deposits along the Luangwa's major tributaries. But agricultural productivity is low (compared to the adjacent plateau lands) and highly variable. Tsetse flies preclude livestock for ploughing and draft purposes, so farms are small. People rely mainly on subsistence and semi-commercial agriculture, with maize and sorghum on about 70% of cultivated land, and cotton, sunflower and rice on the rest. Traditionally, people have hunted and even now gain about 30% of their nutrition from wildlife foods (Sana Chipeta, pers. comm.). Most of the area has poor accessibility, particularly in the rainy season and suffers a general scarcity of development inputs, extension services, credit and opportunities to market agricultural produce. Poverty and malnutrition are widespread. While generally available, schools and clinics are poorly serviced and equipped. Nonetheless, the population is growing, and the project's successes, especially the creation of

economic opportunities related to tourism, are attracting in-migration. As a result, there has been an explosion of unplanned development around Mfuwe near the main entrance to the park, turning the area into a peri-urban centre. The Lupande GMA comprises six chiefdoms: Jumbe, Kakumbi, Malama, Mnkhanya, Msoro and Nsefu (Figure 1.2), dominated by the matrilineal Kunda ethnic group.

3.1 Early conservation efforts and mega-poaching

Game reserves were first established in the early part of the century, but only consolidated along the present boundaries as late as 1972, when all game reserves were converted to national parks and the South Luangwa National Park was created. The Luangwa Valley has exceptional wildlife, and its tourism potential was realised in the 1950s when pontoon crossings were established across the Luangwa River and the first camps and lodges opened. Between 1965 and 1970, elephants were culled to relieve serious habitat degradation, which is still easily seen today, as were hippo and buffalo. Following independence in 1964, conservation issues in the area became a major concern and led to the Luangwa Valley Conservation and Development Project (1968 – 1973), funded by UNDP/FAO. This undertook ecological surveys and concluded that over-population of elephants (some 90,000 in the entire Luangwa basin) was destroying forests and degrading habitats. This project also foresaw the need for a tourism industry, for which it laid the groundwork by constructing the first all weather roads in the park (40km), a bridge across the Luangwa at Mfuwe, several smaller bridges across tributaries thereby allowing access to Chipata throughout the year, and a new airport.

From 1975, there was a rapid escalation of commercial poaching in the Luangwa Valley. This was by highly organised gangs with automatic rifles, which the under-resourced NPWS was unable to deter. Patrols by the Save the Rhino Trust revealed horrific levels of slaughter of elephants and rhinos for tusks and horns. The black rhino population in the Luangwa Valley was reduced from about 8,000 in the early 1970s to less than 100 by the mid-1980s, and are now extinct in the area. Over the same period, elephant numbers in the Valley were reduced from 90,000 to fewer than 15,000 with about nine elephants poached daily in South Luangwa National Park alone. In the project area (SLNP and Lupande GMA), the population fell to as low as 2500 in 1989. But, with protection, numbers have since increased to about 9,000 in the project area.

There was little incentive for local people to resist commercial poachers or inform on their activities. Revenues from wildlife, such as hunting license fees, park entrance fees, and safari earnings, went to central government or businessmen living outside the area. Communities living in the Valley gained little direct legal benefit from local wildlife resources, and wildlife was seen mainly as meat on the hoof, a serious agricultural pest and the plaything of rich, white Westerners.

4 A Short history of LIRD

4.1 Origins of LIRD

In the early 1980s, concern about the loss of Luangwa's elephants and rhinos reached a peak. It was also clear that development programmes were neglecting to address the problems of people in the Luangwa Valley. In response to these problems, individuals working for the government in the Eastern Province (the ad hoc 'Chipata group') started to discuss the possibilities for a catchment-wide project to combine wildlife protection, the conservation of natural resources, and effective land use planning to meet the needs of the people. These ideas were discussed and endorsed in 1983 at the Lupande Development Workshop, funded by NORAD, hosted by NPWS and tasked to consider a management strategy for Lupande GMA. The Chipata group refined this into a proposal submitted to government in late 1983. In mid-1994 the National Commission for Development Planning (NCDP) requested NORAD to fund a detailed project proposal. This was undertaken in mid-1985 and led by

Dr Thor Larsen. Following his interest in conservation and passion for the Luangwa Valley, President Kenneth Kaunda met the consultants, sanctioned the idea and appointed himself as project Chairman. The consultants' preparation report (see Box S.2) was approved by the President on 14 September 1985 and then submitted via NCDP to NORAD with a request for funding.

The report suggested (rather optimistically) that an annual investment of less than US \$1m in research and anti-poaching activities could generate gross revenues (mainly from hunting safaris and tourism) ranging between US \$ 5.7 and 7.5 million, and that other investments in integrated resource development could also yield substantial returns. It was argued that these revenues would be sufficient to maintain infrastructure in the area, manage resources and fund development, with the area becoming self-sustaining after some initial years of investments. A five-year budget (1986-1990) of US \$25.5m was proposed for the project. It aimed to test an approach to integrated resource management on an ecosystem basis by balancing the development of agriculture, forestry, wildlife utilization, tourism and other resources, and to involve local people in the process of determining development priorities. The proposal was heavy on research and collecting baseline data for agriculture and wildlife. It outlined a comprehensive programme to combat commercial poaching, and contained proposals to develop tourism as a source of revenue for local development. It also included environmental education, community activities like fruit and vegetable cooperatives, a feasibility study for roads, and the provision of other facilities, equipment and infrastructure.

The proposal moved LIRDP from the mouldering NPWS to the finance ministry (NCDP) to be overseen by a high-level steering committee and managed by two Co-Directors. LIRDP would provide a co-ordinating function for all relevant provincial and district institutions for the project area, with authority for resource and wildlife management. Mechanisms for the participation of local communities in decision-making were to be developed.

4.2 *Initiation of the project*

The Norwegian consultancy recommended the appointment of two project co-Directors: Dr Richard Bell, a renowned expatriate ecologist; and Fidelis Lungu, a natural resource economist with NPWS. Both were interviewed personally by the President in December 1985 and began work in April 1986 using unspent NORAD consultancy monies. Difficult high-level discussions assessed the direction of the project, with marked resistance from senior officers in NPWS and others, and resentment at the direct involvement of State House in developing the project, raising donor funds, and especially in recruiting staff. However, State House and the Cabinet remained resolute in supporting LIRDP. Intensive discussions continued on the organization and scope of the project. In particular, the eventual inclusion of South Luangwa National Park, the country's flagship, was divisive. Throughout the history of the project, the issue of whether NPWS staff working in the area came under LIRDP control has remained unclear and problematic. With headline media coverage, the President formally initiated LIRDP on 7th May 1986 in a letter to the Minister of Finance. The project HQ was established in Chipata, Eastern Province.

4.3 *Phase 1: Project preparation (May 1986 – June 1987)*

An Advisory Committee of Permanent Secretaries was established to iron out the main features of the project - which remained along the basic design of the consultancy proposals. The committee imposed an overly elaborate system of committees (Box S.2) much criticised in project evaluations to integrate the project with existing government and political structures. Using this structure, work programmes and budgets were developed after lengthy discussions with government departments, local officials, traditional leaders and potential donors.

Box S.2 Elaborate committee structure of Phases 1 and 2

- An inter-ministerial Steering Committee chaired by the President;
- An Advisory Committee chaired by the Permanent Secretary, NCDP, providing a secretariat for the Steering Committee and giving guidance on technical issues;
- Technical sub-committees of the Advisory Committee to develop, approve and monitor the programs of the technical departments in the area (i.e. agriculture, cooperatives, tourism, and national parks and wildlife) - comprising staff of LIRDPA and government departments;
- Local Leadership Sub-Committee (LLSC) comprising the six Chiefs (each with one adviser), the four Ward Chairmen, the Member of Parliament and the Senior Administrative Officer of Mambwe sub-District;
- Coordination of activities on a provincial level by the Provincial Planning Committee;
- Representation of the project on relevant provincial and district councils.

In September 1986, NORAD agreed to provide modest short-term funding while continuing to consider longer-term support. In March 1987, the Ministry of Finance approved the creation of an LIRDPA Revolving Fund with an initial capital of ZK 1 million. This enabled the retention of wildlife-derived revenues within the project area and their disbursement locally for development and project activities. The financial autonomy permitted by this revolving fund has been a critical factor in the survival and subsequent evolution of the project.

A range of activities were initiated including support to vegetable gardening, farming credit, aerial survey of elephant and rhino, anthrax control, the re-introduction of safari hunting, environmental education and theatre, limited food relief (for sale) following a poor harvest in 1987, a forest inventory, initiation of a road upgrading and maintenance programme, and a socio-economic baseline survey.

Proposals for Phase 2 were revised and approved at a project workshop in June 1987, attended by 88 participants including government representatives, politicians, donor agencies, provincial and local administrators, local leaders and others. The aims for Phase 2 were to develop and implement a wide range of development and resource management activities in the target area including, but not confined to:

- A headquarters in Chipata, the Provincial capital, with four units (administration, accounts, research and planning, and aviation).
- A heavy emphasis was put on training and manpower development, covering community members, LIRDPA and other government staff.
- Land and resource use planning and research.
- Road development and maintenance to underpin development. This programme was expected to make up at least 50% of total expenditure during Phase 2.
- Support (including credit, training, advice and monitoring) for cooperatives and other small-scale enterprises.
- An assessment of tourism, including the re-introduction and improvement of safari hunting.

- An agriculture programme including land capability assessment, farming systems research, agricultural research to support a training and visit system with provide information on improved crop varieties, farming, and agricultural extension.
- Electric fencing, monitoring and other measures to protect small-holders' crops from wildlife damage.
- Research into tsetse control.
- A women's program including micro-projects, credit, and adult education.
- A study of the strengths and weaknesses of existing cooperative societies.
- An unclear intention to initiate forestry, fisheries water development.
- Wildlife management including:
 - strengthening conventional approaches under a unified operational command, with increased scout densities, an investigations unit, and involvement of local communities with an expanded village scout program;
 - A Wildlife Research Unit to support adaptive management with applied research including monitoring of populations and off take, landscape classification, vegetation studies (particularly woodland dynamics), climate, fires and animals;
 - Extending the precursory community approaches being initiated by NPWS through the (very local) Lupande Development Project;
 - Conservation education and information.
- An LIRD Works and Supply unit to coordinate an extensive program of construction, installation and maintenance of structures, roads, vehicles and plant, and the procurement and supply of materials, equipment and spares, etc.
- Evaluation capability to monitor the progress of this 'experimental' project.

One can be critical of these goals when viewing them retrospectively after 15 years during which planning has evolved considerably. They are numerous and diverse, mix 'development objectives' and short-term 'activities' (to use the nomenclature of the logical framework approach), and were neither sufficiently prioritised nor defined to form the basis for measurement and management. Subsequent reviews complained of the lack of objectives against which to measure progress. Most of these initial goals were never achieved. Nonetheless they set the tone for a large, complex project, which even today is criticised for its wastefulness. The project could not absorb its funding efficiently, nor find its focus.

4.4 Phase 2: Investment in activities and development of LIRD (July 1987 – end 1992)

Phase 2 was ambitious with a planned budget of US \$23.5m (\$13.2m for road building). This high initial investment was justified as a short-term measure - a 'pump-priming' necessity - to establish the integrated set of programmes seen as necessary to provide for sustainable resource use. Launched with modest financial resources, it took a further two years until a funding agreement for Phase 2 was concluded with NORAD in July 1989. But this was only for US \$ 11.25m – about half of the requested budget. This severely restricted the planned activities, particularly in road construction and maintenance.

All revenues raised by LIRD in the project area were retained in the revolving fund. 60% was used for project operations, and 40% allocated for local development initiatives as determined by the Local Leaders Sub-Committee (LLSC). Revenues came from park entry fees, hunting licences, culling operations (buffaloes, hippos and impalas) and various commercial ventures established by the project. The latter included Malambo Safaris which carried out safari hunting operations in Lupande GMA from 1989 to 1991 "on behalf of local communities", Malambo Trails which operated a small tourist camp, Malambo Milling which transported and milled grain to ensure food availability; and Malambo Transport established to provide a bus service between Msoro and Chipata and which also ran a truck to transport materials. The milling and transport companies both operated at a loss.

Employing over 200 scouts and implementing an excellent and simple monitoring programme rapidly improved law-enforcement. Elephant and other poaching were soon brought under control. Road-building plant was purchased, and a programme to improve roads in the GMA was initiated. It used labour-based methods and some key roads were built, but there are insufficient records and analysis to refute the impression that this was inefficient, especially in the mid-1990s. A consultancy assessed and designed park roads, but investments in the park were small. The third major programme was agriculture. Some useful research was done, a research centre built and extension groups developed, and given the added value and need of this programme there was some hesitation by reviewers in recommending that it be passed back to the parent ministry. Lesser activities included forest guards, well construction, agricultural credit and a women's programme. By some counts, the co-directors were responsible for over thirty different activities at this time. They worked long hours to keep the programme moving, but were never able to develop middle managers. The project remained highly centralised.

4.5 *Project reviews in Phase 2*

The project was subjected to a series of formal and annual reviews during Phase 2. The first review (1989) was critical of LIRD and its management. It argued against further autonomy but for closer liaison with sector ministries however imperfect their performance might be. It recommended the clearer specification of project assumptions, hypotheses and objectives (with quantifiable indicators) and was critical of weak economic analysis in the design of the project. Concern was expressed about benefits not accruing to local people. The role of the Local Leaders Sub-Committee as an effective channel of local participation was challenged, with the recommendation that the project should focus at ward level and on cooperative development (co-operatives being the fashion of the time). On the positive side, the revitalisation of wildlife protection in the area was commended, despite some conflict between the project and NPWS, which had inhibited progress.

The second review (1990) – only nine months later – was also critical and reiterated all the recommendations of the first review, which it claimed had not been acted upon. This was not surprising as the project only received the report a week before the second review. It felt that the project was becoming isolated, by-passing uncooperative institutions and sector departments, and assuming specialist functions (e.g. credit distribution and recovery, cooperative formation, marketing and input supply, sinking wells, etc.). Senior project management was criticised for being arrogant and autocratic and for spending too much time on administrative matters and too little on planning.

In contrast, the third review (1991) was more positive and praised LIRD's operations, particularly its wildlife management efforts, agriculture and women's programmes, and road development and maintenance work. It recommended phasing out the women's programme (originally insisted upon by NORAD) and instead emphasise women in all activities. Relations with NPWS were judged to have improved. Like previous reviews, there was still concern that genuine grassroots participation was not being achieved through the structure of the Local Leaders Sub-Committee (LLSC). The review was concerned about the potential conflict between the local chiefs and the (then) new Mambwe District Council over control of revenues allocated to the LLSC. Problems and inconsistencies in the use of these funds were noted. It was felt that there was a lack of information about the project and its purposes, and that people in the area were largely unaware of its objectives. In contrast to past reviews, the project's cautious approach to land use planning (so as to avoid conflict between different interest groups over exclusions or restrictions on their activities) was supported. The project's heavy reliance on its two Co-Directors and lack of middle management was identified as a problem. Again, like past reviews, it was concluded that the complex committee structure was cumbersome and that an organisational overhaul was needed. To move towards economic sustainability, it was recommended that the project concentrate on those sectors that provided the best returns or ensured food self-sufficiency, namely wildlife production and utilisation, and agriculture

It should be noted that persons linked to NPWS and highly antagonistic to the project were included on some teams, and that reviews at this time were not participatory. It should also be noted that project accounts were neither provided nor insisted upon for fully five years which reflects badly on the management process and makes an assessment of this period difficult.

4.6 *Change of Focus and Bridging Phase (1993-1994)*

Following the election of the MMD (Movement for Multi-Party Democracy) government in 1991, the project came under close scrutiny because of its close association with the former President. The two Co-Directors were replaced by a single project Director, Flywell Munyenembe. In 1992, responsibility for LIRDP was transferred to NPWS and brought under its national ADMADE³ policy.

Comprehensive planning was undertaken during 1992 for a Phase 3 with the goal of becoming a 'self-sustainable' project. NORAD provided bridging finance for 1993 (US \$2.1m) and agreed to support another phase, subject to an independent appraisal of the proposals. The latter (in 1993) praised LIRDP's achievements, particularly its outstanding success in law enforcement and bringing poaching under control. But it also reiterated shortcomings of the project identified by past reviews and pointed to the absence of sufficiently clear objectives. The long-running conflict with NPWS and the delay in harmonising LIRDP with ADMADE policy was seen as having severely restricted progress. The appraisal was also very critical of the approach adopted thus far (by LIRDP and ADMADE alike) to community-based resource management through local chiefs and traditional rulers. It saw this as "top-down" and contrasted it with an alternative system involving democratically elected, accountable, village-based institutions. The appraisal team recommended that the project cease treating the Lupande GMA and the SLNP as a single entity and begin managing each separately. As the rationale for this, it pointed to the fundamental differences in land use objectives in the SLNP (conservation) and in Lupande GMA (sustainable use). The latter recommendation represented a major shift of emphasis and was taken up as the basis for Phase 3. The urgent need to prepare a management plan for SLNP and the (continuing but unaddressed) need to undertake strategic land use planning within the project area were underlined. It was recommended that the project HQ be relocated to Mfuwe (this move had long been delayed due to lack of funds)

Picking up on these and other recommendations, a strategic planning workshop was held in 1994 attended by participants from local communities, the District Council, tour operators, line ministries and LIRDP management. This led to a revised proposal for Phase 3 which requested US \$3.5m from NORAD for the period 1995-1997. The proposal recognised the need to change the orientation of LIRDP and establish a sound community-based natural resource management (CBNRM) programme using fiscal devolution to encourage local communities to participate more fully in the management of natural resources. It also incorporated the gradual transfer of most activities to the respective line ministries, and would restrict itself to assistance with coordination and advice, logistical and financial support for the transition period.

4.7 *Making wildlife the core business: Phase 3 (1995-1998)*

During Phase 3, the project was restructured around two core functions - the management of SLNP and supporting the development of CBNRM in Lupande GMA. NORAD's annual contribution fell from some US \$2.5m to just over \$1.0 million.

NORAD delayed signing the Phase 3 agreement pending the conclusion of official investigations concerning alleged misappropriation of project funds during Phase 2. This severely inhibited project

³ ADMADE (Administrative Management Design for Game Management Areas) policy addresses the need for local communities in GMAs throughout Zambia to have stewardship over their wildlife and to benefit from the proper management and use of the resource (see Appendix 2).

activities although, as a result of extraordinary incomes in 1995 (from park entry fees, hunting license fees, hippo culling and especially the sale of old vehicles), it was possible to finance the core components of LIRD and maintain activities at 1994 levels. This helped to downsize the project.

During 1995, meetings were held with line ministries regarding the absorption and integration of staff and activities formerly under LIRD. The project transferred vehicles to most departments, but the primary result was that most of these activities deteriorated or ceased in the project area. Commercial enterprises were also closed. Equipment from Malambo Safaris was sold, and the title deeds for Malambo Milling were obtained (the premises had been leased) to allow property to be transferred or sold. It was decided to sell all trucks and close Malambo Transport.

NORAD provided some US \$300,000 for a Park and Tourism Development Plan. A draft was developed by an IUCN team during 1995 but was heavily criticised for not establishing clear management objectives, for entirely ignoring finances, for describing Northern solutions to Southern issues, and for comprising an unrealistic wish list. It was impossible to implement and was never approved. cursory attempts to develop plans for the surrounding GMAs by the team had been summarily dismissed by the chiefs.

The restricted operational budget and the death of the highly effective Warden (Doudi Chimbali) affected the activities of the Wildlife Management Section during 1995 with longer term repercussions: permanent carriers (porters) were phased out, patrol allowances to scouts were not paid, investigations were suspended, fuel allocations and patrol rations were reduced, and casual workers were no longer employed to renovate scout camps. The effectiveness of law enforcement declined and it was not until 1998 that these problems were corrected.

4.8 *Building a Vision and guiding coalition*

In late 1995, a Technical Adviser (Dr Brian Child) was recruited to the community programme, and was the first TA not to have line management responsibilities. He used participatory techniques to assist LIRD senior staff to develop their own 'Vision' for the project in early 1996, initiating much wider involvement of senior and middle managers in directing the project, and leading to the change-management process that re-engineered the project and culminated in Phase 4. This began to undo the over-centralisation, lack of unity, and confusion about roles and goals inherited from Phase 2. Strengthened by the recruitment of George Malenga and (later) Tom Mushing from the private sector, this released the creative energy of several middle managers and greatly improved the efficiency and effectiveness of management. Instead of being passive and berated at project annual and review meetings, LIRD's management team gained a level of respect.

The 1996 "Vision Statement" confirmed that LIRD would cut out functions performed by line ministries and concentrate on a core responsibility for wildlife management. SLNP would be managed as a conservation area, but with increasing recognition of the need for financial and commercial sustainability. In the community programme, benefits and responsibility would be devolved to communities, with the project redefining its role as institutional development, capacity building, and monitoring. LIRD would be phased out as an independent project and integrated into the new NPWS structure, but as a relatively autonomous management unit and cost centre. It was agreed that the annual costs of running the SLNP must be reduced to about US \$1 million, and that the gap between income and expenditure must be seriously addressed. At this time, the park earned some US \$400,000 (\$350,000 from tourism and \$50,000 from hippo culling in 1997).

At this Vision workshop, and following a trip by senior management to CAMFIRE, consensus was reached to allocate all revenues from Lupande GMA to communities and to allow them to decide for themselves how to use this money - provided they were organised and followed a set of guidelines that ensured transparent, accountable, democratic management at a scale where people could meet face-to-face. This consensus was taken to the project's review and policy meetings in April 1996,

where the new approach was formally adopted as LIRDP policy. This provided the enabling environment for the reorganisation and revitalisation of the community programme in 1996.

4.9 The new CBRNM approach

Figure S1 summarises the essence of the new community programme. It reversed the top-down approach, and the failure of these benefits to filter to communities or to be properly accounted for, by channelling 80% of revenues into Village Action Groups. That communities themselves decided how to allocate revenues, including the right to household cash dividends, led to radically improved allocation and perception of benefits. Instead of rather spurious projects being decided by chiefs or officials, with no explanation of finances, communities chose and built their own schools, clinics, water supplies and other projects. About 40% of income was used for cash dividends. But the transparency and proprietary impulse generated led to increased efficiencies and resulted in far more VAG-level projects being built, and far more quickly, than when LIRDP managed these. Management at the higher-level ADC was more problematic with slower progress and more misappropriation of funds. Likely reasons include weak accountability at this scale (1,000 households) and the dominance of chiefs at this level. Customarily, chiefs cannot be held accountable, a situation that is not suited to modern financial management.

The new way in which wildlife revenues were distributed significantly improved the ‘value’ of this money measured in terms of projects and dividends. Moreover, the process of organising communities to receive, allocate and use wildlife money led to democratisation, institutional and organisational progress, and grassroots empowerment. These are significant added benefits. As illustrated in Figure S1, the combination of tangible and transformational benefits inherent in the new system led to a metamorphosis of attitudes towards wildlife and the project, and laid the social foundation for later progress in the uptake of responsibility for resource management by communities. It is clear that, in the early 1990s, few people in communities believed they were benefiting from wildlife; but by the late 1990’s, there was universal understanding of the community programme and its benefits.

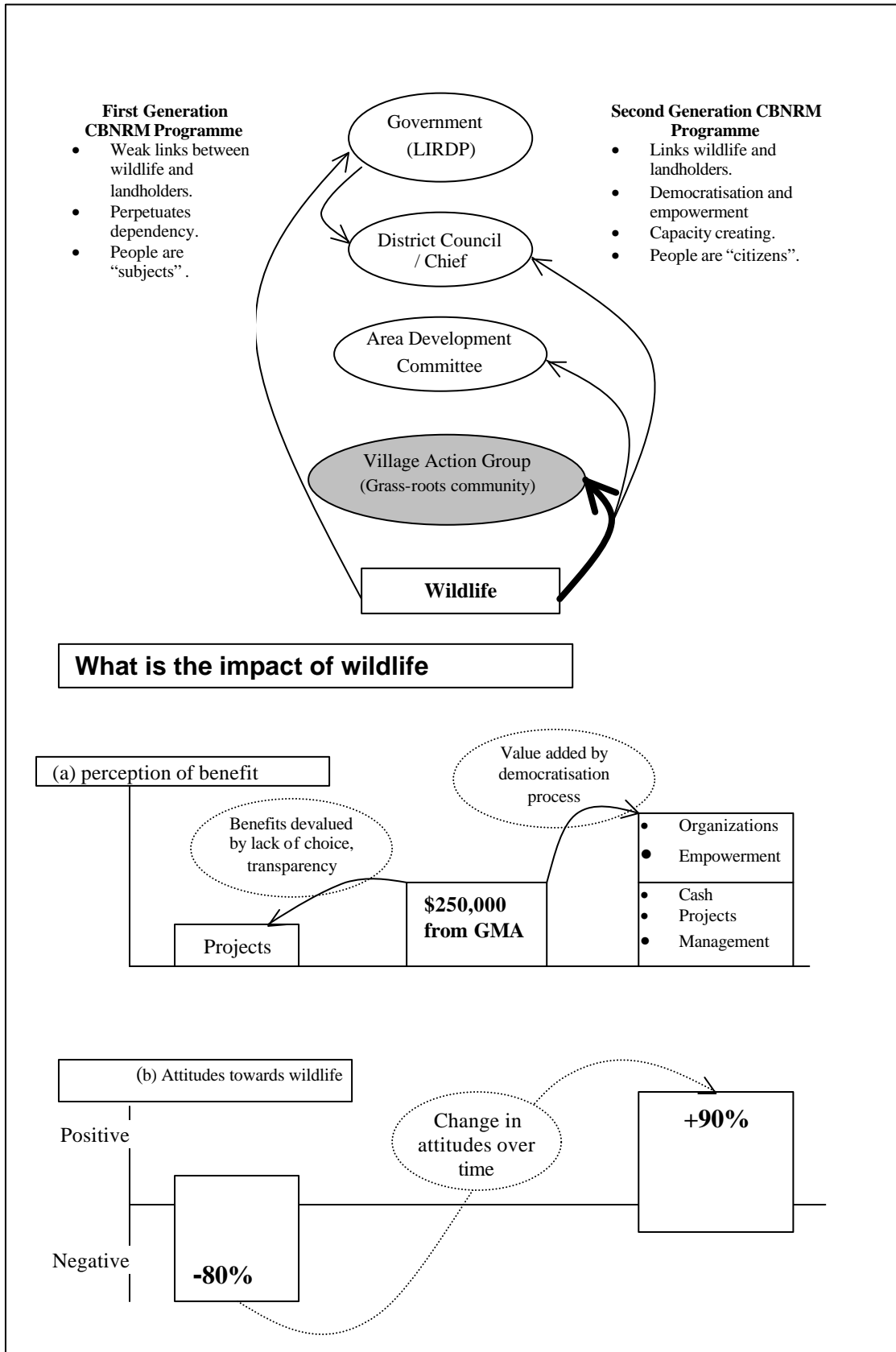
(a) Institutions

Village Action Groups (VAGs) lay at the heart of this progress. They were constituted at a scale that ensured the face-to-face participation necessary for grassroots participatory democracy in largely illiterate communities (roughly 200 households). Constitutions incorporated clear procedures and operationalised the principles of democratic, accountable, transparent and equitable governance. Each VAG reported on its activities, decided how to use its money, and elected a ten-person executive committee at a formal AGM, which was supported by three additional and obligatory general meetings. All 42 VAGs have their own income, bank accounts and projects. The 1999 audit showed only 0.8% of the ZK400m allocated to VAGs to be unaccounted for, and 150 projects underway or complete. This testifies to the efficacy of empowerment at this scale.

Each chief’s area has an Area Development Committees (ADCs) comprising between three and ten VAGs. Together, they receive 4% of revenues. Their primary role is coordination and oversight and, more recently, wildlife management. The respective chiefs assumed the chair of most ADCs. This presented a problem in that chiefs cannot be subjected to auditing and are ‘above’ accountability. ADCs proved less able to implement projects, and financial misappropriation was an order of magnitude higher than VAGs, though this was an improvement on the earlier situation when financial records were simply not required.

The Lupande Integrated Resource Development Authority (LIRDA) established in Phase 3, reflected the structure of the original Local Leaders Steering Committee (see Box S.2), comprising six chiefs

Figure S1:
Comparison of 1st and 2nd generation models of CBNRM



(each with one adviser or *induna*) and women's representative appointed by each of them, plus four Councillors, with LIRDP acting as Secretariat. Its role was to deliberate on policy issues affecting the people of Mambwe Sub-District. To all intents and purposes, the LIRDA was unaccountable. It proved to be time consuming and divisive, and added little value. Chiefs opposed devolution to communities and preferred their former position as the primary channel for information and benefits.

This led to three years of conflict despite their being allocated 6% of revenues and, following pressure, a further ZK1.5m each (see next sub-section).

The project had an uncomfortable time defending the progress described above. Its resolution to do so was legitimated by the policy agreed at the Inter-Ministerial Policy Committee in 1996, and by the support of the NPWS Director (Ackim Mwenya) and NORAD at the first revenue distribution. However, other senior civil servants and politicians were often reluctant to address problems where chiefs expropriated finances in blatant disregard of government policy and procedures.

(b) The importance of revenue distribution

Throughout Phase 2, LIRDP policy returned 40% of wildlife income to communities in the form of community projects. Re-focusing in Phase 3 returned all GMA revenues directly to communities, while retaining park revenues for park management. The new system was criticised by Chiefs and others who saw it as undermining their authority and supposedly causing division within the communities. Indeed, revenue distribution was delayed in 1997 when the six traditional Chiefs demanded an additional 9% (1.5% per Chief) over and above the 6% in the new formula. In a tense period, it was resolved that Chiefs would receive an additional ZK1.5m but could claim no revenue from community funds meant for development projects and household cash dividends. The agreement was nevertheless broken when some Chiefs expropriated money from their communities in 1997 and 1998. The new system, however, is almost unanimously supported by individuals in the community, and has been the crucial factor in the recent turnaround of attitudes towards wildlife. As recently as the early 1990s, people did not believe that they benefited from sound wildlife management. Balakrishnan and Ndhlovu (1992) found that 88.2% of respondents did not support safari hunting. However, by 1999, there was almost unanimous support for safari hunting and for the CBNRM programme in general (revealed by questionnaire surveys conducted by Elias Phiri and Nasson Tembo during MSc field studies).

(c) Evidence that devolution to communities works

By 1999, there were strong signs that the community programme was working and delivering good institutional progress. For example, as already mentioned, out of ZK400m allocated to 42 VAGs, only ZK3.35m was unaccounted for (0.8%). However, two ADCs had serious problems, mostly related to two chiefs⁴. By mid-1999, some 150 community-funded projects were in progress or completed. These included 16 teacher's houses, 34 school constructions or renovations, 14 clinics or other health projects, 26 well projects (with more than 100 wells in total) and 60 other projects including food, electric fences, women's clubs, football clubs, medical drugs, etc. This progress is further supported by the uptake of wildlife management initiatives in the communities and by major changes in attitudes (see below)

(d) The uptake of natural resource management

Communities have now begun to invest in wildlife. Whilst only 2% of revenue was set aside for wildlife management in 1997, this rose to 4% (ZK9m) in 1998 and to 15% in 1999 when 78

⁴ Chief Kakumbi collected ZK24m from VAGs on behalf of the ADCs which could not be accounted for, while Nsefu ADC could not account for ZK20.5m including a loan to the late Senior Chief of K10.5m He used this money mainly for reasons linked to his medical condition and hospitalisation. Such issues highlight some of the moral dilemmas inherent in rural development in areas of extreme poverty.

community based scouts were employed in five of the chiefdoms. Spearheading this drive is Chief Msoro's area where four small dams were constructed to provide water for wildlife. Msoro also employed the first 14 community scouts.

Another significant effect of the CBNRM programme is the increasing number of community initiatives evolving in the area. The most notable are the establishment of community-run cultural tourism businesses (Kawaza Village Tourism Project, Nsendamila Cultural Village) and efforts to control or charge for natural resources including the Kakumbi Natural Resources Business which charges for timber, firewood, grass, sand, etc., Nsefu Fishing Association which is beginning to regulate fishing in an area of conflict, and other communities that are addressing charcoal burning and tree-cutting.

These developments reflect the underlying success of developing sound institutions and organisations. Three conclusions of general importance can be drawn. First, given the right institutional framework and incentives, even poor, illiterate and dependent people can contribute significantly to their own development. Furthermore, they invariably do a better job than agencies that try to help them by supplanting their responsibilities (e.g. designing and implementing projects for them). Second, this programme was in many ways a test of southern Africa's CBNRM principles and suggests that we now have a set of principles that work. By applying these principles, similar progress can be made elsewhere with a high degree of confidence. Third, lower-level organisations work best, reinforcing the principles of subsidiarity and scale.

There is little doubt that community wildlife management provides a sound social basis for conservation where wildlife has a comparative economic advantage. This leaves the question of whether communities can protect their own wildlife. As we have shown, getting benefits to communities effectively revolutionised their attitudes towards wildlife and provided the social basis for wildlife management, as well as the organisational foundation to manage active conservation. Changing attitudes have been enough to reduce subsistence poaching in many communities. But in some (known) communities, there remains a clear tendency to poach. Regardless of social forces, active law-enforcement will always be necessary to control the criminal element that continues to poach⁵ as well as poachers from outside. Communities, or at least their leaders, have employed community-based scouts partly as a response to this, and it is still too early to know how effective these efforts will be.

(e) The impact of revenue distribution on community attitudes

In 1996, it was very evident that the great majority of people in Lupande GMA did not understand LIRD policy. They believed community development came from donor aid channelled through LIRD and were unaware that funding for projects derived from 40% of revenues from the park and GMA. They were also critical that projects were few, incomplete, inappropriate and tended to benefit the chiefs alone. By May 1998, local people knew that wildlife provided money each year and many knew the prices of hunting licenses. In the villages, people were often found talking about *tyolela* (household dividends) and community projects. They conveyed the general view that, if they looked after their wildlife, then the money they received each year as *tyolela* and projects would increase. Indeed, there was a sense of ownership of wildlife by the people. It was now seen as 'their wildlife'. This shift in attitude towards wildlife conservation was a direct consequence of the change of LIRD policy in 1996. This attitude shift was measurable by comparing the results of a series of MSc studies conducted between 1990 and 1999 (Balakrishnan and Ndhlovu, 1992; Butler 1996, 1998; Wainwright, 1996; Tembo, 1999; Phiri, 1999). Butler found local people's attitude towards tourism and the protection of National Parks to be very positive. In 1996 they cited employment as their key benefit, but also mentioned markets for provisions and handicrafts. By 1998, direct benefits gave people a

⁵ Criminal elements tend to be disproportionately high in circumstances of poverty and dependency, and where there is a general disregard of state institutions. Such circumstances certainly apply in the Luangwa Valley as well as in many inner-city areas and urban slums in Zambia.

better realisation of the economic potential of wildlife and featured prominently in their responses. People closer to Mfuwe, the centre of tourism, perceived a wider range of benefits.

(f) Conflicts related to devolution and wildlife

As would be expected in a project centred on devolution, changing the structure of the political economy creates conflicts. In this case, the most serious tensions have been between the project and the chiefs. The project made considerable efforts to improve relationships with NPWS, but these went largely unrewarded., probably because NPWS was also challenging the status quo regarding the role of chiefs. For almost three years (late 1996 to mid-1999) several chiefs contravened government procedures to extract additional money from their communities, and complained that the revenue policy undermined their traditional powers and turned communities against them. Community members, when brave enough to discuss the topic, suggest the problem is that chiefs no longer have unfettered influence and access to wildlife revenues. The project and chiefs argued over these and related matters, with the project's access to communities being prevented for months at a time. However, when the newly inaugurated Senior Chief Nsefu gained confidence, he replaced Chief Kakumbi's informal leadership, agreed that chiefs should repay monies illegally obtained, and began to support the new project. By 1999, relations with five of the chiefs were good, with some beginning to play a more positive role. Chiefs in Zambia enjoy significant power over their communities, and particularly so in the Luangwa area. Chiefs' opinions and actions customarily cannot be questioned, making the definition of their relationships to the newly legislated Community Resource Boards (that replace ADCs) difficult.

A second conflict arose over the principle of 'producer communities'⁶. Chiefs who adjoin the national park, and have more wildlife (Kakumbi, Malama and Nsefu) argued that they should consequently get more. Nevertheless, as a body, the six chiefs ruled that, for the sake of the unity of the Kunda people, they would continue to divide revenues equally. This issue re-emerges periodically. While the project conceptually supports this principle, it also sees the benefit of a phased approach to allow the other areas to develop their wildlife. Transparency and dialogue are seen as the solution. All six communities have considerable potential, but the centralisation and inflexibility of the centralised management of hunting are retarding progress. Critics have argued, with some justification, that under LIRDPA the park has only benefited communities in the Lupande GMA and that other communities on the western flanks of the park, and Bisa people in the Munyamadzi corridor between the North and South Luangwa National Parks, have been alienated. In fact, the Lupande communities benefit only from wildlife revenues earned within the Lupande GMA. In the period 1992 to 1996, they received ZK564m, only 53% of the revenue earned from Lupande GMA (ZK1,056m). After 1996, they received all GMA revenues.

The age-old conflicts between people and wildlife, especially elephants, is a constant factor. This is exacerbated by international policies and pressures to conserve elephants that are not in tune with the situation of expanding elephant populations on shrinking range. Elephant hunting is banned in Zambia. This means that the most destructive animal currently has no value to local people. The demand by local people to kill the elephants that damage their crops, occasional raid and destroy their houses in search of food, and sometimes kill people, clashes with the reluctance of project staff to kill a large number of 'problem elephants'. The evidence shows that killing elephants makes little difference, but the issue is confounded by the demand for meat and a desire to punish the perpetrator. Against an increasingly positive relationship between the project and the communities, problem elephants remain a bitter topic in meetings. It is an impossible problem to solve and its amelioration requires a range of measures. The benefits communities receive are partial compensation, though notably they get nothing from elephants at present. A small-scale, village-managed, pilot electric fencing project has shown some success. The careful introduction of high-fee hunting of elephants would almost certainly help.

⁶ This principle holds that the income from an animal should be returned to the community in which it was produced/shot.

(g) Proprietorship, institutional change and the wider political economic context

The new system of cash distribution (*tyolela*) to households was strongly criticised by chiefs and officials. But there is little doubt that it brought significant net benefits to the rural society and to conservation. It is revealing that the very people tasked with leading development were actually impeding it. This lends support to the contention of 'new institutional economics' that successful institutions have within them the seeds of greater success, but failing institutions are often predestined to maintain their deficiencies because failing and insecure administrative cultures tend to perpetuate themselves. It is tempting to conclude that conventional development aid tends to perpetuate state failure because it assists the survival of institutions that add no value (or reduce it). In having contributed to this problem, there is a moral obligation on development agencies to now try to rectify it. Whilst it makes much sense to place strong emphasis on good governance and sound macroeconomics, there is also a need to support the emergence of 'federalised' communities such as those now functioning in the Lupande GMA. They can provide the political support needed to promote and defend major political economic change.

Although the new community programme has only been operational for four years, it supports an emerging theme that village-level governance offers a powerful opportunity to address many problems. We will come back to this point, for it is important enough to change our whole approach to rural development. Based on our present understanding, a logical end point of this argument is to privatise land resources at this level. The present programme has only made a partial step in this direction. It has given communities rights over wildlife benefits. However, it has not given them the right to manage wildlife, especially to allocate and sell quotas. This is a serious deficiency of the programme, though it is difficult to address because of the political strength of the individuals who currently dominate hunting concessions. Communities have also begun to sell and husband other resources, including firewood, timber, grass, fish and sand, and the pricing of these resources is a positive force for conservation. It has also not clarified the question of land ownership, which is one of the reasons why the urban growth in the Mfuwe area is so difficult to plan and organise.

(h) 1998 – a year of metamorphosis and preparing for Phase 4

In addition to routine activities, 1998 required considerable extra efforts to plan LIRDPA's transition towards a self-sustaining institution, and to implement the new management systems that were necessary to support this. Preparations were made to introduce performance management at the level of project sections, to modify the financial systems to provide timely information and to facilitate the decentralisation of finances, and to develop a better commercial base. These were geared towards the impending change of status, on 1st January 1999, when LIRDPA would cease to exist (after almost 13 years of existence) and would become the South Luangwa Area Management Unit (SLAMU) in preparation for the transformation of the NPWS into the new Zambia Wildlife Authority (ZAWA).

In late 1997/early 1998, LIRDPA management prepared a proposal for a fourth phase. This was appraised together with a review of Phase 3 in April/May 1998. The review was favourable but concluded that the objectives of Phase 3 could not be reached by its completion at the end of 1998. Some outputs had been achieved; others had not. The major successes were the Community Programme, the beginnings of improvements in the projects Roads and Workshops Sections that had previously been an embarrassment to the project, and a general improvement in the direction and administration of the project. The weaknesses included the continuing lack of a park plan; the failure of line ministries to assume their responsibilities; continuing poor relations with chiefs; poor relationships with tour operators; and impediments to expanding the private sector, particularly regarding business opportunities other than tourism and hunting. Most of these problems were linked to external factors. Indeed, the project continued to emphasise that slow and bureaucratic procedures were losing it almost US \$400,000 each year. The review was encouraged by developments in CBNRM and by some initiatives in wildlife management. It found that the project continued to have a profound and positive effect on curbing poaching. Overall, the review concluded that LIRDPA had very positive impacts (e.g. community attitudes had changed and wildlife was now seen as a community

asset); local institutional structures had been established providing democratic decision-making; and a culture of self-reliance in the communities was emerging.

The team concluded that the Phase 4 proposal developed by LIRDPA was “an impressive piece of work” and, after some polishing, NORAD agreed to support an extension to the project for a further four years (1999-2002) in November 1998. LIRDPA sought basic funding of US \$3.5m including recurrent costs (\$1.5m), human resource development (\$100,000), technical assistance (\$600,000), the community programme (\$1m), and some strategic studies (\$50,000). It also noted that investment of about \$15m was necessary for long-term sustainability including headquarters (\$4m) and roads development (\$11.5m), which, despite all previous expenditure, had inexplicably been overlooked.

NORAD agreed to provide SLAMU with US\$ 2.0m over this period, and to fund the headquarters and feasibility studies for roads. LIRDPA expressed concern about insufficient funding for the community programme and for human resource development where investment in a new management culture was seen as critical for future success. The four-year budget was cut to \$6.4m. NORAD would provide 31% of this, with tourism generating \$3.2m (50%), government contributing \$0.23m (4%) and US\$ 0.98m (15%) deriving from other sources.

4.10 Implementing the vision: Phase 4 (1999-2002)

The development objective for Phase 4 was “to conserve and sustainably utilise the natural habitats and wildlife of the Luangwa Valley” (LIRDPA 1998). The project’s purpose, or target for the planning period, was to become “technically and financially capable of managing the SLNP and surrounding GMAs”.

The key element of Phase 4 is to make SLAMU financial self-sustainability. It aims to manage the park and community programme, while curbing expenditure (US \$1.8m in 1996) to meet the rising income curve (US \$300,000 in 1996) pending withdrawal of NORAD. This is called the “One Million Dollar Plan”.

The primary emphasis of Phase 4 is on law enforcement, ecological sustainability, CBNRM and the commercial expansion of tourism. Supporting roles involve the maintenance and development of roads, operating the workshop, construction of buildings, public relations, and administration and finance (including purchasing, stores, human resources, accounts). These activities continue those in place at the end of Phase 3, but the aim is to be more effective and this requires improved management. Thus, in Phase 4, the project has been restructured into a single and smaller organisation with three branches and nine sections. Management has been devolved, and performance monitoring introduced with clear targets. The results are positive. Despite a budget reduction to US \$1.3m, performance has improved significantly: more roads have been built for less money; the workshop has improved; finances are now better managed; and tourism has grown.

Cost cutting has saved almost US \$0.5m annually. Given the rate at which NORAD’s contribution was scheduled to reduce, the tourism income of US \$500,000 had to be increased rapidly. The project recruited a Commercial Manager and implemented a strategy to expand tourism, largely into unused areas of the SLNP. This expansion was hampered by the unresponsiveness of the parent organisation (NPWS) to commercial growth and by political interference. As a consequence, the first tenders for new bush camps took three years to implement (the annual opportunity costs of this delay exceeded US \$150,000). To give some idea of the relative performance of SLAMU, we can compare its commercial efficacy with that of other protected areas. By the end of 1999, SLAMU was up to date with the collection of all fees and had only three problematic leases remaining. This compared to the rest of Zambia where 60% of operations had no lease documents, where 69% of lease fees were not collected, and where there were no records for daily fees. Moreover, there were 13 concessions in

South Luangwa compared with only 16 in the remainder of Zambia⁷. Another key constraint to the growth of tourism, and its expansion into unused areas, is the absence of roads. NORAD has funded feasibility studies to prepare tender documents for an improved road network, but financing for construction has not yet been secured.

Planning, both of the park and the GMA, remains an outstanding issue. The EU-funded park plan was not finalised, but this has not presented a serious problem. The management of SLAMU (and the SLNP) is guided by a Phase 4 project document that already incorporates many of the draft park plan's suggestions. More problematic has been the unclear responsibility and authority for land use planning in Lupande GMA. In-migration and the unplanned proliferation of settlements, businesses and buildings near the park (in response to the growth of tourism) have become an urgent issue with the potential for negative long-term effects in the Kakumbi/Mfuwe area. The Phase 4 proposal indicated the need to carefully plan for the future Mfuwe town, but contained no funding nor strategy to do so. Subsequently, in collaboration with Mambwe District Council, SLAMU developed a proposal for such planning and for devolved rural governance in general, though no funding has been forthcoming.

Phase 4 has continued to consolidate the CBNRM programme and there has been steady progress. But it has not been possible to secure funding to satisfy the demand for capacity building and the opportunity to make advance in this area has been lost.

These lost opportunities reveal a structural weakness in the funding of SLAMU. While the project was rightly subjected to financial pressure (and nothing concentrates the minds of managers so strongly), this clashed with the expectation to provide non-income-generating social services. In the 2000 budget, the funding for community development was cut by 15% to US \$80,000 and, after considerable pressure from many project sections, 10% of wildlife revenue from the GMA was retained by SLAMU to cover a small part of its management costs. The promising conservation education programme (providing support to 28 'Chongololo Clubs' in schools) and the community newspaper (Malco News, targeted at the 45,000 people in the GMA) were cut out because of financial constraints.

5 Key Issues and Lessons

5.1 *The political economy of wildlife and LIRD*

(a) Central control and 'nationalisation' of wildlife

Events have served wildlife badly by taking it out of the marketplace. In a microcosm of the comparison of free-market democracy and centrally planned economies, the 'invisible hand' was replaced by central dictate. During colonial times, wildlife was 'nationalised', excluding locals and converting wildlife into a non-commercial resource. The post-colonial state began to use wildlife, but maintained the highly centralised system of management and continued to centralise its benefits; so local people had little official say and saw few benefits. Although all responsibility for conservation lay with the wildlife department, economic crises led to financial neglect and its deterioration. Simultaneously, patronage and politics dominated the wildlife sector. Senior politicians dominated the legal wildlife industry; lesser officials benefited through legal hunting, and villagers and others reaped their benefits illegally through poaching. The net result was a *de facto* open access wildlife resource that was over-exploited. It was also used extremely wastefully. At this time, Zambia was beset by the wave of poaching that flowed down through Africa, and lost its rhinos and 90% of its

⁷ This information is extracted from reports of the Commercial Unit in NPWS.

elephants. Following the doctrine of central planning, the economy was dominated and run by government under the leadership of President Kaunda.

LIRDPA was initiated in these difficult circumstances, with the broad aim of improving rural livelihoods. Wildlife was to fund the necessary services, and it was assumed that its benefits would persuade communities not to support poachers. It pioneered a people-centred approach to wildlife conservation. This started off as an integrated resource development project in which wildlife was to play a major role. However, as this model proved ineffective and unsustainable, the programme evolved and bifurcated. This led, on the one hand, to a community wildlife programme in the human-dominated GMA and, on the other hand, towards a self-funded national park. The project went through many trials and was not always well managed. But NORAD was persistent and maintained its faith in the project. This has been rewarded as the project now stands on the brink of success and at the cutting edge of both park and community management.

(b) Accountability and politics: Presidential involvement and relations with NPWS

Presidential involvement was very important in getting the project started. In the early 1980s, there was little support for participatory conservation projects. The proposal for LIRDPA was seen by many as too radical and unworkable. Without the intervention of Dr Kaunda, it is unlikely that that LIRDPA would ever have been financed and initiated. The President's direct involvement allowed the original Co-Directors to wield enormous power, allowing them to get some things done in an otherwise stultified system, but also isolating them from the need to build relationships. This danger of high-level patronage is illustrated by the fate of the project following the election of the MMD government in October 1991. LIRDPA was seen by many people in the new government, and by the public, as a personal initiative of the former President, and was therefore a target for very close scrutiny and there were calls for it to be scrapped.

Kaunda also had a very low regard for the NPWS and LIRDPA was placed under the National Commission for Development Planning. This led to problems and tensions between LIRDPA and NPWS/ADMARE which have persisted throughout the project's history, but which were particularly evident during Phases 1 and 2. However, it is unlikely that the project would have worked within NPWS, which was generally associated with demise. The replacement of NPWS became an unwritten donor condition for their re-financing of Zambia's wildlife sector.

There were minor philosophical differences in approach between LIRDPA and NPWS/ADMARE, but personalities and political economics were the real reasons that allowed the conflict to persist and grow. Initially the project was resented because it captured high levels of funding and took the premier national park away from NPWS. More recently, the evolution of an effective organisation began to embarrass NPWS while the empowering of communities threatened the status quo. These conflicts undoubtedly limited more effective progress by LIRDPA. For instance, one can surmise that the overly wide scope of the mini-government phase, and the focus on services rather than financially sustainable activities, was in some part an attempt to placate or harness the support of a range of ministries and stakeholders. Latterly, bureaucratic impediments have regularly been placed in the way of the project, limiting progress. Examples include a three-year battle to sell tourism concessions, continual problems with getting hunting quotas approved, and delays in securing various permissions such as for culling hippos. The project has managed to negotiate and survive these problems using political support from some factions in government, from NORAD, and because of the financial independence accorded it by its 'revolving fund'. Without this fund, it would have failed to survive at all. Unfortunately, these important external and largely political factors were not recognised in the original design of the project. Many days have been spent in Lusaka pursuing permissions and shortening delays. To date, LIRDPA has concentrated its efforts on internal project matters, although there is now recognition amongst senior staff that it is essential to address external factors in a more targeted way. This is a common feature of most projects, and a fertile field for exploration and progress. Indeed, a weakness of the logical framework approach used by NORAD is the absence of a

fourth column to monitor external factors and a lack of indicators for such factors. The experience of LIRDP shows clearly that externalities need to be monitored and managed.

As Drucker (1974) points out, budget-funded organisations can wander far from effectiveness and efficiency because they do not have the discipline of a “bottom line”. These problems are vastly exacerbated where systems for holding officials and politicians accountable for performance are weak. The underlying causes that allowed such clearly unproductive relationships to continue between LIRDP and NPWS for so long are pervasive. They stem from Zambia’s macro-economic situation and in prevailing culture of governance which emphasises patronage at the expense of performance.

5.2 *Integrated rural development*

(a) LIRDP’s objectives for integrated rural development

LIRDP was envisaged as a mechanism to co-ordinate integrated land use planning and resource management and eventually to sustain these through a wildlife-based local economy. It set out to manage wildlife and other resources, to involve local communities in decision-making, to establish ways in which they could benefit from revenues earned in the area, and to co-ordinate the activities of other line ministries across a wide array of activities. As such, it had much in common with more recent approaches to strengthen local government, and especially District Councils, in a similar role. Although these attempts have been generally disappointing, it is usually believed that they could work if District Councils were able to exert co-ordination by controlling the operational budgets of line ministries in the Districts. Yet, despite having reasonable finances, LIRDP largely failed to achieve these coordination goals. Is this evidence that these seemingly sensible approaches are invalid? Or does it simply reflect the difficult circumstances in which the project evolved?

(b) Constraints to success

In its early phases, LIRDP suffered from many problems that stopped it from functioning properly: its design was complicated with no apparent clear vision of where it was going; it had no clear authority to co-ordinate district management; and it was beset by political wrangling, especially with NPWS. Furthermore, there were problems with internal management. As we have already mentioned, the project was unable to produce accounts for five years, so it is hard to imagine that financial planning was astute or that management was efficient. Effective middle management also failed to emerge⁸. While the project could not properly absorb its funding in Phase 2, the long-term financing of services was never clarified. This hardly represents a foundation from which sustainable district servicing can emerge. Many of these problems stemmed from the imperative to survive in an unsupportive macro-environment, and from the gross inefficiencies inherent in the centrally planned system of government in the country at the time.

The much-criticised system of committees established during Phase 2 (see Box S.2) was actually imposed on the project following protracted and difficult negotiations during Phase 1. The aim was to ‘bind in’ the line ministries and other interests groups and to overcome the resistance of government departments to LIRDP assuming a co-ordinating role in the project area. Servicing this complex arrangement absorbed a high proportion of the co-Directors’ time during Phase 2 and prevented them from focusing on many important issues, e.g. land use planning. The project was never truly linked to the people. The formal channel of liaison with local communities was the Local Leaders Sub-Committee, which impeded representative communication, and further perverted information and

⁸ To be fair, according to Richard Bell (pers. comm.), the co-Directors did identify suitable candidates for middle management positions, but NORAD was not at the time prepared to provide funds for positions such as an administrative office or a research coordinator – although, subsequently, NORAD funded expatriates in these positions.

decisions because of the vested interests of its members. Thus the project was not communicating with people at the time it had money to service them, nor therefore did it capture their energy or support. The slimming down and re-focusing of the project in Phase 3 enabled these structural difficulties to be addressed.

(c) The mini-government approach

The situation existing prior to LIRDP was that the development needs in the Luangwa Valley had been neglected for many years, and there was very weak planning or co-ordination between government agencies, which had little capacity. Some ministries and the District Council failed to co-operate and others were unable to do so effectively because of capacity, financial or technical weaknesses - factors that had contributed greatly to the pre-existing problems in the Luangwa Valley. In these circumstances, and in order to make progress, LIRDP gradually took over some of their roles and has been criticised for assuming the role of a 'mini-government' in the area.

There is a common argument that, because projects come and go but government departments remain, sustainability necessitates that projects work with and strengthen the system (i.e., the existing government structures), however imperfect it might appear. Most projects that have attempted to bypass inefficient government systems and set up mini bureaucracies in order to make progress have collapsed once the project has ended and the donor withdrawn⁹. In the case of LIRDP, however, both avenues led to failure. Even government agencies that were strengthened (e.g. agriculture) still collapsed as soon as donor funding was no longer available.

This re-orientation of LIRDP may well prove to have been the right decision. But it needs to be remembered that LIRDP adopted a multi-sectoral approach in the first place because of the extremely poor and uncoordinated performance of line ministries in the area. Arguably, the project should have adopted a much more supportive role, rather than taking over responsibilities where ministries or local authorities were weak. The institutional problems arising from the launch of LIRDP no doubt contributed to this malaise. But it can be predicted that without financial, technical and capacity-building support, it is highly likely that the line ministries will remain unable to deliver what is expected of them. And whilst LIRDP may show success in delivering progress against reduced and more focused aims and objectives, the area will still suffer - as it did before - from neglect on other fronts. Indeed, at the end of Phase 3, there was no evidence that line ministries had been willing or able (due to lack of funds, transport, etc.) to re-assume responsibility for their sectoral activities in Lupande GMA.

⁹ Of note here are the integrated rural development projects/programmes that became fashionable in the 1970 and 1980s and set out to address rural development through a set of mutually supportive components, e.g. a combination of agronomic packages with credit, development of roads and water supply, sometimes even clarification of land tenure. Many such IRDPs were planned and implemented through an autonomous project body, although initially they may have intended to work with and through local institutions. They came to rely on autonomy to achieve their objectives and were also, usually, entirely dependent on donor funding. Without doubt, some IRDPs have had some success in building institutional capacity to undertake planning. For example, under the Serenke, Mpika and Chinsali Districts IRDP in Zambia, funded by British aid, 'planning, co-ordination and implementation systems were evolved by the district institutions themselves, with the IRDP acting as a catalyst in a flexible learning-by-doing, evolutionary approach' which was regarded in the country as 'a model for institutionally sustainable development' (Mellors 1988). However, most IRDPs have been integrated in name only. Their component elements have often been a shopping list of essentially independent sub-projects, each of which could have been (and usually were) undertaken separately by responsible government agencies, and simply subsidised by the IRDP's external funds. In many cases, withdrawal of external funding led to cessation of activity with no perceptible impact remaining in terms of land use patterns or practices (Dalal-Clayton and Dent, in press). Two IRDPs in Zambia's Eastern Province, both with multi-million dollar budgets, are worth noting for this: the Eastern Province IRDP funded by Sida and the Eastern Province Agricultural Development Project (EPAD) funded by IFAD. Both were operating during the 1980s when LIRDP was proposed and initiated.

(d) Possibilities offered by community organisations

As a relatively small project, LIRDPA could never have any significant impact on reversing the steady deterioration of government finances and services. Nor could it substitute these services, having no tax base to sustain these inputs. However, the community institutions introduced in Phase 3 (e.g. VAGs) are proving to be moderately effective at capturing matching funds from national programmes such as the World Bank funded micro-projects project. In the absence of effective government services, co-ordination of demand in this manner may be reasonably effective, mirroring as it does, a free-market system. Those communities that are better organised are generally better able to obtain matching funds.

It is also the case that the ideas envisaged in the original LIRDPA concept – to co-ordinate land use planning and integrated natural resource management in the Luangwa Valley in combination with community-based approaches -- have still to be tested properly. In Phase 2, the project began to approach the issue of land use planning, but these activities were never carried through because of the change of government and then project leadership in 1991. LIRDPA at this stage had opted for a cautious approach fearing that any planning process leading to exclusive or restricted use of resources (i.e. through zoning) could lead to conflict between interest groups. In reality, Phase 2 had many problems and LIRDPA therefore did not enjoy a real opportunity to experiment effectively with the concepts and modalities of integration. Indeed, some interests positively thwarted it from the outset. The project re-orientated itself in Phase 3 and relinquished responsibilities for broader land use planning. But it is notable that, having done this, the most recent project review (1998) again noted the urgent need for land use planning in the Mfuwe area and Lupande GMA and recommended that the project should become involved in this function. However, land use planning is difficult because the tenure system allows chiefs to allocate land but without accountability. Once again, the new community structures offer a way forward. These participatory decision-making institutions are well placed to make good decisions on land use and economic development, especially if provided with sufficient information to enable them to make informed decisions. What is presently missing is the formal authority to do so, and the means to improve their capacity.

(e) How can we integrate rural development?

As an IRDP, the project suffered the same no-win problem faced by many other IRDPs - having to substitute for or prop up an ineffective and failing government system, and a failing economy in general. This is the central issue that needs to be tackled. Placing the blame for failure on IRDP projects alone misses the point. In the right macro-circumstances, there is a good chance that they could work. Unfortunately, when a disproportionate amount of political and economic power is vested in the government-dominated status quo, change is far from assured. Hence, it is no surprise that there is resistance to projects like LIRDPA, even where they clearly lead to social, economic and environmental progress. Political economics (e.g. Gibson, 1999) and the emerging field of 'new institutional economics' may have something to offer in explaining why many developing economies simply never develop, and why innovations such as that offered by LIRDPA in recent years have not been permitted to lead the way.

The experience of LIRDPA adds to the slowly mounting evidence that the devolution of rights to rural African communities can significantly improve their livelihoods and the governance of both development and environment. We have presented evidence that this is contingent on devolution to a scale that allows face-to-face decision-making and accountability, and on the creation of institutional forums that incorporate the principles of democracy, transparency, equity and accountability. In short, it appears that where villagers are able to assume the local civil and administrative functions of the state according to the principles of subsidiarity¹⁰, things can improve. But here we face the

¹⁰ Handy (1995) provides a highly accessible and convincing argument of the importance of subsidiarity, or reverse delegation, for improving the performance of organizations and institutions. He explores the issue of federalism and, in support of a theme pursued in this review, notes that a nation that devolves much to

problem of failure of the state, which tends to maintain tenaciously¹¹ those very institutional structures that result in lower net benefits to society.

(f) How could LIRD have been done better?

Instead of taking over the functions of line ministries, LIRD may have done better to use its financial resources to 'buy' the services and alliances of key departments. In this manner the project could have provided co-ordination and invested its money in outputs rather than replicated overheads. This would have required subtle leadership and considerable effort in building relationships. These are strengths that the project seemed to lack during Phase 2 (or was unable to deploy effectively in the prevailing circumstances) judging by its centralisation, lack of middle management and apparent weak understanding of organisational management and institutional development. While this might have allowed more progress, it would nevertheless have been a refinement of a system with deep flaws. A radically new approach was necessary, and here the community programme has developed new, democratic community structures that offer a basis on which to build. However, these structures would have never been accepted when LIRD was inaugurated.

These community institutions may now provide the best option for integrated resource development. Sustainable economic growth is invariably linked with some combination of market democracy, property rights and widely accepted and enforceable institutions. The project's community programme has shifted institutions and local society in this direction, and their performance has improved. This experience supports the mounting evidence that community ownership of resources at the scale of VAGs presents considerable opportunity for socio-economic growth and equity. However, communities still have highly restricted rights. They can retain the benefits of wildlife, but lack rights for selling wildlife, for setting their own economic plans, and especially for land. Government officials and customary leadership also treat them as subjects rather than citizens. If these rights were to be strengthened so as to build on the foundation of the present highly participatory institutions, this would enable communities to co-ordinate their own development. If it had been possible to establish such village institutional structures at the start of the project, and before the project made its heavy expenditure in Phase 2, then we can speculate that the impact of LIRD would have been considerably greater.

(g) Mistaken financial priorities?

It is clear that there was weak prioritisation of project expenditure during Phases 1 and 2. Much money was spent in the early stages before the project was properly organised. By the time management and the capacity to spend money effectively had improved, there was little left. Moreover, early expenditure was disproportionately on overheads and services, with insufficient investment in the productive capacity of the system. Fifteen years on, the growth of the wildlife industry is constrained because this investment, especially in roads, never occurred.

LIRD was founded on the assumption that wildlife could fund development in Mambwe District, and this is probably still a sound assumption. The burning question therefore is why so little was done to bring this to fruition. The project deserves much credit for bringing poaching under control and thus for, at the very least, maintaining wildlife as an economic option. But it did little to develop the

communities function better than one that clings to centrality. Indeed, the general business literature on devolution has much in parallel with the field of CBNRM.

¹¹ To understand and implement the new concepts of wildlife conservation explored in this review, it is quite clear that we need to embrace the fields of economics, property rights and political economics. We also need to involve efficient and effective management techniques. It also appears that it is necessary to learn about the processes of institutional change. Here, we might begin with the 'new institutional economics', an emerging field that is still largely inaccessible to many people (see, for example, Harriss, Hunter and Lewis, 1995; North, 1990).

wildlife economy. Commercial strategies remained primitive until the late 1990s, and the failure to invest in infrastructure is difficult to understand.

(h) In retrospect, how would we address integrated resource development?

If we were to start again, what would we do? With the present level of management, a sound commercial strategy and investment in roads, it is likely that the park could generate US \$25m annually. With SLAMU presently retaining approximately 10% of tourism turnover, this would yield \$2.5m for the park. Given that it only costs about \$1.5m to manage the park, part of the surplus of \$1.0 m could fund community services in perpetuity. Under this scenario, the park would become a protected area of considerable economic value to local people. It would provide jobs, and also a taxable surplus to fund the governance of the district, presumably through the recently developed institutions since they appear to work better than alternatives. In addition to this, proper management of the hunting in Lupande GMA could turn over \$3m, with communities retaining \$1m (33%). This is four times the present income received by communities, which has already had a powerful impact on their ability to develop their infrastructure, their individual livelihoods, and especially social transformation. By turning around the use of money, and by investing first in the growth of the wildlife economy, the initial aims of the project could have been sustained. Another scenario is similarly attractive. Had NORAD's \$25m been invested in the bank at an interest rate of 7%, the park would have an annual income of \$1.75m. This could sustain the park and, in the manner described above, could also contribute to community development. In purely financial terms, the project has been inefficient (though far less so than most other projects). Nevertheless, it has given us some very valuable lessons for conservation and rural development.

(i) A new role for protected areas?

The model of a park and surrounding community seems particularly poignant. It offers an opportunity to quietly revolutionise rural governance plus an economic engine to fund this in perpetuity. Investment carefully structured in this way addresses some of the fundamental structural and political problems of rural development, and can result in significant improvements in both livelihoods and resource conservation. Wildlife can indeed act as the economic and social catalyst hoped for in the initial design of LIRD¹².

5.3 The Community Wildlife Programme

LIRD¹² has been an experimental initiative in pioneering a new people-centred approach to wildlife management. It was never a national programme like CAMPFIRE¹³, LIFE in Namibia and

¹² The initial design of the project was based on recognition of the link between rural poverty and the survival of wildlife, a link, which at this time was not well elucidated. The early phases of LIRD¹² gave people their first (legal) tangible benefits. Learning that this rather paternalistic top-down approach did not achieve the results that were hoped for and could be improved upon, led to a second-generation of community wildlife programmes. The catalyst for this change was the fiscal devolution of wildlife revenues, coupled with the requirement that decisions about the use of these benefits be made in a participatory, transparent and democratic manner at a level of scale in which all adults could become directly involved. This dramatically raised the perceived value of wildlife and the economic empowerment of communities also led to the rapid emergence of political democracy at the local level.

¹³ CAMPFIRE (Communal Areas Management Programme for Indigenous Resources) is Zimbabwe's national CBNRM initiative. While conceived during the liberation war in the mid-1970s, it was first documented in 1984 (for the purpose of obtaining funding which it never got). Five years later, the first districts received full use rights in 1989. Zimbabwe has had a long track record of innovation in sustainable use and community involvement. It initiated game ranching in 1959, giving commercial landholders full use rights in the Parks and Wild Life Act of 1975. Rural communities first enjoyed benefits in 1961 from the sale of thatching grass from the Matopos National Park. In 1968, people in the Sebungwe region were promised cash from wildlife by the Native Department. In 1971, the Wildlife Department issued its first policy statement on benefiting local people.

ADMADE were. It was also the only non-USAID funded CBNRM programme in the region, leaving it rather isolated. While the credit for developing the enlightened principles for community based natural resource management fall largely to CAMFPIRE, LIRD P contributes to conceptual development in two ways. First a comparison of its earlier 'paternalistic' phase and the introduction of the new policy of fiscal devolution, clearly validates the failure of the 1st generation programmes and the potential of the later ones built on devolution. Second, LIRD P's new policy mirrored the CBNRM principles, so the success of the programme lends credence to the efficacy of these principles. An important contribution of LIRD P was to develop or refine several tools to operationalise these CBNRM principles. It has provided important and tangible evidence that lower organisational levels such as VAGs work considerably better than higher levels like the ADC. By implication, this emphasises the importance of transparent and widespread participation. LIRD P has also provided quantitative indicators that CBNRM programmes work. In support this claim, we have already provided evidence in the form of data on financial management and accountability, the implementation of projects, and the emergence of active wildlife management. While the project has clearly demonstrated the impact of revenue distribution on social transformation and organisation, and shows that this leads to active wildlife management, there is not yet sufficient evidence to 'prove' that communities can conserve wildlife. It can be demonstrated that wildlife populations are generally stable, and there is anecdotal evidence that poaching levels are dropping as a consequence of social pressures but, as yet, wildlife populations are not recovering to carrying capacity. The fact that there is less wildlife in the Lupande GMA than in the SLNP is not the fault of local communities, because government has placed many impediments on their ability to manage it. Most notable is their lack of rights to market this resource or to form productive and close commercial relationships with the private sector. NPWS retained this privilege, though the new Zambia Wildlife Authority Act may allow progress towards devolving these rights to communities.

(a) Revenue distribution

There has been opposition to revenue distribution, mostly from positions that stand to lose dominance if communities become more self-sufficient and assertive. The project is often been called upon to justify this policy, which has constantly been attacked as being wasteful. Fiscal devolution is at the heart of the progress documented above. It is the mechanism for the economic empowerment of grassroots communities. Given that the benefits are so obvious and that it is so clearly the key to success, it would appear to be hardly necessary to defend it. Revenue distribution is highly beneficial except to those officials that subjugate communities. It provides an entry point for addressing the fundamental issues of governance, institutional development and rural organisation. In terms of natural resource economics, it is a crucial step towards proprietorship and for 'getting prices right'. Figure S.1 illustrates how it adds value to the wildlife resource by removing market and policy distortions. From the perspective of a rural developer interested in building schools and clinics, it may seem wasteful because about 40% of revenues are claimed as household benefits and not available for projects. However, the evidence proves otherwise. By capturing the energy, participation and proprietary interest of communities, and by invoking accountable and transparent management, a lot more projects actually get implemented. People mould bricks, carry sand, and donate their labour and little money is unaccounted for. Thus 150 projects were implemented after 1996, compared to about ten in the previous seven years (although this figure is difficult to validate because there are no records). Community interviews also suggest that the more centralised system had serious inefficiencies. The wrong projects were selected; they generally took far longer than they

By 1986-7, the Sebungwe land use plan incorporated these principles. In 1981, the WINDFALL (Wildlife Industry's New Development for ALL) programme was the first to distribute cash from wildlife management to Councils for approved projects in communal areas. In 1982, communities in the Mahenje area received cash from a hunting operator via the government. In 1982 an amendment of the Parks and Wildlife Act gave communal people the rights to all revenues from wildlife management in communal areas, which, as noted, were first given in 1989. The parallels with LIRD P are interesting. In broad terms, Phase 2 of LIRD P can be equated with WINDFALL whereby government managed wildlife and built projects with wildlife revenues on behalf of the people. Phases 3 and 4 conform with CAMFPIRE, with the true devolution of use rights and responsibility.

do now to implement. There was a lot of suspicion about finances and missing pockets of cement, as well as concern about wasting resources on such things as unnecessary overheads, vehicle visits, and allowances.

Finally, revenue distribution is much better suited to the conservation objective of the project. It demonstrates a clear linkage between wildlife and benefit, and converts wildlife into a productive resource 'owned' and managed by the community. Evidence from 1st generation programmes, including WINDFALL and the early stages of LIRD, suggests that people did not link wildlife with the few projects built so that the impact on attitudes was negligible. Attitudes only improved after revenue was distributed, when people received tangible benefits and the rights to use these benefits according to their own priorities. These are the tangible manifestations of proprietorship, with rights and choice being intangible but critical components. Again, the evidence summarised in Figure S.1 supports this argument.

Revenue distribution, and the emphasis on promoting village-based democratic institutions, is in line with current international thinking on CBNRM. The model now adopted follows principles developed in southern Africa for CBNRM. Some people have claimed that the CAMPFIRE model has merely been imported to Luangwa. Indeed, the principles have been shown to be widely applicable, but there are some important operational differences. First, the LIRD community programme is facilitated by the wildlife department (NPWS, and now ZAWA), is closely linked to a major national park and does not directly involve the District Council. Second, finances and decision-making power have been devolved to an even lower level with a much higher proportion (80%) of wildlife revenues reaching the communities, which is a significant improvement on CAMPFIRE. Third, communities are not able to sell hunting rights themselves or to control safari operators, which is a serious disadvantage. And fourth, the programme only partially follows the concept of 'producer community', which is so important in CAMPFIRE.

Time will show if the new democratic institutions can be successfully combined with the strong traditional (feudal) system of rule through the Chiefs. The disputes between 1997 and 1999 over distribution of wildlife revenue to VAGs and tense relationships between chiefs and their people illustrate just how sensitive an issue this is.

It was only in the latter stages of the project that it became possible to introduce these new institutional arrangements and revenue-sharing systems as the concepts of CBNRM have become generally accepted. In the early years of LIRD, when the project was pioneering the approach, it was not possible. The earlier systems were not ideal, but were arguably a necessary part of a learning curve, which had to be experienced. It is to the great credit of LIRD, government and NORAD that the project has been allowed to experiment, learn and modify its approach as it has progressed. In this way, it has contributed enormously to the evolution of CBNRM approaches.

(b) Evaluations

Various evaluation reports provided warranted criticism that helped to guide the community programme to a major re-orientation in Phase 3. Earlier evaluations appeared unqualified to assess a community programme, and comments were largely restricted to the undemocratic nature of the Local Leaders Committee. There was certainly no analysis of the efficacy of the 40% revenue in building projects, improving attitudes or contributing to rural development. At this time, community approaches were unfamiliar to consultants and governments, and some criticism demonstrated a weak understanding of local realities and the difficulties of promoting participatory development. The project also lacked the experience to make the major shift to devolved governance. The change was catalysed by the 1993 Review, which was highly critical of the community approach, and set out the criteria for revamping community programme. Implementation began with the recruitment of a Technical Assistant qualified in community development and the related changes in policy in April 1996.

(c) Administrative and traditional structures, and the role of Chiefs

The Local Leaders Sub-Committee (LLSC) was established at the insistence of President Kaunda in Phase 2. But it provided for no inclusion of non-elites in decision-making processes. Its stranglehold on the community programme was strongly criticised by project evaluations. There is no doubt that the new democratic Village Action Groups (VAGs) are a considerably superior institutional arrangement. However, the resistance to this new, improved approach owes much to problems set in motion earlier through partial decentralisation of decision-making power in rural areas to Chiefs (effectively, a traditional form of district government)¹⁴. The Lupande Chiefs have proved resistant and uncooperative largely because the changes represent a wresting from them of power and access to revenues and benefits. They argue that this undermines their traditional roles and that this could lead to instability in their communities. There were also difficulties with the Chiefs during the Bridging phase (1993-94) when they walked out of meetings and demanded that LIRD P provide them with vehicles. The present challenge is to find some balance between traditional decision-making through chiefs and participatory decision-making through democratically elected village institutions.

Over the past decade, there has been considerable evolution in thinking about how local communities participate in resource management decision-making. The days of 'consultation' and taking community views into account (in the mid-1980s) gave way to a new paradigm of 'participation' and, more latterly, of devolution and control with full stakeholder ownership of resources and decision-making processes. The evolution of LIRD P's community programme mirrors the evolution in thinking and accepted practice, and has been one of the pioneers of such change. There was awareness within LIRD P management in Phases 1 and 2 of the need for greater stakeholder empowerment, but the project had an enormous struggle to put in place those structures that emerged. There was no political will or consensus then to go beyond this. What is regarded as normal, desirable or acceptable today was not possible then.

5.4 *Managing South Luangwa National Park and Wildlife*

Following intensive discussions in 1985-86, the Steering Committee resolved that the SLNP would be included in the project area and NPWS staff working in the area would come under LIRD P control. This decision generated deep resentment within NPWS and led to persistent tensions between LIRD P and NPWS.

(a) Law enforcement

The law enforcement efforts of LIRD P have been praised consistently and claimed as a major success of the project - reducing poaching by as much as 90%. Indeed, LIRD P's law enforcement programme has been described as better than any similar efforts anywhere in Africa (Scanteam, 1993). Without the launch of LIRD P when commercial poaching was at a peak, there is little doubt that the elephant population in the area would have been reduced to very low numbers. They had declined from 35,000 in 1973 to 5,000 when LIRD P was initiated in 1988. Expenditure of US \$ 11 per km² per year on the 22 scouts of the Save the Rhino Trust (SRT) between 1979 and 1986 reduced poaching, but could not control it. An average six elephants were killed by hunters daily but, after the withdrawal of this programme, losses doubled and exceeded ten daily. LIRD P brought poaching under control by employing some 200 scouts, spending US \$37/km² on 22,000 patrol days, and managing this with careful monitoring. An average of 19 elephants were poached each year between 1988 and 1995, not many more than were shot on crop control. This has important implications for the international

¹⁴ Partial decentralisation merely sets up an administration at a lower, usually district, level. It has few of the benefits of true devolution such as improved participation and transparency, while it simultaneously loses many of the strengths of a disciplined and professional organisation. How, for instance, could Chiefs be expected to administer the District? Once the process of development through devolution of decision-making power has been started, it must continue. Partial devolution is not a good idea.

approach to elephant conservation. In South Luangwa, poaching was brought under control two years before the ivory ban, but it continued at a high rates in areas that were not protected. In short, we have no option but to spend money to protect elephants.

Jachmann (1998) argues that the main reasons for the success of LIRDP in the 1988-1994 period were:

- The allocation of sufficient resources for scouts and investigations;
- An incentive system (bonus payments to informers, carriers and scouts for positive law-enforcement returns, e.g. arrests and confiscations of firearms and trophies, and information leading to the same);
- The use of monitoring.

(b) Park planning

NORAD invested significantly in park planning in 1995. In 1998, the European Union funded the preparation of a second plan as part of a wider programme. Both plans followed a conventional bio-centric manner. Despite many months of work and hundreds of thousands of dollars expenditure, neither plan could be implemented. In parallel, LIRDP staff used a participatory process to develop a common vision that culminated in annual work plans and budgets, and in a project document for Phase 4. In contrast to the expensive park plans, these plans are implemented almost to the letter. The primary difference is that the LIRDP plans link objectives to activities and budgets, set milestones for progress, and are developed in a participatory manner by project managers. While based on a common vision developed over several years and through a number of meetings, they take only ten days each year to develop and manage. They also use the logical framework approach to structure objectives. The success of this business-style method of planning has implications for park planners. Many conservation plans are internally inconsistent, for example, they usually seek to maintain untouched wilderness areas without the tourism-base to fund them, or more animals and healthy vegetation. The discipline of quantifying indicators for all objectives inherent in the logical framework approach forced the planning process within LIRDP to deal with these inconsistencies. It also led to philosophical debate and the clarification of trade-offs, something that planners often avoid.

5.5 Project Financing and Management: lessons for development aid and wildlife departments

(a) Levels of donor funding

Criticism has been levelled at the high level of donor funding afforded to LIRDP. As originally conceived, investment in basic infrastructure (such as roads), services (such as agricultural extension, credit and marketing) and research was a central part of the logic of LIRDP. Without substantial 'pump priming' investment, it was argued, development in the Luangwa Valley would remain difficult and disadvantaged in relation to other areas. But, in Phase 2, NORAD provided only about half of the budget required to fully implement all planned activities, and it proved impossible to invest in infrastructure to anything like the extent needed. Today, the primary constraint to development in the area and to boosting tourism in the SLNP remains the lack of infrastructure (particularly roads). In retrospect, it appears that funding in the early phases disproportionately favoured recurrent expenditure at the expense of investment.

Although the project's initial level of funding in Phase 2 was much lower than requested, even this could not be absorbed properly. Bad habits developed (e.g. overstaffing) and there was no accountability for performance. Annual expenditure exceeded US \$2m in Phase 2, was between \$1.5 and \$1.8m in Phase 3, and was cut to \$1.3m in Phase 4. These cuts reflect the revised project goals. In the early phases, the project made little progress towards achieving its stated aim of financial self-sufficiency and in reaching the levels of economic growth forecast in project plans. The degree of

self-sufficiency improved from 4% in 1992 to 19% in 1996. Only from 1998 did LIRD P take cost cutting seriously. The reduction in annual expenditure to US 1.3m in Phase 3 plus some improvement in tourism meant that the project was 39% self-sufficient by 1999. This level of expenditure (the so-called “Million Dollar” programme) is probably the optimum level if the park is to be maintained (it requires an annual investment of US \$140 per sq km). Further improvements in self-sufficiency must then come from an expanded income base. It is estimated conservatively that, by the end of Phase 4, the project will be 62% self-sufficient and will then only require an annual subsidy from NORAD of US \$350,000. Progress would have been much more rapid but for the poor commercial policies and delays within NPWS in the period from 1996 to 2000.

(b) Performance management

It is particularly noteworthy that the reduction in project income led to more, not less, work being done. Credit for this efficiency must be given to the introduction of performance management. Finances are now devolved to the project sections, each of which is required to report quarterly according to a set of quantitative milestones. Previously all budgets were centralised, some sections spent the budgets much more slowly than others, and expected outputs were not made clear. The new system has resulted in a noticeable improvement in management culture. In 1997, Goran Johannsson (outgoing Deputy Director for Administration) lamented that “nobody ever even thought of finances” but, by 1999, staff were talking regularly of targets and budgets.

(c) Tourism

Tourist income trebled from US \$133,811 in 1993 to \$453,419 in 1998, with the number of foreign guests increasing from 3,000 to 10,000 over the same period. Local visitors declined from 5,000 to 3,000 with the opening of new parks closer to Lusaka, and as a consequence of a deterioration in the main road from Lusaka to Chipata, which increased the journey time to the Luangwa Valley from seven to ten hours. The park earned approximately \$20 for each foreign guest in 1994 and \$46 in 1998, reflecting a steady increase in fees. Much of this trebling of income can be attributed to a determination to improve the performance of lodge operations. In 1996, a few excellent operators provided the majority of the income while many sites were tied up by non-performing businesses. The average occupancy rate for the 350 beds in camps and lodges in the Luangwa Valley was less than 20% in 1996, and more than half had occupancies around 10%. Improvements to tourism concession agreements, the removal of poor performers and various other measures led to average occupancy rising to 40% in 1999. The intention is to increase the number of beds to 750 by expanding into the southern half of the park, and to increase the annual income from the average bed from about \$800 to \$1,600 (incomes currently range from \$300 to \$2,000 depending on the operator). This will generate over \$1m but requires major investment in roads.

(d) Road improvements

Road access to the Luangwa Valley and road communications within the area are critical to development and conservation. Early LIRD P plans therefore placed great emphasis on developing, improving and maintaining roads. However, due to a much lower NORAD financial contribution than requested for Phase 2, the road building programme had to be severely cut back. Nevertheless LIRD P achieved some success in Phase 2 with its road building and maintenance programme and this aspect of the project can be seen as a considerable success. Without the project, none of the 60 km of new all-weather road in the Lupande GMA would now exist and many communities would be completely cut off for several months. There has been no analysis of the efficiency of the road building programme. It may have started off reasonably well, but later reviews suggested that no analysis was necessary because the disorganised state of the project’s workshop yard was evidence enough of poor performance. The early phases of the project saw large expenditure on heavy equipment, yet methods of road construction were labour-based.

In Phase 3, formal responsibility for maintaining classified roads in Lupande GMA reverted to the Provincial Roads Engineer. But, in practice, the provincial Roads Department was not able to function effectively and so LIRDPA continued to maintain some roads up to 1998. By default, LIRDPA has been the only effective development authority operating in the Lupande GMA for a number of years.

Since 1998 when performance management was introduced, the road team has been slimmed considerably. It performs very well with both seasonal grading and new construction being done effectively. Despite budget cuts and reduced expenditure, the project has been able to build roads in and around the park for the first time in several years, underscoring its improved efficiency.

Phase 4 plans major investment in road infrastructure in the SLNP to facilitate tourism growth and park management. It contracted consultants to plan and evaluate the road network. Although the contractor won through a fair tender process, the quality of work was poor and the bare minimum specified in the terms of reference was provided. As a result, it proved necessary for the contractor to be constantly challenged and corrected by project staff even with though they lacked professional engineering skills. This experience exemplifies a common situation in Zambia, as in other countries in the region, in which firms win donor-funded contracts in the expectation that the client will not be able to assess the competence of the job performed. It is also indicative of an economy and institutional environment where contracts are difficult to enforce. North (1990) postulates that the high transaction costs of purchasing services in such economies prevent exchange and therefore specialisation and, in doing so, are the primary reason why some developing economies never grow.

(e) Project headquarters

The project headquarters were initially sited at Chipata, with the intention to relocate them to the Luangwa Valley when funds became available to construct offices and accommodation. Thus began a ten-year saga. The initial proposals to build the project headquarters at near to Mambwe District Council Offices was expensive and never funded. It was only in April 1996 that NORAD finally agreed to the principle of funding a new project HQ, this time at Mfuwe to reflect the change in project goals. It then took two years to reach formal agreement to advance the necessary funding for construction. The project spent a year undertaking the necessary physical planning, and especially re-planning its own organisational structure which set the parameters for the headquarters. A year was lost when, in late 1997, NPWS instructed LIRDPA to wait for the completion of a management plan for SLNP – it has still to materialise. A further year was spent wrangling over the tender process, with the first award going to a patently unsuitable firm. Construction finally commenced in mid 1999. However, at the time of writing, the contractor is as many months from completion as the job should have taken in the first place. This experience mirrors that of the project's experience in road construction and maintenance. Both clearly illustrate the high transactional costs of doing business in Zambia. These difficulties are exacerbated by problems in navigating the tendering process.

The movement of the HQ to Mfuwe will be undertaken in three stages: first, new offices and houses for senior staff; secondly, houses for junior staff and scouts at Mfuwe; thirdly, barracks for scouts at sector headquarters in and around the park. The management of the project from two centres, Chipata and Mfuwe, has been expensive in travel time and vehicle wear and tear. Poor road conditions have sometimes meant a seven-hour round trip for meetings. However, the major cost has been the difficulties of communication and team-building - decisions have often been delayed and have sometimes been contradictory.

(f) Commercial ventures

During Phase 2, LIRDPA established several companies: Malambo Milling; Malambo Safaris and Trails and Malambo Transport. All appear to have recorded losses and were closed down and sold during Phase 3, although the absence of clear analyses are an indictment in themselves. However, project reports do suggest that the milling operation contributed significantly to food security, and that the transport company did provide an important social service. Cutting out these two ventures was

reported to have caused problems in the local economy for several years. This was a national phenomenon. Kaunda's command economy had killed the private sector, and it took several years for the gap in services to be filled once government stopped providing them.

(g) A rough cost: benefit analysis of LIRD

In purely financial terms the project is difficult to justify. An investment of US \$25m by NORAD has elicited an annual income from tourism and hunting of \$750,000 (3%) ten years later. Returns could have been double or triple this had the same funds been deposited in a bank. As mentioned above, had this money been put in a trust, the park's financial future would have been ensured.

Nonetheless, NORAD's investment certainly led to the SLNP and the area's elephants being saved, and this has kept open options for developing a US \$30m industry and securing 2,000 jobs in the Valley. Achieving this has been expensive. The central reasons are the political nature of the project as exemplified by the conflicts that have ensued (particularly those involving the Chiefs), the costs of dealing with the NPWS, and the transaction costs of doing business in the small and unsophisticated Zambian economy. Internally, too, there have been inefficiencies. The inability to absorb large amounts of donor funding led to many inefficient habits and waste. On a structural level, it is difficult to understand how the project went five years without audited accounts, and why the balance between recurrent expenditure and investment was never seriously questioned, especially in the light of the initial objectives of the project.

Looked at from an investment point of view, several aspects of the project can be criticised. First, the initial planning was not sufficiently rigorous, and here we refer to its formative years, not specifically to the original proposals and concepts. It did not consider important aspects such as sustaining the provision of services. It did not provide an adequate analysis of costs, and the benefits to be derived from them, and was generally weak at prioritising. It was especially deficient in business planning, doing little to address the growth of tourism that was supposed to fund the project and the region's development. Second, criticism must be made of the operational inefficiencies and financial problems that were allowed to fester, and of the related failure to develop management systems and middle managers. Third, a serious question is why the donor and those individuals supervising the project either did not understand these fundamental financial and managerial issues, or address them? As a consequence, we suggest that the project was allowed to cost almost twice as much as it needed to, with this laxity entrenching numerous bad habits and inefficiencies. Finally, we note that many of these problems have been resolved and that the project is now quite efficient, though we ask why this was not done sooner. The lessons of LIRD, and especially issues of service provision and sustainability, if taken on board by donors and government officials, would allow a similar project to be established much more quickly and efficiently. The rapid improvement in project management sheds some light on the managerial problems underlying these inefficiencies, as well as some of the practices used to address them.

(h) Role of NORAD

The major donor, NORAD, has played a key and pioneering role. It was willing to support the initiation in 1986 of a new and difficult type of project when others said it was far too ambitious and couldn't be done. It was prepared to allow room for experimentation and, above all, it has stuck with the project through its evolution. On the negative side, NORAD approved disbursements that were largely recurrent expenditure. As a consequence, despite the fact that the period of heavy funding is long past, the project is only now making the major infrastructure investments necessary for sustainability. NORAD was also lenient with weaknesses in planning and management, and even accepted the lack of audited accounts for a period of five years.

In the last three years, and in parallel with the improvements linked to Phase 4, NORAD officials have been particularly non-bureaucratic and supportive. The Ambassador (Jon Lomoy) used his diplomatic grace to support the project at many levels while simultaneously insisting on tough targets,

while the desk officer (the late Gudbrand Stuve) was, unusually, more interested in the project's success than in administrative niceties. This has been an effective foil for the project, which, itself, has improved rapidly. If more projects were run in this way, development aid would undoubtedly be many times more effective. These improvements are epitomised by the project's half-annual review and annual meetings. During the middle-period of the project, tedious and unproductive meetings were dominated by long and uninformed complaints about the project from senior government officials without giving much opportunity for the project to present any facts. This is a typical psychological ploy of those who seek to dominate, yet have little interest in the project's real progress. By engineering these meetings to reflect the project's goals, and with the support of NORAD, these meetings now function as a reasonably effective 'board', looking at both policy and performance.

It is ironic that as the project has become able to absorb and use finance effectively, this source of finance is being phased out. In terms of efficiency, the lesson here is that the project should have started smaller with much narrower aims, and should have been allowed to expand if and when it was able to. But this seldom happens since donors seem largely unable to operate in this way. Political and spending priorities are set by head offices and are seldom responsive to opportunities to make progress on the ground. Had LIRDIP not been backed with a large amount of money, its political survival would have been questionable.

(i) Reviews

LIRDIP has been subjected to a series of formal annual reviews during Phase 2 (1989, 1990, and 1991), a further review in 1993 to assess proposals for Phase 3, and a review in 1998 combined with an assessment of the proposal for Phase 4. The first two project reviews took place within a year of each other and at a time when LIRDIP was still struggling to establish itself and gain the co-operation of other government departments and was beset with organisational problems. They were critical of many aspects of the project and of the management style of senior management - which was seen as defensive and hostile to criticism. In contrast, the third review took place after LIRDIP had been operational for three years and was much more positive, noting considerable progress. However, it also pointed out where improvements were still necessary. The most recent review in 1998 praised the considerable progress made, particularly in CBNRM, and noted that the project has had a major positive impact - not just locally but within Zambia and elsewhere. However, it identified deficiencies in project management and the unlikelihood of objectives being met by the end of Phase 3.

Reviews are a necessary part of development projects, helping to monitor progress and to highlight the need for re-orientation where necessary. But reviews also have their problems. Given their normally short duration and team members' usual unfamiliarity with local conditions and project dynamics, review missions often distort reality and make poor judgements. A more serious criticism is the weak communication that often occurs between reviewers and reviewed, which reduces the probability of management learning from the review and implementing improvements. This was particularly evident in Phase 2, when LIRDIP project management felt the project had been over-reviewed and much effort was taken up in repairing inaccurate findings. Frequent reviews can also be distracting and disruptive for a project. In the later reviews, NORAD also corrected problems where reviewers had a conflict of interest, and where teams were not themselves qualified to assess the project. For instance, the members of the first two review missions had little experience of CBNRM (possible because CBNRM was early in its evolution) and failed to provide useful advice to support their criticism that the institutional structures were not working.

In addition, each review team brings its own views on the way a project should proceed which are not necessarily better than those of the project initiators or management. In the high profile field of wildlife management, there are perhaps more conflicting views than in any other sector. Thus the changing membership of review teams changes the focus of the project. Recently, again, NORAD

has adjusted for this. Having found a reviewer that interacts positively with the project, it has stuck with this team¹⁵.

There is much to be gained if the external analysis of reviewers can be combined with the local knowledge of project managers, who are in touch with day-to-day circumstances but may be overly immersed in the project and blinkered to obvious problems. Recently, with the assistance of NORAD, the project has instituted an annual 'mini-review' in the form of a participatory assessment of progress by some twenty senior staff, facilitated by a rigorous external facilitator. In 1999, this process brought home the need to cut budgets and staff in a way that no external report could ever have done, with the result that the project set about doing these difficult things.

5.6 Major threats

There are still some problems that could derail the project. These included the conflict over the role of the traditional chiefs, although this threat is waning given the now more positive attitude amongst five of the six Kunda Chiefs. There is also some question regarding political acceptance of devolution although this is clearly a superior form of governance with significant net benefits to society. Long-term threats include the weakness of government policies for devolutionary wildlife management. For instance, will ZAWA allow further devolution or introduce a return to centralisation.

There is no written CBNRM policy and the new Zambia Wildlife Authority Act is very brief giving ZAWA the scope to pursue either a centralised or devolved approach. It is quite possible that ZAWA could extract wildlife revenues from the communities to fund itself. The possibility that an under-funded ZAWA will extract hunting revenues from communities is a very serious threat to the progress so far made, as is the reluctance to let communities develop their own commercial partnerships. In a similar vein, an attempt by ZAWA to extract money from SLAMU before it is viable will merely leave it with a long-term liability on its hands. Fortunately, protection against these eventualities has been built into the NORAD-GRZ agreement for Phase 4. This buffers the project and its success against potentially devastating impacts that could arise as a result of the changes following the emergence of ZAWA. Zambia's wildlife industry operates in a highly political environment. This foresight has already saved the project more than once. In the transition from NPWS to ZAWA, someone forgot to include ZAWA in the government budget and several months went by when staff were not paid. ZAWA immediately turned to the project, instructing that all expenditure cease and that its money be surrendered to the new Authority. The project was able to use its NORAD-GRZ agreement to prevent this. Similarly, while all activities in other ZAWA commands ceased, and poaching boomed, SLAMU was able to continue operations. The 2000 revenue distribution also went ahead on schedule, avoiding the delays and uncertainty that can quickly damage community confidence that is hard to re-build.

Thus, ZAWA presents a major threat, as well as an opportunity. If ZAWA reverts to old-fashioned, centralised management, and retains the inefficient and corrupt ways of the former wildlife department, all the good work done by the project will be in vain. However, if ZAWA is able to distance itself from politicians and officialdom to become a professional wildlife organisation, SLAMU will quickly flourish. And because the SLNP is the only functional park in the country, it is likely to make a sizeable contribution to the direction ZAWA takes in park management, management systems in general, commercial development and community programmes.

A more general threat to progress is weak national policy, including the absence of responsible and capable rural institutions, conflicting legislation, the failure of local government, the centralisation of finances (all tax is centralised), and the unresolved roles of traditional and democratic governance. Underlying all these problems is the failure to address land tenure.

¹⁵ Headed by Bjorn Lunoe of Scanteam.

5.7 *Conclusions*

Although financially inefficient, we must conclude that the project has been very worthwhile. It has enabled the conservation of the SLNP and the elephants in the area that were severely threatened by commercial poaching. It has developed management and commercial systems that will allow the park to sustain itself, and that provide a valuable model for protected areas in Africa. Here, an important conclusion is that, provided the external environment becomes more certain and constraints (especially political and bureaucratic ones) are removed, the project can be efficiently and effectively managed and sustained entirely by Zambians. The project has also advanced the cause and understanding of community development and conservation, validating the underlying principles of CBNRM and providing important lessons for how the process of implementing such systems can be managed effectively. As with park management, this has provided Zambia with a cutting-edge example of how things can be done.

Thus the project has succeeded in conserving the wildlife resource and in developing new approaches to conservation in difficult political economic circumstances. If it were to replicate these successes, Zambia could develop a tourism industry to rival that of Zimbabwe and Kenya, simultaneously promoting rural development and conserving wildlife. However, there are real questions over whether these opportunities will be taken. The tortuous and intrigue-filled eight year process of transforming NPWS to ZAWA reflects the underlying tension between economic and social progress on the one hand, and the entrenched interests of a powerful elite and the status quo on the other. Only time, and the interactions between culture, politics, economics and donors, will tell if these symptoms of “state failure” (Nelson, 1990; Harriss, Hunter and Lewis, 1995) will be overcome by the enlightened self-interests of society. The future of LIRDPA thus rests in processes much larger than itself.

CHAPTER ONE

INTRODUCTION

1.1 The Purpose of this review

This review provides a case study of the Luangwa Integrated Resource Development Project (LIRD) in Zambia. It is a contribution to “Evaluating Eden”, an international collaborative research programme (1996-2000), co-ordinated by, IIED, and focusing on community-based wildlife management initiatives all over the world. Evaluating Eden investigates whether and how initiatives have contributed to more effective conservation and environmental management, and to improve social and economic conditions for the communities involved.

In writing this account, we have faced a serious dilemma. On the one hand, we have produced a lengthy story in which not everything can be tied down neatly. This does not seem appropriate to current working environments where time is becoming ever more scarce, and people barely read abstracts let alone long documents of this nature. On the other hand, we are aware that many, if not most, rural development projects do not succeed. Yet LIRD represents one such project that is now making significant progress that we have been able to document in some detail. We judged that to describe its progress in a highly abstracted form would lose the reality of a far more complex and untidy process - one which has seen the eventual success of LIRD require long-term commitment and considerable tenacity.

We were also aware that few such detailed cases are available. Our final judgement, therefore, has been that the highest value we can provide is this detailed and lengthy description of the two decades of this project. Between us, we possessed the advantage of both personal knowledge and good data about the project, especially its early and late years, though we did lack personal involvement in the middle stage when investment was at its heaviest. However, there are ample project reviews covering this period and we have sought comments and views from many of those closely involved.

1.2 The emergence of sustainable use and community wildlife management in south central Africa.

The idea of involving local people in wildlife management and in benefiting from its proper use first emerged in Africa and also in the Luangwa Valley in the 1950's. It was proposed, for example, by Roelf Attwell who was head of the Eastern Command of the Department of Game and Fish at the time. This was before FAO supported a Special Fund Project in the area in the 1960s under the leadership of Thane Riney. In his far-sighted writings, Riney emphasised that the future of wildlife lay in its being economically viable and ecologically sustainable. His report on the status of conservation in Africa in 1960 focused on the linkages between people and conservation (Riney, 1960), and similar ideas were urged in Kenya (e.g. Simon, 1962). But it took more than twenty years for these ideas to take root in Zambia, and longer in the case of Kenya.

The early stages of colonisation, including the explorer period leading up to settlement, allowed the harvesting of wildlife almost at will in what we have now come to define as a ‘frontier economy’. That is, resources were treated as so abundant relative to human needs that access to harvesting them remained effectively open. While appropriate and even efficient in certain circumstances, the fact that these institutional conditions continued even after wildlife became scarce led to the elimination of some species (e.g. bloubok and quagga in South Africa) and massive reductions in others, especially elephant in

southern Africa. The declining wildlife populations so scared an emerging conservation movement that the pendulum swung strongly to a philosophy based on non-use and preservation. Following the London Convention in 1933, many colonies banned the commercial use of wildlife. They also began to declare protected areas in which wildlife would be preserved. If we were to describe what happened as a consequence of the London Convention using today's terminology, we would say that central governments nationalised the wildlife resource and removed it from the commercial market place. Some hunting was allowed, and quotas may have been managed sustainability. However, little cognisance was given to the impact of these laws on economic incentives for conservation until the 1960's, or to their political economic implications until the 1980's. It is only recently that we have come to recognise that the sustainability of wildlife management rests on three legs: ecological sustainability; economic or financial sustainability; and social, political or cultural sustainability.

The impetus for questioning the laws that intended to remove wildlife almost completely from the sphere of human's management began in the late 1950's. While wildlife was conserved inside national parks, these comprised only about ten percent of the land areas of these colonies. The majority of wildlife was still located outside parks and was being rapidly replaced by the cow and the plough. In both east and southern Africa, people such as Thane Riney, Reay Smithers and Ian Parker recognised that wildlife would only survive if it could pay its way.

These far-sighted conservationists began to question the way wildlife was governed. At the centre of their argument was the observation that wildlife was disappearing steadily on rangeland despite all the new laws, and their discomfort that such an apparently well-adapted indigenous resource was disappearing. In most cases the cause was simple neglect. For instance, water points were fenced to aid the control of cattle, or were built in ways that excluded wildlife. In a few cases ranchers actively shot wildlife, leaving the carcasses to rot in the field as they were rendered valueless by the regulations of the time. This led to the call that "wildlife must pay its way" replacing the common knowledge "that you cannot farm in a zoo".

Scientists took up the challenge of investigating whether wildlife could compete with domestic livestock on the marginal rangelands of Africa. Unfortunately, they addressed the wrong issues in a poignant example of the failure of research effort to link with economic realities. Most of these scientists were biologists and veterinarians, so they concentrated on technical assessments of the comparative ability of wildlife to produce meat in grass-dependent animal production systems. Despite much effort, they were unable to detect many differences, which is hardly surprising since both wildlife and livestock essentially convert grass into meat for sale. Any ecological advantages that the wider range of wildlife species (more specifically adapted to their habitats) had over domestic monocultures tended to be overridden by the investment and subsidisation of beef marketing and support systems.

The real differences between livestock monocultures and indigenous multi-species systems only really began to emerge in the 1980's. This had two causes. First, the world price of beef declined by almost fifty percent at the same time as the value of wildlife-based outdoor recreation was improving rapidly. Indeed, much of the switch from domestic livestock to wildlife can be traced to a crossover point in about 1985 when the improving terms of trade for wildlife came to exceed the value of livestock where profits were declining. Second, key institutional channels, especially the devolution of use rights to private landholders, were implemented changes, especially the devolution of use rights to private landholders, were implemented. These allowed the underlying trends in relative value to be explicitly reflected in market prices. Nobody would have detected these changes in the relative prices of livestock and wildlife had the wildlife authorities in southern Africa not recognised the institutional limitations to wildlife-based production systems, allowed landholders to begin to use and profit from them commercially, and begun to place wildlife in the market place.

The real breakthrough towards the sustainable use of wildlife was institutional, and took place largely on large privately-owner ranches. When landholders were given the rights to use and benefit from wildlife, they responded rapidly, increasing their wildlife stocks where it was profitable to do so. This proved so effective that, by 1990, more land was conserved by hunting in southern Africa than by the entire protected area system. At the core of this breakthrough is an understanding of the interaction between property rights and the economic scarcity or abundance of wildlife. Colonial settlement introduced new technology (rifles and wire for snares) and rising human populations. This converted wildlife from an 'abundant' source, where use was limited by the ability and demand to harvest it, into a 'scarce' resource where over-harvesting needed to be controlled by property rights. The first swing of the institutional pendulum in response to these changes was to enact strict new game laws, which nationalised the wildlife resource and, by banning commercial uses, took wildlife out of the market place. The second swing moved the pendulum back to wildlife being a commercial asset. However, this time, it was in circumstances of proprietorship rather than the open-access property regimes that had proved so disastrous for wildlife a few decades previously. These initiatives were the intellectual and practical precursor of the sustainable use movement of modern times.

Interestingly, while the scientists were measuring the relative mean-production ability of wildlife and cattle, the free-market system was doing its research far more effectively. Ranches soon found that the best way to make money from a relatively limited supply of wildlife was through high-fee trophy hunting. Meat was a by-product, but was never really valuable because of the problems related to health inspection and transport of animals that were killed in the bush rather than herded and shipped to abattoirs. It took fully twenty-five years before the first detailed economic research was conducted. In the mid-1980's evidence was developed by Child (1988) which showed that the comparative advantage of wildlife was never in meat production, but rather in the ability of wildlife to support recreation through both hunting and tourism. While researchers experimented with game cropping and focused on meat quality and similar issues, it was farmers - facing the rigours of the market place - who really discovered where the worth of wildlife lay. The real breakthrough can be attributed to those conservationists who modified the institutions that controlled wildlife, giving ranchers the leeway to use wildlife and to discover how best to do so.

Prior to 1960, wildlife was a non-commercial state asset and, being of no value to landholders, declined steadily. But from 1960, the government of Southern Rhodesia (now Zimbabwe) accepted that wildlife would survive only if it benefited landholders and began to grant use rights to ranchers through permits. Ranchers responded positively by conserving and using wildlife. In a co-evolutionary progression, Zimbabwe, Namibia and South Africa gradually strengthened the use rights granted to (predominantly white) ranchers and reduced state-administered controls. They were rewarded with expanding wildlife range and wildlife-based economic activity and, ultimately, a new conservation paradigm.

Conservationists saw the logic of applying the same principles to communal areas, but were often faced with the retrogressive racial policies of the times. Much of the early progress and conceptual development was in Zimbabwe. Zimbabwe's long track record of innovation in community benefits from the sustainable use natural resources began in 1961 with the collection and sale of thatching grass in the Rhodes Matopos National Park by neighbouring communities. In 1968, the Native Department promised cash from wildlife management to people in the Sebungwe region. In 1971, the Wildlife Department issued its first policy statement on benefiting local people, a decade after the principle of sustainable use and landholder benefit was initiated on commercial ranches (in 1959) but before this was enshrined in the Parks and Wild Life Act, 1975. By 1986-7, the Sebungwe land use plan incorporated these principles. In 1981, the WINDFALL (Wildlife Industry's New Development For All) programme was introduced and was the first to distribute cash from wildlife management to Councils for approved projects in communal areas. This can be defined as a first generation community wildlife management project.

This introduces a useful typology of community wildlife programmes. WINDFALL (and the earlier stages of LIRDPA's initiatives) can be defined as a *first generation community wildlife management project*. While the proceeds from wildlife were returned to the area from where they were generated, they were treated as a communal rather than a private community resource. Thus, the proceeds were used exclusively for social infrastructure (schools, clinics, water-supplies, etc), and the decision-making power lay with district-level officials. Communities seldom participated in, and certainly never owned, the process of managing wildlife benefits. Indeed, they might be considered subjects, in the sense that they were subject to the decision of their leaders. Consequently, the governance, democracy-creating and empowerment benefits of the later generations of community wildlife programmes were not evident.

In what we would now recognise as a "leaning organisation" or process, the lessons of WINDFALL were heeded and the concept began to evolve. In 1982, the conflicts between the people of the Maheyne area in south-east Zimbabwe and the neighbouring Gonarezhou National Park were ameliorated when they were given a quota of two elephants. The revenue generated was paid to the State but was soon returned to the community where it was used to build a school. The reduction in poaching that result from these benefits led to wider acceptance of the principle of giving communities the rights to use their wildlife.

Thus, in 1982, the Parks and Wild Life Act, 1975, was amended to give communities in Zimbabwe the same rights as private landholders through the granting of "appropriate authority" status. At this time, various ecologists working in the Sebungwe region of Zimbabwe recognised the long-term threat of increasing human populations to wildlife, and began to discuss the broader implications of community wildlife management. This gave rise to idea of the Communal Areas Programme for Indigenous Resources (CAMPFIRE) which was written up in two ground-breaking documents by Rowan Martin (1984, 1986). Essentially, Martin and others with whom he worked, developed a theory of conservation based upon property rights and the establishment of pricing mechanisms to better allocate rural resources. Their objective was to delineate small rural communities in such a way that they internalised the costs and benefits of various land uses. They hoped that this would overcome the major unproductive and degrading land use associated with rapidly increasing human populations using natural resources through open-access property regimes. They certainly hope to place a financial value on wildlife, which, until this time, was seen primarily as a major pest to the peasant farmers in communal areas.

It was not until 1989 that two districts – Nyaminyami and Guruve – were granted the legal status of appropriate authority, with a further ten districts following closely on their heels in 1990. A consequence of this growth was the broadening of the intellectual basis of CBNRM, as social scientists and social activists both saw CAMPFIRE as a means of pursuing their interests. Social scientists such as Marshall Murphree recognised that the fiscal empowerment made possible by wildlife could free local communities from having to always be led by the paternalistic hand of governments and donors. He had just experienced a situation where a centrally-planned resettlement programme was dumped on top of an already existing community without cognisance of their lifestyles, culture or resources. Social activists such as Simon Metcalfe, who was working for Save the Children in Nyaminyami, were feeding starving children and could not reconcile the disbursement of food aid with a system that centralised the considerable revenues generated by tourism and safari hunting.

CAMPFIRE soon made rapid conceptual progress. It gave communities the rights to sell their wildlife through councils, and they soon demonstrated the superiority of decentralised and more accountable systems by increasing revenues by more than 50%, and by changing the texture of their relationships with the 'white' hunters. In a similar vein, communities proved remarkably able to set and monitor their own quotas, with limited technical assistance from the WWF programme. However, perhaps the greatest breakthrough came with revenue distribution, which effectively passed fiscal control down to communities and brought with it many benefits. These are discussed in relation to the LIRDPA programme in Chapter 7, but they had the effect of converting wildlife from a communal into a private (community)

resource. We term programmes that fiscally empower grass-roots communities and give them the full choice over the use of benefits **second-generation community wildlife programmes**. The distinction is important because, as we shall see from the evidence of the LIRD project, communities value wildlife much more highly when it is a private (community) resource and the rate of adoption of passive and active wildlife conservation measures increases¹.

Progress was rapid and, with the unusual circumstances of a government agency determined to devolve power to communities within a system that was continually evolving and being monitored (i.e. “adaptive management”), the learning curve was steep. The CAMPFIRE principles developed from this, being essentially a set of management principles based on the devolution of natural resource governance to small, self-developing communities. These principles had much in common with those developed on an evolutionary parallel course in business practice. Companies were struggling with the failure of command-and-control systems of governance to manage increasing complexity and responded by passing authority to lower levels in flatter hierarchies. We mention this because the principles developed within CAMPFIRE were applied in LIRD from 1996, providing an excellent test of their efficacy. CAMPFIRE made much of the intellectual running in the development of CBNRM in southern Africa. It was only in 1996, when the character of Zimbabwe’s wildlife department shifted radically towards recentralisation, that progress slowed. Fortunately, by this time, the concept has been adopted across the region. In particular, Zambia, Botswana and Namibia had taken up the challenge and, in some cases, the baton of leadership in conceptual progress.

Aid agencies, especially USAID, recognised the potential value of these programmes and were determined to support them. Over the ten years, from 1990 to 2000, USAID spent roughly US \$60m supporting CBNRM programmes in Zimbabwe, Botswana, Namibia, Mozambique, Zambia and Malawi under two phases of the Natural Resource Management Programme. This facilitated a network of personalities, which became important in spreading and testing the conceptual basis of CBNRM. They were outraged at what they saw as Western imperialism and arrogance in attempting to dictate the rights and wrongs of using wildlife, and this served to cement them into a strong alliance. Less impressive was the impact of this aid at the grassroots as programmes built urban superstructures to support their CBNRM programmes. This central source of money also provided an environment in which communities could gain from the donors as well as from producing more wildlife and may well have diverted too much attention away from producing wildlife towards soliciting donor funds. Indeed, in the early 1990s, there were suggestions in CAMPFIRE that districts without donor support were progressing more rapidly than those with support. As a result of pressure from Washington-based lobby groups opposed to the sustainable use of wildlife, it seems likely that USAID will very substantially reduce its support. Without a carefully considered phasing out programme, and a plan to rectify the dependency created by the programmes, this could have serious implications for these programmes.

CAMPFIRE showed considerable early promise. It provided evidence that communities were able to respond rapidly and positively to increased levels of authority, which reinforced a philosophical belief in the principle of subsidiarity. The proponents of CAMPFIRE argued that natural resource governance based on small, delineated communities was far more effective than that driven by central bureaucracies. They suggested that the transparency, accountability and equity associated with village-level democracy was a powerful motivating force, and also speculated that effectiveness would be improved by the high level of congruence between institutional and extended-family goals at this level². The LIRD case study

¹ We would speculate that a *third generation community wildlife programme* is where grassroots communities receive the same rights to use their full range of nature resources as private landholders and no longer have to refer to officialdom to sanction most of their management decisions.

² It is often argued that the poor performance of large bureaucracies in Africa results because of a mismatch between the social and family goals of officials on the one hand and what these organisations require of them on the other.

presented in Chapter 7 provides some of the first quantitative evidence of this. However, CAMPFIRE was undermined by two factors. First, it never had the legal basis to devolve authority to community level. Instead, whilst it devolved authority to council level using legal instruments, a gentlemen's agreement with council was necessary to push devolution further forward as there were no legally recognised sub-district structures. Attempts to rectify this had been thwarted at high levels of government. While this worked effectively when wildlife officials were committed to these principles, progress was reversed when the nature of the Wildlife Department changed. The second problem was the structure of USAID disbursements, which reinforced the tendency to centralise at the level of council; officially, all applications for grant funding for community projects had to be submitted through the district councils.

As noted above, Zimbabwe retrogressed. But, in 1996, Namibia implemented legislation which allowed communities to define themselves as conservancies and, through this, to obtain the rights to use wildlife. This effectively allowed use rights to be passed to a lower level. Similarly, the Zambia Wildlife Act 1998, building on regional and local experience, enables the establishment of Community Resource Boards, which would allow sub-district wildlife management. However, this Act only came into effect in November 1999 and has not yet been used (see Appendix 1).

An important aspect of community wildlife programmes in Southern Africa is that governments mandated NGOs to undertake much of the implementation, the exception being Zambia where both LIRDP and ADMADE were government-managed projects. Their greater emphasis on democracy and devolution is therefore not a coincidence. Unlike LIRDP, all of these programmes are national ones focussed on CBNRM; LIRDP was initiated as an area-specific programme with a dual focus on park-based conservation and integrated rural development in the Lupande GMA. What is informative is that most have co-evolved to recognising the importance of building new kinds of institutions for resource governance as a platform for any conservation initiatives, with the present end-point being recognised as secure tenurial rights for villages.

1.3 The Luangwa Integrated Resource Development Programme (LIRDP)

First proposed in 1983, LIRDP was officially initiated in May 1986. It covers an area of some 15,000 sq. km incorporating the South Luangwa National Park and the adjacent Lupande Game Management Area with a human population that has increased from 35,000 to 45,000. The programme marked the start of a new paradigm of wildlife management in Zambia, in which the relationships between local people and wildlife became central. The concept centred on orientating wildlife management in the Luangwa Valley to the needs of local communities, in the hope that a greater sense of ownership would reduce commercial poaching. These ideas arose in response to overwhelming commercial poaching (of elephants and rhino) in the area, and a perception that this would always thrive given the acute poverty that prevailed. Thus the decision was taken to involve local people in decision-making and in setting priorities for local development, and to ensure that financial (and other) benefits from wildlife management accrued to those communities rather than central government.

The ideas behind LIRDP arose at the same time that the CAMPFIRE program was being developed in Zimbabwe. LIRDP was essentially an integrated resource development project, focussing on co-ordinating and supporting the provision of services to a district, in this case Mambwe district which geographically the same as Lupande Game Management Area.

In its initial phases (1988-1995) LIRDP developed a first generation CBNRM programme quite similar to WINDFALL. After re-orientation of the community programme in 1996, LIRDP evolved into a second-generation, bottom-up programme more like CAMPFIRE. Conceptually, LIRDP and CAMPFIRE have many similarities, but the idea for these initiatives emerged independently through convergent thinking.

Like similar programmes in Namibia, Botswana, Zimbabwe and Mozambique, LIRDPA has evolved to emphasise grassroots empowerment and fiscal devolution.

Zambia's national community wildlife management program - the Administrative Management Design (ADMAD) for Game Management Areas - was initiated almost contemporaneously with LIRDPA. It had common origins with LIRDPA in a 1983 workshop on wildlife and resource management held in the Luangwa Valley (see Appendix 2). ADMAD has tended to focus on law-enforcement and monitoring rather than institutional development, and has been hamstrung by the retention of wildlife revenues by central government and NPWS. It has also remained a first-generation project with the chiefs having considerable control over revenues, which are used almost exclusively for social projects located near the chiefs' palaces. The slower progress in natural resource institutions and governance has been partly compensated for by improved law-enforcement, albeit of a more centralised nature since "village scouts" are legally employees of NPWS.

Funded mainly by NORAD, LIRDPA was one of a number of pioneering community wildlife management (CWM) initiatives that emerged in the 1980s. However, it must be said that community wildlife management was stronger in rhetoric than in practice, especially in LIRDPA's early years. In its initial phases, LIRDPA was a mixture of a law-enforcement and district development programme, with community being largely limited to meetings with chiefs to set development priorities for the use of wildlife revenue and the recruitment of scouts from the community.

An important aspect of community wildlife programmes in southern Africa has been a strong partnership between a small and motivated government department that has mandated NGOs to undertake much of the implementation. It is therefore not a coincidence that they have focused on democracy and devolution. By contrast, both of the Zambian programmes (i.e. ADMAD and LIRDPA) were implemented and managed by government agencies.

LIRDPA also differs from CAMPFIRE, LIFE, ADMAD and Botswana-NRMP which are national programmes focused almost entirely on community based natural resource management. Initially, LIRDPA was established as an area-specific integrated resource development project with two directions of implementation: a plethora of investment in agriculture and rural development in the Lupande GMA and park-based conservation in South Luangwa National Park.

The point of interest here is that these programmes have co-evolved. They all recognise the competitive advantage of wildlife in remote rangeland systems, and use this value to drive progress in governance. They have also identified the importance of building devolved institutions for the governance of natural resources, and see appropriate governance systems as an essential platform for sustainable conservation. In general, the people leading these efforts recognise the end point as being secure tenurial rights at the village level. However, this represents a major shift in the structure of power over resources. For a decade, Marshall Murphee has been advocating this truth (Murphee, 1991, 1995) and has warned that many CBNRM projects are not living up to their promise because of what he terms 'aborted devolution' (Murphee 1998). In other works, the principles still apply, and appear to be effective, but political systems are preventing progress in this direction, presumably because they fear the loss of patronage resources (see Gibson, 2000 for a discussion of this in Zambia).

LIRDPA has evolved significantly over the past decade shifting from the catchall IRDP to a core-business around wildlife, enjoying considerable successes as well as a range of difficulties. It has been the subject of intense media attention in Zambia and at the centre of political debate and controversy, and has been acclaimed as well as criticised.

LIRD P has progressed through various operational and funding phases and has been reviewed and evaluated several times. Phases 1 and 2 saw the project attempt to integrate and co-ordinate a wide range of functions and objectives (including, for example, wildlife management, road development, agricultural research and extension, co-operative development, forestry, fisheries, water development). In Phase 3, the project was redesigned to concentrate on community-based natural resource management in the Lupande GMA and park management in the South Luangwa National Park. Responsibility for the other functions managed in Phase 2 was returned to the responsible line ministries (although, in practice, the latter failed to assume these responsibilities). However, LIRD P retained a dual structure acting as both a project and a wildlife agency with loyalties split between the project and NPWS.

The CBNRM programme, while integral to LIRD P, never consumed many resources in terms of capacity-building and institutional development. Initially, the 'Community Liaison Section' used less than 2% of the project's budget. Even after the impetus provided by the devolution of wildlife revenues from 1996, the CBNRM Section never consumed more than 8% of the LIRD P project budget.

In November 1998, NORAD agreed to support a fourth Phase 4. This renamed LIRD P as the South Luangwa Area Management Unit (SLAMU), re-organised it as a unified institution, and attempted to bring project and NPWS staff together under the new, more autonomous Zambia Wildlife Authority which replaced the civil service NPWS. Phase IV also seriously addressed the issue of long-term financial self-sustainability for the first time. It developed a Commercial Section and specific plans to increase tourism revenues to over \$1.3m. Simultaneously, the organisation was simplified and rationalised and measures were agreed to cut operational costs from some \$1.8m to \$1.3m annually.

LIRD P has been a learning experience for those involved including project staff, government institutions, local communities, donors, observers, etc. Many lessons - practical, institutional, political, etc. - have been captured and acted upon internally, assisting the continuous re-shaping of operational modalities, and also of aims and objectives. The experiences of LIRD P therefore offer valuable insights to others involved in or interested in community wildlife management, park management and the planning and implementation of donor-funded projects.

1.4 Scope of the review and some key lessons

This review traces the history of LIRD P from:

- The origins of LIRD P in the early 1980's;
- Through its initiation and development in Phase 1 (1986-1987);
- The first stage of operations and heavy investment in Phase 2 (1987-1992);
- A bridging period in 1993-1994;
- The re-orientation of LIRD P as a wildlife management project in Phase 3 (1995-1998); and
- The restructuring and introduction of performance management and a clear pathway to financial sustainability in Phase 4 (1999-2000).

The review has several important lessons.

- It illustrates the difficulties of integrated resource development programmes, even at a district level, but shows that once grass-roots institutions have been developed, an integrated approach then becomes possible.
- It shows the importance of law enforcement to protect parks.

- It demonstrates that the CBNRM concepts developed in southern Africa can be implemented in a managed way, and that the first successes such as democratisation can come relatively quickly - even in difficult circumstances such as those faced by the project when Chiefs were first empowered and this power had later to be devolved further.
- This conclusion that a well-structured CBNRM programme has a high likelihood of progress is important. It suggests that CBNRM programmes can be repeated consistently since the requisite principles and implementation design have now been developed and tested. Consequently, the limiting factor now becomes the political will to implement devolved community-based wildlife management.
- Finally, the review has lessons for managing projects, the most important of which is that the adoption of sound management principles and practices. In the case of LIRD, this involved a combination of more devolved and participatory decision-making, but within a tight framework of objective-orientated and performance-based management - often using the logical framework approach. The latter approach proved an invaluable tool both for planning and monitoring feedback when used with a high level of participation using visualisation techniques.

1.5 Key Characteristics of The Luangwa Valley

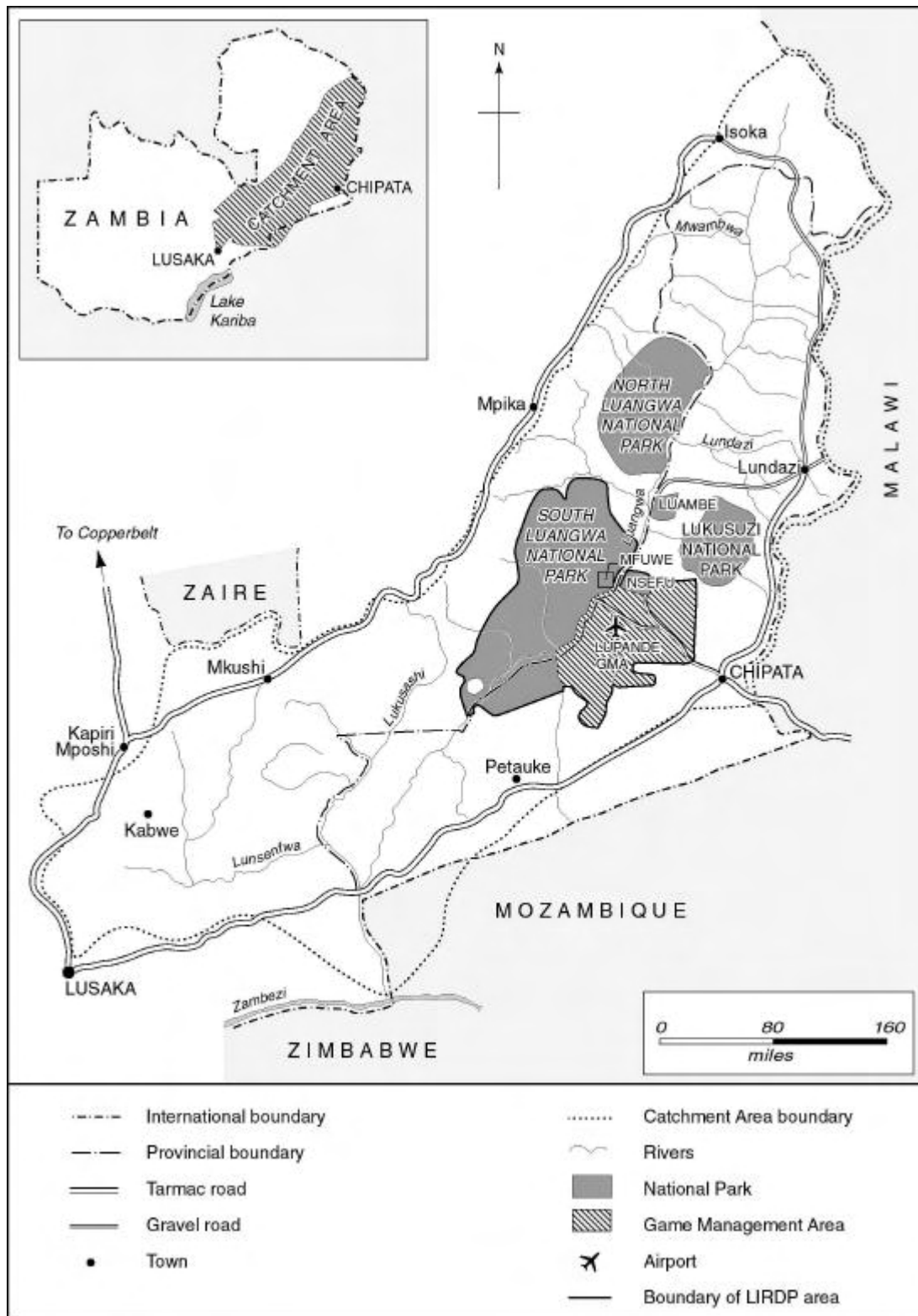
The Luangwa River in eastern Zambia is a tributary of the Zambezi River. Its catchment covers about 140,000 sq. km and represents some 20 per cent of Zambia's land surface. The Luangwa Valley contains five national parks and seven game management areas (GMAs) (Figure 1.1). The area of operations of the Luangwa Integrated Rural Development Project (LIRD) has been within the South Luangwa National Park (SLNP) and adjacent Lupande GMA.

A Game Management Area in Zambia is a buffer zone around a national park in which licensed safari and subsistence hunting is permitted. It is essentially a communal area in which people live by semi-subsistence agriculture, albeit with sufficient wild land and wildlife potential that the wildlife department has seen fit to gazette it for wildlife management. This status gives the wildlife department control over wildlife, but in practice little jurisdiction over land use, the control of which is fragmented among traditional (chief) and several modern authorities. As a consequence of unclear tenurial controls, broad-scale and long-term economic planning is ineffective.

The valley is known internationally for its abundant wildlife, and is amongst the most important and economically valuable in Africa because of its size, low human population and the presence of good populations of large and valuable wildlife such as elephants and buffaloes. Apart from wildlife, the Luangwa Valley has an array of natural resources (Dodds and Patton 1968, FAO 1973), though not much else. Its extensive forests contain hardwoods and provide building materials and fuel wood. Limited areas along the tributaries of the Luangwa River are flanked by fertile arable soils where, in the GMAs, the majority of the valley's inhabitants live.

For a number of reasons the economic potential of the Valley's wildlife has never been realised. In his initial projections for LIRD, Larsen (1987) estimated the potential annual revenues from sustainable safari hunting in the Lupande Game Management Area in the Luangwa Valley at between US \$ 0.1 and 1 million, and the total potential annual revenues from all kinds of wildlife utilisation in the area (i.e. including non-consumptive uses such as game viewing, photography and increased tourism) were estimated at between US \$ 5.7 and 7.5 million. More recently, it has been estimated that the GMA could earn US \$1m for local people from a turnover of US \$3m, while the park could earn US \$1.5-2.5m from a

Figure 1.1: The Luangwa Valley



turnover of US \$15-25m based on some 600 tourism beds. The value of the wildlife industry in neighbouring countries provides confidence in these estimates of potential, and suggests they are conservative. However, achieving them will require sound investment strategies, less bureaucratic attitudes towards business and less cronyism in marketing decisions.

Before LIRD, wildlife was treated much as in the rest of southern and eastern Africa. The revenues deriving from the wildlife resources of the area, such as hunting licence fees and safari earnings, were externalised to central government or businessmen living outside the area. Communities gained little direct benefit from the local wildlife resources. Thus, one of LIRD's major achievements has been to initiate and improve the process of retaining this income in the area, specifically that portion accruing to governments as a use fee.

In spite of its natural resources, large parts of the Luangwa Valley are sparsely inhabited and its people are relatively disadvantaged (Abel and Blaikie 1986, Marks 1984) with hunger being common. This is partly a consequence of the area being generally inhospitable and marginal for agriculture, and partly a failure to use resources effectively, especially wildlife.

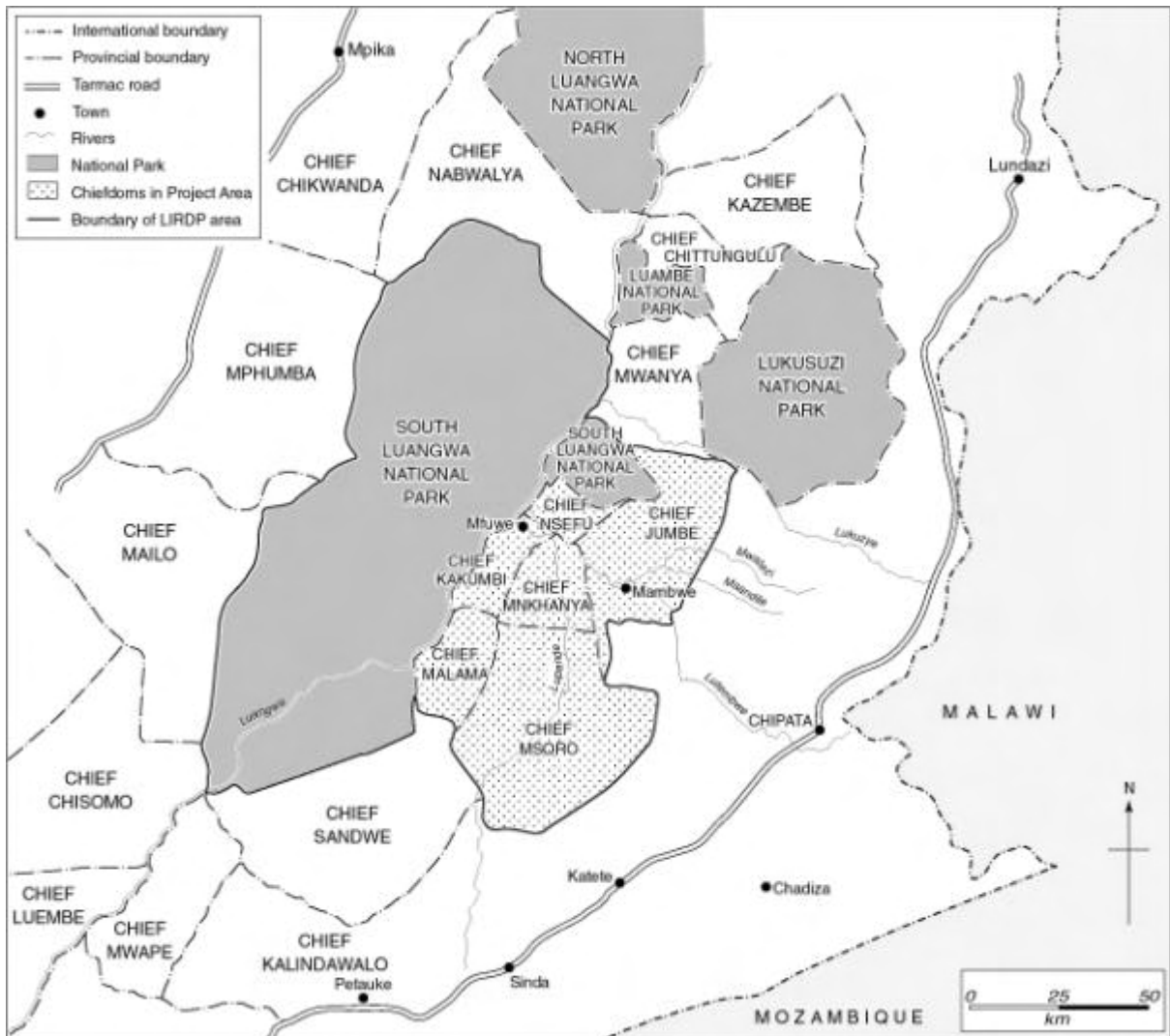
Mopane (*Colophospermum Mopane*) woodlands blanket vast areas of the valley growing on heavy clays and sodic soils, especially in lower lying areas. At higher altitudes scrub and miombo woodlands occur on dissected Karroo sediments and on shallow stony soils on low hills (Astle *et al.* 1969). The river and its alluvial soils provide some of the few fertile conditions and support a diverse magnificent riparian woodlands and ox-bow lagoons. Compared to the adjacent plateau areas, rainfall in the valley is low (rarely exceeding 900 mm per year), temperatures are high and, as a result, agricultural productivity is poor.

With the exception of the all-weather road linking Chipata and Mfuwe, road access to, and within, the valley is poor and mostly seasonal. As a result, the area suffers from a general scarcity of development inputs, extension services, credit and opportunities to market agricultural produce. There is wide evidence of poverty and malnutrition and life entails many hardships. Most people live in traditional mud huts with few sources of income apart from very marginal agriculture. Tsetse flies prevent the keeping of livestock for ploughing and draft purposes, and farm sizes are therefore small. Hunger is common and malnutrition prevalent, especially in the months before the harvest. Mortality from preventable diseases is high, and the AIDS epidemic is now of serious concern. There are relatively few schools and clinics. At one school almost 50 of the 300 children are orphans. Schoolboys greatly outnumber girls who are withdrawn for household chores or early marriages, and schools have few trained teachers and almost no teaching materials: it is common for trees to function as classrooms. Many people suffer from a chronic sense of dependency.

The main occupation, source of revenue and provider of food in the Valley is agriculture, both subsistence and semi-commercial. Subsistence crops such as maize and sorghum are grown on about 70% of the cultivated land, with cotton, sunflower and rice on the rest. Other crops include bananas, cassava, cowpeas, greengram, mangos, pumpkins and sugarcane (Kalyocha 1995).

According to a 1990 census, the population of the Lupande GMA was 31,722, with an annual growth rate of 4% (Kunda, 1995). The current population is probably of the order of 40,000 to 50,000 given that almost 30,000 adults were registered as members of Village Action Groups in 1999. The Lupande GMA comprises six chiefdoms: Jumbe, Kakumbi, Malama, Mnkanya, Msoro and Nsefu (Figure 1.2). Although the matrilineal Kunda ethnic group is predominant in these chiefdoms, smaller groups found in the area include the Bisa, Senga and Chewa.

Figure 1.2: Chiefdoms in the Luangwa Valley



Traditional rulers are the main form of authority given the weakness of modern government organisations, and derive considerable power from their role in allocating land for fields and dwellings. The power of the hereditary Kunda chiefs is reminiscent of feudal Europe. The chiefs acquire their life-long positions through the female line. Traditional checks-and-balances act through *indunas* who the chiefs appoint as advisors. This accountability is not based on elections and, in some cases, it breaks down allowing a chief to become highly autocratic. In other cases, this form of rule can function reasonably well, providing leadership over important matters. At a lower level, villages usually consist of an extended family or group of families, and each has its own headman. This traditional structure is responsible for the allocation of land and for managing the communities' internal affairs.

1.6 A Brief History of Conservation and Development in the Luangwa Valley

There is evidence of stone-age habitation in the Luangwa Valley dating back at least 50,000 years. The present inhabitants, the Kunda, migrated from the Luba area in the Congo, settling in the present Lupande area in the early 19th century under the leadership of the legendary Chief Mambwe. Between the Stone Age and the arrival of the Kundas, the Luangwa Valley hosted a number of different peoples. In addition to the African tribal migrations, including the Ngonis who had fled from Chaka in Zululand, Arab Traders came for ivory and slaves – a mosque still survives to the northeast of the South Luangwa National Park as an important Muslim religious place. Later, Portuguese traders followed, until they (and slave trading) were restricted by the British in the mid 19th century. Dr. David Livingstone crossed the Luangwa River near Chibembe in December 1866 and was deeply touched. He wrote: “I will make this beautiful land better known to men that it may become one of their haunts. It is impossible to describe its luxuriance...” (Boje, 2000).

N.E.Rhodesia came under the administration of the British South Africa (BSA) Company in 1898 under charter from the British government. At the time, the elephant and hippo populations in the area were heavily exploited by the Chikunda from Mozambique and Arabs from Malawi. Hippo became so scarce that, in the 1920s, the BSA Company imposed a ban on hippo hunting until the numbers recovered. The first game reserve was proclaimed by the BSA Company in December 1904 in the present Luamfwa area in order to protect a remnant population of Thornicroft's giraffe (it was de-proclaimed in 1911). Under BSA Company rule, uncontrolled hunting of elephant and other game declined and their numbers began to recover. But by the 1930s, crop raiding by elephants was becoming a problem to subsistence farmers in the Luangwa Valley. The government (by then under direct British rule) established a system of elephant control by contracting several hunters to shoot crop-raiding elephants (for six months each year) and allowing them to keep one tusk - the other going to government. The arrangement was not entirely satisfactory owing to the temptation to shoot elephants with the biggest tusks, irrespective of whether they were raiding gardens. Although hundreds of elephant were shot every year, the population was large and grew rapidly.

In 1931/2, Captain Pitman, a Game Warden from Uganda, was seconded to Northern Rhodesia to undertake a game survey. His report recommended the establishment of various game reserves, an elephant control department with permanent salaried Elephant Control Officers, and legislation covering a wider range of game animals. This led to the proclamation in 1938 of three game reserves in the Luangwa Valley (North and South Luangwa, and Lukusuzi). Villagers within the reserves were moved onto the peripheries.

The legendary conservationist Norman Carr was appointed in 1939 as a Game Ranger working mainly on elephant control. In 1950, after war service, Carr devised a scheme to involve the local people in conservation and to enable them to benefit from the proceeds. He persuaded Senior Chief Nsefu to set aside a portion of his tribal land as a Private Game Reserve. A camp was built on the present Luangwa

Wafwa (Chipela) lagoon. Nicknamed Nsefu camp, it was the first game camp open to the public in Northern Rhodesia. Revenue from the camp was paid to the Kunda Native Authority. The camp was relocated to its present site in 1953. Nsefu camp was such a great success, the Chewa Native Authority in Lundazi District requested their own reserve and camp, and Luambe camp was established in 1954. Both private sanctuaries were given full Game Reserve status for ten years.

In 1951, Carr also submitted proposals for hunting safaris³ to be operated by the then Department of Game, Fisheries and Tsetse Control, with the revenues going to the local 'Native Authorities'. Such a scheme was set up in Lundazi district and four government Game Rangers were seconded to act as professional hunters.

In 1955, the Department formed a Luangwa Valley unit with special responsibility to develop tourist facilities. Big Lagoon, Chilongozi (near Luamfwa) and Lusangazi camps were opened during the period 1956-1959, and several pontoon crossings were established across the Luangwa river to facilitate access to the camps and Reserve. An airstrip in the South Luangwa National Park near Mfuwe was built in 1959/60. Luamfwa Lodge (replacing Chilongozi camp), a new Mfuwe Lodge (replacing the old camp - now used as a National Parks and Wildlife Service rest house), and Nyamaluma school camp were completed in 1965.

Carr retired from the government in 1961 and, with Peter Hankin, established a private safari company, taking over government hunting safaris. While Hankin concentrated on hunting, Carr set up pioneering walking and photographic tours in the Luangwa Valley (Chibembi lodge) and continued to operate Kapani lodge near Mfuwe from 1986 to April 1997 when he passed away.

In 1962, an experimental elephant culling project was started in Luambe Game Reserve and, subsequently, an elephant and buffalo cropping scheme was carried out at Panza in the South Reserve. The first aerial census of elephants, rhino and buffalo in the valley, especially in the South Reserve, was conducted in 1964. It led to a recommendation for cropping to control the numbers of these animals and a subsequent culling project (see Box 1.1).

Box 1.1: The Luangwa Game Cropping Project

A game culling project was established in the Luangwa Valley in 1965 to relieve the grazing and browsing pressure on habitats. It was based on ecological grounds rather than economic necessity. A sophisticated cropping station was built on the east bank of the Luangwa river in Chief Kakumbi's area. Cropping was undertaken between 1965 and 1969. Buffalo and hippo were culled at night using spotlights. Elephant were also culled. Carcasses were carried to the station on tractor-towed trailers, butchered, the meat certified by a Health Inspector and deep frozen deboned meat transported to towns on the line of rail for sale. Fair quantities of meat went to the local people as it was only worth transporting the best cuts to urban centres. As part of the infrastructure for the culling operation, a network of roads was constructed in the valley. However, the scheme was opposed by Peter Scott and John Hanks and the government stopped the culling in 1970.

In an LIRD report, the culling project is described as "disappointing emphasising commercial off-take at the expense of implementing a community-orientated integrated program appropriate to the socio-economic situation in the valley (LIRD, 1987, p 6).

³ Earlier hunting safaris had been conducted for international clients before the First World War in the Bangweulu and Serenje areas in Northern Province.

Following independence in 1964, Zambia underwent rapid development. By 1968, construction of a power line across the valley was completed, bringing electricity from Lusiwashi hydroelectric station to Chipata and the Eastern Province. Conservation issues in the Luangwa Valley became a major concern and led to the Luangwa Valley Conservation and Development Project funded by UNDP-FAO between 1968 and 1973 (see Appendix 4). The project included a comprehensive ecological survey of the valley and a detailed census of elephant numbers, which revealed an elephant population of about 90,000 in the entire Luangwa basin. It was concluded that this over-population was leading to forest destruction and habitat degradation, particularly of mopane woodlands (FAO, 1973). The project also included agricultural and socio-economic components and made a series of recommendations concerning tourism, which gave way to a second phase of tourism development in the valley in the period 1973-75. This saw the building of about 40km of all-weather roads in the South Luangwa National Park, construction of a bridge over the Luangwa River at Mfuwe, construction of several smaller bridges across tributaries allowing for year round access from Mfuwe to Chipata, and the building of the present Mfuwe international airport. Without the substantial infrastructure developed in the mid-1970's, the South Luangwa National Park would have remained inaccessible and development extremely difficult. NPWS policy prohibited the building of new permanent structures in the SLNP, but an exception was made to enable the construction of Chichele Lodge for the President. However, it was decided to convert it to a tourist lodge in 1972. Other camps and lodges were developed by private investors: Tundwe in 1973, Chibembe in 1974, Chinzombo in 1977, and Kapani in 1986, all outside the park.

All game reserves were converted to national parks in 1972. The new South Luangwa National Park (SLNP) was expanded to include Nsefu and the Chifungwe plain to cover an area of 9,050 sq. km. This effectively abolished community control and ownership of land and revenue in these areas, but local people still lay claim to their land and argue for its return though feelings about this do not appear to be strong.

From 1975 there was a rapid escalation of commercial poaching in the Luangwa Valley. The rather paltry efforts of the under-funded NPWS were unable to deter the highly organised poaching by gangs armed with automatic rifles. The Save the Rhino Trust was established in 1980 as an anti-poaching organisation to assist the NPWS, which was unable to cope with the growth in illegal hunting (Box 1.2). SRT patrols revealed horrific levels of slaughter of elephants and rhinos for tusks and horns, and with only 18 scouts could reduce poaching in only a few areas. The activities of SRT were taken over by NPWS in 1987, and this one year gap before LIRD anti-poaching operations commenced in 1988 proved devastating, with the disappearance of rhino and large losses of elephants. The black rhino population in the Luangwa Valley was reduced from perhaps 8000 in the early 1970s to probably less than 100 by the mid 1980s, and they are now extinct in the area. Over the same period, elephant numbers were reduced from 90,000 to under 5,000 (increasing to about 10,000 by 1996 with increased protection). Surveys in 1987 indicates that about nine elephants were being poached daily in South Luangwa National Park alone (Kaweche *et al.*, 1987).

Whilst wildlife in the Luangwa Valley was coming increasingly under threat, there was little incentive for the resident people to resist the presence of commercial poachers or to inform on their activities. Indeed, the primary incentives were to support poaching. Most revenues from wildlife resources in the valley, such as hunting license fees, park entrance fees, and safari earnings, went to central government or businessmen living outside the area. Communities living in the valley gained little direct legal benefit from local wildlife resources. Wildlife was (and for many people still is) seen mainly as meat ('nyama') on the hoof.

Astle (1999) provides a detailed account of the history of wildlife conservation and management in the mid-Luangwa Valley up to about 1990. He traces changes in attitudes to wildlife, controversies over elephant culling, expansion of tourist development and problems of habitat survey and monitoring which

Box 1.2: Economic conditions and their consequence for commercial poaching

The rapid expansion in commercial poaching after 1975 throughout Zambia, and in Luangwa in particular, can be linked to economic circumstances, which reduced the government's ability to fund conservation, and to the liberation wars in the region which supplemented their circumstances by the sale of ivory and rhino horn.

World copper prices were falling whilst mining costs were rising. As a result, foreign exchange earnings fell significantly. At the same time, the country faced large rises in its fuel import bill following sharp increases in world oil prices. Zambia suffered high budget deficits and was forced to borrow heavily from multi-lateral development banks and aid agencies (the country is still massively in debt). International sanctions against Rhodesia and the isolation of South Africa (Zambia's key regional trading partners) during the same period further disrupted the country's economy. These circumstances led to worsening socio-economic conditions. In the face of hardships, people turned to using natural resources unsustainably and to illegal extraction including poaching of wildlife.

General insecurity and warfare in the region worsened the situation. During this period, Zambia was providing a haven to some of the region's liberation movements. There is evidence that guerrillas engaged in poaching as late as 1992. Local people were also able to easily acquire military rifles from freedom fighters, which they subsequently used to kill elephants and rhinos. There is also evidence of clandestine involvement of various military organisations in poaching throughout the region including Angola, Namibia, Zimbabwe and Mozambique.

Given the general decline in public expenditure and funding to line ministries that accompanied the economic decline, NPWS lacked resources to combat the wave of poaching. It remains poorly funded.

the government attempted to solve with assistance from FAO (e.g. Dodds and Patton 1968). He argues that all development schemes outside the South Luangwa National Park (SLNP) have been based on 'special pleading' for wildlife and that economic accountability and rigorous scientific and sociological scrutiny must underpin all conservation initiatives. In relation to SLNP itself, Astle believes that local resources are insufficient to generate required management funds and that the park is unlikely to generate sufficient income in the foreseeable future, and that long-term international investment is required. This conventional wisdom is disputed by the present managers of the park. Provided they can acquire donor capital for road construction and are able to manage the park professionally without excessive bureaucratic and political impediments, they believe that the park can become financially sustainable while still maintaining biodiversity and the quality of the tourism experience. To achieve this through self-funded, relatively autonomous management and cost centres will be a major breakthrough for conservation in Africa. It provides an alternative model to the large, centralised bureaucracies that manage most of Africa's national parks, but without government giving up its overall responsibility

CHAPTER TWO

ORIGINS AND INITIATION OF LIRDP

In the early 1980s, concern about the loss of Luangwa's famous elephants and rhinos was growing. There was also concern about the status of rural development in the area. A group of individuals working in Chipata for the Eastern Province authorities, which later became known as 'Chipata Ad-hoc Group'¹, started to discuss ideas for a project to combine wildlife protection, resource conservation, effective land use planning and development to meet the needs of local people. At the same time, a small-scale research program² on resource management problems initiated by NPWS at Nyamaluma in Lupande GMA also indicated the need for significantly improved planning to secure the long-term sustainable development of the Luangwa Valley.

A workshop had been planned to review the results of the Lupande study with a view to formulating a management strategy for Lupande GMA. Informal discussions between the Chipata group and the coordinator of the Lupande study on the broader issues of conservation and development in the Luangwa catchment led to agreement to use the planned workshop as a vehicle to review the situation and options for action.

2.1 The Lupande Development Workshop

The Lupande Development Workshop was held at Nyamaluma Camp in Lupande GMA on 19-22 September 1983. It was hosted by NPWS and chaired by Gilson Kaweche, Chief Wildlife Research Officer. The workshop was organized by Dale Lewis with help from the Chipata Ad-hoc Group, and additional financial support was provided by AFRICARE and NORAD. The workshop had two main aims:

- to apply quantitative data on resource potentials, land use capabilities, socio-economics of village societies, and cost-effective designs of resource protection for helping solve land use problems in the Lupande Game Management Area; and
- to extend the lessons learned in Lupande to embrace the future requirements of land use management for the entire Luangwa river catchment.

The workshop was attended by over 30 resource specialists, government officials, politicians, businessmen and others. Participants highlighted the fact that the Luangwa Valley received little attention from central or provincial government and that little development assistance was channelled to the area. They endorsed the need for a broad, multi-disciplinary approach to deal with current problems and the future development in the Luangwa Valley. It was also resolved that a policy to protect natural resources and the environment would have to concentrate on "man and his economic and social welfare". The workshop recommended (Dala-Clayton and Lewis, 1984):

¹ This group comprised Barry Dala-Clayton (Provincial Soil Surveyor), Carl Ivar Storoy (Provincial Land Use Planning Officer), Gosta Oscarsson (Provincial Planner) and Steve Atkins (Agricultural Economist).

² Coordinated by Dale Lewis.

- “the establishment of a Luangwa Development Project (LDP) to develop the Luangwa catchment as a model for efficient management and utilization of wildlife and other resources;
- that significant funds should be mobilized from domestic and international resources to establish and support the LDP in its initial stages;
- that the people of the Luangwa Valley GMAs must participate in the development and management of the catchment’s natural resources and benefit from the yields from those resources;
- that extensive research pertaining to the management and development of the Luangwa catchment was required and that a Luangwa Resource Development Institute should be established; and
- that an Interim Planning Group, based within the Provincial Planning Unit in Chipata, should be established to prepare project designs and budgets to support development of the LDP”.

2.2 An Outline Proposal for a Luangwa Development Project

The Interim Planning Group³ met in Chipata during October and November 1983 to prepare an outline proposal for a Luangwa Development Project. NPWS separately developed a small-scale Lupande Development Project⁴ which led later to the development of the ADMADE programme (Administrative Management Design for Game Management Areas). The proposal for the Luangwa Development Project (see Box 2.1) and several supporting documents were presented to the Permanent Secretary of the Ministry of Lands and Natural Resources on 28th November 1983 for consideration by the government. The proposal was passed to the National Commission for Development Planning (NCDP). At the time, Zambia was developing the National Conservation Strategy (NCS) and discussions within NCDP during 1984 led to the proposed Luangwa Development Project being suggested as a pilot project under the evolving NCS. On 17th July 1984, NCDP requested NORAD, which had expressed continued interest in the project, to provide consultants to evaluate the outline proposal and elaborate a detailed and costed project proposal.

2.3 Development of the LIRD P Proposal

The terms of reference for the evaluation highlighted the requirement to “propose a plan for an integrated program for sustained and balanced development of agriculture, forestry, wildlife management, tourism and the local rural population in Luangwa Valley”. The Norwegian consultancy team was led by Dr Thor Larsen, with inputs from Trond Vedeld. Fidelis Lungu of NPWS was appointed as a Zambian

³ Initially, the Interim Planning Group comprised the original Chipata Ad-hoc Group (see footnote 1) and Dale Lewis, coordinator of the Lupande study. The latter later withdrew and played no part in finalising the proposal for the Luangwa Development Project (see footnote 8) and independently worked with NPWS on developing the Lupande Development Project.

⁴ The Lupande Development Project was an extension of the Lupande Research Project based on work around Nyamaluma in Lupande GMA (Kaweche & Lewis, 1985). It had three main components directed towards community involvement: (i) a safari hunting scheme in which hunting rights were put out to tender; (ii) a hippo culling scheme supervised by NPWS staff. (in both cases the revenues were to be used to fund resource management and community development programs in the Nyamaluma area - identified and implemented by the communities themselves); and (iii) a programme in which local community members were recruited and trained as village wildlife scouts as Classified Daily Employee (CDE) of NPWS, in order to strengthen the NPWS law enforcement capability in the area by means. It was hoped that this combination of wildlife-funded Village Scouts and community members motivated by the incentives created by the safari hunting and culling schemes would reduce poaching

Box 2.1: Original Proposal for a Luangwa Development Project

The proposal for a Luangwa Development Project (Dalal-Clayton and Oscarsson, 1984) was skeletal and submitted as a concept or framework for further development. The objective was to improve the standard of living of the people in the area through sustainable use of the full range of available resources (e.g. wildlife, forests, fisheries and water). It envisaged a mix of community-based activities to manage resources and broader land use planning. A major aim was to replace the illegal over-exploitation of wildlife with legal sustainable use, and to ensure the ploughing back of revenues from wildlife and other non-agricultural resources to the area via a revolving fund to finance development activities identified as priorities by local communities. A long-term objective was to develop and implement a regional strategy for land use rationalization and the protection and conservation of wildlife and natural resources in the Luangwa catchment as a whole. The proposal envisaged strengthening government agencies engaged in development work in the catchment and providing the systematic steering of development and conservation programs in the area. It contained the following key elements:

- a broad-based and high-level Steering Committee to provide overall supervision;
- establishment of a Luangwa Resource Development Institute to: plan, implement and coordinate project activities through relevant Zambian organizations; manage the disbursement of project funds; coordinate research on wildlife management (including population monitoring and habitat changes), land utilization, planning procedures, etc.; promote environmental education and awareness within the valley; and provide information. This approach with integrated research, planning and coordination functions was seen as vital to overcome the unfocused, piecemeal nature of development in the area, the lack of any provincial land use or resource management strategy, and the weakness of existing government agencies in the region in terms of skills and capacity;
- a staged approach over several years to gear up to a full-scale program, initially comprising necessary studies to develop proposals and plans for action (and further studies where needed), covering issues such as land use, wildlife management, tourism potential, etc.;
- initial activities in Lupande GMA as a pilot program and model for subsequent expansion through the Luangwa catchment, comprising activities which return benefits from wildlife management and resource use to local communities and meet their socio-economic needs. Amongst suggested activities were a local resource cooperative and sustainable hippo harvesting initiative;
- multi-disciplinary land use and development planning in the catchment - with the integration of environmental, economic and social concerns - covering provincial, district and GMA levels. This would be in support of the provincial- and district -level work of the National Commission for Development Planning, working through existing government agencies and institutional structures but with capacity strengthening where necessary. Such planning would be based on strengthened land use policies, adopting appropriate systems of land classification and land evaluation, addressing issues concerning land tenure and land allocation, etc.; and
- urgent action to strengthen measures to control commercial poaching, particularly of elephants and rhinos - a major attraction for tourists and the potential source of revenues to drive development in the area.

It was argued that the national and global importance of the Luangwa Valley and its important wildlife resources justified an initially high financial investment in wildlife protection and in establishing the project. Commercial poachers were slaughtering considerable numbers of elephants at the time. This represented a severe loss (in terms of ivory value alone) to the Luangwa Valley and its residents. Based on an aerial survey of elephants in 1987, it was estimated that the annual value of poached ivory in the park was between US \$ 16 and 33 million (Kaweche *et al.*, 1987). Such funds invested in development would have had an enormous impact in the remote and relatively ignored Luangwa Valley. Realistically, of course, the Luangwa Valley could not support elephant harvesting at such a rate and extinction in the area would soon have occurred. But the calculation underscored the logic of the argument that serious investment in bringing such destructive poaching under control would allow the elephant population to stabilize and increase. This, in turn, would allow an opportunity to promote a change to the sustainable use of these wildlife resources, including legalized hunting and perhaps culling. The revenues from sustainable, controlled and legalized off-take would still be very considerable. Unfortunately, the subsequent placement of elephants on Appendix 1 of the Convention on Trade in Endangered Species (CITES) eliminated the opportunities to generate such revenues for conservation and community development from international trade in elephant products.

counterpart. The team undertook its work between June and September 1985, and was assisted by members of the Chipata Ad-hoc group.

Towards the end of this period President Kenneth Kaunda came to learn of the work being undertaken and summoned Larsen and Lungu to Mfuwe to explain the proposals in detail. Enthused by the ideas for a community-based Luangwa Integrated Resource Development Project (LIRD), the President immediately sanctioned the idea and announced that he would act as Chairman of the project steering committee⁵. The consultants' preparation report for LIRD (Larsen & Lungu 1985) (see Box 2.2) was approved by the President on 14 September 1985 and then submitted to NCDP and NORAD. The National Conservation Strategy was endorsed by Cabinet in 1985 and LIRD was identified as a crucial element in its implementation (Larsen 1987).

2.4 Initiation of LIRD

Dr Richard Bell, an ecologist, and Fidelis Lungu, a natural resource economist, were recommended by the evaluation consultancy team as candidates for co-Directors of the project. Both were interviewed by the President in December 1985 and appointed (Lungu on secondment from NPWS). State House suggested that the government would commit Kwacha 1 million annually for three years to the project, whilst seeking a substantial foreign exchange component. Bell arrived in mid April 1986 (paid temporarily by WWF International) to join Lungu and temporary office space was made available in NCDP. High-level discussions followed concerning the future and direction of the project. But these were difficult and marked by opposition from some senior officers within NCDP and other ministries and resentment to the direct involvement of State House in developing the project, raising donor funds, and recruiting staff. However, State House and the Cabinet remained resolute in supporting LIRD. At the outset, the only available funds were some unspent NORAD monies remaining from the Larsen consultancy. Intensive discussions continued on the organizational structure and scope of the project. Critical issues included whether the project area would include or exclude the South Luangwa National Park - (it was eventually resolved that it would cover this, the flagship national park in the country) and whether NPWS staff working in the area would come under LIRD control.

It is important to note again that the original proposals for LIRD were developed as a result of the Lupande Development Workshop at Nyamaluma in 1993. This was hosted by NPWS, and the workshop

⁵ Gibson (1995, p169-170), comments that:

"Following the 1983 Lupande Workshop, the European-led group [presumably referring to the Chipata Interim Planning Group] pursued its desire to create an IRDP in the Luangwa Valley. While facing the same set of political institutions as NPWS, this group, however, confronted a different task in setting up their programme. They were not government officials [in fact they were contracted expatriates, but functioning within the government service]. They did not currently run a Zambian public agency. They had no staff. And they controlled no funds. These factors forced these groups [the Chipata Interim Planning Group and NPWS] to choose different tactics in their efforts to gain control over Zambia's wildlife estate, and to contend with the political uncertainty of the Zambian one-party government. Most importantly, it pushed them [again referring to the Chipata Interim Planning Group] into an alliance with President Kaunda".

Gibson (1995, p174) also asserts that "Larsen and Lungu used the influence of the Eastern Province Member of UNIP's Central Committee and the leverage of Larsen's affiliation with NORAD to press for a private audience with Kaunda".

In fact, the Chipata Interim Planning Group never had any dealings with the President. It ceased to exist once its concept proposals had been submitted in late 1983. Nor was this group aware at the time of the substance of the plans being developed by NPWS, which would lead later to ADMADE (see Appendix 2). The former President did meet with Larsen and Lungu on 14 September 1985 (the author was also at the meeting). But this arose because the President was on holiday in the Luangwa Valley at the time and was routinely briefed by the Eastern Province Political Secretary on matters concerning the Province. On this occasion, the briefing also covered the presence of the Larsen-Lungu evaluation team. This captured the President's attention because of his conservation interests and he immediately summoned those involved to brief him.

Box 2.2: Consultants Proposal for LIRDP

The preparation report set out a framework for an experimental pilot project (LIRDP) covering the South Luangwa National Park and adjacent Lupande GMA to develop and test an approach to integrated resource management on an ecosystem basis. The overall aim was to provide for the balanced development of agriculture, forestry, wildlife utilization, tourism and other resources, and to involve local people in the process of determining development priorities.

The key problems facing the Luangwa Valley and proposals for action were discussed under various headings: soils, landforms and land use; vegetation; socio-economics and agricultural systems; wildlife research and management; anti-poaching activities; tourism; information; cooperatives; a women's program; and infrastructure and development.

The report suggested (rather optimistically) that an annual investment of less than US \$ 1 million in research and anti-poaching activities could generate gross revenues (mainly from hunting safaris and tourism) ranging between \$ 5.7 and 7.5 million, and that other investments in integrated resource development could also yield substantial returns. It was argued that these revenues would be sufficient to maintain infrastructure in the area, manage resources and fund development, with the area becoming self-sustaining after some initial years of investments. A five year budget (1986-1990) of US \$ 25.5 million was proposed.

Proposed activities included classical research to generate baseline data (which was mostly lacking) for planning activities and actions, covering: soil surveys and landform mapping as a basis for land classification; studies of soil erosion to facilitate remedial action; studies of current land use; and adaptive on-farm research to improve crop production, accompanied by socio-economic studies amongst valley communities. Key research was proposed on the population numbers, biology and dynamics of important mammalian species to enable hunting quotas and harvesting levels to be set, and to determine management requirements for vulnerable or endangered species of importance to tourism (e.g. elephants and rhinos), vegetation dynamics and habitat degradation.

The re-instatement of safari hunting in Lupande GMA was recommended, with safari jobs to be restricted to local people and meat from kills distributed fairly and locally. All revenues from hunting licenses, trophy, GMA and concession fees and other project investments would be retained in a revolving fund to fund local development activities determined by community representatives.

A comprehensive program to combat commercial poaching was outlined and recommendations made to improve and expand tourism as a source of revenue for local development. A programme for information and environmental education associated with LIRDP was included. The development of a range of community-based activities was envisaged, e.g. local cooperatives to market fruit and vegetable in Chipata and at tourist lodges. The program included a feasibility study for feeder roads in the park and GMA to facilitate development, tourism, wildlife management, agricultural services and marketing, etc., and the development and provision of other facilities, equipment and infrastructure.

The proposed administrative organization for LIRDP placed the project under the jurisdiction of the NCDP. It included a high-level steering committee with broad representation of government ministries, district councils and chiefs, etc., and two Co-Directors (one for administration and finance; the other for research, logistics and technical matters). Effective linkages between LIRDP and all relevant ministries, provincial and district institutions and structures were to be established to facilitate dialogue and cooperation in making policy decisions affecting the project area, with LIRDP providing a coordinating function and exercising management authority over land use, resource management and wildlife resources in the project area. Mechanisms for the close cooperation and participation of local communities in planning and decision-making were to be developed.

Source: Larsen & Lungu (1985)

participants gave the proposals its mandate. At this stage, therefore, it was essentially an NPWS project. However, it was subsequently placed under NCDP and was de-linked from NPWS. This move resulted in intense rivalry between LIRDP and NPWS. Some of this antagonism was carried over even when the project was transferred back to NPWS and the Ministry of Tourism in 1993.

A Norwegian delegation travelled to Zambia in late April 1986, visited Luangwa and met with the President to discuss LIRDP and air some of their concerns about the project's size and the administrative capacity required. Their visit received headline media coverage. LIRDP was formally initiated on 7th

May 1986 by the President in a letter to the Minister of Finance. The project HQ was established in Chipata, Eastern Province. LIRD P was implemented through several phases, which are described in the following chapters and summarised in Box 2.3)

Box 2.3: Summary of LIRD P Phases

- *Phase 1 (1986 - 1987):* establishment of the organizational structure and definition of activities, inputs and work programs.
- *Phase 2 (1987 - 1992):* investment and development phase - 5 year agreement between NORAD and Zambian government, to implement all necessary programs and to attempt to attain sustainability. Annual budget: c.US \$ 2.5 million.
- *Bridging phase (1993-94):*
- *Phase 3 (1995-98):* restructuring and focus on wildlife management as a core function, with reduction in NORAD's annual contribution to about \$ 1 million annually.
- *Phase 4 (1999 - 2000):* On 1st January 1999, LIRD P became the South Luangwa Area Management Unit (SLAMU). This change was in preparation for the proposed transformation of the Department of National Parks and Wildlife Service to the Zambia Wildlife Authority (ZAWA). Envisaged changes for SLAMU in 1999 included:
 - Formation of a commercial section to face the increasing challenge of increasing revenues;
 - Streamlining the organisation and improving management systems. The Area Manager will oversee three main sections: Wildlife and Natural Resources Management, Commercial Services, and Finance and Administration;
 - Reducing staff to reduce costs and increase efficiency;
 - Decentralising management and finances
 - Investment in a new headquarters in Mfuwe to attain a single management centre, and roads to stimulate tourism

In addition to the South Luangwa National Park and Lupande Game Management Area, SLAMU may assume responsibility for Sandwe Game Management Area and all open areas in Chadiza, Chipata, Katete, Petauke and Nyimba. SLAMU headquarters is currently under construction at Mfuwe with additional funding from NORAD.

CHAPTER THREE

PHASES 1 AND 2: PREPARATION AND IMPLEMENTATION

This chapter describes the major investment period of the LIRD P programme following the plans developed in the previous chapter. It coincides with the leadership of Richard Bell and Fidelis Lungu.

3.1 Phase 1 (May 1986 - June 1987): Preparatory Phase

An Advisory Committee at Permanent Secretary level was established to iron out the main features of the project - which remained along the basic design of the consultancy proposals. The committee insisted on establishing an elaborate system of committees to integrate fully the project with existing government and political structures:

“LIRD P should not be regarded as a “special project” with special privileges, conditions and treatment. Though the organization may be novel, it must develop as a main-stream component of the Zambian government, which can function within the government framework, which can sustain its viability in the long term, and which can be replicated more widely if this seems desirable in the future” (LIRD P, 1987, p 17).

The result was a rather large, unworkable hierarchy, the antithesis of modern management systems. The following organisational structure emerged:

- an inter-ministerial Steering Committee chaired by the President. This included members of the Central Committee and Cabinet Ministers responsible for relevant sector and provinces, namely Ministers for Rural Development, the three affected provinces (Central, Eastern, Northern), Agriculture and Water development, Co-operatives, Works and Supply, Tourism, Lands and Agriculture and the Secretary to the Cabinet. This committee was mandated to deal with issues relating to national policy and the constitution, especially the formulation of a revolving fund and the re-allocation of powers from government departments to communities;
- an Advisory Committee chaired by the Permanent Secretary of the National Commission for Development Planning. This was to provide a secretariat for the Steering Committee and giving guidance on technical issues. It consisted of the Permanent Secretaries of affected ministries (9) and provinces (3) involved plus Director NPWS and the Conservator of Forests. It also functioned as the Board of the LIRD P revolving fund;
- Technical Sub-Committees were established for the various sectors affected by LIRD P, namely agriculture, women’s programme, forestry, fisheries, water development, wildlife management, and works and supply. These committees were to develop, approve and monitor the programs of the technical departments in the area (i.e. agriculture, co-operatives, tourism, and national parks and wildlife). These comprised staff of LIRD P and the relevant government departments. They were officially sub-committees of the Advisory Committee.
- Within the area, a committee of local people was established to set development priorities on behalf of the people. This Local Leadership Sub-Committee (LLSC) comprising the six Chiefs (each with one adviser), the four Ward Chairmen, the Member of Parliament and the Senior Administrative Officer of Mambwe sub-District. This was intended as the primary avenue for local participation, and

the intention was to progressively devolve control over revenues and land use decisions to this committee;

- A hierarchy was planned through which to maintain interaction with the grass-roots level, identify needs and priorities within their areas of responsibility and provide avenues of information flow to the LLSC. This comprised a hierarchy of Ward, Branch and Section¹ (of the then ruling United National Independence Party) Development Committees, which were responsible to the LLSC,
- co-ordination of activities on a provincial level by the Provincial Planning Committee; and
- representation of the project on relevant provincial and district councils.

This structure was complex with some duplication. The sub-district structures were never fully developed. Most administrative structures evolve towards having two or three levels that actually function, and this happened in LIRD. The Technical Advisory Committee, and the project itself worked, the LLSC began to function, and many of the other organs atrophied, or used time unproductively.

Work programs and budgets were developed using the above organisational structure. This entailed lengthy discussions with government departments, local officials and leaders, and potential donors. The two largest components covered agriculture and wildlife. Disputes continued with the government departments over the secondment of staff and control of work programs. There was strong resistance to the idea of LIRD acting as a co-ordinating agency with executive control. Some people preferred that it act only to raise funds and provide advice. The resulting plans and budget proposal for Phase II were consolidated in a progress report (LIRD, August 1986). By September 1986, NORAD was still considering its possible support in the longer-term but did provide modest short-term funding to cover running costs and four vehicles. Separate project proposals were developed and submitted to the EC for road development, anti-poaching work, aviation and technical assistance for an amount totalling US \$18 million.

In March 1987 the Ministry of Finance gave notification of the creation of an LIRD Revolving Fund with an initial capital of ZK 1 million. This was a critical factor in the later survival and success of the project. It enabled LIRD to retain wildlife-derived revenues within the project area for use in project activities and for community development projects. Without this facility, LIRD would never have been able to evolve its CBNRM programme into a democratic and devolved initiative, nor, given the experience of NPWS and other Ministries, would it have had any money to operate with, or the opportunity to modernise its management systems.

A list of the activities undertaken in Phase 1 gives some indication of the breadth of the project:

- A small pre-cooperative horticultural scheme to improve incomes and nutritional levels;
- Devising a farming credit package for initiation in Phase 2;
- Limited purchase and transport of maize meal into the area (for sale) following a poor harvest in the project area in 1987;
- Forest inventory survey to assess availability of hardwoods, fuel woods, building materials, etc.
- An aerial survey of elephant and rhino in the area to assess the status of these two key species (funded by WWF-US);
- A program to contain an anthrax outbreak;

¹ A Section being more or less equivalent to a village.

- Lease of safari hunting rights for the Lower Lupande Hunting Block to provide revenue for program management and for community development projects (to be identified by local leaders);
- Initiation of a road upgrading and maintenance program;
- Socio-economic baseline survey of communities in Mambwe sub-district;
- Initiation of environmental education program through local drama groups.

In March 1987, IUCN agreed to assist LIRDPA with some assistance to bring the initial planning to fruition. IUCN provided advice and briefings on donor interests, conducted reviews of proposed work programs and monitoring systems, identified technical expertise and assisted with liaison between the government and donors.

Proposals for Phase 2 were presented to a workshop at Chichele Lodge in June 1987. This was attended by 88 participants including government representatives, politicians, donor agencies, provincial and local administrators, local leaders and others. The proposals were approved, with some revisions. Negotiations were then conducted with various potential donors.

3.2 Phase 2 (July 1987 -end 1992): Investment and development phase

In keeping with the original project concept, Phase 2 aimed to develop and implement a wide range of development and resource management activities in the target area. These “including but were not confined to the following: land use planning, infrastructure improvement, crop diversification, co-operatives development, women’s activities, wildlife conservation and utilization and tourism planning” (LIRDPA 1987) (see Box 3.1). Each of the technical sections of LIRDPA was to be structured so that all

Box 3.1: Expectations of Phase 2

“The primary objective of Phase 2 is to put in place a self-sustaining system in terms of the environment, the use of resources, economic viability and skilled manpower. This will require:

- Strengthening and adjustment of the organizational structure to progressively delegate control of resource-use to local communities, with technical support and safeguards supplied by government agencies and with an emphasis on recycling revenues to local communities. This may require new legislation, perhaps in the form of an authority;
- Development of a land use plan through the organizational mechanisms adopted, to reduce conflict between incompatible land uses such as wildlife management and agriculture. Community participation in this process at all stages is crucial;
- Improvement of infrastructure, particularly roads, which present a constraint to all forms of development and conservation in the area, and hence implementation of the land-use plan;
- Upgrading agricultural research to allow farmers to increase productivity within environmental limitations and land-use plan constraints;
- Improvement or initiation of extension services for agriculture, forestry, fisheries, water development and wildlife management, aimed at promoting community participation in sustainable resource use within the land-use plan framework; a women’s program will ensure participation of this underprivileged sector of the community;

- Coordinating the supply of credit and inputs for, and the marketing of, the full range of resources, promoting the future economic viability of resource use; and
- Creation of a socio-economic environment in which illegal and unsustainable exploitation of resources is unacceptable, so that local communities will participate with upgraded law enforcement agencies in protecting their resources”.

Source: LIRD (1987).

aspects of management were undertaken “as a test of the theory on which they were based, incorporating adequate baseline data, reporting procedures and means of evaluation” (LIRD, 1987, p 141). The main elements proposed for the project are briefly described in Box 3.2 and the budget relating to these proposals is summarised in Table 3.1.

Table 3.1: LIRD: Proposed Phase 2 Budget

Program Element	Budget (US \$)
Road development	13,197,000
Technical assistance	2,294,000
LIRD HQ (construction/running)	1,065,000
Community organization & manpower development	752,000
Tourism task force	261,000
Agricultural research, extension, soil survey, etc.	788,000
Tsetse control	91,000
Women’s program	232,000
Co-operatives extension	74,000
Forestry program	229,000
Fisheries program	75,000
Water development	114,000
Wildlife management and research	3,641,000
Works and supply unit	567,000
Evaluation capability	121,000
<i>TOTAL</i>	<i>23,502,000</i>

In the event, agreement was finally reached between NORAD and Zambia in July 1989 for funding Phase 2. But the amount was only NOK 75 million (c. US \$ 11,250,000 at 1989 rates) - about half of the planned budget. This inevitably led to a restriction of activities. For instance, it proved impossible to plan and implement a comprehensive road system although this lay at the heart of the development agenda. Some roads were developed in the Lupande GMA in Phases 2 and 3, and roads were maintained in both the park and GMA. However, very little was done to build new roads in and around the park for either management or tourism. Twelve years later, the lack of road infrastructure remains the primary constraint to the expansion of tourism and the financial viability of the organisation. The failure to build a project headquarters in the project area is also being addressed in 1999. While capital investment in

Box 3.2: Phase 2: Main Proposed Project Elements

LIRDH HQ: Initially the HQ was to remain at Chipata, the Provincial capital, comprising four units (administration, accounts, research and planning, and aviation). It was intended that HQ would be relocated to Mambwe Sub-District Boma, the main government centre in the project area “when funds are available”. The local leaders preferred this location; they feared that having the HQ at Mfuwe would lead to it being controlled by NPWS. A feasibility study to develop site plans was proposed and undertaken but construction was excessively expensive (over \$12m) and never funded. The relocation of the HQ remained an important goal and, eventually, in 1998 NORAD agreed to provide funding for a headquarters after the Project had undertaken a critical review of its long-term requirements and scaled down both staffing and infrastructure requirements very considerably. In 1999 NORAD provided funding (\$3m) to develop the HQ facilities in the Luangwa Valley, but at Mfuwe rather than Mambwe.

Land and resource use planning: The project was to provide formal co-ordination of land and resource use planning for the area for unreserved land. To produce a land capability map, technical information was to be collected (through surveys where needed) on landscape, soils, water, existing settlement and agriculture, agricultural potential, vegetation, fish, wildlife, pests, etc. Working with relevant official agencies and with community inputs, consensus was to be sought for land use zonation and for planning the development of infrastructure and other facilities (e.g., road system, electric fencing, tsetse-free zones, rural water supplies, tourism developments, etc.). A zonation and management plan for the SLNP was also proposed.

Road development and maintenance: All aspects of the Phase 2 program depended on the improvement of road access to the area. Since 1981, economic constraints had placed severe restrictions on the government’s capacity to build and maintain roads. The result was a progressive deterioration of the network, which affected agricultural production and marketing, the revenue-earning potential of tourism, law enforcement, etc. The project was to undertake a feasibility study to develop plans for road alignments, designs and construction. In the interim, it would maintain the roads in the area. This program was expected to make up at least 50% of total expenditure during Phase 2.

Training and manpower development: A heavy emphasis was put on training and manpower development, covering community members (in specific skills, e.g. bee keeping, vegetable farming), small-scale entrepreneurs (e.g. in business and accounting skills), LIRDH and other government staff. This was to be carried out through short local training seminars and overseas training (for recognised qualifications).

Non government programs: Support (including credit, training, advice and monitoring) was to be extended to cooperatives and other small-scale and community-based resource use organizations and enterprises covering the full range of natural resources including wildlife, forestry and fisheries. A tourism task force was to be established to collate information on, and make recommendations for, the development of the tourist industry in Zambia, with particular reference to the Luangwa Valley. A trial of management procedures for professional safari hunting was to be conducted and evaluated.

Agriculture program: This was to be carried out in collaboration with existing programs. The programme included: (1) soil surveys, land classification, and soil erosion studies (by Stirling University); (2) agricultural research to support a training and visit system, and to provide information on improved crop varieties, farming and livestock production methods, and methods for integrating these into existing farming systems; and (3) support for agricultural extension.

Electric fencing: To overcome the conflicts between wildlife and agriculture, crop damage would be monitored and self-help electric fencing schemes to protect smallholders’ crops from wildlife damage would be tested.

Tsetse control: To control human and bovine trypanosomiasis in the area, a trial was to be carried out with the Veterinary department, for local tsetse eradication using “impregnated” targets or screens.

Women’s program: A program to provide extension services specifically aimed at “improving the nutritional and

health status of women and female-headed households in the project area with the intention of breaking the poverty cycle of this segment of the population". The program aimed to improve women's access to credit facilities, ease daily workloads and increase literacy rates.

Cooperatives: The program was to comprise a study of the strengths and weaknesses of existing cooperative societies, developing recommendations for improvements, identification and evaluation of cooperative ventures for possible support, training of group members, and supervision and monitoring of established cooperatives.

Forestry, fisheries water development: A forestry management and development plan was to be developed. Forestry inventories were planned for forest reserves, proposed concession areas and the rest of Lupande GMA to obtain estimates of standing crops and sustainable yields for forest products, including hardwoods, building materials, fuel wood, etc. Priority areas for LIRD P action were protection and management of forest resources, extension and public relations in forest conservation and management, introduction of community woodlots and a forest nursery, and a rural craft workshop for local carpenters and pitsawyers. The fisheries and water development programs remained to be elaborated.

Wildlife management: This was a central component of Phase 2 and was based on close collaboration/liaison with NPWS (through LIRD P committee structures, and a re-organized NPWS command structure for the area). It proposed to extend approaches initiated by NPWS under the (very local) Lupande Development Project to the whole Lupande GMA and SLNP. A wildlife management policy and programs were to be developed. Two approaches to law enforcement were proposed: strengthening conventional approaches under a unified operational command, with increased scout densities; and involving local communities in the process, with an expanded village scout program. This work was to be supported by establishing an investigations unit. The NPWS education and information unit in the area was to be upgraded and its program reinforced. A combined entrance gate and information centre was to be constructed at the Mfuwe entrance to the SLNP. Capacity in wildlife management extension was to be developed. A Wildlife Research Unit was to be established to evaluate adaptive wildlife management options and undertake priority applied research (through a strengthened NPWS Wildlife Research Unit). Research priorities included: landscape classification, studies of vegetation studies (particularly woodland dynamics), climate, fires and animals (e.g. monitoring the status and off-take potentials of key species).

Works and supplies: An LIRD P unit (as a branch of the Ministry of Works and Supply) was to be established to coordinate the extensive program of construction, installation and maintenance of structures, roads, vehicles and plant, and the procurement and supply of materials, equipment and spares, etc.

Evaluation capability: Given the experimental nature of LIRD P, the intention to build a strong evaluation capability was indicated, to be closely linked to the evaluation functions of existing and co-operating programs.

Source: Compiled from information in LIRD P (1987)

infrastructure was not funded, the investment in wildlife protection ensured the survival of the park. This funding, and the innovation and dedication of staff, implemented a sound law-enforcement programme, which operates to this day. This programme rapidly brought the serious poaching problem under control.

The budget suggests a wide-ranging approach to the Valley's problems, which could alternatively be described as 'comprehensive' or a 'shotgun approach'. The budget shows that the planners who designed phase 2 were aware of the neglect suffered in the project area and the need to cover a wide array of issues. They were also aware of the need for political support from the various government agencies. However, with the benefit of the considerable advances made in project planning since this time, it may also reflect the absence of a methodology to properly analyse and prioritise the 'core problem' and the processes needed to address it. For instance, there is some confusion between what we would now term objectives, purpose, outputs and activities, with all of these occurring in the main proposed project elements (Box

3.2). It is interesting to speculate whether the more disciplined logical framework approach now used by the project for both planning and performance management would have made a difference at the time to the ultimate performance of the project.

All revenues raised by LIRD in the project area, primarily from safari hunting and tourism, were channelled to the revolving fund. Sixty percent of this income was allocated for the management of the program and project operations. Forty percent was earmarked for local development initiatives as prioritised by the Local Leaders Sub-Committee.

The Phase 2 Project Document acknowledged the work already undertaken by the NPWS Lupande Development Project in the area around Nyamaluma in developing a community-based approach to wildlife management (see p vii of this document). However, it signalled its intention to extend this approach, both in area and scope by expanding operations to cover the whole of Lupande GMA and SLNP, and through tourism and capital investment in infrastructure, etc.

“By integrating wildlife resources into the rural economy, LIRD intends to engage them as the engine driving those economies. By emphasising community-based ownership, management and distribution of benefits of the full range of natural resources, LIRD expects to avoid the disruptions to community land-use practices associated with high initial technological investments in wildlife management and privatisation of land and wild resources” (LIRD, 1987, page xii)

While the intentions contained in this quote are laudable it is doubtful whether the potentials and mechanisms for achieving these intentions were ever properly analysed. Moreover, over the next ten years, little concrete was done to provide the institutional or infrastructure framework for this new economic engine. These lost opportunities are to be lamented because the Luangwa Valley certainly has huge potential to support a viable wildlife-based economy.

The strength of commitment given to the project by President Kaunda, and his commitment to the approach it established, is indicated by the following extract from his forward to the Phase 2 program document.

“I look upon this project as a trial of the application of our national policies of decentralization, diversification [see Box 3.3] and humanism within the framework of our National Conservation Strategy. Zambia possesses many remote rural areas with important non-agricultural resources for which this project may provide a model for rural development. I also believe that the approaches being developed may be relevant to rural areas in other parts of Africa. For these reasons the project is accorded high priority in our national development program”.

H.E. President Kenneth Kaunda
Foreword to the Phase 2 Program
LIRD (1987)

These wise intentions were not backed up by sound implementation. Chapters Five and Six describe how, in Phases 3 and 4, the project has gone some way to addressing these intentions of decentralisation and economic growth, though unfortunately at a time when funding for investment is increasingly short. The final chapter makes some comments on the reasons for these problems.

Some observers have criticized the high level of donor funding provided to LIRD, and the diversity and complexity of programs. In launching Phase 2, the high initial investment was justified as a short-term measure - a ‘pump-priming’ necessity - to establish the integrated set of programs seen as necessary to provide for sustainable resource use:

“LIRD is a Zambian Government program which is rated a high priority as witnessed by the large initial GRZ [Government of the Republic of Zambia] contribution to its progress. In the future, GRZ will allocate sufficient manpower and infrastructure to ensure effective management of the project. However, GRZ

expects that, as LIRD P begins earning revenues, demands on the national treasury will be progressively reduced until the area becomes self-supporting.

In the meantime, LIRD P represents an extensive set of programmes which will require outside support in funding and expertise for at least the 5-year period of Phase 2. The total requirement over Phase 2 is estimated at US \$ 25 million, of which US \$ 14 million are budgeted for the development of an all-weather road network” (LIRD P, 1987, P xii).

Box 3.3: LIRD P in Relation to Zambia’s Decentralisation and Diversification Policies

LIRD P was planned to pilot the application of Zambia’s national policies of decentralisation and diversification to the less developed rural areas, particularly those with important non-agricultural resources such as wildlife, forestry and fisheries. In the LIRD P area, these policies were to be applied as follows:

1. Government departments concerned with land and resource use and marketing would co-ordinate their programmes at the level of the LIRD P project area. They would produce and implement a land use program compatible with the particular socio-economic and ecological conditions in the area.
2. The activities of NGOs in the area including aid agencies, research agencies, wildlife utilization companies and the tourist industry, would be co-ordinated with the land-use program at the same level.
3. A mechanism would be developed for ensuring local inputs into decision-making with respect to land and resource use and the use of revenues and other benefits derived from them.
4. Revenues derived from the use of natural resources in the area will be returned to the area and re-invested in the local economy.

It was argued that these applications represented the national policies because:

Decentralization: all government and non-government programs concerning land and resources would be coordinated at the level of the LIRD P project area, local participation in decision-making would be ensured, and locally-derived revenues would be ploughed back into the area; and

Diversification: the full range of resources would be utilized, including wildlife, which was often ignored in conventional development planning.

Source: LIRD P (1987, P 5)

3.3 Phase 2 Reviews

LIRD P was subjected to a series of formal reviews during Phase 2 in 1989, 1990, and 1991, and a further review in 1993 to assess proposals for Phase 3. The first three were organized by IUCN and undertaken by independent teams comprising a mix of Zambian and international experts. The sections below present their main findings. These are presented in some detail as they illustrate key problems and issues during the first few years of LIRD P. Some of these issues inhibited effective implementation of the ambitious integrated resource management program envisaged for the project. They influenced the subsequent changes in structure and emphasis of LIRD P in Phase 3.

3.3.1 *First Review Mission*

Project progress was first assessed by an independent review mission (RM) in September 1989. The RM noted that LIRDPA was an important and innovative experiment in resource management. It reported favourably on many key aspects of the project and the range and scale of accomplishments achieved. For instance, it endorsed the committee structure and commended the establishment of the revolving fund, etc. However, it did not support the proposal for Authority status.

The RM accepted the ambitious programme, and was not surprised by the many of its teething problems, noting that “in a complex, multi-sectoral, yet integrated approach still in its infancy, problems inevitably will arise”. It drew attention to issues of integration that were still to be resolved including land-use choices, project management structures and community governance, encouraging the project to make decisions and trade-offs “between the modes of natural resource use, and the trade-offs necessary to satisfy the aspirations of local people; between the administrative structures of LIRDPA; and between the project and its intended beneficiaries” (IUCN, 1989, p2).

The RM found it difficult to evaluate the project against its broad objectives.

“There is a difference between specific objectives for the project (i.e. measures against which to evaluate the success of LIRDPA as an experiment) and specific objectives for the improvement of the standard of living of people in the project area. The first is in the gift of project management; the second is a value-judgment by the people which will be reflected in how far project activities are sustained after termination of outside funding” (IUCN, 1989, p14).

A key recommendation concerned the need for more clarification and specification of assumptions, hypotheses² and objectives (with quantifiable indicators). Indeed, with hindsight one can speculate that confusion over objectives in both planning and implementation may have been an important reason that good intentions were poorly implemented and not translated into outputs. Project documents at this time contained too many broad-level objectives - what we now classify as “development objectives”, but lacked clear and measurable “purposes” and “outputs” to guide project activities towards these larger goals³.

Given the experimental and innovative nature of the project, the RM recommended enlarging the monitoring and evaluation component to test the hypotheses and assumptions on which this pilot initiative was based. Various suggestions were made for monitoring the conservation of wildlife, soil, forest, fish and water resources, and villagers’ perceptions, as well as for integrating local knowledge and skills into this monitoring.

The review commented favourably on the formation of a Local Leaders Sub-Committee (see Box 3.4) praising its independence and forthright views - “it is to the credit of project management that its views are subordinated to those of the local leaders”. But the RM was also concerned over the difficulties of this committee as a channel of local participation, noting that:

² In criticising what it saw as the absence of a statement of assumptions and hypotheses upon which LIRDPA was based, the RM was also critical of there having been “almost no input from specialists in rural and agricultural development, resource economics, and regional and economic planning”. This was a surprising conclusion since the conceptual basis and design of LIRDPA remained essentially the same as those put forward in the original proposal for the project developed by the Chipata ad hoc group. This comprised a land use planner, regional planner and agricultural economist (see footnote 5), and had the backing and support of a wider group of specialists.

³ This supports SLAMU’s intention to simplify the project and to focus on measurable outputs since “what gets measured gets done”.

“Participation does not commence with local leaders. LIRDPA should be monitoring villagers’ perceptions of the project and their attitudes. [The RM continue with a recommendation that] LIRDPA could best achieve improvement in people’s participation by focusing on the ward level and co-operative development.”

Box 3.4: First Review Mission: Comments on Local Leaders’ Sub-Committee

“The project depends greatly on the local leaders as channels of popular participation. The five chiefs and one senior chieftainship are at the apex of the local traditional authority structure, receiving information about the concerns and problems of their people either directly or through their *indunas* and village headmen. The four ward chairmen are at the apex of the local political structure of the United National Independence Party. Each chairs a Ward Development Committee (WDC) and receives information from lower levels. The WDC is replicated at branch, section and village levels. Although this channel of information flow from lower to higher levels was established nearly a decade ago (Local Administration Act, 1980), many ward, branch, section and village committees are either inactive or are dominated by a few prominent individuals and interest groups. However imperfect these traditional and political structures are, as the main channels for local expressions of views, the project is correct in trying to use them”.

IUCN (1989, p35)

There were clearly difficulties in reconciling the views of these two parallel systems, one autocratic and traditional, and the other supposedly democratic and modern. These two systems were naturally in conflict, and it was only much later in the project that these conflicts were addressed. However, as Rihoy *et al.* (1999) point out, “the process of devolution is usually fraught with conflict”. The following quote by Bell and Lungu (1990) indicates that they were well aware of these challenges. Indeed, this document was conceptually far-sighted. What was disappointing is that this far-sightedness was never actualised in sound institutional development.

“[Noting the disappointing outcome of decentralisation initiatives in Zambia, Lungu and Bell continued] ... it must be recognised that decentralisation is a process that conflicts with the basic law of human nature, that each level of an organisation strives to wrest power and the control of funds away from the levels above it, and strives to resist the devolution of power and the control of funds to the levels below it”.

Both project management and the RM failed to outline a clear strategy for achieving community governance and benefit. The general direction and recommendations were towards increasing devolution and empowerment. However, there were no examples of this anywhere in the region in 1989, and absence of a clear strategy for implementation was understandable. The failure after this was not. With the advent of CAMPFIRE in 1989, the understanding of the operational aspects of CBNRM expanded rapidly in the region. LIRDPA’s lack of progress after this time represented a lost opportunity. LIRDPA was probably as advanced as CAMPFIRE in 1989, but by 1993 was conceptually and operationally far behind. The project would have made faster progress had it networked with other programmes in southern Africa and participated in this learning experience. LIRDPA failed to capitalise on its very strong position to lead the emergence of CBNRM, with the very marked advantage of revolving funds, donor money and a strong mandate to pursue community wildlife management. Unfortunately, the community programme remained a by-product of other initiatives, as the project failed to develop its capacity for institution-building and community wildlife management. LIRDPA did not develop a strong CBNRM programme until the mid-1990s, nor did it have much expertise in institutional development until this time.

The RM noted that a major hypothesis on which LIRD was built was that:

“local communities in the project area will benefit through the utilization of their own natural resources and the retention and further investment of profits. Put another way, do the benefits accrue to the people who protect these natural resources and live locally?”⁴

Following on from this, the RM was critical of the weak understanding and use of economic analysis (particularly cost benefit analysis) in relation to key components of the project. For example, the project preparation report (Larsen & Lungu, 1985) had suggested tenfold revenue returns were possible from wildlife utilization following investments in anti-poaching and wildlife research management. But the RM found these calculations failed to take account of the necessary additional costs of expanded tourist facilities, roads, administration and logistics that would be essential to achieve the revenues. Barbier (1992) also draws attention to the insufficient planning and economic analysis carried out before LIRD implementation. Whilst noting that great efforts had been made to increase the revenue-earning capability of LIRD, the RM concluded that the project could not achieve financial self-sustainability by the end of Phase 2 in 1992, and that additional external financing and cost-reduction would be required. The appointment of a resource/environmental economist was recommended.

Bell and Lungu’s (1990) report to the National Assembly in December 1990 indicated a rapid improvement in gross income, but the lack of detail in this presentation indicated weaknesses in commercial management. For instance, income was not itemised, trends were not explained, net revenues figures were not calculated and, in an economy prone to inflation and devaluation, figures were not calculated in real terms. This report summarised revolving fund earnings (Table 3.2).

Table 3.2 Summary of Income for LIRD Revolving Fund (1986-1990)

Year	Total Earnings (ZK)	60% Project Management (ZK)	40% Community Projects (ZK)
1986	132,500	79,500	53,000
1987	242,175	145,305	96,870
1988	1,012,500	607,500	405,000
1989	2,240,000	1,344,000	896,000
1990	7,500,000	4,500,000	3,000,000

The RM noted that there had been difficulties in securing full co-operation of, and effective contributions by, sector ministries, and that such stresses and strains were to be expected with a new type of ‘integrating’ project such as LIRD. It urged that LIRD did not seek autonomy but should liaise more closely to provide true co-ordination, “however imperfect the work of sector departments might appear to project management”. This suggests that the Project was becoming frustrated with its partners.

Other problems identified included the constraints due to the shortage of good, motivated staff in all sectors, key administrative posts unfilled, and inadequate accounting procedures. The RM highlighted the need for closer co-operation among project management, other agencies and organisations working in the

⁴ This question is being addressed in relation to community wildlife management initiatives around the world by IIED’s “Evaluating Eden” project.

area, and the people they served, urging closer conformity with Chipata District Council and district planning. But it was noted that there was considerable potential for conflict at national levels where recommendations from the Steering Committee had to be acted upon within individual ministries. The RM suggested that LIRDP proceed cautiously in its relations with national and provincial level institutions and emphasise its co-ordinating and supportive role. These conflicts, like those between ADMADE and LIRDP, reflected weak national policy objectives, leadership and management systems. This is discussed in more detail in the final chapter.

The RM found that the project had revitalized wildlife protection in the area, introducing new procedures to correct long-standing abuses (e.g. NPWS staff game meat rations), and had made considerable progress in wildlife management. By 1990, 1,029 poachers had been arrested and 1,401 firearms confiscated and poaching was occurring but at sustainable levels. Lungu and Bell estimated that wildlife products worth US \$500m had been poached from the valley since the mid-1970s.

However, the RM was concerned about the considerable conflicts that persisted between LIRDP and NPWS over operations in the LIRDP area, particularly with regard to the ADMADE program. This occurred despite the intent on the part of LIRDP to work together, as stated in the Phase 2 project document (LIRDP 1987), and strong personal animosities developed. As the RM put it, “both groups feel that the other is trespassing on its legitimate terrain”. The rift between LIRDP and ADMADE had its origins in the aftermath of the Lupande Development Workshop (see footnote 7) and hardened during the development of the LIRDP Preparation Report (Larsen & Lungu 1985). The rift was claimed to represent a difference in approach. Lungu and Bell (1990) suggested that:

“ADMADE is a wildlife sector programme operated by the Ministry of tourism through the Department of National Parks and Wildlife Services. LIRDP is a multi-sectoral programme including, in addition to wildlife management, programmes aimed at development of agriculture, forestry, fisheries, water resources and infrastructure (i.e., roads). LIRDP is managed by an inter-sectoral Executive Committee involving several Ministries”

Both LIRDP and ADMADE probably missed the boat. As the experience of CAMPFIRE, and more recently LIRDP, showed, one can lead to the other. And as Murphree (1989, 1995) and others (e.g., Rihoy *et al.* 1999; Child 1996) have noted, wildlife has proved to be an excellent tool for the economic empowerment of local communities. This has provided a mechanism to build these grass roots institutions into a new and devolved form of natural resource governance that was probably more appropriate than the centralising systems pursued by colonial and post-independence governments.

Whilst both LIRDP and ADMADE sought reforms to conventional approaches to wildlife management and law enforcement, the latter opted for a more incremental, small-scale approach⁵. According to the RM report, it was told by NPWS that the extension of ADMADE to all GMAs was its response to the stance of LIRDP. “In other words, there is an almost irreconcilable breakdown of relations between the two, and the mutual hostility and suspicion makes any attempt at mediation likely to fail”. The RM commented that NPWS co-operated reluctantly with LIRDP and “by word of mouth, tries to undermine the credibility of LIRDP”⁶. This rift is perhaps the single most important reason why more effective progress was not made in implementing LIRDP. Unable to suggest any resolution to the conflict, the RM recommended “a clear separation of national functions such as village scout training - under ADMADE - at Nyamaluma

⁵ Until today, there is little fundamental philosophical difference between the ADMADE and LIRDP approaches suggesting that the major problem was related to personalities.

⁶ This animosity continues. The first submission of one of many reviews of ADMADE (Mano, 1998) was highly critical of LIRDP’s community programme and devoted a great deal of space to this criticism. The Review team had never officially visited the LIRDP programme and its primary source was ADMADE personnel. Following objections from several sources, the Review was re-written to focus on ADMADE.

camp in Lupande GMA, and all local development functions such as placing of village scouts in Lupande and wildlife culling schemes which should be under the jurisdiction of LIRDPA”.

The road-building and maintenance program was central to most of the Phase 2 proposals. Plans were cut back substantially because of reduced funding. Nevertheless, substantial maintenance was still carried out. LIRDPA commissioned an inventory of existing roads and proposals for a road improvement program (Pettit & partners, 1989) and the RM recommended that project renew efforts to raise funding to accelerate the road building and maintenance program, based on locally agreed priorities. This was never achieved, undermining public expectations that had been raised.

The RM suggested that the LIRDPA management view was that investments in tourism didn't pay and “that the project has to invest more in facilities than it receives in revenues”. It noted tensions between LIRDPA and tourism operators and recommended a thorough analysis and preparation of a strategic plan for tourism development following full consultations with all stakeholders. Again, this problem continues to the present day.

The agriculture program was found to have shifted from its initial emphasis on co-ordination to direct implementation, and the RM felt the program's range of activities was so large that it was almost becoming unmanageable. It suggested concentration on ‘best bet’ activities - those most likely to succeed and produce attractive, beneficial results. For this, an agricultural development plan was recommended. The RM was also critical of the lack of effective progress in land use planning and land zonation. It urged more integration of gender concerns in the project.

In short, the RM, recommended a lot of planning activities including agriculture, land use planning, tourism, and road infrastructure

On the scale of LIRDPA, the RM noted that:

“As originally conceived, LIRDPA was to cover a natural landscape unit: a whole catchment (or watershed), the Luangwa Valley. This makes sound ecological sense. But for pragmatic reasons, LIRDPA was limited to the status of a ‘pilot’ project which meant that it reduced its boundaries rather than reduced the scale of its activities over the larger area. This was particularly unfortunate because it led to various problems [for people living in other GMAs surrounding the SNLP]: restrictions on local hunting and anti-poaching activities; diversion of resources (e.g. road graders) and effort that previously were available to all; and loss of standing in Zambian society as non-beneficiaries of the project” (IUCN, 1989, p85).

Having suggested that LIRDPA was large and complex and needed a lot more planning to address several of its primary functions, it is somewhat surprising that the RM lamented the fact that LIRDPA did not cover a much larger area. In the context of line ministry responsibility, LIRDPA had been reduced from a co-ordinating mechanism for a defined geographic region into a ‘mini-government for a geo-political sub-division of the whole, i.e. Mambwe sub-district and the park. The resulting vacillation between the co-ordinating role envisaged in LIRDPA's mission and the executing roles it was assuming coupled with and probably exacerbated inter-agency rivalries to reduce the project's impact.

3.3.2 *Second Review Mission*

The second annual review (July-August 1990) followed only nine months after the first one. It examined the reactions of LIRDPA to the findings of the first review and was extremely critical, re-iterating all of the recommendations of the first RM, which it found had not been acted upon. However, it is unclear when the first RM report was received by LIRDPA. In the introduction to the second RM report, it is stated that the Co-Director (Management) claimed that “the first RM report was received by him only one week

prior to this RM". The report admits that, in these circumstances, "it would have been unreasonable to have expected LIRDPA to have acted upon the recommendations"⁷.

The second RM reported that there had been "some retrenchment of effort into two main components - agriculture and wildlife management", with some sectors such as fisheries and water appearing to have been forgotten altogether. They felt that there was a loss of focus on sustainability and integrated resource use - the initial rationale of LIRDPA. They criticised what it saw as a drift into isolationism. LIRDPA appeared to avoid or by-pass institutions with which it was difficult to co-operate. For example it did not communicate well with the provincial HQ of the Department of Agriculture and did not work through Chipata District Council because it was seen as weak and had few viable sources of revenue. The Local leaders' Subcommittee was treated as a "shadow council". The RM re-emphasised "the necessity of LIRDPA cooperating with other agencies, and stressed the "urgent need for annual planning meetings which bring together all LIRDPA staff and representatives from other agencies". LIRDPA was seen as "intent on taking over specialized fields such as credit distribution and recovery, co-operative formation, marketing and input supply, and even sinking of water wells and provision of hand pumps". The RM queried why LIRDPA was "trying to do things it does not understand when professional assistance is close at hand" and offered some cautionary advice (see Box 3.5).

Some other criticisms and recommendations included:

- The project directorate was still absorbed for most of their time dealing with the pressures of day-to-day administration, leaving no time for basic planning. Also, because the Co-Directors took on more and more routine tasks, there was a danger that LIRDPA was becoming identified solely with these individuals and the local leaders;
- RM reports had not been circulated - but see the comment above of the Co-Director (Management). It was recommended that they receive wide distribution - at least to the Steering Committee, chairs of all technical committees, local leaders, project directorate and management, with an invitation for comment and open debate of the issues;
- Meetings of the Local Leaders' Sub-Committee (LLSC) were called at very short notice (members greatly resented this discourtesy), the agenda was not distributed in advance and there were no minuted records of proceedings of the last eight meetings. Also noted was the infrequency of Technical Subcommittee meetings.

Members of the LLSC were confused as to how their 40% share of revenues was derived and never saw project accounts; were upset at LIRDPA employing area non-residents in preference to local people (e.g. bricklayers); and were critical of some decisions which affected local people being taken without being tabled at the LLSC, e.g. they were unaware of the purchase by LIRDPA of Chamilandu safari camp, operated by LIRDPA under Malambo Trails (and the RM said it could find no evidence that this operation had been economically evaluated);

The Co-Directors were perceived often to have acted in arrogant fashion, making promises, which were not kept, and "clearly, many persons are deeply offended by the behaviour of the project"; the RM recommended that LIRDPA adopted a more "sensitive and consultative attitude".

⁷ This illustrates a key weakness in the review system. Recently, SLAMU has initiated an annual participatory review whereby staff review their performance against targets in a professionally facilitated forum. This has helped to unify sections towards common goals, and to ensure that the project develops and therefore buys into its own solutions. In addition to this, the external reviews are far more participatory.

Box 3.5: The Dangers of Isolationism and Autonomy

“Many of LIRD’s activities by-pass the work of existing government institutions and NGOs, most notably the responsibilities of district councils. We understand why LIRD finds it difficult to co-operate with such institutions; they are often weak, ill-staffed and lack motivation. However, to duplicate their functions not only drives those institutions into a weaker position, but also makes the people of the project area wholly reliant for such diverse needs as credit, seed supply, agricultural extension, roads, bus transport and famine relief on a project with a finite life-span which may fail. The policy of decentralization in Zambia is about strengthening capabilities at local, district and provincial levels. For these reasons, the RM disagrees with the recent statements that LIRD should seek Authority status”

Source: IUCN (1990, p2)

“Post-independence experience clearly shows that the failure of past development projects was largely due to attempts to become autonomous and self-contained, with by-pass mechanisms for procurement of equipment and materials. Such projects performed well as long as donor funding was forthcoming. Without exception, the projects failed as soon as donor funds phased out. Examples [in Zambia] abound: the Israeli-supported Kafubu/Kafulafuta Co-operative Scheme (Copperbelt); the FRG-funded Monze Pig Scheme (Southern Province); Intensive Development Zones; and the “classical” Integrated Rural Development Programs which all created unsustainable implementation empires. Such projects had focused on short-term successes associated with the enthusiasm and energy of the managers. They were identified with specific individuals and obtained foreign exchange easily. They invariably did not strengthen local institutions to take over successfully. Instead they weakened and demoralized existing institutions. The result was total collapse when donor fatigue set in.

Such past experiences are instructive, and the lessons which they provide should be heeded. For example, if the co-operative movement in the Valley is not working properly, it should be strengthened, not have its functions taken over. If the Department of Water Affairs is weak or absent in the Valley, it must be supported to work there and not weakened by taking over its functions and making decisions on its behalf. LIRD’s proper role is clearly the co-ordination of and assistance to other departments, rather than the duplication of their functions in a new Authority

In short, the 1990 RM found that LIRD’s attempts to weaken institutions, rather than to support them in doing their designated tasks, is causing resentment and hostility. This could well undermine the success of the whole project as LIRD on its side and all government and non-government institutions on their side further retrench into mutual animosity. What is certain is that government and its institutions will survive, albeit in demoralized condition; the same cannot be said for LIRD”.

Source: IUCN (1990, p41)

While both RMs were rightly critical of increasingly autocratic management, they failed to look at the longer-term sustainability of the project. There was little assessment of the way money was used, and they did not criticise the fact that much of the budget was used for recurrent expenditure at the expense of long-term investment and productivity. Today, the project is paying heavily for this oversight as it searches for money to invest in roads.

3.3.3 Third Review Mission

Following two fairly critical reviews, this third mission (August 1991) reached quite different conclusions. It was much more positive and found clear evidence of positive change in the LIRD

structure and mode of operation. It reported definite signs that the project was concentrating and consolidating its activities on (a) strengthening wildlife management and (b) its priority components such as agriculture and the women's program.

Management systems had been strengthened. Planning meetings and reports, and monthly management meetings had been scheduled throughout the year. LIRDPA had commissioned an independent organisational study, strengthened its reporting system, reinforced its financial management and accounting procedures, and recruited key administrative staff.

The RM found that much work was being done, and their conclusions are summarised below.

1) There had been significant progress with road development and maintenance (no quantitative details were provided).

2) A tourism development plan had been completed and submitted to NCDP for approval.

There was increased appreciation of the resource protection achievements of LIRDPA by tour operators in the area. However, there were still disputes between the project and tour operators over park access fees and the distribution of tourism benefits. The RM consequently recommended an independent analysis of the tourism industry in the area to provide a rational basis for the equitable distributions of such benefits

3) A Mambwe Baseline Survey undertaken jointly by Save the Children Federation (USA), the Provincial Planning Unit and LIRDPA revealed the priority needs of the local population: almost half (45%) of the respondents to a questionnaire identified hunger as their most serious problem, followed by lack of water (27%), lack of transport (26%) and lack of agricultural inputs/implements (11%). The development of a district agricultural plan was recommended.

4) In the agricultural sector, the horticultural schemes had been experiencing problems due to lack of water, pest problems and lack of market information and management skills. Crop storage sheds erected in remote population centres had increased food security, and the establishment of the Malambo Milling operation had relieved hardship for women. But the seasonal credit scheme slowed due to low repayments of loans and the rising numbers of debtors. It was recommended that this scheme be phased out and that LIRDPA should instead support other credit institutions. An acceleration of appropriate agricultural research was suggested and, given the food shortage in the area, it was recommended that the budget allocation to the agriculture program be at least doubled.

5) The idea of establishing a women's program was seen as having isolated or marginalised women's issues and was viewed as an error. Rather the RM, like previous ones, emphasised the need to involve women in all project activities. Some progress had been made through awareness raising at a management workshop, and several LIRDPA programs had begun employing women in program activities. The RM recommended phasing out the women's program and moving its co-ordinator to the community liaison department of LIRDPA to advise all other programs. It was suggested to abolish the existing women's clubs or turn them into forums for discussion and information flow on urgent issues affecting women - to "deliberate issues and present them to the appropriate authorities" - and where appropriate, develop them into primary co-operatives.

6) Only limited progress had been made in promoting and assisting co-operatives, and the RM again suggested that LIRDPA should support existing institutions working in this field.

7) Previous RMs had asserted that forestry, fisheries and water had become "forgotten sectors". This view is perhaps a bit unfair. The project had been unable to make progress due to lower levels of project funding than expected, and difficulties in securing inputs from suitably qualified Zambian professionals.

LIRDPA had resisted the temptation to employ an expatriate forestry expert. The Forestry Department had consistently failed to analyse data acquired during the 1987-88 inventory survey. But the RM also opined that the perception of project management was that “these sectors are not as important as wildlife and agriculture” - a view shared by local leaders. Following a socio-economic survey of fishing camps (numbers had trebled over five years due to changes in occupation of former hunters), a preliminary zonation of the Luangwa Valley had been undertaken to mitigate the negative impacts of fishing camps⁸. Some progress had been made in the collection of rainfall and hydrological data and a water survey was completed in 1990. The RM recommended that LIRDPA more vigorously pursue progress in the forestry, fisheries and water sectors.

8) Relationships between LIRDPA and NPWS were judged to have improved, but were still bad and here was still a need to pay more attention to this key issue. The RM alludes to tensions between LIRDPA and ADMADE, the latter reported as congratulating itself for being a “cheaper and more effective method of conserving wildlife than LIRDPA”.

9) The law-enforcement programme was working effectively. The RM noted that data on law enforcement and from aerial censuses gathered by LIRDPA showed that illegal hunting had declined dramatically and that elephant populations had stabilised. LIRDPA had successfully employed reformed illegal hunters on a range of project activities, including law enforcement patrols (“turning poachers to gamekeepers”).

10) The RM also took the fact that there was immigration of people to the project area as further evidence of success. It noted that former urban dwellers were returning to their home area which was now seen as more attractive than previously, although this should be seen a symptom of the poor state of the Zambian economy. The latter, and a reduction in the subsidisation of urban life, was reversing the earlier trend of urbanisation and resulting in urban-rural drift. It also noted temporary immigrants from outlying areas arriving during the rainy season seeking to purchase food from Malambo Milling.

11) The RM paid particular attention to the issue of local participation. It found that:

“the local community is participating in such activities as the issuing of district hunting licences, selection of village scouts, running of the two culling schemes and provision of poaching information to responsible authorities in the project area. This participation is facilitated by the NPWS Warden for Mfuwe Command. The reduction of poaching in the project area was cited by many individuals as an outcome of local participation” (IUCN, 1991, p28)

But, like its predecessors, the RM still found difficulty to gauge the incidence and quality of local participation in LIRDPA activities below the level of the Local Leaders Subcommittee. For instance, the chiefs, who may also have been the primary beneficiaries, essentially ran the transport and culling schemes. The project also did not have quantifiable and measurable indicators of grassroots participation, nor perhaps a clear idea of what this would look like. The one indicator commonly cited by project management was the employment of local people. But the RM noted that “while this indicator is notable, it is nevertheless not satisfactory because employment per se does not define local participation”.

12) The RM noted conflict between the chiefs and local political leaders, each feeling they should have authority over the other. There was also potential conflict between the chiefs and the newly created Mambwe District Council over the management and utilisation of the 40% of LIRDPA revenues allocated

⁸ Identified impacts included, but were not limited to: over exploitation of the fishery, adverse impacts on crocodile populations due to competition with fishermen, depletion of fuel wood resources due to the practice of smoking fish, increased loss of human life to crocodiles, increased nutritional level of the human population due to increased availability of protein, and an increase in the human population following improved diet which in the long term may affect the ecological sustainability of the project.

to the LLSC. Each felt that they should control these moneys. Another factor which was seen to have narrowed the decision-making capacity of the local community was the bureaucracy of LIRD, especially the “enormous power wielded by LIRD top management”... because of its “strong connections with local and national political leadership” (particularly the President). But the RM acknowledged that LIRD management had taken some steps to co-ordinate and link LIRD activities with the local community through hiring a community liaison officer (but based in Chipata), followed subsequently by a deputy community liaison officer (based in the community)⁹.

13) The RM found that the supposed project beneficiaries, the local people, did not know much about the purposes and role of LIRD in the project area. “Some members of the community referred to LIRD as a company while others did not know about the project. Altogether, LIRD and its objectives are to a large extent either unknown or ill-understood by the local community”. This confirms that the LLSC was not bridging the gap between the Project and its intended beneficiaries. Indeed, given that its members could empower themselves by controlling both financial allocations and information, it was not in their interest to keep communities well informed.

While supporting the allocation of 40% of LIRD earnings to the local community, the RM found a number of problems in the utilisation of the funds (see Box 3.6). It mentioned conflict over the fairness of distributing the funds equally to the six chiefs in the project area because of population differentials, and reported a strong feeling that distribution should be on a per capita basis¹⁰. The RM recommended “creating conditions for meaningful grassroots participation through policy practice”. While the RM supported the principle of returning benefits, it made no assessment of the use and impact of this 40%. This is a pity, since it would be informative to compare the effectiveness of the post-1996 policy with that achieved in these earlier stages. It would have allowed a comparison on the effectiveness of first and second generation CBNRM programmes for building rural infrastructure¹¹. Anecdotal evidence will have to suffice. The Nsefu clinic was referred to by Lungu and Bell (1990) as a major project. While the main structure was built using community revenues from phase 2, it was only actually finished in 1996 when the new CBNRM policy (introduced in that year) gave communities money and the flexibility to do this themselves. Moreover, in a single year, the Nsefu Area Development Committee (established under the new CBNRM approach) built the two staff houses required by this clinic, despite this being a notoriously weak committee. This implies that community empowerment increased effectiveness significantly over centralised systems. Some of the problems associated with the latter were mentioned by the RM (Box 3.6).

Past RMs had criticised the lack of progress with land use planning. This time, the RM pointed out that this urgency “ignored the political implications of attempting to develop a locally acceptable plan without

⁹ Curiously, this officer was a prominent ward chairman in the project area - and the position was filled without advertising. The third RM commented that “there is no good working relationship between the community liaison officer and his deputy.

¹⁰ This recommendation is a direct contradiction of the “principle of producer communities” that proved so important to the success of CAMPFIRE (Child, 1995; Murphree, 1991). This principle states that: “benefits should be returned to ‘producer communities’ because economic progress is driven by the premise that benefit is directly related to input”. This ensures that there is a positive correlation between the quality of management and the magnitude of benefit, accepting that the allocation of land to wildlife is a management action. Murphree (1991) notes: “frequently, arguments of equity are used to suggest the contrary. These arguments, however attractive they may be to the political ethos, are disastrous when applied to wildlife utilization

¹¹ As defined by Child 1999, a first generation CBNRM programme returns wildlife revenue to an area through district level authorities, usually exclusively for the construction of social infrastructure. A second generation programme is based on fiscal devolution and empowerment. Communities usually have the freedom to retain wildlife benefits as cash or to allocate them for projects. It is likely that the increased democracy, transparency and ownership associated with second generation projects will result in more projects being built more efficiently, even when communities opt for a reasonable proportion of benefits as cash.

Box 3.6: On the Local Use of LIRD P Funds

“Typically funds are intended for use on such projects as the construction and upgrading of schools and clinics and housing for teachers. Other funds are used for procurement of miscellaneous items. Last year (1990] some areas, for example in Mnkhanya, did not utilise their allocations. Other areas, for example in Jumbe, partially utilised their funds. Only Msoro area fully utilised its share of funds upon allocation. There is, therefore, differential capacity in the utilisation of funds by the local communities in the project area. The local leaders do not have the necessary technical support to help them in deciding which projects to have The leaders decided to buy a bus from Zimbabwe at a cost of US \$70,000 in order to alleviate the serious problem of transport in the project area. But this bus has not been used by the local community because of bad road conditions. The bus is currently operating between Chipata and Lusaka. Yet other funds from the 40% allocation are utilised as a ‘hardship allowance’ to chiefs and ward chairmen. It is divided such that Senior Chieftainess Nsefu receives ZK 2,500 and other chiefs ZK 2,000 while ward chairmen receive ZK 1,500”

Source: IUCN (1991, p30).

first winning the confidence of local leaders and people at the grass roots level”. The RM accepted the cautious approach of LIRD P to developing land use plans, noting that “any process for an exclusive or restricted set of activities will lead to conflict (and possibly intense conflict) between different interest groups in the project area. LIRD P had completed a land capability classification and introduced the subject of land use planning to the local leaders. It was intended to commence the development of plans with full local participation at ward and branch level in 1992. This would have required a major extension effort. Local leaders and LIRD P senior management expressed preferences to the RM team for a pragmatic approach to integrated strategy for resource utilisation, which appeared to focus on outputs and ignore the institutional processes required to get there (see Box 3.7). Despite these intentions, participatory land use planning was never pursued. LIRD P may have been naive in believing that a document, or at least resource descriptions and land capability assessments, represented a plan. There were also difficulties in persuading the chiefs of the importance of planning. They rejected the offer of the IUCN park-planning team to develop a similar plan for the GMA in 1995, a rejection that probably stemmed from the chiefs' reluctance to relinquish any power over land use issues and also from the teams' manner.

The failure to establish a land-use or economic development plan or planning process in this stage of the project is now having serious implications, and must be seen as a lost opportunity, especially as it was at the core of the project concept. While the project has undoubtedly created economic growth, it has failed to deal with the consequences of this growth. For instance, farmers are clearing land between the original settled areas and the park, while the Mfuwe settlement around the main park gate is growing in a rapid and uncontrolled manner. Thus, both agricultural and peri-urban settlement is expanding towards the park, and resource depletion (e.g. soil erosion and tree-cutting) is occurring in high potential tourism areas in the GMA. There are also growing urban problems such as crime, excessive drinking and high unemployment for the many young men flowing into the area in the hope of wage employment.

There were clearly problems with LIRD P's management systems. The RM commended the efforts of management to streamline LIRD P administration which included a plan to phase out the position of Co-Director (Technical) and replace it with Technical Adviser. But it commented that the existing situation was still ‘top heavy’:

Box 3.7: A Pragmatic Approach to Planning Integrated Resource Utilisation

As shown below, the preferences of both the local leaders and LIRD management expressed to the 1991 RM looks like a wish list of requirements. The ultimate failure to deliver on many of these outputs, and on land-use planning in general, reflects the failure to outline a participatory planning and implementation process, and institutional processes in general. In short, the list reflects things, but not the process of getting there, which is very important in community programmes. The failure to recognise the importance of processes and institutions appears to have been a characteristic of LIRD and its RMs.

The preferences of local leaders and LIRD management expressed to the 1991 RM included:

- Continue to develop the capacity of people in the project area to produce and use wildlife for income generation;
- Focus attention on that part of the agricultural development program which is most likely to increase food security without incurring large financial inputs or serious negative environmental impacts;
- Promote meat production through the introduction of hardy breeds of small stock such as goats, rabbits and guinea fowl.

The development of other sectors should proceed within the limits imposed by financial and manpower resources and possibly in the following order of priority:

- Water supplies for small scale irrigation and domestic supply;
- Small scale fish farms using available water bodies; and
- Utilization of forest produce.

Source: IUCN (1991, P36)

“The project is closely identified with its two Co -Directors. While this may be good in so far as it underscores the dedication of the Co -Directors in ensuring the success of the project, the personal identification is also negative in that it blurs the objectives of the organization under the cloud of the personal aura of the Co-Directors. There is already a general impression that the project cannot succeed without the present Co-Directors. Such an impression, real or imagined, and however flattering to the incumbents, is dangerous in that it can lead to fatal dependency on individuals instead of organizational processes. In any case, the very existence of such an impression is testimony to the unsatisfactory state of delegation of authority throughout the organization” (IUCN, 1991, p41).

LIRD suffered from a lack of middle management with delegated authority. Some key middle management positions had stayed vacant for too long or the necessary positions were not provided for. In addition, too few personnel were seconded from other government units. In addition, the decision-making structure was complex and time consuming. The problem of LIRD’s complex committee structure was highlighted:

“LIRD’s organizational set up is burdened by an excessively cumbersome committee structure with a strong political bent at the top. There is no functional managerial relationship between, and coordination of, the committees with their sub-committees and the project’s regular administration. In essence, communication channels are either poor or non-existent. The arrangement of having two Co-Directors has not helped the situation. In any case, the result has been the creation of a complex organization, over and above typical project structures. The project’s Steering Committee does not have a clearly defined, legal status. This committee is too open to the charge that it exists purely for political purposes since it is not the executive board of LIRD” (IUCN, 1991, p38).

All three RMs and an independent management report¹² (Coopers & Lybrand, 1990) all concurred that an organizational overhaul was immediately required. More delegation of authority to middle management, with capacity-building was viewed as vital, accompanied by a continuously updated manpower development plan. It was also recommended that a plan should be prepared for integrating LIRDPA with the new Mambwe District Council.

In reviewing prospects for a Phase 3 of LIRDPA, the RM found that the project had been over-ambitious, ambiguous in defining its roles and how to measure them, was still in its organisational and implementational infancy, and had made little progress towards the stated goal of self-sufficiency:

“LIRDPA’s original objectives are too broad and ambitious. Many objectives are not quantifiable and thus are not easy to measure. Objectives like integrating utilization of natural resources with agriculture remain to be achieved.

The project’s initial funding projection has been adversely affected by economic fluctuations such as inflation. There have also been serious cash flow problems caused by lack of proper planning and forecasting.

LIRDPA is still in its experimental stages. It still does not have a fully operational organizational structure with all the required national personnel and technical support. Financial sustainability of LIRDPA in the foreseeable future is very unlikely. Manpower sustainability using local staff is possible in the intermediate to long term but the policy for ensuring its realization needs considerable reinforcement.

In order for LIRDPA to move towards economic sustainability during Phase 3, the project must concentrate on those sectors, which give the best economic return and ensure the food self-sufficiency for the people of Luangwa Valley. These are the wildlife production and utilization sectors and the agriculture sector. Attempts should also be made, within the limitations imposed by budget and personnel constraints, to integrate more fully the various sectors of wildlife, agriculture, forestry, water development and fisheries” (IUCN, 1991, p49).

The RM was of the opinion that many of the assumptions behind the LIRDPA model has not yet been fully tested, and felt it was still premature to consider replicating the LIRDPA model nationally in Zambia. It recommended a first step should be to consider introducing LIRDPA to other GMAs adjacent to the SLNP. This would need feasibility studies and comparison with other models such as ADMADE and CAMPFIRE.

A comment on the review process is appropriate. The three reviews had some contradictions, but the bottom line was that the review process did not put the project on the right track. The reviews did list a number of problems, but seldom resulted in these problems being solved. Land-use planning and participation are examples of serious problems identified by all three reviews that were not addressed.

An assessment of these reviews suggests weakness in both diagnosing problems and solutions, and in communication with project management. The reviews identified a list of symptoms, but never clearly identified the root causes of these deficiencies. Nor did they suggest workable solutions. Linkages between the review and management changes were largely absent. Even when problems were identified, they were often not acted upon, suggesting that the review teams and Project management were not working together to devise corrective mechanisms, with the result that the Project did not buy into nor implement these actions. This is a common problem when a team of experts flies into an area for a few weeks.

¹² This report was unsatisfactory, failing to fulfil its terms of reference.

It also appears that none of these teams had the capacity to assess organisational management, or community based programmes. This is a factor in the failure to identify the underlying weaknesses of the project. These root causes were probably related to weak management systems, without clear and measurable objectives and effective institutions. The reviews did hint at these problems, but never really addressed them in a critical and constructive manner.

In the late 1990s, the introduction of a facilitated participatory review process addressed some of these problems, and improvements resulted, suggesting that the process of reviewing donor projects can be improved.

CHAPTER FOUR

A CHANGE OF FOCUS

4.1 The Close of Phase 2 and the Bridging Phase (1993-1994)

During this phase the project faced huge changes. After 27 years as a one-party state, Zambia had a democratic election in October 1991. This led to a change in the ruling party and the new MMD (Movement for Multi-Party Democracy)¹ assumed power. The MMD changed the entire premise on which economic policy had been built since independence. A paternalistic and nationalised economy was opened to the private sector, many subsidies fell away, and people had to learn about living in a free market system. Given the former President's role in LIRDP, the project came under close scrutiny.

In 1992, responsibility for the project was wrested from the National Commission for Development Planning and assumed by the Ministry of Tourism, through NPWS. The two Co-Directors were removed and replaced by a single project Director, with three Assistant Directors and their counterparts. The structure of LIRDP at this stage is shown in Figure 4.1.

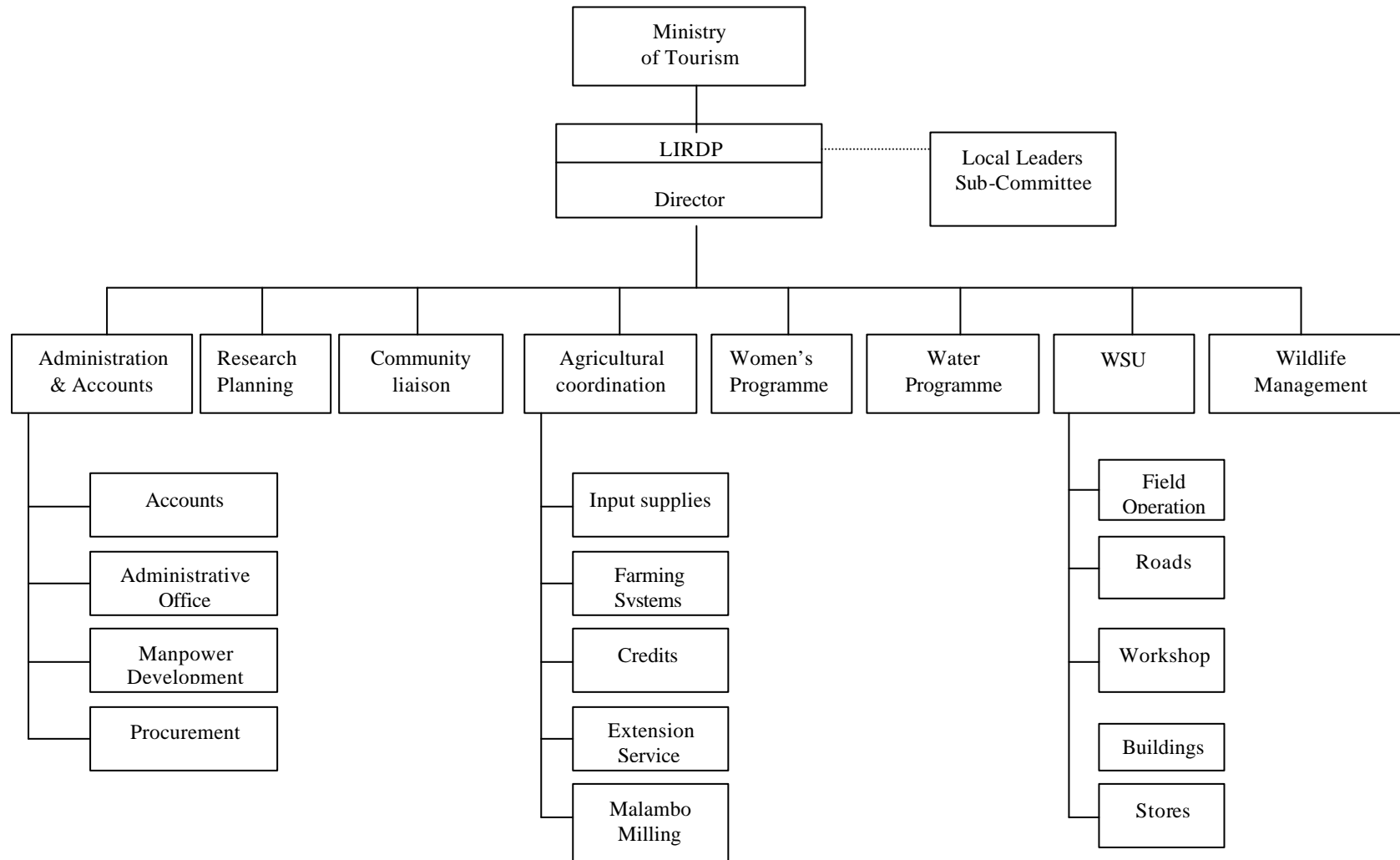
The project was also brought under the national ADMADE policy, accepted by government in 1987. This was not really a change, since LIRDP and ADMADE had in any case been pursuing almost identical philosophies. However, both programmes remained first generation community wildlife programmes, decentralising only to the district level (i.e., Chiefs or LIRDP) and allowing wildlife proceeds to be used only for projects like social infrastructure. The report of a consultancy mission looking into the re-organising and restructuring the Department of National Parks and Wildlife Services (Child and Lee, 1992) was highly complimentary of the intentions embodied in the ADMADE concept, but stated that it was time the flaws in the programme were dealt with. In particular, the report expressed concern about what is now defined as fiscal devolution, a critical step towards real participation and empowerment. The report stated:

“Government should now take the bold but essential step of allocating the rights to use and/or benefit from wildlife in a given area outside National Parks to these people with established usufruct in the area. These people should then be viewed as shareholders of the resource and, as with any shareholders, should be entitled to the dividends from the proper management of their shared assets. This necessitates a second major policy decision – the decision to pay people in cash for their wildlife in the same way that they would be paid for in any other produce they market”

While slightly watered down, these same recommendations were embodied in the Policy for Wildlife in Zambia, approved by Cabinet on 25th August 1993 (GRZ, 1993). However, this opportunity to further devolve responsibility for wildlife management to communities was not taken (until LIRDP did so in

¹ Following violent street protests against increased food prices in mid 1990, which quickly transformed into a general demand for the return of multi-party politics, President Kenneth Kaunda was forced to accede to public opinion. A snap referendum in late 1990 failed to stop the protests becoming more vocal and he was forced to amend the constitution, legalise opposition parties and set full elections for October 1991. Kaunda and his party, UNIP, were resoundingly defeated by Frederick Chiluba and the MMD.

Figure 4.1: LIRD structure in 1993



1996), and wildlife in GMAs remained under the control of NPWS, albeit with some fine words about community benefit.

During the latter stages of Phase 2, it became clear that the goal of achieving project self-sufficiency could not be achieved by the end of 1992. LIRD P therefore undertook a comprehensive planning exercise during 1992 which led to a Revised Project Submission for a Phase 3 (RPS-3), for the period 1993-2000, based on feasibility studies and workshops.

This document was presented to NORAD in October 1992. It proposed an extension to the project for a third phase, with the overriding goal of becoming self-sustainable at the completion of its proposed additional eight-year period. NORAD was requested to provide continued, but declining, support during Phase 3. Bridging finance (NOK 14.5 million; c.US \$ 2.1 million at 1993 rates) was agreed by NORAD for 1993. It agreed to support a third phase but subject to an independent appraisal of the RPS-3.

4.1.1 Review of Phase 3 proposals

This appraisal was undertaken by Scanteam International in October 1993. Like previous reviews, this one also praised the innovative nature of LIRD P and its many achievements, particularly its outstanding success in law enforcement and bringing poaching under control:

“LIRD P has maintained a well executed and monitored law enforcement program [see Box 4.1], which is as good or better than any like effort on the African continent” (Scanteam, 1993, p27)

Box 4.1: LIRD P Law Enforcement and Control of Poaching

“Law enforcement is based on good ground coverage and the building up of very effective intelligence networks in and around the park, including areas outside LIRD P’s area of influence. The number of Game Scouts has been increased to an optimum level in the light of well-documented and evaluated ongoing experience. LIRD P has been able to equip these people properly and to pay them the field allowances due to them, as well as a bonus based on results, which have provided the incentive for efficiency. The results have been gauged against the illegal off-take of elephants and the overall incidence of illegal activities, and have been most satisfactory.

It is interesting to note that the Save the Rhino effort, which was highly efficient, but on a much smaller scale than the LIRD P effort, was able to curb but not control elephant poaching while spending US \$ 15 per sq km per year. LIRD P controlled elephant poaching spending US \$ 65 per sq km per year. Neither intensity was sufficient to control rhino poaching. This expenditure compares with the usual rough estimate for effective law enforcement under a variety of African conditions of around US \$ 200 per sq km per year”.

Source: Scanteam (1993, p28).

But it also reiterated the project's shortcomings (as identified by previous RMs) and opined that LIRDP still suffered from unclear objectives:

“the project is poorly structured, fragmented into sectoral activities and poorly integrated to achieve holistic goals. Furthermore, the scope of the project does not seem to have been defined. Whether it should be supply or demand driven; should focus on wildlife or a multi-sectoral approach; should differentiate between financial objectives inside and outside the national park; and how project resources should be proportioned between the different resource categories; are examples of topics that have not been thought through fully enough” (Scanteam, 1993, p12).

The appraisal was critical of both LIRDP and ADMADE, each of which had elected to develop their community based resource management (CBNRM) programs through the local chiefs and traditional rulers:

“As it is being applied at present, ADMADE [and LIRDP] has fundamental defects. The approach is still very top-down and the essential decision to give the ‘ownership’ of wildlife to the local landholders, who share their land with the resource, has not been taken [This situation occurred despite all the good intentions in the planning and earlier stages of the project]. The determination to vest authority with local leaders, rather than democratically elected and hence accountable institutions, leads to the trapping of authority at the level of the chiefs where there are no really effective mechanisms for preventing abuse of the resources. Hence the need to enforce the legislation through the use of village scouts, when landholders might do this as a service to their communities, given appropriate social and economic incentives” (Scanteam, 1993, p11).

By this time, there were three layers of community institution. The primary body remained the Local Leaders Sub-Committee². An Area Development Committee (ADC) had been established in each chief's area, which was another nominated body chaired by the chief. Below this were Village Action Groups - representative of the people, including women's groups. The RM noted that this elaborate but un-elected system was paralleled by the Mambwe district administration and its elected District Council (see Figure 4.2, but there was little liaison between the two, and the latter “has been sidelined, causing resentment among legally established district institutions”).

The appraisal team felt that the project had made little real progress in developing ‘hands-on experience’ of CBNRM largely due to its:

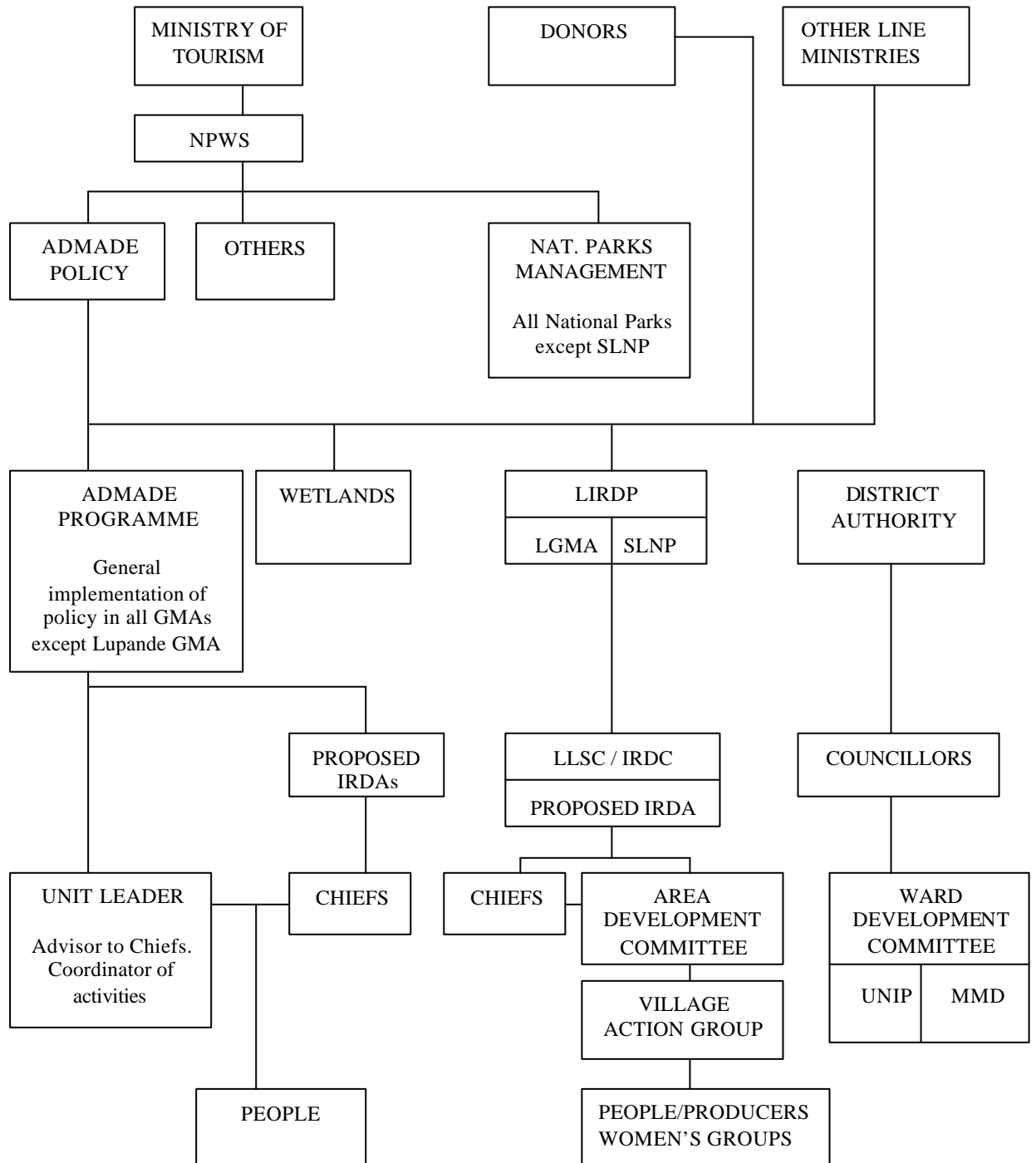
- Paternalistic attitudes towards local communities;
- Failure to abandon conventional top-down wildlife management;
- Permitting authority over wildlife to be captured at the chiefs' level;
- Dealing formally only with this level; and
- Not exploring the potential of working with lower social entities.

Beyond finding fault with these structural arrangements, the appraisal team also commented on relations between LIRDP and NPWS, describing the situation, which had been permitted to develop as “fraught with the seeds of conflict and destruction”:

“With LIRDP answering through a rather ineffective but powerful Committee of Management, chaired by the former President of Zambia, to the Ministry of Finance during Phases 1 and 2 of the project, the essential confidence that should have been built up with the responsible Department and line Ministry did not emerge. Instead, parallel institutions began to develop without sufficient cross fertilisation, with considerable animosity between key personnel on both sides, and with

² Following changes in the law related to the ADMADE programme, this was formally renamed the Lupande Integrated Resource Development Authority, LIRDA, though the term Local Leaders Committee stuck.

Figure 4.2: The organisation of integrated resource development activities involving wildlife in Zambia, 1993



NPWS understandably resentful of having two of its prime areas arbitrarily removed from its jurisdiction. It is difficult to conceive how the project could have contemplated becoming sustainable without regularising its relationship with NPWS and the ADMADE policy This delay resulted in many lost opportunities to use LIRDPA as a prime demonstration and test bed for the development and implementation of the ADMADE policy ... It is a pity it has taken so long for them to come together” (Scanteam, 1993).

This failure to implement true CBNRM had been exacerbated by the “overwhelming size of the donor contribution, relative to the revenue earned by the project”. As a result, “there has been little incentive for LIRDPA to develop and harness the capabilities of ordinary landholders whose ability to manage wildlife continues to be doubted without having been tested”. It was noted that only 2% of the LIRDPA budget was devoted to community development. The suggestion was that the project was not really serious about the community programme, nor did it have the skills to advance this concept.

In addition to these problems, the project had no clear philosophical difference between wildlife conservation inside and outside the park. Implicit here was a failure to distinguish between the primary objective of the South Luangwa National Park as conservation, and that outside the park as rural development, in which the sustainable use of wildlife could be a vital component. In Zimbabwe, for instance, the recognition that landholders should fully commercialise the use of their wildlife, provided use was sustainable, was the main driving force behind the expansion of wildlife outside parks. Conservation agencies, in general, tended to be too conservative regarding the use of wildlife, with the consequence that wildlife’s ability to compete was often blunted (Child G, 1995). The team was of the view that the project had failed fully to “recognize the fundamental distinction between the national responsibilities and priorities in a National Park and the local interests and priorities in areas surrounding the park”. LIRDPA had become “sidetracked and needs to be redirected”. The team was also concerned that mixing the revenues from each area would ultimately blunt incentive systems. It recommended a strict distinction between the park and the Lupande GMA in project planning:

“The present approach to consider the GMA and SLNP as a single entity, and the inclusion of all activities (e.g. wildlife management, other natural resources, roads, community liaison) in a single compartment (i.e. LIRDPA) complicates the management and assessment of the sustainability of the project. To improve the possibility of sustainability, and assessments of this possibility, the GMA and SLNP should be separated, and each activity should be assessed and managed as a separate entity (Scanteam, 1993, p79) (see also Box 4.2).

The team had three major recommendations: to develop a financially viable park; to implement a sound second-generation CBNRM programme; and to pass most non-wildlife functions back to line ministries (Box 4.2).

The team suggested that tourism could generate roughly US \$ 1 million per year provided the 20% sales tax on tourism could be redirected to the park (rather than central government) and this compared favourably with wildlife management costs - this would be the key to financial viability for the park. Interestingly, these very same figures emerged later in the programme, first after a rough analysis in a *Debriefing Report* submitted by Goran Johansson in 1997 to the Permanent Secretary, Ministry of Tourism and in the detailed financial assessments underlying Phase IV and the planning of the new headquarters (see annexes to LIRDPA’s (1998): *Project Submission for Phase IV: 1999-2002*).

This recommendation to manage the SLNP and Lupande GMA separately represented a very major shift in approach which was subsequently taken up as the basis of LIRDPA in Phase 3.

Box 4.2: Main Recommendations of Phase 3 Appraisal Mission

“Project objectives and the strategy by which they are to be realised need to be redefined with much greater emphasis on:

(a) The planning and development of the [South Luangwa] national park to conserve natural values and optimise the capacity of park-based tourism to protect the asset and render the park as self-supporting as possible.

(b) Developing viable community-based resource management in the [Lupande] GMA using wildlife with its high value as the flagship. This should involve open, democratic governance in small cohesive social groupings of people with wildlife on their land. They should be given proprietorship over the resources and the right to use it, without abusing it, thus establishing clear linkages between wildlife, accountability for the resource, and the human welfare it generates. This action divides into three main activities:

* the development of institutions, from national legislation to permit the necessary local institutional evolution, through arrangements to guide the proper equitable allocation and management of the resource at grass roots, to marketing and financial measures to maximise the return from the harvestable ecological energy;

* preparing the people to assume these responsibilities; and

* monitoring and guiding the whole process, particularly the flow of benefits, so as to continually reinforce and extend the learning experience (the need for this aspect of the work will continue long after LIRD P has been phased out. Logically, it should be absorbed by ADM ADE, but this pre-supposes that ADM ADE will keep abreast of the essential elements in CBNRM).

(c) Integrating project functions with the line ministries responsible for such functions, so that LIRD P becomes facilitatory, catalytic and coordinating, and able to fade out, confident of having established viable resource management institutions and the route to better human well being, well before the end of Phase 3.

Source: Scanteam (1993)

The team was particularly critical of the lack of a management plan for the SLNP. It recommended that developing such a plan should be an immediate priority.

Like previous reviews, various suggestions for improved monitoring were presented. The team noted that “the strongest aspects of LIRD P are generally those accompanied by good monitoring programs”, e.g. law enforcement and the systems for crop yield forecasting, describing farming systems and identifying constraints to agricultural production.

The appraisal, like previous reviews, argued strongly against authority status for LIRD P, but it did suggest the need for a suitable institution to enable strategic land use planning within the project area:

“This [institution] should cover both the SLNP and the Lupande GMA, and might be expanded to the other parks and GMAs in the region. A possibility is the formation of an SLNP/Lupande Board, with membership dominated by landholders (i.e. NPWS and community representatives) but supported by such people as tour and safari operators. Such a body might also form the basis

of a regional tourism board with functions like the development of a corporate image, the maintenance of standards, and marketing” (Scanteam, 1993, p31).

This idea had much in common with the proposal for a Luangwa Resource Development Institute advanced in the initial proposal for LIRD in 1984 (see Box 2.1):

Regarding tourism, the team suggested the creation of a tourism authority for the project area, the development of a tourism plan and tourism training program, a review of the tourist taxation system, and developing mechanisms to place proprietorship for tourism in local community hands.

The appraisal questioned the acquisition of “commercially dubious ventures, with doubtful justification”. Malambo Milling had been established to ensure the availability of food to the local communities, but had operated at a substantial loss. Malambo Safaris and Trails had carried out safari hunting operations in the Lupande GMA from 1989 to 1991 “on behalf of local communities” and operated a small 7-bed seasonal walking safari tourist camp. Both operations had also recorded losses. Malambo Transport was established to provide bus transportation between Msoro and Chipata on a revolving fund basis (the operation was inefficient and lost money and the bus had been sold), and a truck was used to transport materials. The transport company also showed a substantial deficit. The appraisal team recommended that the milling company, transport business and safari equipment be sold.

Two village-based wildlife culling schemes (buffaloes, hippos and impalas) had been established, originally with the aim of providing protein to local communities at affordable prices. But the meat was sold in Chipata where better prices were achieved (transport being subsidised by LIRD). The revenues went to the Local Leadership Steering Committee (by then controlled by the chiefs³) rather than the community. One scheme at Malama made a loss, the other at Kamwenje made a profit. In both cases, wages were a large element of the expenses. The team recommended the communities should sell animals on the culling quota to safari hunters (in fact, the project had already started doing this) who would also distribute the meat to the community as part of the hunting agreement - thus eliminating culling expenses whilst providing protein to the communities.

These financial assessments of LIRD’s business ventures were the first to be conducted by any of the review teams. While understanding the nature of the times, and that Zambia was dominated by such state run businesses, it is an indictment of the project and the various bodies that oversaw it that such assessments were not a regular component of management and reporting. The withdrawal of these subsidised services harmed some people, more especially the local elite who ran them, as the private sector took several years to emerge to fill this gap. Similar problems affected many sectors as Zambia shifted from a nationalised to a market economy, the most important of which was agricultural marketing. From a donor’s perspective, the money spent did alleviate hunger in the short term. However, this was an expensive and inefficient solution, and in the longer term, was unsustainable - possibly even harming the emergence of sustainable (private) alternatives.

The RM noted that LIRD had proposed to maintain the functions but to pass this responsibility to the LLSC once it was ready to receive them, a strategy that was naïve and unattainable.

³ After the elections in October 1991, the structure of the Local Leadership Steering Committee was changed. The elected members were removed leaving only the chiefs and their *Ndunas* (advisers) in full control.

Instead, it recommended that functions be returned to line ministries. The RM noted that the cost:benefit ratio of the agricultural programme was high, was reluctant to recommend the closure of this programme, and recommended discussions with the Provincial Agricultural Office to merge the programmes. In the event, the programme was passed to Department of Agriculture and subsequently collapsed. Reading between the lines, it appears that the RM concluded that a focussed LIRD P would be better at managing the wildlife functions that were in any case central to the programme. The private sector would take up milling, transport, etc., where these were viable. The community, if structured properly to receive wildlife revenues, could provide its own social facilities (e.g. water) more efficiently than the project could, and could also address natural resource management issues such as fishing and forestry. Even assuming that line ministries would fail in their obligations, the only real casualties would be the roads and agricultural programmes.

The RM also looked at the workings of the project, including the important issues of gender, the siting of the headquarters and financial and management systems. The appraisal agreed with the project's proposal to discontinue the separate women's program and integrate its objectives throughout the project.

The siting of a new HQ for LIRD P had been much delayed during Phase 2 due to insufficient funds⁴, lack of clarity about the future role of the project, and the change in governments⁵. The team suggested that Mfuwe appeared a better location than Mambwe, based on rough socio-economic estimate. This suggestion ignored the preference of the local people for the HQ to be sited at Mambwe, the tour operators wanting development kept away from the park and Mambwe being more central for some local communities. Both arguments fall away with LIRD P's transition to an organisation responsible for wildlife rather than integrated rural development.

Previous reviews had criticised LIRD P accounting procedures. Clearly much progress must have been made since the team was of the opinion that "the budgeting and accounting system of the project is one of the best and most elaborate seen on a project of this nature anywhere in Africa" (though projects do not set an especially high standard. While the funds were easily accounted for using computerised accounts, the systems did limit the growth of middle management. The biggest criticism was that management was overly centralised, so that the performance of individual sections was difficult to analyse (e.g. the business enterprises).

Finally, it was suggested that the Phase 3 plan should be developed in a planning workshop using the logical framework approach. This should redefine project objectives, redefine the organisational structure, improve integration into the local institutional system, and establish outputs and indicators.

4.1.2 Revised Proposals for Phase 3

At the annual meeting between NORAD and the Zambian government, held at Chichele Lodge in November 1993, NORAD supported the recommendations of the Scanteam appraisal report. LIRD P then began negotiations with various line ministries at Chipata District level and at

⁴ Interconsult prepared a feasibility study for a new headquarters at Mambwe in 1990. The report was submitted in May 1991, suggesting a cost of NOK 65m.

⁵ Eastern Province was a stronghold of Kaunda's UNIP government, and made Mambwe a full District Council. However, after assuming power in 1991, the MMD government downgraded Mambwe to a sub-boma of Chipata District council.

national level in Lusaka. These led to a Second Revised Project Submission Document for Phase 3 which was discussed again by NORAD and the government in March 1994. It was requested that the document be subjected to analysis according to the Logical Framework Approach (LFA) and be reformatted. This strategic planning workshop was held at Lilayi Lodge in May 1994, with participants from local communities, district council, tour operators, line ministries and LIRD management. The results of this workshop were used to compile a further revised proposal for Phase 3. This requested US \$ 3.5 funding from NORAD for the period 1995-1997.

The proposal (LIRD, 1994) recorded a range of successes and problems experienced during Phase 2 (see Box 4.3), and recognized the need to change the orientation of LIRD:

“through a revised project mandate, including objectives, strategy and scope, the gradual transfer of most of the activities to the respective line ministries [operating in the project area] and improving the capability of the local communities to manage their own resources. Hence, LIRD will restrict itself to co-ordinating the activities of the various line ministries, assisting them with advice, logistical and financial support for the transition period, emphasizing public awareness activities and strengthening community based natural resource management (CBNRM) through grass roots organizations (LIRD, 1994, p4).

Box 4.3: Phase 2 Successes and Problems

(a) Successes

In proposing a Phase 3, LIRD project management noted the following as successes achieved during Phase 2:

Local participation: Active local participation in project planning and supervision was developed through the LLSC, comprising the 6 local Chiefs, one induna from each Chief, women’s representative, one Councillor per Ward, and the District Administrative Secretary.

Land Use Planning: A land-use planning and zoning exercise has been initiated in conjunction with the local leadership, addressing issues of land use, human population growth and development of agricultural, forestry and wildlife industries.

Infrastructural improvements: Improvements in the road system have been achieved, through upgrading and construction, including drifts, culverts and a bridge crossing the Msandile River. In SLNP, each year approximately 450 km of seasonal tourist loops have been graded and 80 km of new roads have been added to the existing network.

Food security: Major improvements in food security have been achieved through the agricultural program and the Malambo Milling operation. Six storage sheds were built, one in each Chief’s area.

Employment opportunities: Through the activities of the project, a significant proportion of the local population has gained permanent and part-time wage employment (382 villagers in road construction, 100 village scouts in wildlife management), resulting in improved household incomes and welfare in general.

Gender considerations: The project has addressed the interests of women residing in the project area, through incorporating gender issues in the agendas of all sections, particularly through direct wage employment, and through the provision of services through women’s clubs.

Improvement of the law enforcement effort: The catch/effort indices for most classes of illegal activity have been reduced to acceptable levels, with particular reference to the illegal off-take of elephants.

Poaching was reduced by 90 % - before LIRD, on average 10 elephants were killed each day; but since 1989, only 10 to 20 elephants have been killed by illegal hunters annually. Over 5000 assorted firearms were confiscated.

Allocation of revenues to community development: As an example, in 1993, an estimated US \$ 250,000 was collected through safari hunting and tourism. The local communities were allocated 40% of total revenues, to be used for community development projects.

(b) Problems

Despite this achievement, the project experienced a number of problems precipitating its failure to achieve financial sustainability during Phase 2. The Phase 3 proposal presented the following 'problem tree', based on a Logical Framework Analysis, showing the problems inherent in the project format as related to the core problem, causes, effects and inter-relationships which the project was supposed to address.

"The core problem in the project area was identified as socio-economic deprivation of the local communities with regard to resource utilization and resource management. This was compounded by poor socio-economic welfare and food insecurity. This resulted in illegal and unsustainable resource use, threatening the conservation status of the natural resources of the project area and thus the standard of living of the people living adjacent to the park.

With regard to the project, the basic problems arose from inadequate project plans and strategies, as a result of an unclear project mandate, lack of park and land-use plans necessary for sound management decisions, unclear roles of interested parties and a weak public awareness campaign. This resulted in the project taking an implementing role rather than strengthening and coordinating the activities of line ministries, resulting in poor community participation, a poor revenue base, high financial requirements/inputs, failure in achieving financial sustainability and consequently a persistent dependence on donor funding. Problems in the cooperation between some traditional leaders and some councillors were evident".

Source: LIRD (1994, p11).

Box 4.3 is a good reflection of the management capacity of the project at this time. The law enforcement effort was quantified, showing that poaching was under control. The road section, which had purchased a large amount of equipment, built only 80km of roads during phase 2, often using labour-based methods. The aspects affecting local communities, namely local participation, land use planning and revenue allocation, tended to be assessed using an indication of inputs rather than outputs, and the understanding of institutional development and the goals of the community programme appeared to be weak. While the participation of local communities through the LLCC was lauded by LIRD, this was not open and transparent participation of local people in the mode now widely accepted⁶. The amount of money allocated to communities was known, but there was no record of how this money was spent and how members of the local communities benefited. The land use planning was too reliant on deskwork, and never led to anything. Overall, there was no assessment of value-added or cost:benefit, a frustration voiced by project Assistant Director for Administration, Goran Johansson, who bemoaned the culture of free-money in the project (Johansson, 1995). This lends credence to some of the criticism that LIRD was extremely wasteful and inefficient. However, LIRD was having to operate in a complicated, bureaucratic and unbusiness-like environment that was not used to financial efficiency. It faced numerous and constraining external factors, and not all these failures were the project's fault. For example, when asked about these problems, Richard Bell (pers. comm.)

⁶ When asked about these problems, Richard Bell (pers. comm) points out that the LLCC model was imposed by the Steering Committee despite project management suggesting various approaches.

points out that the LLCC model was imposed by the Steering Committee despite project management suggesting various approaches

One of the most important improvements of the new proposal was that it was laid out using a much clearer framework of objectives. Objectives and indicators were also provided for all project activities, together with external factors. LIRDPA's new development objective focussed on wildlife and economic development through the sustainable use of this wildlife, by implication dropping most of the social services it had provided. The immediate objective was to develop a sound CBNRM system, although this was still concerned with benefits via services and to be controlled by the LLSC (Box 4.4).

Box 4.4: Overall Objectives and Suggested Indicators for Phase 3

Overall Development Objective

“To improve the status of the wildlife resource in the project area, thereby increasing the densities of key-animal species while maintaining the biological diversity and creating a favourable environment for further development of the tourism and hunting safari industries, which will allow continued generation of benefits for communities and revenues for effective management of the resource” (LIRDPA, 1994, p12).

Suggested indicators:

- populations of key-animal species stabilized at the respective economic carrying capacity levels, while maintaining the biodiversity of the area;
- increased revenue collection from wildlife -based industries;
- lowered incidence of illegal off-take
- favourable environment for further tourism development
- agreed land-use plans being adhered to; and
- environmental impact assessments positive.

Immediate Objective

“To establish a sound CBNRM system, operative under the Integrated Resource Development Authority* (formerly LLSC), which will gradually take over all responsibilities of LIRDPA” (LIRDPA, 1994 p13).

Suggested indicators;

- local communities fully participate in the management of the natural resources;
- incidence of illegal resource use in the [Lupande] GMA has been reduce;
- the law enforcement budgets in both SLNP and the GMA have been reduced;
- by the year 1997, all households in the project area obtain benefits from wildlife utilization activities through services funded by community projects; and
- increasingly more management tasks are taken over by the IRDA.

**. Integrated Resource Development Authorities (IRDAs) were designated under section 37 of the NPWS Act No. 10 of 1991, but had yet to be formalised and achieve legal status. Once this occurred, it was envisaged that LIRDPA would become Lupande IRDA with the project as its secretariat. In practice, on 1st January 1999, LIRDPA was transformed into the South Luangwa Area Management Unit (SLAMU) in preparation for NPWS becoming the Zambia Wildlife Authority.*

Success factors would included the clarification of the issue of ownership of the wildlife resource; grass-roots capacity building; the preparation of a park and tourism development plan; broadening of the revenue base; and the full acceptance of their responsibility by the key line ministries.

Management positions were to be restructured, and the community liaison section strengthened by appointing a co-ordinator for CBNRM.

The intention for Phase 3 was to scale down activities to levels that could be supported by the expected revenues and later sustained by local financial resources. At the time, 85% of financial support for LIRDPA was provided by NORAD. It was envisaged that donor support would gradually be scaled down and replaced by support from the project's own resources with supplementation from the government. Participating line ministries would be expected to assume their responsibilities in the area using financial resources allocated from their departmental budgets.

Downsizing the implementation responsibilities of LIRDPA would greatly reduce the size of the project HQ. The aim was, therefore, that as soon as all relevant activities were taken over by respective line ministries, the Chipata HQ would be closed and moved to Mfuwe, but this would still need the construction of new office space and housing. The proposal also envisaged a Phase 4 after 1997.

CHAPTER FIVE

A NEW APPROACH: MAKING WILDLIFE MANAGEMENT THE CORE BUSINESS

This chapter is concerned with phase 3 of LIRDP – a period of internally-driven change. It discusses the shedding of those project activities and functions not related to wildlife management, and describes the main project activities undertaken within the South Luangwa National Park - park planning, law enforcement and culling. Some of the factors influencing these changes within LIRDP are discussed, together with the process of change itself and the results of these activities (see section “Vision for the Future”).

In addition to routine activities (law-enforcement, road maintenance, support for tourism, CBNRM, etc.), a major focus of this phase was project planning in 1997, 1998 and early 1999. This was geared towards developing a sound proposal for a fourth phase of the project and in response to the change of status when the new Zambia Wildlife Authority (ZAWA) Act would be implemented. Thus, and after 13 years of existence, LIRDP was transformed on 1st January 1999 into the South Luangwa Area Management Unit (SLAMU) in preparation for the transformation of the NPWS into the new ZAWA (ZAWA was finally initiated in January 2000). The extended project planning process culminated in the proposals for phase 4 (submitted to NORAD in April 1998) and these are described, together with the findings of a consultancy to review phase 3 and the plans for phase 4.

Perhaps the greatest advance during phase 3 was a new approach to CBNRM. In this chapter, we describe how LIRDP shifted from a first-generation to a second-generation CBNRM programme is described (a more in-depth analysis of the new programme is provided in Chapter Seven). During this period Dr Cheryl Butler provided an independent view of the CBNRM programme and her findings are reported in some length.

1998 was a year of metamorphosis and changes continued. The structure and management systems of LIRDP were over-hauled in setting the stage for financial and operational self-sufficiency. This was the main work of phase 4 and is discussed in chapter Six.

5.1 The Phase 3 Program (1995-1998)

Under Phase 3, the project was restructured and “trimmed around its core functions - wildlife management” (LIRDP, 1996b). NORAD’s annual contribution was reduced from some US \$ 2.5 million to about US \$ 1.0 million. Although accepting the proposals for Phase 3, signing of the agreement and release of funding by NORAD was delayed pending the completion of official investigations by the Anti-Corruption Commission concerning alleged misappropriation of project funds during Phase 2. The investigations led to the dismissal of some officers and the suspension of others (including the project Director during July-August 1995). There was also a parliamentary hearing on the 1986-1992 audit report. The allegations were reported in the Norwegian press which pays close attention to the issue of development assistance (public opinion is divided on the level of aid provided by Norway). Some people in Norway were critical that too much funding had been provided to the project in Phase 2 with insufficient setting of priorities. While this situation severely threatened and inhibited the project, it also represented a turning point for LIRDP – it forced the project to cut costs and to prioritise activities. Extraordinary incomes in 1995 made it possible for the project to finance the core components of LIRDP and maintain some activities at 1994 levels pending the delayed release of NORAD funds. The main sources of income were park entry fees, hunting licence fees which were not paid to the community until 1996, hippo culling and the sale of a significant number of old vehicles since the project was reducing its fleet.

5.2 Shedding non-wildlife functions

During 1995, meetings were held with line ministries to finalise the absorption and integration of staff and activities formerly under LIRD. Some departments responded favourably (e.g. NPWS, Water Affairs) but others did not have the capacity and did not keep their pledges (e.g. Agriculture and Community Development) and problems resulted. For example: "Most staff affected by this process have never got their salaries; and the operations of the agricultural component have almost come to a stand-still due to lack of support resources" (LIRD, 1995a, p4). By late 1996, the performance of the line ministries was still "rather disappointing, despite the fact that the project has handed over vehicles to most of the departments" (LIRD, 1996d). The failure of various government agencies to use their vehicles in the project area, which was indicative of the low level of their activities here, was a constant theme at project annual meetings between 1995 and 1999.

Equipment belonging to Malambo Safaris was disposed of through public sale, and the title deeds for Malambo Milling were obtained (the premises had been leased) to allow property to be transferred or sold. Calculations showed that it was cheaper to hire trucks for transporting materials than to operate the project's own fleet, and it was decided to sell all trucks and close Malambo Transport. It is interesting to note that:

"All the chiefs were disappointed with the sale of Malambo Milling and phasing out of Malambo Transport, respectively. They felt that selling of Malambo Milling might result in the re-allocation of the mill to an area outside the project area or an increase in the mealie meal prices - thus depriving the people of the project area of the opportunity to purchase cheap mealie meal. They also felt this would reduce the anti-poaching effort, as this activity mainly depended on the mill for patrol rations The consequences of phasing out Malambo Transport are already being felt by the people living in the valley. There is no reliable public transport between Mfuwe and Chipata. Thus people face the same problems they faced in the 1980s before the project was in operation" (LIRD 1996b, p6).

In the event, these closures did cause short-term problems. People who had been used to a reliable and subsidised source of maize meal took several years to adjust to free-market conditions. Some farmers sold their crops almost immediately after harvest to get cash, but then went hungry prior to the next harvest when maize was available, but at two to three times what they had sold it for. Speculators made large profits while people were learning about the laws of supply and demand. For a few years there was also a shortage of transport but, by the late 1990's, at least ten 4-wheel drive vehicles or mini-buses were servicing this route. Moreover, this was a problem common to much of Zambia at the time as the economic structural adjustment programme was implemented (Reed, 1992).

However, the diabolical state of the Chipata-Mfuwe road was also a factor in both of these problems. NORAD did provide independent funding the Ministry of Roads (about US \$70,000 annually) to maintain (annual grading) and upgrade this road, but this money was often held until late in the season so grading occurred just before the rains. A few sections of the road were upgraded, representing a long-term improvement, but more could have been done with the money.

Seasonal grading of 400 km of roads was undertaken in the park and GMA, despite the financial constraints, though the total budget in 1995 was K124m (\$173,000) compared to K310 in 1994. The grading of park roads continues to be an important project activity immediately after the rains, but support to road maintenance in the GMA was gradually downsized in phase 3. In 1997, K200m was allocated to this activity but, by 1999, assistance for grading was provided only for those GMA roads that were linked directly to park and wildlife activities. The most important of these was the Mfuwe-Malama road. Expenditure of some K400m from 1997 to 1999 allowed this road to remain passable throughout almost the whole of the rainy season. It also meant that, unlike in the past, the 'dying' Malama community was not cut off for six months of the year.

The agricultural programme had operated to provide extension services and conduct farming systems research. In January 1995 responsibility for this reverted to the Ministry of Agriculture and services declined due to erratic of inadequate funding. By 1996, all field trials had been abandoned, though a few trials of various drought resistant food and relish crops were continued at the Masumba agricultural research sub-station, which had been maintained by LIRD. By 1998, the programme had to all intents and purpose collapsed.

The Water Development Section of LIRD failed to undertake any useful activities (but spent \$40,000) and the planned phase-out was delayed by a year to allow it to complete a work programme, but this never happened. There was no improvement when the line Ministry assumed its responsibilities.

5.3 Park and wildlife management

5.3.1 Park planning

A Park and Tourism Development Plan for the project area was developed by an IUCN team during 1995. In 1996, a draft was presented to and debated by the local community, tour operators, professional safari hunters and LIRD management, and was also circulated for wider comment. However, the park plan, while providing and collating important land use data, was described by LIRD staff as a “shopping list for Santa Claus and therefore un-implementable. With sustainability as the primary goal the core of the plan should be a commercial strategy” (LIRD, 1996c). It was also criticised for failing to set out clear management objectives, for not encompassing the surrounding GMAs and for omitting some existing tourism facilities. Adoption of the plan was delayed pending review and ratification of new legislation concerning wildlife management in Zambia (passed in 1998 - see Box 5.7). In the event this report was relegated to the shelf, having taken seven months and some US \$350,000 to develop. In any case, it was not seen as a workable plan. Like many bio-diversity-focused park plans, it included a broad list of rather general ecological goals and almost totally ignored the finances and management systems needed to attain these goals. No clear targets or goals were explicitly defined. A killing fault in the plan was that it advocated very low density high-quality tourism, yet provided no financial analysis to show how this approach would provide sufficient income to fund the servicing of the resource base, including road maintenance and anti-poaching.

In 1998, the park plan was taken up again. Work to consolidate the draft management plan for SLNP was initiated as part of the national planning process for restructuring the wildlife department. In addition to funding for this transformation, the European Development Fund supported NPWS to develop general management plans for priority game parks in Zambia. Some of the information in the plan prepared by an IUCN team in 1995 (see section 5.1) was used, but it was essentially a new initiative.

Planning was the responsibility of the Protected Areas Planning Unit at NPWS Headquarters in Chilanga. This unit comprised NPWS staff and technical assistance officers funded by the European Union. Several workshops were held with key stakeholders, and the planning team and various consultants undertook a survey of park resources and facilities. The team identified the park’s exceptional resources and noted a range of key problems (e.g. continued poaching, congested tourism facilities around Mfuwe, the uncoordinated activities of Command Wardens, poor control of NPWS staff, and a poor main entrance to the park). In essence, the final plan comprised a zonation map and, after considerable pressure, did include support for sufficient tourism facilities to fund the park. The final version of the plan was submitted in early 1999 but still awaits ratification.

There was some criticism from stakeholders that an old-fashioned desire to have untouched wilderness zones remained in the plan despite strong consensus, especially amongst park managers and tour operators, that this approach was unsuitable. It was seen desirable to have remote bush camps in all areas because of their negligible ecological impact, and their positive results for both ground

coverage and park income. Areas without any tourism were perceived to be more susceptible to neglect or poaching. While the planning process and the inclusion of many stakeholders was a very positive move, the plan still suffered the fate of many traditional park plans. It proved not to be a management document but more a very general statement of intent.

For practical purposes, the park is managed using LIRDP project plans (which are implementable) and budgets agreed with NORAD rather than the park plan (which is not implementable). There is no fundamental disagreement over this approach since project plans have built on the information and opinions gathered at stakeholder workshops. This implies that an implementation plan with objectives and budgets is ultimately far more valuable than the conventional 'park plan'.

5.3.2 Law enforcement

The restricted operational budget affected the activities of the wildlife management section during 1995: permanent carriers (porters) were phased out, patrol allowances to scouts were not paid, investigations were suspended, fuel allocations and patrol rations were reduced, and casual workers were no longer employed to renovate scout camps. The restrictions affected law enforcement (see Box 5.1), with repercussions for several years.

Box 5.1: Law Enforcement in 1994-1998

Since the inception of LIRDP in 1988, great efforts were made to reduce both commercial and subsistence poaching. The project introduced a program of village scouts to act as informers and help NPWS scouts deal with poachers in their respective and surrounding villages. Initially, the program was very effective, but it was not long before village scouts were informing their relatives about the presence of NPWS patrols. To combat this problem, village scouts were transferred out of their home areas. The result was that village scouts were essentially the same as normal scouts, except that they were employed by the project rather than NPWS. The participatory aspect of the programme was lost. More recently (1998), communities have employed their own "community-based scouts" who patrol in conjunction with regular scouts. To date, this system is working, and is much cheaper, but can be very much improved with training in both law-enforcement and the management of ground coverage.

Notwithstanding the problems with developing participatory law enforcement systems, law enforcement was effective. From 1989, the working morale amongst NPWS scouts was high due to incentives provided by LIRDP, a substantial increase in the number of scouts, an effective warden leading the programme, and training. "In 1990 and 1991, the Mfuwe Command had some officers who had graduated from Chikomeni and Chunga Colleges of Wildlife Management. With the fresh ideas and the eagerness to experiment [with] whatever they were taught at college, they had the desire to go out for operations".

Prior to LIRDP, hundreds and even thousands of elephants were poached each year. In the first year of LIRDP, losses were reduced to 36 elephants (in 1988) and further improvements in law enforcement reduced poaching to as low as 9 in 1993. In terms of population dynamics, these losses were negligible. In addition to the factors mentioned above, LIRDP provided incentives for catching poachers, and patrols were managed and monitored well, making illegal hunting difficult. But 1994 and 1995 saw an increase in the number of elephants and other animals killed (patrols finding 23 poached elephants in 1995), and a decrease in the number of arrests from patrols. This was attributed to financial restrictions and the consequent restriction in mileage allowance, late payment of patrol allowances, laying off of permanent carriers, and a reduction in the number of investigator teams together with some restrictions in their areas of operation. The level of poaching was closely correlated with the level (and cost) of law-enforcement effort, and, in a detailed study of ten years of data, it has been shown that the number of men on the ground was the critical determinant of poaching levels, with the ivory ban having no measurable impact (Jachmann, 1998a).

When working at its maximum capacity in 1991, 360 patrols were undertaken. This reduced steadily thereafter: to 300 in 1993, 260 in 1994, 175 in 1995, and 174 in 1995, with the increasing neglect of law-enforcement being in part a reflection of the loss of two senior staff, the Co-Director (Technical) and the late

Warden. To counter the moderate increase in poaching, efforts were made to upgrade law enforcement. Investigations were 'revamped' in 1996. Improvements were made in the bonus rates system, other security wings were used to complement LIRD P efforts, and new vehicles were allocated for both investigations and patrol operations. Temporary carriers were also re-introduced. These measures boosted morale, and law enforcement effort improved. The number of patrols increased to 214 in 1997 and to 241 in 1998. Over the 1996-1998 period, the number of long 15-day patrols increased by 38%.

The following data provides some indication of law enforcement effort and reporting. According to LIRD P's Third Quarter Report, "In January-September 1996, LIRD P recorded 281 arrests and 249 convictions with a recovery of 217 firearms (210 muzzle loading guns), 30 pieces of ivory (while 16 elephants were recorded poached), 70 snares, 6 bicycles, 13 skins of prescribed trophies (lion/leopards). Nine convicts were imprisoned for a maximum of 5 years. Investigations recorded a success rate of 2:1, i.e. one arrest or recovery per two effective investigation days. This success rate is the highest ever recorded since the inception of the project, and probably the most successful performance ever recorded on the whole African continent. This index also indicates a continuing high rate of illegal activities in 1996 in and around the project area with pressure on wildlife still high". Part of the reason for the high success of investigations was that teams followed up poachers in non-project areas where much less anti-poaching effort had been made, investigations officers thereby getting themselves more bonuses.

Comparable data for 1998 show that 113 poachers were arrested, 69 firearms and 6 skins confiscated, and 15 elephants and 96 other animals found poached, suggesting that the increased efforts had reduced poaching.

Whilst commercial poaching is being controlled in SLNP and Lupande GMA, subsistence poaching in the form of snaring is an increasing problem. 713 snares were confiscated in 1996. From mid-1997, a unit of voluntary but officially gazetted Honorary Game Rangers (HGRs) was established in Mfuwe. Their patrols found more than 800 snares in 1997 and 628 in 1998. Snares have been found mainly along the Luangwa River, often close to fishing camps. According to the leader of the HGR unit, "every fishing camp on the Luangwa river also supports a snaring operation". To combat this problem, SLAMU has assisted fishermen in the Nsefu area to establish their own organisation in the hope that they will control snare-setters.

Sources: LIRD P (1995a, 1996a, 1996d), LIRD P News, 4, 1998; SLAMU News, 5, 1999

5.3.3 *Hippo culling*

After weighing the evidence and finding that an over-population of hippos was threatening ecological health and bio-diversity (see Box 5.2), a major hippo culling exercise was undertaken by a contractor in 1995 along a 165 km stretch of the Luangwa river (culling had been suspended in 1994 across the country under a ministerial ban) - 507 hippos were killed. The carcasses were sold to the public. The Area Development Committees were involved in processing 61% of all carcasses and finding a market for the meat. Unfortunately, this was not well accounted for and led to the Minister of Tourism instructing that a review of the means of processing hippos be carried out. In 1996, a further 234 hippos were culled, and an agreement was made with safari hunting operators to cull 28 buffaloes in Lupande GMA under the community culling license - the meat being distributed to communities.

LIRD P was allocated 750 hippos for culling in 1997 but, because of bureaucratic hurdles in the tendering procedure, the exercise was never undertaken and the project effectively lost about US \$ 205,000 income. In 1998, the culling programme started late due to similar difficulties, and to problems in finding companies prepared to do the work because of low hippo skin prices following a market collapse due to a surplus of skins. As a result, only 350 of the 750 allocated hippos were shot and actual income amounted to only US \$43,500 (\$225,000 had been expected) (see Table 5.1). Furthermore, one of the companies proved to be inexperienced and LIRD P ended up having itself to organise cleaning, preservation and storage of hundreds of skins and teeth. There were also accusations that one company was illegally selling safaris. All in all, the 1998 cull was highly

Box 5.2: Hippos and Culling in the Luangwa

The hippo population in the Luangwa river in the LIRD area had been monitored for many years. This population was decimated in the early part of the century and stood at less than 500 in 1940. However, with the protection afforded by the park, the population grew rapidly to about 4,000 in 1960 and 6,000 by 1980, after which it was maintained by a combination of large-scale die-offs and culling. In the 1960s, several scientists expressed concern over the ecological impact of excessive hippo populations. Some hippos were culled. The subsequent monitoring provides an exceptionally long series of wildlife population data. In the later stages of this growth (the 1970s and 1980s), the average annual rate of population increase was 4%, compared to a maximum or intrinsic rate of increase of 15.5%. This suggests that growth was being severely limited and that the hippo population had reached its maximum capacity. These conclusions were confirmed by Suzuki (1996) whose analysis of carcass data from the 1995 and 1996 culls showed that hippos were growing slower and breeding later, a classical indication of over-population. There were also regular deaths of hippos in the late dry season.

The large numbers of hippos were viewed as an ecological problem, given the propensity of such a mega-herbivore to damage habitats. Not unexpectedly, there was a massive outbreak of anthrax in 1987, which killed 1,400 animals along the monitored stretch of river. Anecdotal evidence (Phil Berry, pers. comm.) suggested that this outbreak spread to several other species, but has a particularly catastrophic impact on wild dogs – numbers crashed to the extent that they were rarely seen for almost a decade. The decision was taken to cull hippos to prevent further ecological degradation, and the risks of further disease outbreaks. It was also the view that, without culling, animals would continue to die through diseases and food scarcity and, in an area where people were hungry, this was wasteful and unacceptable.

Early ecological indications of problems were the loss of reed beds, a riverbank *ficus* species (Attwell, pers. comm.) and rufous-bellied herons (Berry, pers. Comm.). This may have been a partial cause of the increase in river silt loads from 30,000 tonnes in the early 1960s to almost 60,000 tonnes in the 1990s (Sichingabula, 1998). In 1999, there were 1,900 hippos in the Nsefu sector, a density of almost 50 hippos per kilometre of river. An ecological survey by Changwe and Child (1999) showed heavy grass use in 43% of plots here compared to 15% in the rest of the park and 0% in the GMA. The incidence of puku dung here was only 25% of the average elsewhere in the park, while waterbuck and zebra dung was almost absent from this sector of the park. The clear implication is that the high number of hippo (and buffalo) were out-competing other grazers. There was also evidence that hippo trails were cutting down to depths of 30cm to 70cm, and draining both ox-bow lakes and dambos. Along some hippo paths, a dendritic pattern of annual grasses had replaced perennial grasses, an indication of degradation or desertification.

Source (other than citations): LIRD (1996a).

Table 5.1 Comparison of financial returns from hippo culling (1995 to 1999)

Year	Exchange rate	Number of hippos killed (quota)				
			Total income (ZK)	Income per hippo (ZK)	Total income US \$)	Income per hippo (US \$)
1999	2,300	352 (500)	ZK144.0m	ZK409,000	62,600	\$177
1998	2,400	353 (500)	ZK104.5m	ZK296,000	43,500	\$123
1997		Nil (750)				
1996	1,300	234 (500)	ZK 98.0m	ZK418,800	75,000	\$320
1995	715	507 (500)	ZK131.0m	ZK258,382	\$183,217	\$361

problematic. In 1999, Hawk Trading was again contracted, and killed 350 hippos. The meat contractor pulled out at the last minute, leaving SLAMU and Hawk to do this at short notice.

A further 150 hippos were allocated to Safari Expeditions, but were never culled. Getting the exercise started and keeping it going took a great deal of management time. There was vociferous antagonism from some tour operators over the culling; while there is an acceptance of the need to cull, there is concern over the way it is done, as well as an obvious conflict of interest between photographic tourism and culling. To avoid this workload and similar problems in the future, the project was intending to seek clearance from the National Tender Board to agree long-term contracts with a few experienced professional companies with capacity to undertake large-scale culling in a professional manner (SLAMU News, 5, 1999).

5.3.4 Safari hunting

During phase 2, LIRD P had attempted to run its own hunting operation, Malambo Safaris. In 1996, all the hunting areas in Zambia were re-allocated through a tender process¹ (see also Box 5.3). The project continued to earn some US \$200,000 - 250,000 annually from hunting, but there was no

Box 5.3: Safari Hunting in Lupande GMA: 1993-1995

The LIRD P area has two hunting blocks: the Upper and Lower Lupande. In these blocks, two different companies hunted during the 1993-1995 period: Baobab Safaris and Safari Expeditions.

The operations of the hunting safaris usually start around May and end in October. Animals are sold to international clients who are hosted by these safari outfitters. They pay about \$1,500 to hunt a buffalo and \$6,000 to hunt a lion, which are reasonable prices but not exceptional compared to other countries. When each client buys his hunting licences, the money is collected by SLAMU and immediately paid into a joint community-SLAMU bank account. At the end of every financial year, a share of the total revenue accrued is given to Lupande residents as community benefit.

According to the 1996 Annual Report, LIRD P collected a total of ZK 177 million (\$245,000) in 1995 from safari hunting exercises of which 50% (i.e. ZK 88.5 million) was given to the local community. In 1996, it was intended that this share would increase to 60%. In the event, policy was changed and the community received all the GMA wildlife revenues. At this time, the money was deposited into community accounts by LIRD P and was later used by the community on community-based projects like building of schools and clinics.

Source: LIRD P (1996)

growth in income. This can be explained by the politicised and uncertain nature of the administration of the hunting business and contracts, which gives safari operators little incentive to invest in either the resource base or their relationships with the local communities. With a sound commercial strategy, income and wildlife populations in the GMA could be increased very significantly. As noted elsewhere in this review, the allocation of the hunting quota to lower-value uses such as culling and district licences has also served to halve its value.

¹ There were allegations of corruption in this process. NPWS had allocated concessions in 1996 with some stakeholder representation (largely chiefs), but these recommendations were taken to higher levels and changed. For the next three years, NORAD continued to follow up their request for a report from the Anti-Corruption Commission regarding these allegations at project annual and review meetings. As Gibson (1999) explains, hunting is a highly politicised industry in Zambia. 'Front-benchers' gain from the allocation of concessions, and 'back-benchers' gain from special licenses, which give them the right to hunt a few animals at prices that make the sale of meat profitable.

5.3.5 Wildlife surveys

During phase 3, regular aerial surveys and ground counts of large mammals were conducted. The elephant population was recovering well but poaching pressure on elephant remained high. In the project management's view:

“Although to some extent the [ivory] ban has been helpful, the recovery of the elephant population is not dependent on the ban, but on adequate budgetary provisions and logistical support to combat poaching. The LIRDPA experience is that there is a need to keep the anti-poaching support at a level where poaching incidence is kept at or reduced to a minimum. The level of support to LIRDPA has reduced elephant poaching from 10 elephants killed per day in the 1980s to 20 elephants killed on average per year since the inception of the project” (LIRDPA, 1996d).

LIRDPA undertook its own aerial surveys until 1997, when Hugo Jachmann transferred from LIRDPA to the Wildlife Resource Monitoring Unit of the Environmental Management Council. The Wildlife Resource Monitoring Unit was then commissioned to undertake airborne wildlife surveys in the project area, covering elephants, buffalo and a wide range of antelope species. The data from 1993 to 1999 are summarised in a very useful report (Jachmann and Phiri, 1999) which shows:

- The elephant population in the project area increased from 5,000 after the period of severe poaching to almost 9,000 in 1996, after which it declined to about 7,000. Low carcass ratios indicated that this decline was definitely not caused by poaching. It was either a result of statistical error (chance) in the samples, or a movement out of the area. In the Mfuwe area, anecdotal evidence (including crop raiding and tree-damage) suggested rapid breeding and a steady increase in numbers.
- Buffalo increased significantly from 7,000 to 20,000
- The eland population recovered from a few hundred to over 1,000.
- Hartbeest and roan declined and, although this should be interpreted with caution, it could be attributed to their presence in more remote and less patrolled western escarpment area, or even to habit change through fire. Sable had almost disappeared.
- Wildebeest and waterbuck had both declined steadily since the mid-1970s, this being largely a function of competition from bulk-roughage grazers.
- Distribution maps showed that the population density of large mammals in Lupande GMA was less than half that in the park, and was concentrated mainly along the Luangwa river and in the unpopulated areas in Msoro and Nsefu.

By 1998 there were 9,500 elephants in the project area, compared with only 2,800 in 1988 (LIRDPA News, 4, 1998). The population was approaching the density of <1.0 per km^2 suggested by Cumming (1997) at which damage can be expected to the structure of woodland with a reduction in the diversity of associated bird and insect fauna. The over-population of elephant in the Luangwa Valley in the 1960s and 1970s led then to serious damage to the vegetation in the area, with severe coppicing of *mopane* woodland and anecdotal evidence of considerable loss of *Acacia albida* and baobab (*Adansonia digitata*). Following the crash in elephant numbers during the 1980s due to commercial poaching, the woodlands began to recover. However, there are renewed signs of over-use of vegetation by this species (Scanteam 1998). The growth of hippo populations and the concerns about the impact of these mega-herbivores on habitats is discussed in Box 5.2.

5.4 A Vision for the Future: re-engineering LIRDPA

In early 1996, the project began a serious attempt to re-organise itself. The impetus came from several directions. There was confusion at the time within the project about its general direction, and the need to clarify this and perhaps set a new direction was brought to a head by the funding difficulties in 1995. The community programme was also restructured as a second-generation

CBNRM programme (explained in section 1.2, Chapter 1) following the recommendations of the 1993 review, with the recruitment of a technical advisor for CBNRM. Finally, the issue of the new headquarters was still being pursued. NORAD insisted that the physical plans be responsive to the longer-term needs of LIRD, so a re-planning of LIRD preceded the planning of the new headquarters.

An important internal workshop was held by LIRD in April 1996. It achieved two purposes. It set a new direction for the project. It also involved all senior staff in a participatory forum. This was the start of a new and more inclusive style of management that began to create a common purpose and teamwork in the project. This allowed a major, and generally smooth, transition over the following three years. This was in marked contrast to the difficulties of the NPWS-ZAWA transition, which, at the time of writing, is still characterised by wrangling. Two threads brought this catalytic workshop about: the need to plan for the new headquarters, and the re-organisation of the community programme. These are discussed below in turn.

Project headquarters continued to remain in Chipata, although most operations were in the project area. This had direct cost implications with much travelling and duplication of several services. But of most importance were the resulting problems in co-ordinating management. It was difficult to develop a unified and co-ordinated management team and there were operational and organizational problems associated with having two centres of administration, e.g. slow decision-making and poor internal communication. As a result, relations between staff based in Chipata and Mfuwe were poor. This situation also exacerbated the poor communications and relations with the tour operators and with local communities and their leaders. Considerable time and energy was wasted travelling between the two centres, especially as telephone communications were often not working and the road in terrible condition.

In 1995, consultants undertook preliminary design studies and prepared costings for a new LIRD HQ and Mfuwe NPWS Command HQ at Mfuwe, together with staff housing, recreational and other facilities. The facilities were to support a project trimmed to two core functions: the management of South Luangwa National Park and supporting the development of CBNRM in Lupande GMA. Consequently, the previous proposals that the headquarters form the core of a district headquarters at Mambwe were no longer appropriate. Proposals based on these studies were considered by the eighth annual meeting of LIRD in January 1996. The meeting requested project management to provide scenarios of the future organisational structure of LIRD/LIRDA/NPWS as a basis for determining the optimal location and required physical capacity of the new HQ. Subsequently, a detailed proposal for the new project HQ was presented to NORAD in July 1996. This proposal was appraised by a NORAD team, which requested further clarifications relating to future project organisation and staffing.

At the same time, the newly formed CBNRM section of LIRD had requested a discussion on the implementation of this programme because the programme was not working and needed to be fundamentally modified.

“A series of workshops with ADCs [Area Development Committees] [in early 1996] indicated that the CBNRM programme was not working. Projects were not being implemented and, where they were, there was a lot of suspicion about the financial management of them. Indeed, a mapping exercise done in all VAGs [Village Action Committees] showed a surprising lack of appropriate projects². Few benefits had accrued to communities since 1992³. Overall, the Project was viewed in a negative light. The greatest worry, however, was that there was little association of wildlife with benefits, indicating a

² For example, the agricultural storage sheds mentioned as a project achievement in the 1994 annual report (Box 4.3) were not valued by the community.

³ Some of this money was borrowed from the communities, albeit with the permission of the LLSC, to tide the project through 1995 when NORAD funds were not forthcoming (see top of this chapter).

failure to achieve one of the primary objectives of the project. Many of these weaknesses had been identified by the 1993 review of the project upon which the present Phase III is based.

In April, senior management met to discuss the future direction of the project. This resulted in the “Vision” statement ...[in which] the CBNRM policy was transformed. Centralised, relatively paternalistic management would be replaced by devolved community-based management. This policy was presented to the policy and review meetings in April [1996] and was accepted. It was also discussed with all ADCs where there was enthusiastic support from all members, with the exception of some of the Chiefs” (Child and Phiri, 1997).

The senior staff meeting at which LIRDP decided to change its direction was relaxed and informal, and happened almost on the spur of the moment. It used participatory visualisation techniques (ideas written on cards and debated, organised and agreed upon) to capture the complexity of the programme in a logical manner (a problem tree), and to ‘memorise’ arguments and agreements.

The outcome was the important “Vision Statement” for the future Mfuwe Command/LIRDP (LIRDP 1996c) that is summarised in Box 5.4. This statement went a long way towards clarifying the project’s new mission. It was responsive to the challenge that the mini-government approach of Phase 2 was expensive and inefficient. It also moved financial realities to centre-stage – this was vital given that LIRDP had been funded for eight years and was still only 30% financially self-sufficient.

It was envisaged that future sustainability of the SLNP would be achieved through self-sufficient, “objective-orientated, performance-based management”. This would be funded by increasing revenues from an expanded tourism base, and an aggressive tourism investment plan for the park. The visioning staff meeting also assessed the CBNRM functions of LIRDP in some detail (see Box 5.4).

Box 5.4: Vision for LIRDP: 1996

The 1996 “Vision Statement” proposed that LIRDP would cut out functions performed by line ministries and concentrate on a core responsibility of wildlife management (thus complying with the recommendations of the 1993 review). It was agreed that LIRDP would have two main functions in line with the conservation objectives of the park and the sustainable development objectives of the community area:

- SLNP would be managed as a conservation area, but with increasing recognition of the need for financial and commercial sustainability; and
- in Lupande GMA, the benefits and management responsibility would be devolved to communities with the project’s role being the establishment of such structures and related capacity-building.

LIRDP would be phased out as an independent project and integrated into the new NPWS structure, but as a relatively autonomous management unit and cost centre⁴.

National Park Management

The park was clearly unsustainable in the short (and even medium) term, and it was agreed that serious measures had to be taken to address this issue. The annual running costs of the SLNP were about US \$1 million compared to income of some US \$ 400,000 in 1997 (\$350,000 from tourism, \$50,000 from culling). This situation required either a reduction in costs, or an increase in revenues, or preferably both. Efficiency and cost-cutting required improved and streamlined management structures, including a resolution of the situation whereby both Project and Wildlife Section reported independently to NPWS. The addition of a commercial management component was required to increase revenue including additional professional staff to facilitate the expansion of the private tourism sector and “extract appropriate charges from these

⁴ Zambia already had two other national parks managed on behalf of government by outside agencies: Kasanka and North Luangwa. It was hoped that rationalisation of management philosophies and processes in the LIRDP project area would demonstrate an alternative model (to ADMAD) for the emerging Zambia Wildlife Authority. It was hoped that this model would generate confidence in following a second-generation CBNRM approach, and in instituting a park management system that included the elements of both modern management systems and financial sustainability, but also run largely by Zambians.

operations”. Their objective would be to:

- make the park financially self-sufficient by upgrading the image of the SLNP - both internally (e.g. road signs, uniforms, standards of staff conduct) and externally (e.g. public relations);
- develop commercial opportunities (e.g. a tourism development plan and investment portfolio);
- market these new opportunities, usually through the private sector; and
- raise funds through other means.

Since SLNP is a large and integral ecosystem, natural resource management would likely be limited mainly to fire management and essential culling (only hippo, elephant and buffalo to date) which would be contracted out. The new management structure (now SLAMU) would continue to provide technical services (roads, water, equipment, etc.), would maintain its law enforcement functions in the park and related surrounding areas, and would carry out monitoring (ecology, CBNRM, economics, tourism, etc.) and any necessary research that was identified through this monitoring.

CBNRM Objectives in Lupande GMA

Two project objectives were set for the Lupande GMA: wildlife conservation, and economic and community development. LIRDPA argued that “because wildlife has a comparative economic advantage in semi-arid environments such as the Luangwa Valley, both objectives can be achieved with one tool - wildlife can be conserved by making it a competitive and well-managed land-use option. In addition, devolving wildlife management to local communities generates economic growth and also provides a vehicle to promote democratic, transparent, accountable rural institutions and a general improvement in rural governance”. Thus the new program would aim to: develop wildlife as a new economic resource; and develop a grassroots system of natural resource governance (i.e. CBNRM).

To achieve these goals, the following activities were seen as necessary:

- **Policy.** The development of appropriate institutions, including organisational structures and roles, and the policies and procedures by which these would operate
- **Training.** Institution and capacity-building by LIRDPA to various community institutions covering organisational, financial and wildlife management. Due to the lack of NGOs in Zambia, these functions would be implemented almost exclusively by NPWS and LIRDPA. Community-based democratic management structures would require some central administration (e.g. for marketing, revenue collection, monitoring of off-take).
- **Monitoring.** The monitoring and regulation of this experimental approach (LIRDPA/SLAMU).

Sources: LIRDPA (1996b, 1996c).

The “Vision” was the start of many things, including improved management. The use of a participatory forum and the Logical Framework Approach signified the start of not only a new direction for LIRDPA, but also improved co-ordination within the project. It led to the introduction of the objective-orientated performance-based management systems increasingly applied over the next four years and integral to phase 4.

The “Vision Statement” was presented at a review meeting in Lusaka in April 1996 where “NORAD agreed in principle to fund the construction of the new HQ at Mfuwe, and where the new CBNRM policy was ratified”.

5.5 Review of Phase 3 and planning for Phase 4

Consultants (Scantam International) were requested to appraise the proposal for phase 4 and to combine this with a review of Phase 3. Their mission was undertaken in April/May 1998. Overall, the review concluded that LIRDPA had had very positive impacts (Box 5.5). It was encouraged by the developments in CBNRM and by some initiatives in wildlife management.

Box 5.5: Phase 3 Review Comments On the Impact of LIRD

“It could be said that the experiences of the project have had an impact that has gone beyond the project area and...., especially those [experiences] relating to the involvement of local communities in wildlife management, [which] have contributed to the changes effected to the Wildlife Act and which gave legal backing to the involvement of local communities in the management of the wildlife estate.

Another impact is to be found in the change of attitudes in the local communities,wildlife is now perceived as a community asset, and in order to manage the resource coming from wildlife, communities have had to establish local institutional structures necessary to manage that income. These structures, in turn, have brought about new values such as democratic decision-making, transparent procedures in the use of public resources and the need for accountability.

Furthermore, and owing to the fact that local communities have their own resources to plan their own development projects, a new culture of self-reliance has emerged. Communities no longer have to wait for government departments to provide them with services, especially those that the communities feel they can do for themselves. This particular change in attitude has far-reaching impact on the development prospects of communities in the project area.”

Source: Scanteam (1998)

It found that the project had continued to have a profound and positive effect on curbing poaching. The review concluded, however, that some of the objectives of Phase 3 could not be reached by its completion at the end of 1998, but noted that the project was aware of some of its shortcomings. These weaknesses are listed below, together with some of the actions taken subsequently:

- Lack of a park plan for SLNP.

By this time the 1995 plan had been abandoned and preparation of a new plan was underway, this time by the European Union as part of the NPWS-ZAWA transformation;

- Failure of line ministries to assume their responsibilities in the project area.

The project continued to push this issue at annual and review meeting but recognised this it was effectively a futile effort;

- Some delays in achieving the CBNRM objectives to establish community-based institutions which are democratic, accountable, transparent and effective at managing finances, wildlife, natural resources and projects.

The primary hindrance was the continuing poor relations with chiefs. Such conflicts are an integral part of such programmes (Rihoy *et al*, 1999). Conflicts were particularly intense in 1997 and 1998, but the tension began to dissipate after the late Senior Chief Nsefu wrote to the Norwegian Ambassador to withdraw a letter the chiefs had sent removing their communities from the programme. This letter marked a turning point where most, but not all, of the chiefs began to co-operate with the CBNRM initiative;

- Little done to prepare a policy and strategy for involving the private sector, particularly regarding business opportunities other than tourism and hunting;

- LIRD Technical Services (responsible for construction and maintenance of roads, buildings, vehicles, etc.) was poorly managed and had failed to function effectively and to an acceptable standard.

Within 18 months, and as a result of the review, Technical Services was broken into three sections (roads, workshop, buildings) which were operating very much more effectively;

- No defined gender program;
- Sustainability of the project not addressed

This became the central theme of the Phase 4 proposal;

- Little progress on preparing mechanisms for monitoring and evaluation.

This was built into the performance management system in phase 4.

Various reasons for the lack of progress were noted, mainly management shortcomings and inertia at the project level, as well as cumbersome bureaucracy within NPWS and its parent Ministry. It was pointed out that resources had been squandered on less important things due to misplaced priorities and lack of knowledge and skills. The report was critical of the LIRD Monitoring and Research Section for doing very little and for not paying sufficient attention to management issues, e.g. not preparing a strategy to respond to the problem of a renewed rise in elephant numbers and the over-population of hippos, and to the damage to ecosystems that might arise through over-browsing and over-grazing.

The team praised the Phase 4 submission for its thoroughness but suggested that some of the objectives and proposed outputs be clarified and that accurately defined and measurable indicators of these were needed. It particularly stressed the need to develop a tourism plan for the SLNP and wider project area, to resolve the chiefs issue, to pay serious attention to management matters, and urged that sufficient investment in infrastructure be made available. The report recommended that NORAD provide support for Phase 4.

In response to the review team's recommendations, LIRD management held further planning workshops and, using a logical framework approach (Table 5.2), revised the proposal as well as the work plans and budget for 1999. The justification for a fourth phase was to enable LIRD/SLAMU to restructure its organisation and prepare to increase and sustain income from tourism and commercial activities. Its objective was to reduce the level of donor support to no more than 50% of that in 1998. The NORAD grant would fall steadily from US \$685,000 in 1999 to \$350,000 in 2002 when it would comprise only 28% of project expenditure. The project's budget would also be cut immediately from around US \$1.8m in phase 3 to \$1.3m annually in phase 4. The project, at last, had defined a pathway to sustainability.

In November 1998, NORAD agreed in principle to support an extension to the project for a further four years (1999-2002). The funding requested from NORAD for SLAMU was US \$3.5m, but it agreed to provide only US\$ 2.0m over this period. The pressure exerted by these tight budgets had a generally positive impact on management. However, the project expressed concern that it would have negative implications for some important social services, and that this would affect the process of transferring the responsibility for wildlife management to local communities. These concerns proved to be accurate. In the 2000 budget, the CBNRM programme was cut by over 20% to some US \$80,000 annually. This resulted in conservation education in schools and a community newspaper being dropped altogether - both being important for the longer-term processes of democratisation and community wildlife conservation.

Table 5.2 Project matrix: community-based natural resource management programme in Lupande Game Management Area

Source: LIRD 1998

AIM	INDICATORS	EXTERNAL FACTORS
<p><u>Development objective</u> Successful rural economic systems based on sustainable use of natural resources</p>	<p>Wildlife populations in Lupande GMA are at carrying capacity, and people are making a significant part of their income from the sustainable use of these and other natural resources</p>	<ol style="list-style-type: none"> 1. General economic situation in Zambia liberalises and improves; 2. General atmosphere in Zambia continues to encourage democracy and decentralisation; 3. International market for wildlife is sustained; 4. Zambian tourism industry expands, supported by sound macro-policies for infrastructure, taxation, etc.
<p><u>Immediate objective</u> Community-based institutions which are democratic, accountable, transparent and effective at managing finances, wildlife, natural resources and projects</p>	<ol style="list-style-type: none"> 1. Wildlife population in GMA increases by 25% by 2000; 2. Democratic system for governing wildlife/NR in place, managing finances, setting and marketing quotas/tourism sites, reducing poaching to less than 20% of present level, and beginning to zone settlement and land use 	<ol style="list-style-type: none"> 1. NPWS enacts devolutionary legislation, and further encourages devolution of wildlife management by devolving functions such as marketing; 2. Donor funding available for at least five years to invest in development of community-based management
<p><u>Outputs</u></p>		
<ol style="list-style-type: none"> 1. Legally mandated communities are established with clear rights to use and manage wildlife 	<ol style="list-style-type: none"> 1. IRDA/s formally established with clearly defined rights, responsibilities and procedures; 2. The number of positive agenda items of wildlife increases 	<ol style="list-style-type: none"> 1. New National Parks Act gazetted and favourable
<ol style="list-style-type: none"> 2. Establish democratic, transparent, accountable, community structures to manage wildlife, and related finances and projects/activities 	<ol style="list-style-type: none"> 3. Six ADCs elected and constituted by June 1997; 4. All VAGs (30) elected and constituted by end of 1996; 5. IRDA/s elected and constituted by end of 1997 	<ol style="list-style-type: none"> 3. Chiefs support devolution; 4. Government encourages democracy and devolution
<ol style="list-style-type: none"> 3. Capacity of community institutions to manage finances, development activities and projects developed 	<ol style="list-style-type: none"> 6. IRDA/s submit quarterly reports by?? 7. VAGs submit audited quarterly financial reports by June 1997; 8. VAGs have General Meetings and submit minutes by March 1996; 9. VAGs have monthly meetings and submit minutes by March 1997; 10. ADCs have monthly meetings and submit minutes by January 1997; 11. All ADCs and VAGs implement at least one project as agreed by the community with quality confirmed by minutes/report (finances, technical evaluation) 	<ol style="list-style-type: none"> 5. Availability of additional staff and/or a collaborative partner; 6. LIRD 1998 continues to release 100% of Lupande wildlife income to communities; 7. Availability of trainable manpower in communities; 8. CLAs are recruited for Nsefu; 9. CLAs have improved transport (motorbikes)

4. Capacity of communities to manage wildlife and natural resources is increased	12. Annual wildlife census shows increase (no decrease) in wildlife populations; 13. Demands to shoot problem animals reduced	10. Research & monitoring section monitors populations, poaching and problem animal reports; 11. NPWS/LIRDP willing to devolve powers and to accept that learning is a process and provide sensitive support to this process
5. Clear system for identifying (e.g. quotas, tourism sites) commercial opportunities and marketing them established and devolved to communities, with LIRDP managing this system in the meantime to ensure that income is maximised	14. Clear agreement with NPWS on procedures for setting quotas and marketing wildlife and tourism opportunities; 15. Quotas sold at world prices; 16. Quotas fully utilised; 17. Tourism sites marketed to best advantage (at least one by end 1998); 18. IRDA in charge of marketing by end of 1998	11. Willingness of Ministry of Tourism and NPWS to devolve its powers
6. Public relation mechanism established to promote the project's goals and philosophy and to create an enabling environment for the CBNRM programme	19. Key persons (government, donor, tourism industry) identified and targetted (to be done in collaboration with MS PREI DW)	12. Availability of additional staff, funds and equipment and/or a collaborative partner
7. System to monitor the progress of the programme (institutional, financial, ecological factors) and allow adaptive management established	19. Annual reports summarising trends in finances, institutions (POMS) and wildlife; 20. Ad-hoc survey reports on project impact	13. Availability of additional staff and/or collaborative partner and/or suitable external students
8. Feeder roads programme completed	21. All weather roads to Nyamaluma, Kakumbi, Nsefu in good condition by end 1997	14. Ability of TS to undertake work; 15. Cooperation/agreement of communities; 16. Sufficient funds
9. Staff trained to implement CBNRM and to be marketable at the end of the project	21. System ('point'; performance) to monitor staff experience and performance established by Dec 1996; 22. Each staff member (6 CLAs; senior staff) undertaking a formal qualification	17. Additional senior member of CL staff to provide support to mid-level staff
10. Investment fund and associated procedures for communities to invest in wildlife conservation/production established	23. Investment funds in place by Dec 1997; 24. At least five applications for matching funds submitted by communities by early 1998	18. Project and/or donors(s) willing to provide a core fund for investment in wildlife resource
11. Project management: Unit established to effectively implement and monitor CBNRM	25. Timely report and corrective action taken when deviations from aims occur	19. LIRDP seriously committed to CBNRM and Community Liaison Section

The overall project budget for the four-year period is summarised in Table 5.3 and is indicative of the minimum recurrent costs of running a park (about US \$14 per sq km). If South Luangwa National Park achieves financial and technical self-sufficiency, it will be one of the few large parks in Africa to do so.

Table 5.3: Summary of budget for phase 4 (1999-2002)

Expenditure	(US \$)
	1,265,100
Operational expenses	2,475,500
Technical assistance and consultancy	626,700
Capital equipment	689,700
Total expenditure	5,057,000
<hr/>	
Income	
Tourism	2,110,900
Culling	334,300
Other	188,200
NORAD grant	1,995,000
GRZ grant	428,3000
Total income	5,056,700

5.6 Changes to the CBNRM programme

In late 1995, a Technical Advisor for CBNRM was recruited⁵ to develop grass roots institutions and build capacity for natural resource management. The CBNRM programme was restructured and worked to assist the fiscal empowerment to the grassroots. Under new arrangements, 80% of all GMA-generated wildlife revenues was directed to Village Action Groups (VAGs). In Phase 3, LIRD P worked through the three levels of community institutions (see Box 5.6) but focused on participatory and democratic management at the VAG-level. The community programme advanced rapidly, as the 1996 Annual report showed (Child and Phiri, 1997):

“The year 1996 has been a turning point for LIRD P’s CBNRM programme. A clear policy has been developed. The old top-down paternalistic approach has been replaced by true community-based natural resource management with the devolution of financial benefits and increasing responsibility and management to communities.....One of the primary achievements in 1996, therefore, is that every household in Lupande GMA has received direct cash benefits, an achievement which has revolutionised attitudes towards wildlife. Only yesterday, a resident of Nsefu noted that they had been told of the benefits of wildlife conservation for many years but had never really seen them... Communities allocated over half their money to projects [and] because they have given up their own income and prioritised and chosen these projects themselves in a public forum, the projects too were ‘owned’ by them and implementation appears to have been significantly more efficient than previously. The greatest benefit of the new approach, however, is that people are doing things for themselves, allowing community capacity and self-esteem to replace a crippling sense of helplessness and dependency. The management of the CBNRM Section has also been overhauled to use [participatory] performance-based management systems with clear objectives.”

⁵ Dr Brian Child from Zimbabwe.

Box 5.6: Proposed CBNRM Principles for LIRD

In proposing the new approach to CBNRM, an internal LIRD report re-iterated the concerns of many of the RMs:

“The current [LIRD] program is top-down, with each layer (household, Village Action Group, Area Development Committee, the Local Leadership Committee) ‘begging’ for funding from above”.

It also noted that the system for disbursing revenues distorted economic signals away from wildlife production:

“funding is related to administrative capacity rather than production of wildlife so that the vital link between wildlife production and benefit has not been made.”

It proposed a second generation CBNRM policy as the solution:

“This [over-centralisation, and delinkage of wildlife from benefits], and the dependency it created, will be reversed by channelling all (100%) of wildlife revenues earned in the [Lupande] GMA into the communities from the bottom. Since this bottom-up approach is central to the success of any CBNRM approach, the principles will be strictly adhered to, to the point where participation and benefit in the program are conditional on agreement to follow these principles”.

However, the report noted that the issue of who should benefit from GMA-generated wildlife revenues had been very divisive, and outlined the three options. First, it defined the current system as “‘begging’ from above (through project requests)”, emphasising that this “was the primary reason for the weakness in CBNRM to date and was strongly rejected”. The second was to “share evenly amongst Area Development Committees (ADCs) which, in turn, share evenly amongst their Village Action Groups (VAGs).” The third option was to follow the experience of the CAMPFIRE programme (as explained in chapter Four) and implement the principle of “‘producer communities’ whereby the income from an animal is returned to the VAG/ADC in which it was produced/shot.” In conclusion it recommended that:

“In the long term, it is essential to move towards the principle of the ‘producer community’, recognizing that all six chieftainships [in Lupande GMA] produce wildlife. In the past, the agreement was to share revenues equally so all past revenues (held in the joint Community Account) will be allocated on this basis. In the future this may change, but no decision is needed until the end of 1996 at the earliest.”

(This topic, not surprisingly, continues as a major point of debate until today. Revenues are still shared evenly, primarily to unify the Kunda nation at the request of five of the six chiefs. However, there is some acceptance that, eventually, communities will have the rights to the benefits from wildlife in their area. This transition will be easier if wildlife enterprises can, in the meantime, be developed in the areas of the non-producing communities.)

The new policy clarified the roles of the various levels. The role of chiefs changed significantly because the old structure proved unworkable (see Box 5.7). Recognising the importance of chiefs, and also that chiefs could be neither audited nor sanctioned, it was suggested that chiefs would be given a high status but non-executive role. They would receive direct personal remuneration in recognition of this role (much as the British Monarchy) each receiving 1% of gross income from Lupande GMA (i.e. a total of 6% to the six chiefs).

According to the new policy, 100% of gross wildlife revenues would be channelled to communities. It would be allocated as follows:

- 6% to the six chiefs,
- 4% to the six ADCs,
- 10% to the elected community body [which was mooted to replace the LLSC but never materialised],
- 80% to the VAGs to cover benefits and community-based resource management. VAGs were the primary building block of the institutional structure, a move which the project never regretted.

LIRD P's role was to develop this system (capacity-building), and monitor it for progress and compliance with the project's policy. The community would fund its own projects and management systems and, after a few years', it was hoped, would begin to manage wildlife. LIRD P recognised that in the medium-term, at the very least, it would still have to retain wildlife management functions such as law enforcement in the GMA, because the community would take time to, first, learn that wildlife was beneficial and, second, learn how to manage it.

Sources: LIRD P (1996c, 1996d).

During 1996, much effort was spent establishing democratic, accountable, transparent and effective community-based institutions (Village Action Groups) for managing finances, projects and wildlife (described in detail in section 8.3). Most of this was done in community workshops, with over 5,000 people attending to learn about the new policy, their responsibilities and rights, constitutions and the management of democratic institutions, sustainable resource utilisation, prices of wildlife for safari and district hunting, safari hunting, licensing of animals, etc. While people learned quickly, progress was restricted by the opposition of the chiefs - there were no local leaders meetings between February and August 1996 due to "a sour relationship which had developed within the local leadership over distribution, utilisation and management of community revenue" (LIRD P, 1996d) (see Box 5.7). Some local community members were trained to undertake animal ground counts.

By 1998, the 40,000 (plus) people in Lupande GMA had been organised into 42 VAGs, each comprising some 200 households. The VAG system worked well to facilitate participation and for managing finances and projects. The VAGs became the only effective sub-district organisations in the district, and other projects used them as 'entry points' for their own work, e.g. a World Bank-funded micro-projects support program, the German-funded water and sanitation project, and various church projects.

Each VAG and ADC has a constitution, which proved important for consolidating community-rights, for entrenching transparency and accountability, and for providing procedures for dealing with money matters, disputes, etc. Later, constitutions were used to introduce natural resource by-laws which the Chief 'unofficially' approves. Each VAG also has its own bank account. VAGs have initiated a variety of projects, e.g. construction of classrooms and teachers houses, clinics, wells and even starting a football club. The committees hold monthly meetings and are obliged to report to the community at quarterly general meetings. All meetings are minuted. Early minutes tended to contain long and rambling stories but were gradually replaced with 'action' minutes. The CBNRM section introduced a process-oriented monitoring system (POMS), with quarterly monitoring of all VAGs to assess progress. Community Liaison Assistants (CLAs) assist with the meetings, and undertake general institutional monitoring which includes the following:

- Assessment forms that measure progress in (1) general participation, (2) in the effectiveness of committees and (3) in natural resource management;
- A questionnaire recording the attitudes of 3 individuals in each VAG;
- Minutes of all General Meetings and all VAG Committee Meetings;
- An audit and summary of the financial performance of the committees;
- An assessment of the implementation of each project initiated by the VAG.

By the end of 1997, there was still little 'active' management of wildlife by communities. This was expected since it was assumed that it would take several years for communities to come to believe that they really have a stake in wildlife and to learn active measures they can

Box 5.7: Institutionalising CBNRM in Lupande GMA

During 1996, LIRDPA expended considerable effort in facilitating discussion and debate within Lupande GMA on the institutionalisation of a new legal framework for CBNRM as proposed in the then draft Zambia Wildlife Authority Bill. LIRDPA (1996e) discuss some of the problems:

“The present structures are unworkable. They are neither democratic, nor accountable, nor transparent, nor equitable, and are not resulting in dynamic management programs. Nonetheless, the system is being maintained by those who benefit from it. A few examples show the problems associated with the existing system:

- *In Nsefu, there is a major and sometimes violent conflict between the local people and wildlife scouts. While the aim of the program is to benefit local people, this is not actually occurring, with this conflict emphasising the fact.*
- *The Local Leaders meetings also highlighted several weaknesses and dangers. There was considerable ambiguity over both the election/nomination of a chairman and, following a walkout by certain chiefs, more ambiguity over whether or not a quorum was present. Little cognisance was taken of the Standing Orders and Terms of Reference for the Local Leaders Sub-Committee with, for example, there being no election of the required managerial (i.e. non-Traditional) chairman. Moreover, decisions were not subject to voting but to the dictate of traditional leaders. The result is a committee that cannot operate and, since this committee is presently the cornerstone of the program, a program that is likely to fail.*
- *There is also considerable conflict between, and confounding of, traditional and modern roles. This is likely to damage both traditional and modern institutions, making modern institutions unworkable and damaging the credibility of traditional ones. The walkout at the recent Local Leaders Committee illustrates this. This conflict arose over the allocation of wildlife monies among Areas. Such conflicts are inevitable, and the purpose of bodies such as the IRDA/LLC are to resolve them. However, given the ambiguous composition, roles and constitution of this body, it proved completely unable to do so - how many management boards would function effectively if conflicts resulted in walkouts rather than voting, with the project now having to expend considerable energy acting as a go-between in resolving this conflict? The result has been a major conflict between Chiefs Malama, Kakumbi and Nsefu on the one hand, and Chiefs Jumbe, Mnkhangya and Msoro on the other, creating serious tensions in the traditional structures (see also section 5.8.4). Thus the present system is unworkable as a management institution, and is also damaging traditional structures.*

The program has currently become locked in a position where it benefits local elites (i.e. the chiefs) at the expense of local people and ultimately wildlife resources [it is important to note that this system was imposed by former President Kaunda, not by LIRDPA management]. This confirms Murphree’s principle⁶ and the need for specific and firm action to further the devolution process that underlies the success of any CBNRM program. In short, it is necessary to impose a bottom-up approach. There will undoubtedly be short-term conflicts, which LIRDPA, NPWS and the Ministry of Tourism must face with a considerable degree of unity and strength. If this is done, a system of accountable, democratic, transparent and equitable community-based wildlife management can be in place by the end of 1996. Developing the capacity of this system to sustain itself will, naturally, take much longer, but the program will not advance until such a system is in place”.

To overcome these problems, LIRDPA proposed a system of representative structures and roles for an *Integrated Resource Development Authority* (IRDA) in Lupande GMA. The philosophical and operational cornerstone of this structure was that VAGs would be the primary unit of benefit and participation:

- Village Action Groups (VAGs) comprised some 300 households and were constituted to embody the

⁶ Murphree’s Law (first claimed to have been elaborated by Richard Bell, and then stated in Murphree 1989) holds that there is an in-built tendency at any level in bureaucratic hierarchies to seek increased authority from levels above and resist its devolution to levels below.

principles of transparency, democracy, face-to-face participation and accountability. Each would elect a 10-person committee at a public meeting to implement decisions and projects, and would be represented at the next level up (the ADC) by two to four officers.

- Area Development Committees (ADCs) were constituted for each chief's area (six), with membership being from VAGs. A small budget (4%) was allocated to ADCs to assist them fund their roles of communication and co-ordination. They were never intended to undertake much implementation and, where they were, it was intended that they would have to get money from VAGs and would therefore be answerable to them.
- The Lupande Integrated Resource Development Authority (LIRDA). This was the third tier of the organisational structure, equivalent to the former Local Leaders Steering Committee. Its role was to deliberate on policy issues affecting the people of Mambwe Sub-District, especially those that related to resource management and community welfare. Unfortunately, it was an unworkable institution. So, to overcome the problems outlined above, it was proposed that the LIRDA would be split into two houses: an elected and democratic Administrative Committee, and an un-elected over-seeing Traditional Council (this arrangement was never implemented, and is still a topic for discussion today. However, the structure works well without this level).

take to improve wildlife resources. Preliminary results from a questionnaire survey carried out in the area by Nasson Tembo in 1999⁷ showed that 97.8% of respondents felt it was necessary to conserve wildlife whilst 93.4% said it provided a benefit to them - mainly through household income (49.6%), projects (12.1%) and employment opportunities (17.2%). This survey indicates a massive attitude shift compared to the early 1990s (Wainwright and Wehrmeyer, 1998; Balakrishna and Ndlovu, 1992).

There is some evidence that improved attitudes have led to some social controls being introduced to regulate resource abuse (passive management), e.g. a reduction in poaching and in the visible sack of poached meat. However, the real challenge facing many CBNRM programmes in southern Africa is whether these attitudes can be translated into active and effective natural resource management. Another recent questionnaire survey conducted by Elias Phiri (report in prep.) revealed that only a low percentage of respondents (15.7%) are yet aware that a core function of VAGs is wildlife management (see Appendix 5). However, VAG and ADC leaders have employed 76 community scouts and undertaken other conservation measures, and have used money provided by the community to do so. This suggests that the understanding of the need for active management is greater amongst community leaders, and possibly greater than Phiri's research reveals. In some cases, communities are ready to do more (e.g. Msoro), but their activities are limited by several factors: the absence of a sound legal basis; insufficient support from SLAMU, and insufficient understanding and training in exactly what natural resource management involves. In a few cases, communities are doing very little (e.g. Kakumbi). SLAMU still faces the challenge of implementing active community-based wildlife management and, if it rises to this challenge, it will be able to claim leadership of the CBNRM movement.

Community-based wildlife management initiatives are still conducted mainly at the level of the ADCs. Management includes such activities as active law enforcement (employing scouts and patrolling), commissioning electric fencing to deter problem animals, establishing fishermen committees, controlling tree-cutting and charcoal burning, etc. Some techniques have been developed for wildlife management (e.g., quota-setting; electric fencing; marketing). However, to our knowledge there are no comprehensive community-managed wildlife management systems. If it achieves this goal, the Lupande CBNRM programme will be breaking new ground.

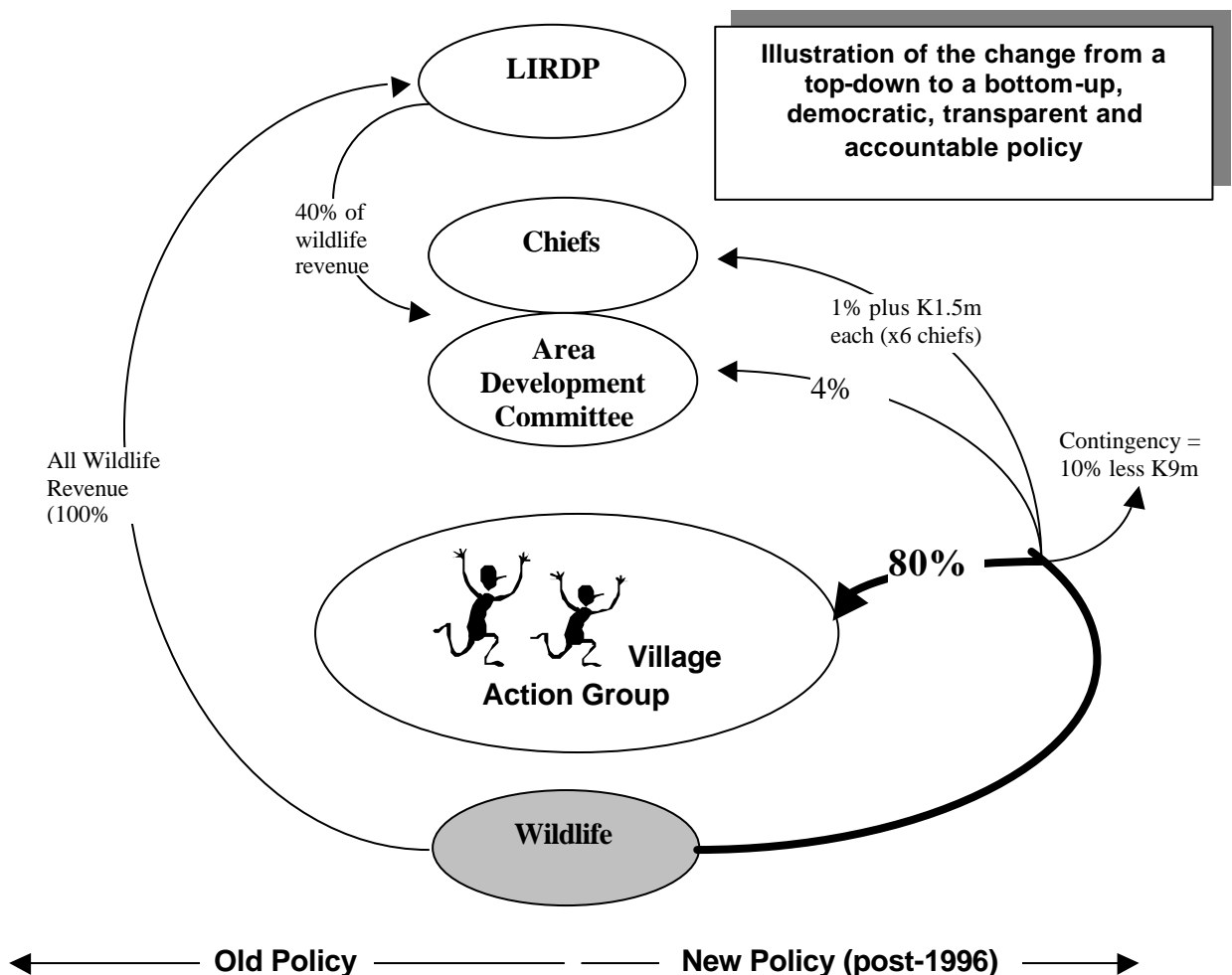
⁷ Undertaken for M.Sc. thesis, University of Aberystwyth.

5.7 Devolving the Distribution of Benefits

Throughout Phase 2, 40% of LIRDP earnings were allocated to communities (see Box 3.6). After the re-focusing of the project after 1996, 100% was allocated to local communities as explained above (see Figure 5.1). The key was financial devolution to VAGs, and these communities were free to choose how to use the cash dividend allocated to them, although chiefs did impose their will in some cases. The principle of choice was important, following the assumption that communities would allocate monies to the use of highest value to them and that this, in turn, would value wildlife more highly. Consequently, some cash was set aside for community projects and the management of community organisations and wildlife, and some issued as cash dividends to households (referred to locally as *tyolela*). Not surprisingly, bureaucrats regularly question this system. Implicit in this is the assumption that they (bureaucrats) know better what is of value to communities.

Within a year, the new system was being criticised by Chiefs and others who saw it as undermining their authority and causing division within the communities (Box 5.8). Indeed, the whole issue of distribution in revenue from wildlife in Lupande GMA was delayed in 1997 because the six traditional Chiefs demanded an additional 9% (1.5% per Chief) over and above the 6% in the new formula (Figure 5.1). The issue was passed to the project Policy

Figure 5.1: Revenue Distribution in LIRDP



**Box 5.8. Some criticisms of the wildlife Revenue distribution system
by Chiefs and others in authority**

Traditional leaders and their appointees gave the following comments:

“People don’t want to follow what their Chiefs say or what the Area Development Committee decides because staff members from the project tell them contrary advice. In Mfuwe area, the Chief was almost man handled upon giving advice to his people that they contribute to community projects.”

Chief Kakumbi

“We need to review this tyolela system because, in highly populated areas, they get very little while, in lowly populated areas, they get quite some money. What can one do with K2,000?”

Chief Jumbe

“The system brings about a lot of confusion and fighting among members of the community”

Women’s representative from Jumbe

The following observation was made by a Councillor, an elected political leader partly removed from the CBNRM programme:

“There is a big division between the Chief and his people today in our communities. There is no point telling the people that this is your money so you can do what you want with it yet is some ways you dictate that you have to contribute towards the development of community project.”

Councillor

What did the ordinary people think?

After the conflicts between the project and chiefs over the chiefs demands to double their share of revenues, the policy and review meetings instructed the project to ask the people for their views by way of a vote. Only the first vote was held, because these were stopped by the chiefs who were unhappy that voting was causing them to ‘lose respect’ in their community. In Madimba VAG, over 130 people voted to support the new policy changes. Seven people, almost exclusively old women, opposed the new policy.

Source: LIRD News: 4, Jan 1998.

Committee in Lusaka which comprised representatives from the National Development Planning Commission, LIRD, and Ministries including Finance, Tourism and Natural Resources. It was resolved that a secret ballot should be held in all Village Action Groups (VAGs) to determine if people agreed to such a change. But the Chiefs objected to this move on the grounds that revenue distribution was dividing them from their people and declared that revenue cheques for VAGs should not be signed until the problem was solved. A meeting was then held in Chipata chaired by the Deputy Minister of Eastern Province and attended by the local MP, the Provincial Permanent Secretary and other senior civil servants. It was decided that Chiefs would receive ZK 1.5m in addition to their 1% each.

This model secured each of the chiefs K3.68 million in 1998. The agreement reached stated that Chiefs could not claim any further share of revenue from community funds meant for development projects and household cash dividends. But the agreement was broken when some of the Chiefs requested money from their communities for the maintenance of their vehicles, for the acquisition of title deeds to their land and for their own personal use. The conflict between the chiefs and their people over this issue is discussed in section 5.8.

In 1996 and 1997, ZK588m was given to communities in the six chiefdoms in the project area. In 1996, VAGs spent 47% of these revenues on projects, but the proportion fell in 1997 when only 19% was put aside for administration and community projects. This was related to

uncertainty caused by the conflict with the chiefs and the delays in disbursement, and to fears that chiefs would appropriate money allocated to projects. However, the share increased again in 1998 to 37% (ZK 87.3m out of a total ZK 237.5m distributed) whilst, at the same time, the amount given out as household dividends fell from 65% to 41%. According to Brian Child, Technical Adviser to the Community Section (quoted in SLAMU News, 5, 1999):

“The communities are getting more mature. They have realised that it is better to invest in development instead of giving money out as cash, and the amount allocated for projects is likely to be more in future.”

By 1999, some 150 community-funded projects were in progress or completed, including 16 teacher's houses, 36 projects to construct or renovate classroom blocks, 14 clinics or other health projects, well projects in 26 VAGs (over 100 wells) and other projects such as employing teachers, electric fencing, food relief. Communities were also investing increasingly in wildlife. Whilst only 2% of moneys distributed to communities was set aside for wildlife management in 1997, the figure rose to 4% (ZK9m) in 1998 and 15% in 1999. Spearheading this drive have been villages in Chief Msoro's area. Four new dams have been constructed by local builders (with temporary work for some 40 villagers) to provide water and a better environment for wildlife. It was also the first community to employ community scouts (indigenous residents between 21 and 30 years old). By 1999, there were 76 of these scouts in five areas, only Malama not having any. Such community scouts are paid less than government wildlife scouts, cost less to administer, and may ultimately reduce the cost of wildlife protection significantly.

Disappointingly, poor relationship between the project and Chiefs continued throughout Phase 3. In their review of Phase 3, the Scanteam consultants urged that this issue be given special attention. The report notes that, initially, LIRDPA was required (by a decision of Permanent Secretaries sitting as the project Advisory Committee) to operate through the Local Leadership Committee which underscored the role of the chiefs. It also points out that the introduction of CBNRM in Phase 3 diminished the control and decision-making rights of the chiefs, undermining long-held traditions and customs. The team writes that:

“There has not been sufficient consultation with, education and probably involvement of the chiefs as far as the new approach [CBNRM] is concerned although the project staff claimed this was done exhaustively. Thus ... there is ignorance of this concept [CBNRM] on the part of the chiefs and this has contributed to their feelings of mistrust, suspicion, resentment and even uncertainty, that their traditional authority is being undermined by the project resulting in them losing respect among their subjects. This has resulted in some staff being accused of conniving with the community, and in division between the people and their chiefs.”

(Scanteam 1998, Appendix 3,)

The team recommended more training and capacity-building at the level of the ADCs and the LIRDA/Community Resource Board, and special attention to educating the chiefs on the role and concept of CBNRM. It argued that time and patience, continued dialogue and consultation with traditional leaders would be required for the project and chiefs to understand each other and for changes to be effected. It was also suggested that population numbers in chiefdoms might have to be considered in determining the distribution of revenues in order to overcome the resistance of some chiefs. The team felt that the skills of a rural sociologist were needed to enable the project to address these problems. In defence of the project, such conflicts are an integral part of the process of devolving authority to communities (Rihoy, *et al.*, 1999). The early phases of the project had empowered the chiefs financially but without accountability, so it was hardly surprising that an attempt to reverse this situation was opposed by the chiefs. The recommendations regarding the distribution of revenues also run counter to the principle of 'producer communities' (Murphree, 1991).

Relationships between the project and communities also continued to be strained over issues such as damage to crops by elephants and other wildlife. In 1998, villagers marched on the Warden's office because not enough elephants were being shot in defence of crops. People regularly commented that elephants were the animals that caused the most problems yet had the least value. Elephant hunting has been banned in Zambia for several years⁸.

There was an increase in the numbers of snares found (or collected) along the Luangwa River, despite the improving benefits from wildlife revenues flowing to communities. On average, 2-3 snares were collected every day from an area some 100km long, a visible but containable problem. The level of reported incidences of poaching in Chief Kakumbi's area increased but, when scouts responded to this, there was an unfortunate incident in which scouts were accosted and defended themselves by shooting two villagers (see section 5.8 – sub-section on 'attitudes towards LIRD'). Although two scouts died from internal injuries, ten spent over a year in jail before being sentenced for manslaughter. As a result, scouts were unwilling to work in this area and some 26 elephants were subsequently poached.

Nonetheless, the general trend in the community was towards less poaching, and less game meat was reported to be available. Project management supported the community programme with wildlife conservation information. Twenty-eight school conservation clubs were supported with regular lectures and a community newsletter was introduced in 1999.

The CBNRM project is discussed in more detail in chapter Seven. It was based on an administrative arrangement and project policy, not on any legislative change. This was possible because of a general understanding in the project and NPWS that community management was a move in the right direction. However, the legal basis for CBNRM remains weak, and the programme's long-term survival requires that this is addressed.

The Zambia Wildlife Authority (ZAWA) Act (1998) (see Box 5.9 and Appendix 1) partially addresses these deficiencies. It provides for the establishment of *Community Resource Boards* (CRBs) and could be used to give communities greater rights provided ZAWA's management is far-sighted and confident enough to do so. In particular, communities need a much greater say over the sale of their wildlife. At present, sales are controlled by NPWS, the Ministry of Tourism and even the Cabinet. Communities also need the authority to conduct law-enforcement.

SLAMU is intending to use the Act to establish CRBs as a direct replacement for ADCs. But in doing this, it will give CRBs clear responsibilities and targets (e.g. patrol days) in addition to the benefits they currently receive. Some thought has been given to formally disbanding the LIRDA (which is not, in any case, functioning) and replacing it with a Council of Chiefs. The sub-district structures are working well. With some improvements in Mambwe District Council occurring, the project has started discussing mechanisms to link the sub-district to the new Mambwe District Council, though it is wary of the propensity for District Councils to collect funds without adding value in the form of service provision. Two linkages have been considered. A technical link with CRBs and VAGs working with the District Planning Unit to plan infrastructure, land-use, etc. And a political link by enabling Councillors to be *ex-officio* members of CRBs. This will avoid the new Council having to develop parallel structures. In many ways, this brings the project around to its initial objective – the co-

⁸ Amongst communities and wildlife officials, there is almost unanimous support for the resumption of carefully controlled elephant hunting for this reason. In any case, elephants are being killed to protect crops; and it is seen as extremely wasteful that these animals cannot simultaneously be used to earn money. At the political level, however, there is opposition to elephant hunting. A cynical assessment is that politicians have more to gain by pandering to external NGOs than to their rural constituency who are bearing the heavy costs of having elephants on their land.

Box 5.9: Zambia Wildlife Authority Act

The Zambia Wildlife Authority Act was passed by parliament in April 1998 and became operational on 1st November 1999. Its main elements are listed in Appendix 1. Under this legislation, the National Parks and Wildlife Service (NPWS) has been transformed into the Zambia Wildlife Authority (ZAWA) - a non-civil service Authority (parastatal) answerable to a Board, with substantially increased emphasis on commercial functions and financial self-reliance.

In the new Act and policies, there is considerable emphasis on decentralization, although the transformation process has often re-centralized functions. While stating an intention to maintain South Luangwa National Park (SLNP) as an independent cost centre, and the financial and institutional basis on which the proposed future of LIRD (now SLAMU) and SLNP is based, much autonomy has been stripped making day-to-day management difficult. For instance, ridiculously low spending limits have been imposed, and the payroll has been centralized so that staff go for months without pay even when SLAMU is flush with money.

Regarding CBNRM, the Act incorporates the concept of co-management but is rather unspecific and could be used either to centralize or to devolve wildlife management. The Act potentially has important implications for community-based wildlife management, if it is interpreted to provide the "enabling legislation" that is such a critical component of such developments. It provides for the legal formalization of communities to acquire use rights and authority over wildlife by constituting themselves as local Community Resource Boards. If ZAWA is far-sighted and willing, communities can obtain the rights to allocate quotas, to market them to safari operators, and to retain all benefits so generated. However, to date power has been centralized rather than devolved (see Appendix 1), negating this potential for the explosive growth of the CBNRM sector.

ordination of district development. Communities are increasingly able to contribute to this goal, and in a democratic manner. The primary constraint is that Council's have even less capacity than many communities, and the legislative framework for decentralisation has not been approved by parliament.

5.8 Changing attitudes: an independent assessment of progress in the CBNRM programme

A study in 1996, repeated in 1998, looked at the development of sustainable tourism in the Luangwa Valley (Butler 1998, and in press). It also explored the local communities' views and attitudes towards wildlife conservation and tourism in the area and towards the LIRD project in general. This enabled changes in attitude over time (during which LIRD introduced its new CBNRM approach) to be assessed. In this section, we set out Butler's results, largely as presented by her, and these can be viewed as an independent evaluation of the community programme by a proponent of such programmes. However, we also update some of the outcomes about which Butler could only speculate, and add a comparison with Nasson Tembo's more recent survey (1999) that generally supports the trends that Butler identified.

Data from the local communities in Lupande GMA were collected in both 1996 and 1998 by three complementary methods: questionnaire work (interviews: 222 in 1996, 200 in 1998), participatory community workshops and participant observation. In-depth interviews were also conducted with key LIRD staff, local tour operators, chiefs and other key opinion formers in the area, and reports and other documentation were analysed. A number of key issues and shifting perceptions highlighted by this comparative study are discussed below:

5.8.1 Views and attitudes towards national parks, wildlife conservation and wildlife tourism

In 1996, local people's attitude towards wildlife tourism and the protection of national parks was very positive and, in 1998, remained positive. The majority of people agreed that national parks were part of the world's heritage and should be protected at all costs, and that they were important tourist attractions. In Nsefu and Malama chiefdoms, however, far fewer people supported this view. This perhaps reflects the fact that although adjacent to the park, these chiefdoms do not benefit to any significant extent from employment in the safari camps and lodges due to their relative remoteness from the main tourism area of Mfuwe. Additionally, Nsefu was reported to have more illegal hunting than other chiefdoms at this time, and both had a higher proportion of elderly people than other chiefdoms. In the main, these older people still resented the removal of traditional hunting rights when the SLNP was established⁹.

There was the overwhelming view that it was a good idea to attract tourists to SLNP itself except, again, in Nsefu and Malama chiefdoms where some residents believed that the park should not be for tourists but for local people to carry out. Malama is the chiefdom situated furthest away from the tourist centre of Mfuwe, and as such, probably, has least contact with tourists. Almost all people agreed that local communities should be helped to generate income from wildlife tourism by setting up their own tourism enterprises, and also that wildlife tourists to the National Park should pay a levy to a community development fund.

5.8.2 Views on local community benefits from wildlife through tourism

Butler's research indicates clearly that local communities in Lupande GMA are increasingly realising the economic potential of wildlife tourism (Figure 5.2). People were very positive towards tourism and would like the opportunity to derive greater benefits from the tourism activities in the Luangwa Valley, particularly in Nsefu and Kakumbi areas.

In both 1996 and 1998, the creation of employment for local people - mainly in the tourist lodges and safari camps¹⁰ - was cited as the key benefit of wildlife tourism. As might be expected, a higher proportion of people held this view in Kakumbi chiefdom - the chiefdom closest to Mfuwe where there is the greatest concentration of tourist activity. However, people reported that although they knew people who were employed in the lodges, opportunities for employment were low, due to the low level of tourism in the area. They also commented that those gaining employment in the lodges tended to be involved in the less-interesting and low-paid positions. Opportunities for promotion were far and few between. The majority of lodges were also reported to discriminate against employing women¹¹, an issue on which the local women became very vocal in the community workshops.

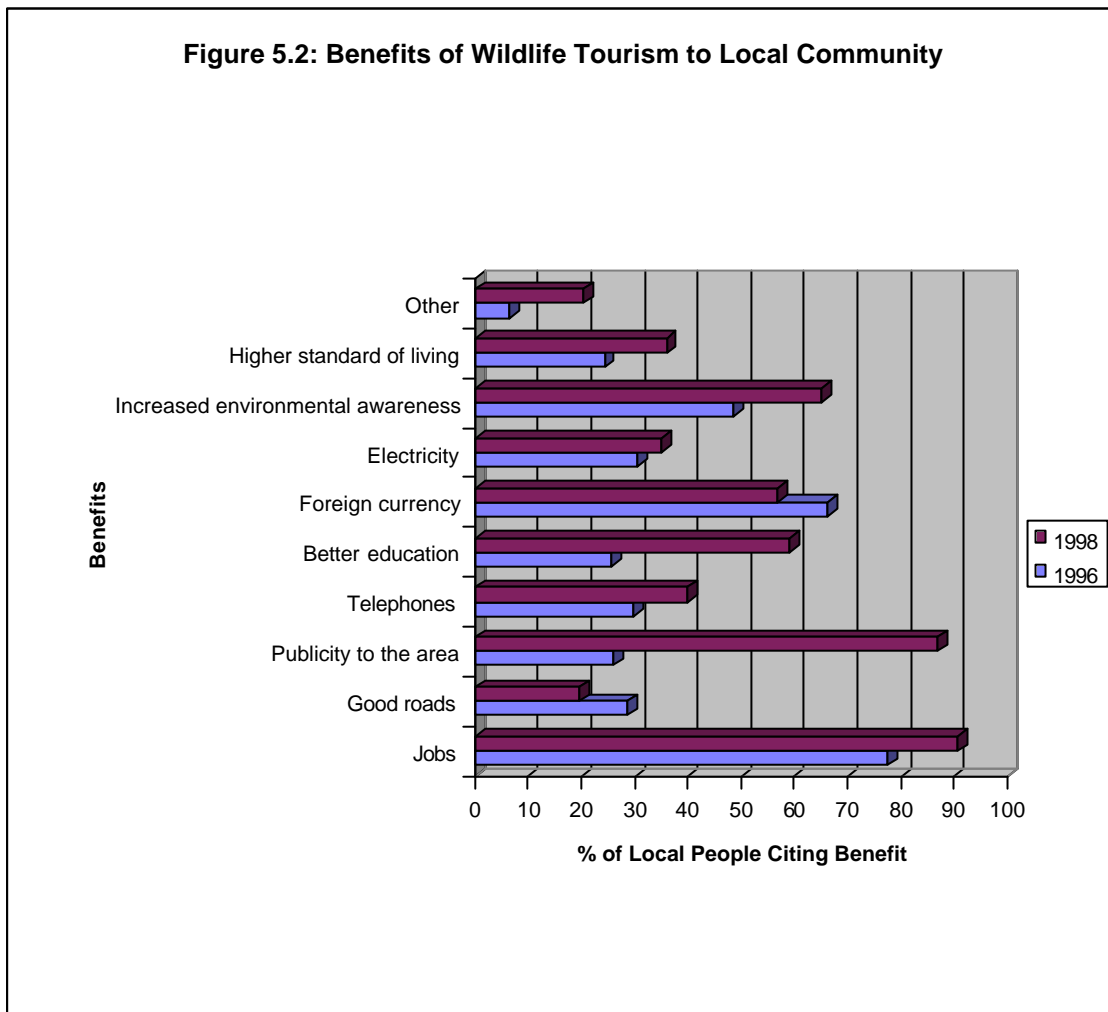
Other cited benefits of wildlife tourism included publicity for the area and increased environmental awareness.

⁹ Hunting had been curbed by the creation of three reserves over 60 years previously.

¹⁰ Photographic tourism in the LIRD area provides for about 500 permanent and seasonal jobs and about a further 100 seasonal casual jobs (pers. comm Tony Green, Executive Officer, Luangwa Safaris Association).

¹¹ Tony Green (pers. comm.) provides two main reasons why few women are employed in lodges: the problem of discontinuity due to frequent pregnancies; and the need to maintain a 'single' workforce (rather than families on site), particularly within the national park.

Figure 5.2 shows clearly that communities responded more positively to questions about the benefits from wildlife tourism in 1998 compared to 1996 (except for the provision of good roads and influx of foreign exchange into the country). This might have been due to people having a much better understanding of the linkage between development projects and wildlife as a result of the educational activities of LIRD P's CBNRM section between 1996 and 1998 - suggesting that the project has made real in-roads into raising environmental awareness. Despite this, however, few people reported to have seen tangible benefits at the household level. Indeed, in 1998, only 36% of people (but still increased from 24% in 1996) felt that



their standard of living had improved as a direct result of wildlife tourism (see Table 5.4). This perception may reflect the newness of the second-generation CBNRM programme, and the problems over revenue distribution at the time of Butler's survey due to the stance taken by some chiefs. A later survey conducted by Nasson Tembo showed that perceptions had changed markedly, with direct benefits over-shadowing indirect benefits such as job opportunities by a factor of four (Box 5.10). Most people acknowledged that wildlife tourism brought foreign exchange into the country.

Table 5.4: Community Views on Benefits from Tourism

VIEW	1996	1998
Wildlife tourism has benefited me and my family financially	23.9%	33.5%
Wildlife tourism has benefited my community financially	64.0%	57.5%
Wildlife tourism has lead to a higher standard of living for people in my community	24.3%	36.0%

Note: Figures indicate percentage of people responding positively to question about benefits from tourism.

Box 5.10: Community perception of wildlife: the results of a comparable survey done in 1999

In a survey conducted in 1999 by Nasson Tembo, people in Lupande GMA indicated that the primary “values and benefit of conserving wildlife” was household revenue (49.6%) followed by job opportunities (17.2%), bringing development to the area (12.1%), promotion of tourism (8.6%), revenue for Zambia (5.1%), meat (4.3%), conservation for future generations (2.7%) and publicising the area (0.4%). 97.8% of respondents stated that it was necessary to conserve wildlife, and 93.4% said that wildlife was of value to them. 99.5% responded that wildlife provided the community with revenue, and 97.3% said that they personally had received revenue.

On the issue of the magnitude of benefits, 25% said wildlife revenue was important in the household economy, 37.8% minor and 37.2% not important. The importance of wildlife ranged from 56.7% to the small, remote Malama community where dividends were high, to only 2.9% in the large, agricultural Mnkhangya community and 23.3% in Msoro.

The comparison between Msoro and Mnkhangya is informative. These communities are similar in size and types of occupation, the major difference being that Chief Mnkhangya has forced his people to contribute to a single centralised project (electrification of a clinic) whereas Chief Msoro has encouraged VAG-level projects. This validates the hypothesis that benefits at the level of the VAG are valued far more highly than those that are centralised. The implication is that any project that has conservation as its core objective, should emphasise direct benefits at community level.

Source: Nasson Tembo (MSc Dissertation)

Many responses differed significantly between the chiefdoms, however. Again, Kakumbi residents living closest to the main tourism developments reported the most benefits¹². Butler concluded that, if there is to be more widespread acceptance of the benefits of tourism throughout the area, and hence of the value of the park and its wildlife, then benefits of tourism need to reach all chiefdoms. It appeared that the introduction of the new policy had gone some way to achieving this. Tembo’s survey confirmed that employment was more important in Kakumbi and Mnkhangya (25%, 28% respectively compared to 10% in the other four areas) but, even here, household benefit was still on average more important (37%, 42%). By comparison, Tembo found that overall average responses for all areas showed that 50% of people valued household benefit the most, and 17% indicated employment opportunities. His survey also suggested that the new policy had greatly increased the perception that wildlife provided benefits. Whereas previously, the major benefits had been indirect in the form of

¹² Tony Green (pers. comm.) comments that under the current tourism arrangements in the area, benefits would not be expected to accrue in those chiefdoms lying away from the national park such as Msoro and Jumbe.

employment, household dividends were now valued more than twice as much as employment. Yet employment opportunities had undoubtedly increased in this period in response to the growth of tourism and related businesses. In addition, the new revenue distribution system had certainly improved equity since all areas were now included in the benefit stream. Butler commented on the lack of benefits accruing to the small, remote but wildlife-rich Malama community. However, under the new CBNRM programme, this community received cash benefits of some significance (over US \$50/household) and 57% of people here responded that this money was an important part of their household economy.

As indicated in Table 5.4, Butler's surveys showed that far more people felt that tourism had benefited their community than their individual families - probably reflecting LIRDPA's initial policy to channel benefits from safari hunting etc., to the community level (i.e. indirect benefits). People claiming to have benefited individually (directly) were probably those employed in lodges or safari camps or those making a living from selling provisions and handicrafts to the lodges and tourists. This argument is supported by the fact that a significantly higher proportion of people in Kakumbi chiefdom (nearest Mfuwe and thus probably employed by lodges, etc.) stated that they and their family had benefited from tourism.

Similarly, there were significant differences in the responses to a question on community benefit - 80% of respondents in Kakumbi chiefdom reported that their community had benefited from tourism in 1998 compared to only 35% in Nsefu chiefdom.

According to Butler's surveys, from 1996 to 1998, the perception that benefits were flowing to the community decreased and, conversely, that individuals were deriving benefits increased - again reflecting LIRDPA's revenue distribution policy change in 1996, when household dividends (*tyolela*) was introduced. Tembo's survey showed that this trend continued.

The growing international movement promoting the sustainable use of wildlife resources is built on the assumption that if people perceive that wildlife benefits them more than alternatives, they will tend to take measures to conserve wildlife. In southern Africa, there is considerable evidence that wildlife has a comparative economic advantage. However, two primary factors prevent this advantage from manifesting itself at the level of the landholder who ultimately makes land use decisions. First, without use rights or proprietorship, the landholder cannot capture these benefits. Second, policy, market and administrative distortions severely reduce the value of wildlife relative to its potential. Gibson (1999) shows how political and bureaucratic institutions in Zambia have acted to capture the majority of the value of wildlife. This is confirmed by Child and Bergstrom (in prep) who show that an added effect of this system is that wildlife is used inefficiently. For instance, in the LIRDPA area, the wildlife hunting quota is sold for about half its value, and over 75% of wild land in the Lupande GMA is not even developed for wildlife enterprises.

While inefficient use of wildlife resources reduces the amount of money earned from it, the way in which this money is used can greatly affect its value. The surveys of both Butler and Tembo, and a comparison of their results with earlier surveys undertaken by Balakrishna and Ndlovu (1992) and Wainwright and Wehrmeyer (1998), provide invaluable insights into this effect. Throughout the LIRDPA programme, roughly the same amounts of wildlife revenues have been made available to communities.

These surveys have measured the impact of these benefits. They show that when LIRDPA was a first generation CBNRM programme, it had almost no impact on communities. Most people still opposed wildlife conservation efforts that prohibited them from using it, for reasons well argued by Gibson (1999). Butler's two surveys illustrate the beginning of the transition in the perception of benefit as LIRDPA changed from a first-generation to a second-generation CBNRM programme. Tembo's survey shows that the same amount of money has a far

greater impact on community benefit and perception of wildlife – and therefore creates more value -when it is devolved to communities. This has long been advocated by proponents of CBNRM. In the case of LIRD, Child and Bergstrom (in prep) argue that the current revenue distribution process uses money effectively whilst, in addition, the process by which this money is used adds further value in the form of community empowerment, organisation and democratisation. This is a form of beneficence. The fact that communities can allocate wildlife benefits to the uses that they value most ensures that wildlife revenues generate significant benefits. Previously, when officials decided on the allocation of wildlife revenue, they often chose projects of little value to communities. This had the effect of devaluing wildlife and, therefore, any perception that wildlife can provide a benefit. This problem was further exaggerated by the fact that communities often had no idea of what was going on and, consequently, it is unlikely that they even made any link between projects and wildlife.

The majority of government officials remain suspicious of this new approach, and LIRD is constantly having to justify its CBNRM policy - even though it is clearly the best option for maximising the value of wildlife to communities, and therefore for both conservation and development. Gibson (1999) argues that wildlife in Zambia has been used extensively to “grease the wheels of patronage”. He would no doubt argue that officials and politicians oppose the new policy because it reduces their own ability to benefit from wildlife. From this, it can be surmised that many officials tend to value their own choice of projects more highly than those selected by local people; and that they also tend to promote those projects, which reflect well on themselves in the eyes of their superiors. The democratic and organisational benefits of wildlife are almost invisible to the visiting dignitary.

At this point, a comparison of ADMAD and the new CBNRM programme is interesting. Gibson argues that the primary beneficiaries from hunting are: (a) the ‘front-benchers’ that acquire or dispose of hunting concessions through a system of patronage; and (b) the ‘back-benchers’ and middle-level politicians and officials who gain in smaller amounts by getting special licenses which they use to hunt animals and make profits from the sale of meat. Local people benefit largely by poaching.

In Zambia, the use of wildlife for meat (special licenses and poaching) has reached a point where it is threatening the viability of hunting concessions. The structure of ADMAD is such that it uses a portion of hunting revenues to employ Village Scouts to protect wildlife, and a further portion is used to fund projects, usually around Chiefs’ residences. This arrangement has official support, but it fails to empower communities to demand use rights and, therefore, it threatens the long-standing status quo under which wildlife has been an important patronage resource.

The LIRD programme has gone a step further than ADMAD by democratising decision-making about the use of revenues from wildlife. If it is able to reach its logical conclusion, communities will become increasingly proprietorial over their wildlife, at the expense of officials and politicians. The LIRD CBNRM programme is therefore challenging the status quo in that it is converting wildlife from a resource subject to patronage to one under local control. However, it also offers an opportunity to resurrect the beleaguered wildlife resource and to provide the platform for a large and lucrative wildlife industry. It will be interesting to see what political choice is made.

5.8.3 Local community ambitions for the future

It is encouraging that Butler’s surveys show that the majority of local people now believe that they could earn more money from tourism if given the opportunity. In community workshops, the view was strongly expressed that this could best be achieved by establishing small enterprises to service the tourism market - selling handicrafts, local products and produce and

through community tourism initiatives. It was claimed that local communities currently had no access to tourists – “tourists don’t visit our villages” - a view held to a significantly greater extent in Nsefu chiefdom than Kakumbi reflecting the formers relative isolation from current tourism activity. Several other requirements were cited as lacking: access to start-up capital; awareness of how tourism can help local communities; and the provision of education, skills and training to local people in tourism and enterprise development. Workshop participants requested that skills classes be organised to help local people learn to apply their skills in more appropriate ways. It was also suggested that a market should be developed for the sale of products to tourists and lodges.

In both 1996 and 1998, people expressed an interest in providing a range of services to the tourism industry – again if they had the opportunity to do so. The most popular services were tours around their village, music & dancing performances, story telling and theatre, selling handicrafts and providing produce to lodges. Table 5.5 shows that interest in delivering such services increased significantly from 1996 to 1998. Indeed, in 1998, the majority of people said that they would first like to run their own tourism enterprise or, secondly, to be an employee in a locally owned and run tourism enterprise. This is very encouraging for the conservation of SLNP. If people have a stake in tourism, they are more likely to protect the resources that bring tourists to the area.

Table 5.5: Community Interest in Providing Tourism Services

Note: Figures indicate percentage of people responding positively to question about interest in providing the indicated service

SERVICES	1996 %	1998 %
Tours around village	68.5	85.0
Music & dancing performances	53.6	81.0
Storytelling & theatre	46.8	83.0
Teaching tourists about wildlife tracking	36.9	73.5
Bird watching tours	29.3	55.0
Bush survival training	25.7	50.0
Providing chickens/eggs to lodges	48.6	62.0
Providing textiles to lodges	36.0	36.5
Providing fish to lodges	42.3	54.5
Cooking a meal for tourists in own home	49.1	83.0
Selling handicrafts in village	51.8	78.0
Boat trips on the river	16.2	38.0
Canoe safaris	16.2	41.5
Teaching tourists about local trees and plants	32.4	81.0
Providing vegetables to lodges	55.4	79.0
Selling food/drink	38.3	60.0

In Butler’s community workshops in 1998, people expressed a desire to develop community-based tourism as a way to secure a more equitable share of the benefits of tourism in the area. Such tourism was seen as a way of bringing about cultural and social exchange between tourists and local people – something seen as currently lacking. Women, who felt discriminated against by lodges, particularly thought that such tourism would provide them with opportunities for employment. Participants discussed the types of enterprises in which they would like to be involved, given the opportunity. Responses were all concerned with sharing and teaching tourists about Kunda traditions, customs and beliefs, and ways of living, e.g. how people farm, pound maize, carry water and build huts etc.

5.8.4 Attitudes towards LIRD

In 1996, Butler's research showed that the great majority of people did not understand LIRD's policy. They were aware that LIRD had conservation and development objectives, but very few had linked the development projects they were witnessing in their communities with earning money from wildlife. Butler reports that the majority of local people believed that money for community development came from donor aid channelled through LIRD. Very few realised that the money derived from wildlife tourism (hunting and photographic safaris). Those that were aware of this requested that a much higher percentage (80% was suggested) of the money generated from wildlife tourism activities should be allocated to the local communities.

The majority of people believed that all money from photographic tourism accrued to National Parks and Wildlife Services (NPWS) in Chilanga and did not appreciate that the community funds they received from LIRD were, in part, generated from such tourism. They expressed their unhappiness with this state of affairs. This was an important finding for the future conservation of wildlife in the area. If people did not understand that there was an economic benefit from protecting wildlife, then they would most likely continue poaching and destroying habitats. Given the low level of participation of community members, it is not surprising that they misunderstood the project. They did not know that all wildlife revenue from both the Park and GMA was retained by LIRD, and that 40-60% of this was earmarked for community development through the Local Leaders Sub-Committee.

Those community members who were aware that some of the income generated from safari hunting was distributed to the communities had no idea how much money was involved. When told how much tourists paid for certain safari hunting licenses, people were genuinely amazed.

Butler reported that the majority of people claimed that they saw very little benefit from money coming into the community for development purposes. Whilst some benefits had been experienced (e.g. improvements in roads and clinics, an increase in environmental awareness, a decrease in commercial poaching), it was felt that these were not enough. Furthermore, people thought that funds from LIRD were being misdirected because they were channelled via the traditional Chiefs (through the Local Leaders Committee) who, they felt, mainly used the money for their own benefit (e.g. purchasing vehicles and electrifying their palaces). Additionally, they claimed that many of the community projects financed by these funds were incomplete and that others were ones that the local people would not themselves have chosen. Many projects were seen as benefiting the Chiefs alone.

Communities believed that if the decision-making power was entrusted to local people, then real issues of concern to them would be addressed, e.g. food security, maintenance of water wells, new boreholes, improvements in infrastructure, development of agriculture, control of 'problem animals', creation of permanent employment and education. People requested that they themselves be allowed to decide how the funds should be allocated and be empowered to select the projects that they felt were most needed. In this way, they felt that the community funds could be translated into real benefits for the community at large, and that people would value wildlife as a resource that provided them with these benefits and would hence protect it. They also requested improved management and accountability of the funds by LIRD.

The period from 1996 to 1998 saw a significant shift in people's attitudes towards the project. Butler's research showed that by May 1998, local people had become very aware that wildlife was the source of the money they received each year from LIRD and that the majority knew the monetary value of wildlife safari hunting licenses. In the villages, people were often found talking about *tyolela* (household dividends) and community projects and the general view amongst the communities was that, if they looked after their wildlife, then the money they

received each year as *tyolela* and projects would increase. Indeed, there was a sense of ownership of wildlife by the people. It was now seen as 'their wildlife'.

In 1998, communities in Msoro and Jumbe chiefdoms allocated a percentage of their wildlife money to employ and train Community Based Scouts (CBS) to curb poaching activities in their area. In addition, the Msoro community set aside money to construct four small wildlife dams in Pendwe and Mdimba areas in order to attract more wildlife. Similarly, in Nsefu chiefdom, the Nsefu Fishing Association was established to manage fish resources sustainably into the future. Active participation in wildlife management was happening for the first time in recent history, and certainly since the majority of local people were alienated from their wildlife by colonial and post-colonial wildlife policies which pursued centralised management.

Butler concluded that this shift in attitude towards wildlife conservation was a direct consequence of the change of LIRD policy in 1996. The evolving CBNRM programme, coupled with the change in revenue distribution policy, had clearly begun to reap benefits in terms of the change of attitude of local people towards the conservation of wildlife. People perceived that they were receiving tangible benefits for the first time since the start of the project and they linked these benefits with wildlife.

Whilst there were positive developments in the community between 1996 and 1998, some serious conflicts had developed towards the end of 1998: between the project and certain chiefs, between those chiefs adjacent to the Luangwa river (and hence national park) and those from more distant areas, and between the project and communities over problem animals (although, in truth, this has been a long-standing issue). Despite this, overall relations between the project and people in the communities were positive.

Those chiefs whose areas adjoin the national park - and therefore who have more wildlife (Kakumbi, Malama and Nsefu) – became aware of the concept of '*producer community*' (i.e. the community in which an animal is shot by a safari hunter receives the benefit) and as a result began to pressure LIRD to change its policy of distributing revenues equally and instead to base it on the concept of the producer community. Chiefs Msoro, Jumbe and Mnkanya opposed this, as they would have been cut off from all but a small amount of community development income. Ironically, two of these 'non-producer' communities were the most actively involved in wildlife management through CBS and dam construction.

This conflict between the Kunda chiefs continues to leave them split on this issue and there are fears amongst some chiefs that this issue, if left unresolved, could lead to the split of the Kunda tribe.

Chiefs Kakumbi, Malama and Nsefu had raised the issue of 'problem animals' as a major concern, possibly to amplify their stand on the producer community issue and enhance their demands for additional revenues. At community workshops, residents complained that the NPWS Wildlife Police Officers under LIRD did not respond to their complaints about problem elephants. Villages stated that with the rising elephant population, damage was being caused to crops and lives were at risk.

The senior chief of the Kunda tribe is Chief Nsefu. Sadly the chief who was in place during Butler's research in 1998 passed away in November 1999. The most dominant chief, however, during this period was Chief Kakumbi (who has since passed away) and he was very hostile towards the project over the issues of producer communities and control of problem animals. In late 1998, he publicly distanced his chiefdom from the project and would not allow any LIRD meetings to take place in his chiefdom. This problem was exacerbated in November 1998 when two villagers in Kakumbi area were shot dead in a conflict with Wildlife Police Officers over suspected elephant poaching. Whilst some say that the Wildlife

Police Officers were arguably acting in self-defence – scouts had been set upon and severely beaten by angry villagers with nine scouts being hospitalised (two officers subsequently dying from their injuries) - both sides appear to have been at fault in this confrontation and tensions in this chiefdom have remained high.

After this incident, Chief Kakumbi broke off relations with the project totally and openly ‘declared war’ on NPWS. All Wildlife Police Officers living in villages in Kakumbi chiefdom had to be relocated and all patrols in the chiefdom were suspended for fear of retaliation. As a result, poaching increased and game meat was being sold openly in the villages. By the end of 1998, the project was in a particularly vulnerable state. The tensions are illustrated by the following letter to the project’s Malco News (community newspaper);

“When will the war between the local people and the Wildlife Police Officers end? There is no peace between the villagers and the scouts. A scout has got no freedom to do his duties in the villages. He can’t communicate with the villager; he can’t move freely in the villages and his family is living in fear. If the Honourable Chiefs and the Warden don’t solve this war, the spirit of protecting the animals in our area will be weak.

If this war continues, how will the Wildlife Scouts be able to teach the local people the importance of keeping their animals and all the development that wildlife can bring?

I hope that the Warden and the Honourable Chiefs and their Indunas [advisers] will come in to solve this war between a local man and a Scout.”

Deluxe Chipazu
Ex instructor, Nyamaluma Training School for Wildlife
Malco News, 1,1, May 1999

Another issue raised by the communities was the lack of accountability over community wildlife monies. Despite the new revenue distribution arrangements introduced in 1996, some chiefs still continued to secure money from their communities against their wishes. In 1997, a formula was agreed in Chipata with the chiefs to resolve this problem, but some chiefs then broke the agreement and demanded extra money from their VAGs (see section 5.7). It is estimated that ZK 29 million (\$15,000) was extracted from community funds in this way in 1998, preventing some agreed community projects from being implemented. Many local people complained that development in the area was being hindered by the action of certain Chiefs and that, although they had been told by LIRD that they could use the wildlife money as they wished, they did not really feel in charge of it. They also claimed that LIRD management was doing nothing to stop chiefs from securing community monies.

Viewing issues from another angle, by the end of 1998 the majority of Chiefs were complaining that the project was undermining their traditional powers and that it was trying to turn their communities against them. They claimed that their people were now listening to the project’s messages and voice more than their own Chiefs. They asserted that it was traditionally one of their key roles to make decisions in the best interests of their communities and that the project was undermining this, notably through the introduction of household dividends. Some Chiefs claimed that this was simply a waste of resources and that the money could be put to much better use if it was used collectively for projects (especially those that they personally felt served their communities the best). They complained that their people were rejecting projects suggested by them as best for the community and were choosing household dividends instead.

One of the most serious threats to the success of the project in Butler’s opinion is this ‘alienation’ and ‘bypassing’ of the Chiefs. Chiefs in Zambia traditionally enjoy significant power in their communities, and particularly so in the Luangwa area. Butler has criticised the LIRD CBNRM programme for ignoring this important cultural aspect of Kunda life, taking

the view that, to be successful, any CBNRM scheme needs to embrace and work within the existing cultural framework of a community.

Fortunately, the conflicts appear to be healing. With five of the six Kunda supporting the project there is a solid platform for progress. It is, however, accepted that working 'around' the Chiefs rather than through them in order to implement CBNRM policy can only undermine the project's long-term sustainability.

5.9 Community empowerment: cultural tourism and community businesses

A significant effect of the CBNRM programme is the increasing number of community initiatives that are evolving in the area. As communities have become more empowered and motivated under the CBNRM programme in the valley, several side products have emerged. The most notable initiatives are the establishment of community-run businesses based on cultural tourism and natural resource utilisation (Kawaza Village Tourism Project, Nsendamila Cultural Village, Nsefu Fishing Association and the Kakumbi Natural Resources Business). A new culture of self-reliance and confidence is emerging amongst the local community.

5.9.1 Development of Community-Centred Cultural Tourism

This section reflects Butler's perceptions on community-centred tourism and other enterprises and organisations that were established in the Luangwa Valley with her involvement in the period 1996 - 1998.

Village tourism, through which a local community provides visitors with an opportunity to see how the community lives on a daily basis and to share with them their culture, is one way in which local communities can benefit from tourism to an area. Such tourism requires very little capital investment and this is particularly important for poor rural communities such as those in Lupande GMA. It is also a unique form of tourism that only a local community can provide. Culturally based tourism is a growing market but is still untapped in many countries in Africa, including Zambia. However, access to such tourism opportunities is through the operators of more conventional luxury wildlife tourism, and these operators are not yet convinced of the value of community tourism to themselves and their clients.

Nevertheless, there has been some recent progress in developing village tourism ventures in the Luangwa Valley with the establishment of the Kawaza Village Tourism Project and Nsendamila Cultural Village, both of which are being shaped and managed by the local community. Kawaza is currently more self-sufficient and entrepreneurial and is growing in stature. By comparison, whilst Nsendamila is located in the midst of the tourism activity in Mfuwe, the enterprise has been unable to capitalise on the advantage since it has lacked support from both the local community at large and from the local tour operators.

(a) Kawaza Village Tourism Project

Kawaza village is a traditional, working Kunda village located in Senior Chief Nsefu's area. The residents around Kawaza school have opened Mwizala village to visitors in order to share the customs and traditions of the Kunda people with them (Figure 5.3). At the same time, they hope to take a share of the tourism revenue that flows into the area through wildlife tourism to invest in the local school and to assist vulnerable groups in their community. This is a project

Figure 5.3: Scenes from Kawaza Village



Photo 1. Cotton Pressing



Photo 2. Local Handicrafts



Photo 3. Traditional Dancing



Photo 4. Cooking Nshima



Photo 5. Housekeeping Work



Photo 6. Lesson in Kawaza School



Photo 7. Brewing Local Beer

conceived of, initiated and run by the villagers themselves. The origins of the project were in 1996 when Kawaza school hosted visits by two schools¹³, arranged through Robin Pope Safaris, which had supported the school for several years. A pilot programme in 1997 was assisted by SLAMU when a group of Australian visitors (visiting through One World Challenge) was hosted, and reported very favourably on the experience. MS – a Danish volunteer organisation – provided a ZK 3.5m (US \$1,500) grant to purchase equipment (mattresses, plates, bed sheets, lamps, etc., radio telephones – yet to be used due to lack of batteries).

As indicated in the previous section, Butler's research and community workshops in 1996 and 1998 identified this type of community-centred, sustainable tourism (involving low-impact cultural and social exchange between local people and visitors - see Box 5.11) as a way of providing communities with a stake in the tourism development in the area and a share in its economic benefits.

Box 5.11: Minimising Visitor Impacts on Kawaza Village

As the tourism product is being delivered in a real village environment, there is the possibility that visitors could have a very negative impact on the lives of the local community. However, this is being carefully managed by limiting the number of visitors that can be accommodated in the village at any one time (there are only 7 tourist huts) and by totally immersing the visitors in village life. Only minor deviations from traditional ways of living (e.g. mosquito nets) have been made to accommodate Western needs. Other than this, all activities and services provided are purely traditional. Tourists are briefed at the start of their stay in the village by members of the Welcoming Committee on how they should act whilst in the village and which Western customs would offend villagers (e.g. dress code, ways of greeting, use of cameras/videos, etc.). As such a Code of Ethical Visitor Conduct is laid down from the outset so that the negative impacts of visitors are minimised. The committee in Kawaza are continuously working on this Code as their knowledge and experience of visitors increases. It is the hope at Kawaza that sharing their culture and traditions with visitors will bring back some of the old traditions and act as a way of keeping traditions alive in the community (Butler, 1998).

The Kawaza Village Tourism Project, according to Butler, is a model of good institutional practice needed for developing this type of tourism. Here the community has established a committee of community members, which includes a SLAMU representative as a technical advisor. The committee members (total 12, including 3 teachers) all have particular functions that allow for the efficient running of the business, whilst the community as a whole is involved in the project through hosting tourists in their village, interacting culturally and socially with visitors, and in having a say in the development of the tourism project and how the profits are spent. In this way, SLAMU is able to provide technical support (mainly facilitating management workshops covering marketing, fund-raising, business planning and financial training) when requested by the community and occasional help with transport. This type of participatory institution-building support from SLAMU has been one of the keys to the project's success so far, and its continuation in the longer-term will be vital if the business is to become sustainable financially. The initial assistance of the tour operator and the continued supply of tourists, plus the technical support from SLAMU, has given the local community both the means of funding and the capacity to organise itself.

Another key factor identified in Butler's research in the successful evolution of the Kawaza initiative has been that all community members have given freely of their time and skills

¹³ Axton Chase School from Australia and Clough Hall School from Glasgow visited the School for one week each during July 1996.

during its formative years. There has been an understanding of the need to 'sweat and sacrifice before benefits are reaped'. This has allowed the business to develop and for all accrued profits to be re-invested in the project to purchase essential items for the tourists' stay in the village.

In 1998, the project received over 100 guests (37 for whole-day visits, 35 staying overnight, plus casual part-day visitors) and the income was ZK 2.8m (US \$1,200). By the end of August 1999 (with the peak season still to follow), visitors had totalled 47 (an increase on the comparable figure in 1998). Products and current costs are shown in Box 5.12. If business grows, it is planned to develop similar tourism venues in other villages in the chiefdom.

Box 5.12: Products offered and charges at Kawaza Village Tourism Project

Products

Village tour – conducted by village guides
Visit to traditional healer
Meeting with Senior Chief Nsefu – to discuss development issues
Visits to local institutions – school, clinic, church
Herbal walk – to learn about plants used in cooking and for medicines
Bush walk – to see the vegetation and learn about economic and social values
Traditional dancing and story-telling
Cultural stories – about marriages, funerals, religion, legends, myths, etc., by elders
Daily activities (e.g. pounding maize, preparing food, etc.)

Charges

Overnight stay: US \$40
Lunchtime and evening experience: US \$10
Conference rate (for 2000): Overnight: US \$45; Day-rate: US \$25
Sale of handicrafts and local produce: 10% commission on sales

Website: www.ftsl.demon.co.uk/KVTP.HTM

(b) Nsendamila Cultural Village

Nsendamila Cultural Village is located in Chief Kakumbi's area. In contrast to the Kawaza Village Tourism project, the Nsendamila venture was originally conceived by one of the tour operators in the area but was then initiated and run by members of the community. They first established a site under a large baobab tree close to the tourist lodges in Mfuwe and near to the entrance gate to the National Park where visitors could see traditional dancing and buy crafts.

Later the site was developed to resemble a real working Kunda village with tourists able to see women sweeping, pounding and cooking maize meal (*nsima*), producing grass mats, etc. (see Figure 5.4). Profits generated are earmarked for community development projects in the chiefdom. Like Kawaza, the aim of the Nsendamila project is also to share Kunda customs and traditions with tourists, but it has enjoyed less success.

(c) Kawaza and Nsendamila compared

There are some key differences between the two projects that suggest what might be necessary to make a success of such community-centred initiatives. The Nsendamila project

was established by relatives of the traditional chief and, as a consequence, local people have no sense of ownership. Most of those people involved in the project therefore demand wages and the business is running at a loss. Its long-term viability looks doubtful. A committee structure and constitution has only just been formulated for Nsendamila Village whereas Kawaza has had such institutional arrangements from its inception. The wider community is not consulted over the project and is concerned about how Kunda culture is portrayed to visitors. The committee is predominantly male and, at times, has been insensitive to the portrayal of certain female-related aspects of Kunda culture. For example, dances from the Kunda Girl Initiation Ceremony should never be seen by males but have, on occasion, been performed for tourists. This has offended some members of the community. Additionally, since the village was specially built for tourism, some tour operators have felt that it lacked authenticity and have not supported the venture. In Nsendamila, local participation has been paid for and not volunteered, and this attitude pervades the village. Feedback from tourists about the experiences at Nsendamila has been much less enthusiastic than for Kawaza. There is a consensus amongst tourists that there is a strong emphasis at Nsendamila on extracting their money and insufficient effort to provide an authentic African experience, and a general view that the experience is not worthwhile. By contrast, most people return enthused from Kawaza and ask how they can donate more to this project.

Another constraint between the two models is that visitors to Nsendamila are 'shown' Kunda culture whereas at Kawaza they are active participants. The visitors are merely passive spectators and, as such, do not receive a true reflection of life in the Kunda way. Tour operators view Kawaza as a quality experience in which tourists can join in cultural activities and are keen to support this venture. But they tend to avoid taking their guests to Nsendamila, which visitors see as artificial, and insufficiently entertaining¹⁴. Operators are also suspicious of anything linked to Chief Kakumbi, as they believe that money in his chiefdom seldom benefits his subjects. As a result, Nsendamila is difficult to promote, is not really competing and may not survive.

(d) Marketing

Marketing such tourism is difficult and communication costs are high. The communities have very limited resources for marketing, lack exposure and have few contacts with foreign tour operators. Thus, despite the use of posters (see Figure 5.4), it has been difficult for them to market their ventures amongst the international tourists visiting Luangwa. One way out of this dilemma is the partnership approach that the Kawaza Village Tourism Project has adopted. They have joined forces with several local tour operators in the area (e.g. Robin Pope Safaris, Kafunta lodge and the Wildlife Camp near Mfuwe) to offer a joint tourism product based on both wildlife and Kunda culture. In this way, the community is able to take advantage of the local tour operator's marketing efforts and existing contacts with foreign tour operators. The benefit to the local tour operator is the ability to offer a broader and unique product, giving them a competitive advantage over other operators.

The UK-based tour operator, Discovery Initiatives, has included a product based around wildlife viewing and total immersion in Kunda culture in its 1999 brochure, jointly marketing Kawaza Village, Kafunta lodge and the Wildlife Camp. The lodge has access to e-mail, telephone and fax. It co-ordinates all bookings on behalf of the three partners and handles communications with the UK tour operator. Sunvil Discovery in the UK similarly markets the village alongside a stay in one of Robin Pope Safaris' up-market safari lodges.

¹⁴ A large proportion of the tourists visiting the area are not first-timers to Africa. They include overlanders and people from the region who are familiar with village activities. So a poor quality product is not attractive.

Cultural tourism is an emerging market in Southern Africa and tour operators can exploit its growth by forging partnerships with community-centred tourism initiatives operating in their area.

5.9.2 Nsefu Fishing Association (NFA)

Butler reports that in order to ensure that the fish stocks in the area are managed on a sustainable basis, LIRD P worked with fishermen in Nsefu Chiefdom during 1998 to:

- Bring the fishermen operating in Nsefu Chiefdom together through the formation of the Nsefu Fishing Association with a membership including all fishermen and their helpers.
- Draw up and adopt a constitution for the association and form an elected committee to manage its affairs.
- Negotiate with Mambwe District Council to allow the NFA to manage and issue fish licenses within Nsefu Chiefdom. As such, from 1st January 1999 all fishing permits issued in Nsefu have been handled by the NFA and this was expected to greatly reduce the possibility of licenses being granted to poachers.
- Draw up and agreed a set of rules and regulations for fishermen in Nsefu to ensure the sustainable harvesting of fish resources in the area. Issues addressed here are net sizes, fishing seasons, location of fishing camps, permissible areas to fish and the control of 'strangers' entering fishing areas.
- Agree a monitoring and enforcement programme to ensure that the association's rules and regulations are adhered to. This has involved employing and training three community scouts (paid for by the fishermen from NFA membership fees) to patrol the riverbank and enforce the regulations. A penalty system involving fines and revoked of licenses has been agreed and is applied to those caught breaking the regulations.

As part of this new initiative the LIRD P CBNRM Section agreed to:

- Provide on-going technical support to the association during its first year of operation covering: capacity-building for the committee and members; facilitating co-ordination and co-operation between the association and Mambwe District Council; assisting in developing the management of the enforcement system; and developing fish resource health monitoring systems.
- Facilitate the delivery of fish resource management workshops amongst members by experts in this area.
- Assist in the training of community scouts to patrol the riverbank.

During interviews conducted by the senior author with villagers in Nsefu chiefdom in August 1999, a number of problems were reported. The Fishing Association had started well but then only 14 of 30 members actually paid their fees and some did not buy licenses. There has also been poor management of the three Community Scouts. The Community Liaison Assistant had assumed responsibility for them along with 6 other community wildlife scouts and was trying to revitalise the Association. Wildlife police officers had continued to find a lot of snares around fishing camps in the chiefdom. More people were living in the camps than expected. Fishing was to be undertaken around three designated fishing camps during agreed periods (Camp 1 for January-April; Camp 2 for May-August; and Camp 3 for September-

November). But due to lack of water in the lagoon (preventing fishing), Camp 1 was not used and fishermen moved to Camp 2. However, they did not follow the rule of fishing only around the camp area and scattered. Nonetheless, the problem of the proliferation of temporary fishermen's dwellings along the park boundary, and the deleterious effects on animal movements, was overcome by establishing these centralised areas.

5.9.3 Kakumbi Natural Resources Management Business (KNRMB)

Uncontrolled over use of natural resources is an increasing problem in Lupande GMA and particularly in the congested Mfuwe area - mainly due to population growth in the area, much of which is linked directly or indirectly to tourism development. The main impact on the woodlands has been tree cutting for domestic fuel wood, but timber (particularly *mopane* trees) is also used for construction (huts, lodges, camps, local shops/bars/rest houses) and for commercial use (brick-making, bread-making, brewing, firewood for lodges, fish drying, etc.). Most of the natural resources used in lodge and camp construction (trees for poles, grass for roofing, sand for cement, etc) have been taken from the surrounding area. The land in the national park cannot easily be accessed for development of commercial enterprises, and so the majority of private investors have established commercial enterprises (safari lodges, camps, etc) in the adjacent Lupande GMA, and especially in Kakumbi chiefdom – the nearest to the main park entrance.

Increasing concern amongst the VAGs in Kakumbi chiefdom about deforestation and resource extraction by lodges led to the communities asking VAG members to raise the issue in ADC meetings. They complained that their natural resources were being depleted by commercial enterprises whilst the communities were receiving little benefit from this free harvesting of mopane trees, sand, gravel, stones and grass.

In 1997, Kakumbi ADC held a special general meeting to discuss natural resources management in the chiefdom. It was resolved firstly that the ADC should extend its management of natural resources beyond just wildlife to encompass all natural resources and, secondly, that all commercial enterprises in the area using natural resources to agree to guidelines on their sustainable harvesting and should pay for what they collected. A committee was formed to implement these recommendations.

In response, ADC members met with members of Luangwa Safaris Association (LSA) and jointly agreed to the establishment of a natural resources management sub-committee - called the Kakumbi Natural Resource Management Business (KNRMB) – with the aim and principle of introducing payments for resources taken in the area. The Committee was to comprise commercial investors and local community members, enabling local people and lodge owners to work together to protect the area's resources and to generate income from natural resources for the community.

In order to strengthen the function of the KNRMB, Butler reports that the CBNRM section of LIRDIP facilitated a workshop in which the local community and tour operators worked together to draw up a constitution for the business, detailing its aims and objectives, how revenue would be generated and allocated, etc. Work began on developing a constitution for the committee, but Tony Green (LSA Executive Officer, pers. comm.) has subsequently complained that the final version of this constitution was one-sided and not agreed to by the LSA because it laid down that only those taking resources for commercial purposes were to pay for resources. According to Green, the LSA felt that all users should pay - villagers as well as businesses, even if there were to be a two-tier payment system with businesses paying at a higher rate. Butler (pers. comm.) refutes this claim, reporting that the LSA, through its representation on the KNRMB sub-committee, were actively invited to comment on the constitution before it was finalised with Chief Kakumbi, but, for their own reasons, failed to

take up the opportunity to comment. She also believes that the biggest over users of resources in the area are commercial enterprises, and that villagers, as the owners of the resources on their land, should not be charged to use them. Despite the LSA claiming to not having agreed to the constitution and arguing that an opportunity to place a value on resources (applicable to all users) has been lost, most lodges are now paying for resources taken as they agree with the principles involved.

The constitution established local rules for sustainable harvesting of natural resources (it is, however, questionable whether these can be enforced in law, so instead will probably need to rely on a voluntary compliance by commercial users). These stipulate protected areas where the collection of natural resources is prohibited and tree species that cannot be used. They also provide guidance on collecting natural resources. For example, where possible, trees should be lopped not felled, and no tree should be felled within 30m of another felled tree to avoid the creation of clear-cut areas; only dead wood should be collected for firewood. A forest guard accompanies a customer whilst collecting resources to ensure the rules are strictly adhered to.

To provide funds for conservation initiatives, all commercial customers must now pay for those resources that they use (e.g. sand, gravel, grasses, palm leaves, *mopane* poles). Prices reflect both market rates as well as conservation objectives (e.g. those for firewood and *mopane* poles have been set high to discourage usage). The aim is to encourage lodges to find alternatives to the indiscriminate use of natural resources (e.g. solar power rather than firewood to heat water). Each of the 18 sawyers organised in the Kakumbi Sawyers Association have agreed to give 3 planks per month to the sub-committee to raise money.

The money raised in this way was to be distributed monthly as follows (Phiri and Butler 1998):

- 40% for the administration of KNRMB (including staff salaries);
- 25% divided equally between the five VAGs in the Chieftdom for natural resources conservation initiatives (e.g. conservation education, drama, tree planting, school drawing competitions)
- 30 % divided equally between the VAGs for community development;
- 5% to the Chief.

The accounts are audited quarterly by LIRD P.

In 1998, ZK 13m (US \$5,000) was earned from the sale of natural resources. It was intended to support various development projects (e.g. rehabilitation of the local clinic) and conservation initiatives (e.g. replanting trees project at a local primary school and drama in the villages around the theme of sustainable use of natural resources). The business has proved viable. However, it has fallen down because money is badly accounted for and is not used for the constituted purposes, with a large proportion supposedly having been 'loaned' to the chief. While theoretically sound, people have generally lost faith in the system. Lodge operators, who willingly contributed, now view it as a means by which the chief, in particular, raises money with little concern for people or conservation.

5.10 Conclusions from Butler's research

Cheryl Butler's research provides an independent evaluation of the community programme by a proponent of such programmes. Her work and Nasson Tembo's survey both show a very significant improvement in attitudes and understanding of wildlife conservation by the communities from 1996 onwards. This is a direct response to the introduction of a second-generation CBNRM programme, and principally to the participatory revenue distribution system. Prior to the 1996 policy change, the LIRD P community programme had failed in

these objectives, despite returning money to communities and providing a wide range of services to the community (e.g. agricultural, credit, road maintenance, water development). This clearly demonstrates the superiority of the principles embodied in second-generation CBNRM compared to the project's more paternalistic and top-down beginnings, which did little to shift attitudes. The failure of the early programme can be attributed to not having established responsive governance, institutions and incentive structures, and to the perpetuation of the system of centralised patronage (albeit at a lower level).

According to Butler, early enthusiasm for the four community initiatives (discussed above in section 5.9) and a sound theoretical basis were only converted into sound practice where the process was catalysed and supported by SLAMU, and where the system was open and transparent. She concludes that a big spin-off of the CBNRM programme in the Luangwa Valley from 1996 onwards has been the empowerment of local communities through workshops and the transfer of business skills from SLAMU to the community. While progress has been made in many areas, both Kakumbi initiatives (Nsendamila Cultural Village; Kakumbi Natural Resource Management Business) have been affected by governance and transparency problems related to the involvement of the traditional chief. Elephant poaching has increased and few projects have been completed because money allocated to them in many instances has been 'borrowed' by the chief and is not accounted for. Elsewhere, the Nsefu Fishing Association initiative has reduced conflicts with hunting and tourism, but could have made more progress with on-going technical support from SLAMU. Kawaza cultural village has improved steadily, and can be said to be sustainable, though growth is limited by difficulties in accessing the tourism market.

CHAPTER SIX

IMPLEMENTING THE VISION: THE FIRST YEARS OF PHASE 4 (1999-2002)

This chapter describes Phase 4 of the programme and, as such, refers to SLAMU rather than LIRD to indicate that the project had been reformulated. The first section (6.1) looks at the process of planning and changing LIRD into SLAMU, and at why this was financially necessary. The next section (6.2) describes the introduction of performance management since this is an important contribution to a more general understanding of both donor-funded projects and park management. The third section (6.3) assesses some of the results of the new system and whether performance management is workable. It also provides a description of the status of various activities, and includes a review of the law enforcement programme for the entire duration of the project.

6.1 Planning and change management

6.1.1 The process of change from LIRD to SLAMU

As noted in Chapter Five, senior management held an internally facilitated logical framework approach (LFA) workshop in April of 1996, which set out a project vision for the first time and began to focus the project on wildlife and CBNRM management. The success of this led to a series of workshops, and began to build the guiding coalition necessary to implement the changes embedded in the Phase 4 document.

SLAMU staff invested heavily in developing the Phase 4 proposal (Box 6.1) and committed themselves to the approach embedded in it. It represented the first serious attempt to make the project financially sustainable, despite many pledges to this effect in earlier project documents. After two internal workshops, one to set parameters for proposals and the second to consolidate these proposals, two further workshops provided stakeholders with a forum for their inputs. At the same time, the National Parks and Wildlife Service (NPWS) was being restructured. SLAMU became involved in this process, the outcome of which was uncertain. 40 LIRD personnel attended a final facilitated workshop where objectives and a four-year work programme and monitoring calendars were established.

The highly participatory nature of this planning enabled a much smoother transition than was occurring in the conflict-ridden process of changing NPWS. It was also the start of a performance-management process driven largely by peer pressure. The inclusion of many staff members not previously included in any planning processes was a positive, unifying and motivating force and served to improve project coordination. The comprehensive review of the project led to an internally-driven process to transform it. Participation generated consensus and commitment to make the transformation work. Indeed, even before the formal implementation of Phase 4, it led to improvements in budgeting, planning, control and reporting processes.

A primary motivating force for change was the realisation that the gap between income and expenditure had to be closed by 2003 when the donor money ran out¹. The magnitude of this gap is illustrated in Figure 6.1, and people's continued employment was threatened by it. Closing this gap required serious

¹ Part of the skill of organisational transformation is to make people dissatisfied with the status quo (Kotter, 1996).

effort, cutting costs from US \$1.8m to \$1.0m annually, a major restructuring of the organisation and its management systems, staff cuts, and the building of a single

Box 6.1 Workshops to develop the Phase 4 proposal

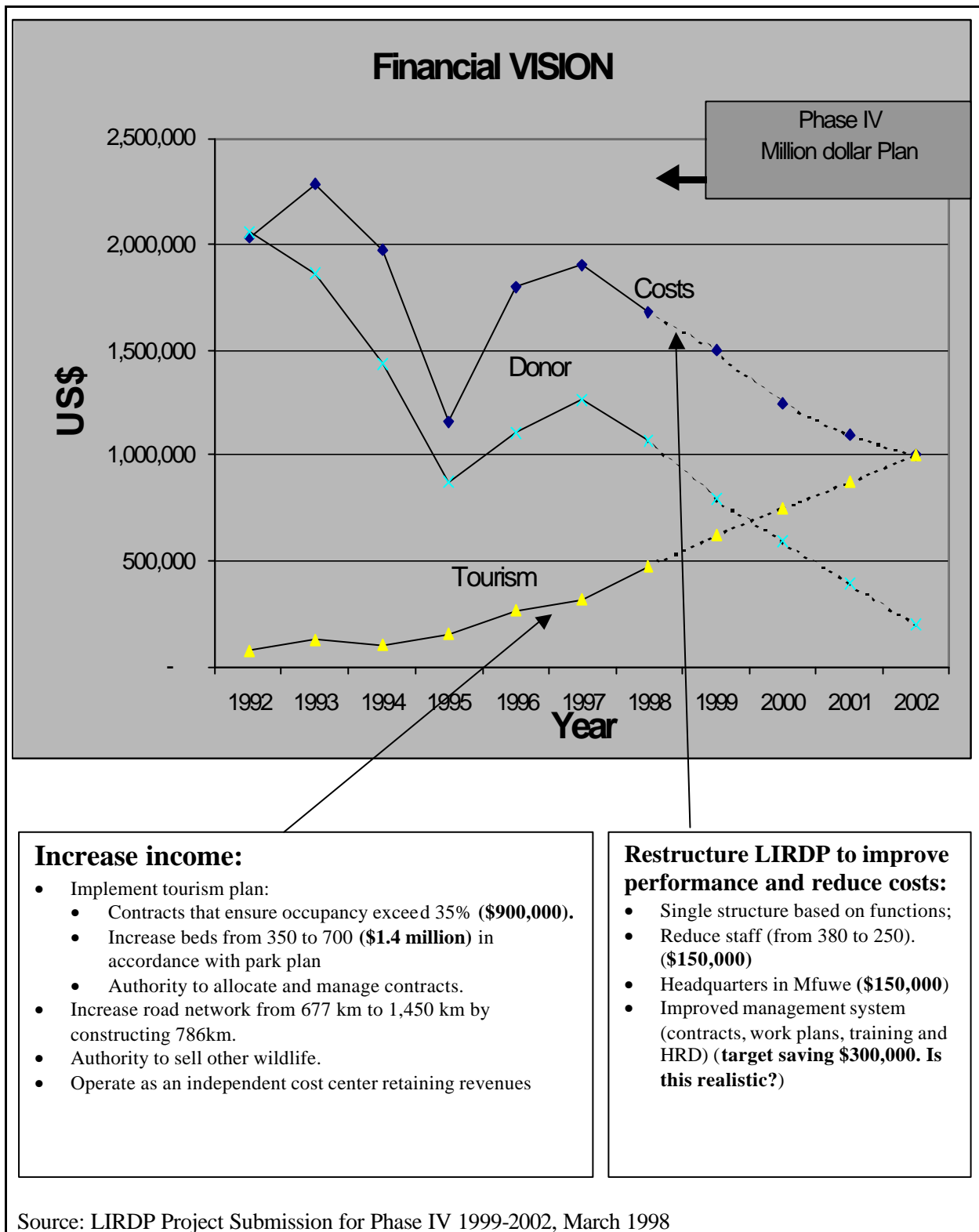
Over a period of two years, LIRDPA held a series of meetings to develop the Phase 4 project submission. This process culminated in a series of formal workshops:

- *September, 1987, Mfuwe.* Internal meeting of 15 senior LIRDPA staff. Initiated the formal process of compiling the Phase 4 proposal. Situational analyses (using logical framework approach, LFA) and brainstorming techniques (SWOT analysis) were used to prepare a comprehensive list of issues to be tackled. Tasks were allocated to staff who were given three weeks to prepare written reports.
- *October 1997, Chichele Lodge.* Internal workshop. Reports were presented and discussed in detail. A participatory budgeting exercise was used to define priorities. These reports were consolidated into a draft project submission (coordinated by Brian Child) which were supported by a set of annexes describing and analysing major activities. Annexes included: project finances, financial projections, the cost of expanding the project geographically, law enforcement, ecological monitoring and research, CBNRM, tourism, roads, public relations, vehicles and workshop, management systems and human resource development, gender, goal-setting for protected areas, and a review of phase 3 objectives.
- *February 1998, Chichele Lodge.* Organised by the Protected Area Planning Unit and attended by LIRDPA, tour operators and communities as part of the European Development Fund (EDF) project to restructure NPWS. This was a park planning workshop for South Luangwa National Park, but LIRDPA fed the results into its re-organisation process and its project submission for NORAD.
- *March 1998, Kapani Lodge.* Attended by LIRDPA and other stakeholders (tour operators, chiefs, community representatives). The draft project submission was presented and discussed before it was finalised.
- *March 1998, Lusaka.* Senior LIRDPA staff attended an EDF-funded workshop to discuss the restructuring of NPWS. This information was incorporated in the Phase 4 proposal.

The project submission was submitted to NORAD in early April 1998. In late April/May 1998, the submission was reviewed by an external team. This concluded that “the document is an impressive piece of work, although it requires some polishing and tidying up before it can be adopted as the framework and basis for annual work plans”. The review, however, noted the need for a professional facilitator to finalise the plans.

- *August 1998.* A 2-week professionally facilitated workshop led to an updated project submission in LFA format. This included clear objectives and targets, plus a four-year monitoring calendar. Following liaison with LIRDPA, the consultant (Hasan Moinuddin) submitted a final project proposal to NORAD in September, 1998.

Figure 6.1: The Phase 4 strategy for financial self-sufficiency



headquarters in Mfuwe. The necessity to increase tourism revenue to cover these costs would require park-planning, business planning, improving the management of commercial activities and tourism concession agreements, and the development and sale of new commercial activities - especially camps and lodges in the large areas of the park that were not being used. This expansion would require significant investment in infrastructure, particularly roads to allow for the development of tourism in the southern and western parts of the park, which are currently inaccessible by road.

The search for sustainability and the bringing together of income and expenditure became known as SLAMU's Million Dollar Plan. This is a strategy of financial survival and was chosen above one based on growth as a response to the uncertain commercial climate associated with NPWS and its non-commercial outlook and the potential destabilising effects of the changes associated with the conversion of NPWS into ZAWA. The case of allocating of new tourist camps illustrates the difficulties of adopting a pro-active commercial strategy. LIRDPA initiated a process to allocate such camps in mid-1997, but it was only nearing culmination three years later (in early 2000). Initially, it took well over a year to persuade NPWS (the responsible authority) to allow tendering for camp sites. Then, the first tender was aborted after it had been completed and delayed a full year, purportedly because of the interference of a politically-connected businessman. If the conditions prevailed in which greater commercial authority for promoting tourism was decentralised to SLAMU, it would be possible to shift strategy from "survive" to "thrive", and to generate as much as US \$2.5m annually. Maintaining operational costs at US \$1m would leave considerable finances for capital investment in infrastructure (roads), developmental activities (CBNRM, conservation activities), the development of surrounding districts and GMAs, and as a cross-subsidy to ZAWA headquarters or other parks and conservation priorities, especially in the region².

The LFA set the long-term objective as conserving the habitats and wildlife of the Luangwa Valley. The medium-term objective is to establish a technically and financially capable institution, and recognises the reality that natural resources in the area have to finance their own conservation. The outputs defined the major activities of this institution. Prior to the planning workshops, it was almost impossible to draw an organogram of LIRDPA. The new structure is illustrated in Figure 6.2. Overall responsibility for co-ordination and supervision of the project now lies with the Area Manager of SLAMU with three further Managers responsible for: Wildlife and Natural Resources; Commercial Services; and Finance and Administration.

Table 6.1 lists the objectives of Phase 4. They are not much different from Phase 3 in substance. The real difference lies in the management system to achieve them, which is more organised than before with each objective having clear indicators. This is strengthened by a realistic assessment of sustainability, including clear targets for costs, cost-cutting, and income (see below). It is also strengthened by a new and simplified structure based on functions each of which has measurable objectives (see examples of higher level indicators in Box 6.2) with a system of regular review to ensure that progress is being made.

The strategy of the next four years is to achieve sustainability for SLAMU. In pursuit of this goal, SLAMU will limit itself to an annual recurrent expenditure of US \$1.0m (see Table 6.2). This figure represents an informed estimate of what it would cost an efficient organisation to effectively manage the park. This, in turn, has set the commercial goals, and has a strong influence over tourism planning. The

² As such, South Luangwa National Park could be successful in an emerging paradigm which sees national parks as economic catalysts in remote rural areas in addition to fulfilling their normal function of bio-diversity conservation. As a regional park, South Luangwa might provide the funding necessary for district-level co-ordination and investment. For instance, if it earned US \$2.5m annually, compared to costs of \$1.5m, the profit could be split four ways: staff incentives; capital investment in the park; cross-subsidisation of other parks; funding of district co-ordination and investment.

Figure 6.2: Organisational structure of South Luangwa Area Management unit

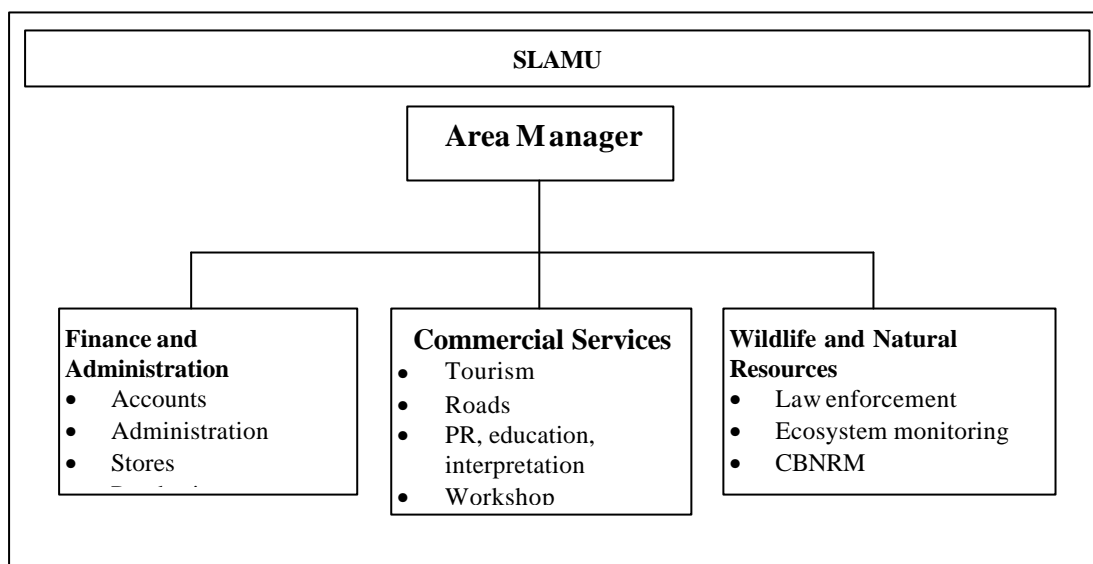


Table 6.1 Summary of Phase 4 Objectives using the Logical Framework Approach

Development Objective	Luangwa Valley natural habitats and wildlife conserved and sustainably utilised.
Immediate objective	South Luangwa Area Management Unit (SLAMU) is technically and financially capable of managing the park and ecosystem.
Outputs	<p><i>Core functions:</i></p> <ol style="list-style-type: none"> 1. Effective ecosystem monitoring and management in place. 2. Effective and efficient law enforcement system put in place. 3. Effective community institutions in place for managing wildlife. 4. Commercial and tourism development activities facilitated and managed <p><i>Services:</i></p> <ol style="list-style-type: none"> 5. Conservation education, information and public relations services provided. <p><i>Support services:</i></p> <ol style="list-style-type: none"> 6. Infrastructure improved and maintained. 7. Equipment and vehicles repaired and maintained efficiently. 8. Effective procurement and distribution system in place. 9. Efficient personnel, finance and general administration in place.

Box 6.2: Proposed indicators for achieving the objectives of SLAMU

Development objectives

- By 2002, GMA wildlife areas are secured and wildlife populations increase by 20% by 2002, and by 50% in the next decade.
- By 2002, populations of large mammals such as elephant, eland, giraffe, waterbuck, hartebeest and puku increase, while those of hippo, impala, zebra and buffalo are stabilised in SLNP.

Wildlife populations are maintained within a range of acceptable change. The lower limit is set according to a judgement of the minimum acceptable population (with numbers given for each species). The upper limit is defined by on-going monitoring of vegetation to ensure habitats are maintained in a healthy state or are improving from a degraded state.

- Community incomes and other benefits from wildlife utilisation increase to ZK 450 million by 2002, from ZK 300 million in 1998.

Immediate objective of securing financial viability and technical capacity

- By 2002, management plans for habitats and species are in place and regularly updated.
- Communities in the adjacent GMA are controlling poaching (i.e. less than 10 serious offences per 1000 patrol days), thus reducing SLAMU effort to 25% of 1998 levels.
- SLAMU income from commercial and tourism activities reaches the equivalent of US \$ 1.2 million by 2002. At the same time, grants from government as well as income from the SLNP allows a reduction of donor input to 50% of the 1998 level; projected favourable trends will allow SLAMU to phase out NORAD assistance by 2005 and build funds to allow it to finance local consultancies from its own funds.

Source: LIRD (1998)

intention is for tourism income to reach US \$1m as soon as possible, and then to increase moderately above this 'survival' level to provide for capital investments in the longer term.

The budgets for Phase 4 are summarised in Table 6.2. Annual expenditure is reduced to US \$1.3 compared to about US\$ 1.8m in Phase 3. The grant from NORAD is phased to fall, in the hope that increasing tourism revenues will compensate for this. As noted above, this represents a realistic and achievable financial scenario, possibly for the first time in the project's history³.

³ This provides important guidelines for the management of large savanna parks in southern and eastern Africa. The management cost is approximately US \$130-150 per square kilometre. Tourism results show an average income of \$1,186 per bed per season for a largely seasonal park, with good performers usually yielding more than \$1,500 per season and the top performers yielding over \$2,000. By implication, each tourism bed can support 10 sq. km of park. With new charges for park entry (\$30/tourist per night), SLAMU hopes to earn a guaranteed minimum fee of \$1,975 per bed, so the park will require some 650 beds.

Table 6.2: Budget agreed for Phase 4 (LIRDP Project Submission 1999-2002, November 1998)

	1999	2000	2001	2002	Total
EXPENDITURE					
Recurrent	1,002,200	966,300	911,000	923,000	3,802,500
Manpower	355,300	313,900	296,000	299,900	1,265,100
Consultancy	15,800	15,900	15,000	15,200	61,900
Operational expenditure	631,100	636,500	600,000	607,900	2,475,500
Capital	319,800	322,400	304,000	308,000	1,254,200
Technical assistance	144,000	145,200	136,900	138,000	564,800
New headquarters	18,000	18,200	17,100	17,300	70,600
Capital equipment	157,000	159,000	150,000	152,000	618,800
<i>Total</i>	1,322,000	1,288,700	1,215,000	1,231,000	5,056,700
INCOME					
Tourism	410,000	508,400	564,300	628,200	2,110,900
Culling	80,000	80,700	84,700	88,900	334,300
Other income	44,000	45,700	48,000	50,500	188,200
NORAD grant	685,000	550,000	410,000	350,000	1,995,000
Zambian govt. grant	103,000	103,900	108,000	113,400	282,300
<i>Total income</i>	1,322,000	1,288,700	1,215,000	1,231,000	5,056,700

The Phase 4 strategy is ambitious and vulnerable to a range of external factors over which the project has no control, especially the confusion regarding the way in which the new ZAWA will function, and the government's poor record in providing an attractive and supportive environment for investment in tourism. Some caution is warranted on project projections. While the new offers an opportunity to entrench and even spread the lessons of SLAMU, the final outcome of the long change from NPWS to ZAWA process is still not clear. It has been difficult for SLAMU to attain stability in a situation where its mother department has been under-going major changes without clear leadership or policies. For instance, SLAMU had intended to increase pay levels by reducing staff from 300 to 220, but was required to delay implementing these increases pending similar actions in ZAWA – and the latter have not been specified.

The second major uncertainty is commercial policy that ZAWA will follow. As described above, it took SLAMU three years to get a tender for ten new bush camp sites through the system. The cost of the lost opportunity is in somewhere between US \$150,000 and 300,000. There is also concern that ZAWA has not inherited a revenue base from NPWS, and that this will provide strong temptations to extract money from SLAMU and from community programmes. Fortunately, such problems were foreseen, and an alliance between SLAMU and NORAD ensured that protection was built into the Norway-Zambia agreement.

6.1.2 NORAD-GRZ agreement for Phase 4

NORAD has allowed SLAMU much more freedom than is usual in the integrated projects supported by the agency. This is because it is still seen very much as a pilot initiative paying the way for the implementation of the new Zambian Wildlife Authority. In a broader context, the project is also

pioneering a paradigm of sustainable park management coupled with linkages to community wildlife management in adjacent areas.

In the agreement with the Government of Zambia, NORAD obtained formal recognition of this status for SLAMU in the Phase 4 project agreement. This helped to insulate SLAMU from the confusion surrounding the NPWS-ZAWA transformation, while simultaneously allowing SLAMU to become a part of the emerging organisation. For instance, ZAWA inherited from NPWS the lack of a sound revenue base, and lacked funds to pay staff salaries in its first few months of operations⁴. So, in early 2000, ZAWA issued a directive to SLAMU to stop all expenditure and mooted using SLAMU funds to meet its salary costs. But SLAMU was able to resist both moves by referring to the Norway-Zambia agreement, and was therefore able to keep functioning. Under its contributions and obligations, signed in December 1999^{5,6}, Zambia agreed to:

- grant the project the status as a pilot initiative within the Zambia Wildlife Authority throughout the Phase 4 period and thereby;
- grant the project permission to retain all revenues from tourism and safari hunting in SLNP and LGMA;
- allow the Community Based Natural Resources Management (CBNRM) approach to be continued;
- delegate sufficient decision-making authority to the project to facilitate its operation.

6.2 The introduction of performance management

6.2.1 *Managing through the logical framework approach*

In preparing for Phase 4, the first step in restructuring the project was to set out clear goals, something that had not been done before. This was achieved using NORAD's version of the logical framework approach (LFA) (NORAD, 1992)⁷ and the resulting project matrix provided the foundation for transforming LIRDP into SLAMU. This move towards objectives-orientated planning and the corresponding management and control systems was critical for institutional transformation. The hierarchy of goals is presented above (Table 6.1 and Box 6.2) together with the transformed organisational structure (Figure 6.1) and four-year budgets (Table 6.2).

(a) Improving management systems

With objectives clarified by the LFA, including the definition of outputs, activities and indicators, SLAMU also redefined its budgeting and reporting procedures. These are shown in Figure 6.3. The

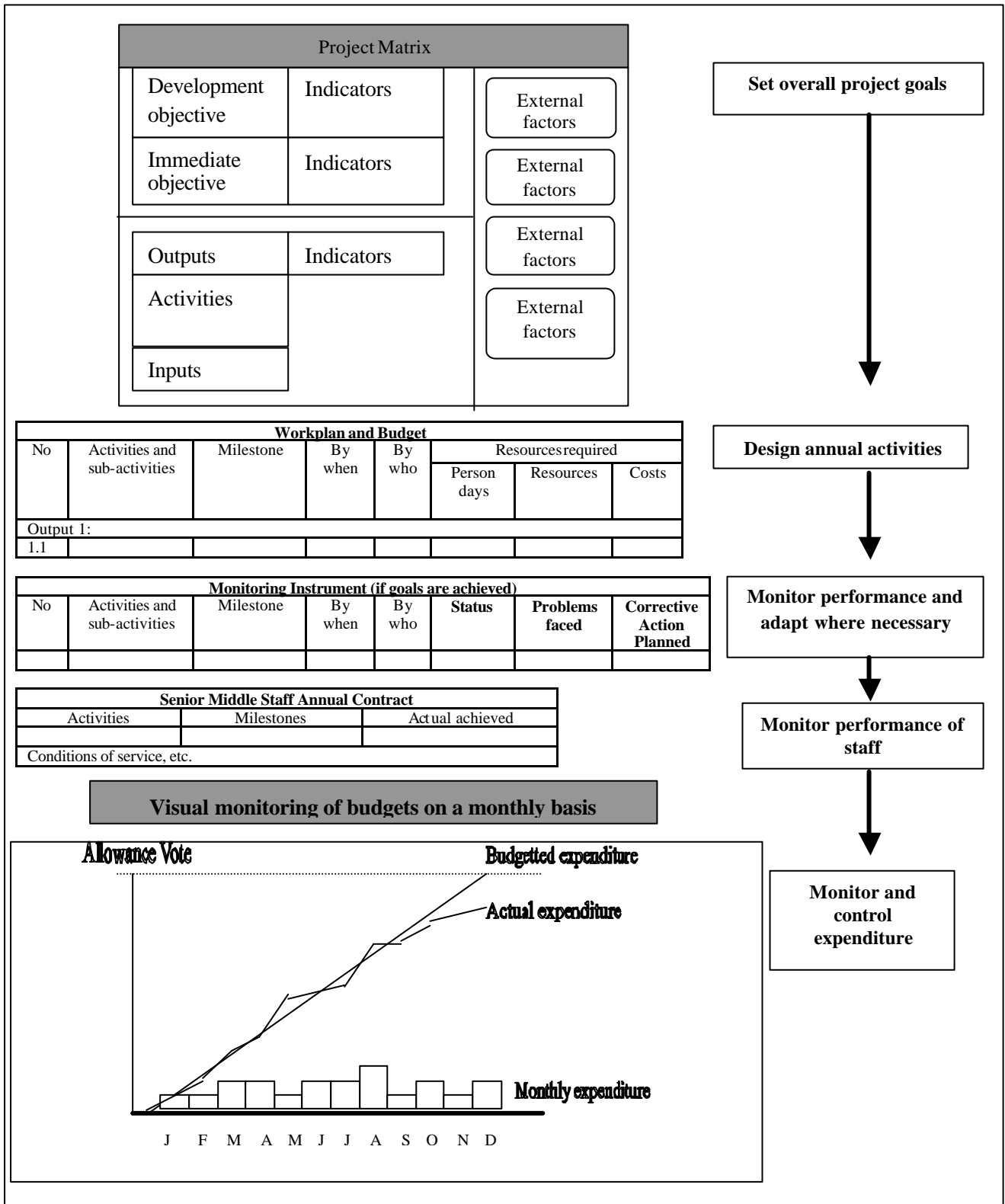
⁴ The failure to make a contingency to pay salaries is indicative of the confusion surrounding the transformation of NPWS into ZAWA. This arose because the transformation was a highly political process. On the one hand, politicians and NPWS officials had long used wildlife as a source of patronage (Gibson, 1999) and wanted to maintain the status quo. On the other, Zambia's wildlife industry has enormous potential for growth and, in a country with a failing economy, there were strong pressures to professionalise wildlife management and to make it more transparent.

⁵ Agreement between The Government of the Kingdom of Norway and the Government of the Republic of Zambia regarding Support to South Luangwa Area Management Unit (SLAMU) (Formerly Luangwa Integrated Resources Development Project – LIRDP) Phase IV

⁶ In order to enable the project to initiate the first year of its Phase 4 programme, an addendum was made to the Phase 3 agreement providing for about NOK 6 million for 1999 (NOK 5.5m plus some funds remaining unspent from Phase 3).

⁷ NORAD 1992 The Logical Framework Approach (LFA). Handbook for objectives-orientated planning.

Figure 6.3: Objective-orientated performance-based management



project matrix provides guidance for the development of annual work plans and budgets. Control takes the form of quarterly reporting according to the financial and performance targets. The formal monitoring of staff performance has not started.

The 1993 Review Mission had praised LIRDPA's financial systems because up-to-date information was available on the expenditure of each section. However, from the perspective of performance management, LIRDPA's financial management was weak prior to 1998. Sections that used money carefully often had budget cuts towards the end of the year because other sections had over-spent. Moreover, financial control was centralised, and sections were unconcerned about their financial standing. In his final debriefing report in early 1997, Goran Johansson (Deputy Director for Administration) described the weakness in financial direction and control:

“The most striking conclusion is that so little has changed despite all appraisals, workshops, project documents, consultancies, etc. The resistance to change, typical in all human organisations, is expressed in the multitude of small everyday decisions in the project where guidance is primarily derived from old bureaucratic patterns and not from a strategic vision of change. Whether you compare the figures from 1996 directly with 1992 figures or with the average of the 1992-1995 figures, the result is the same; only marginal changes have taken place and the project is still nowhere near financially sustainable. The level of expenditure has only been reduced marginally (by 2.3%) and the structure is fairly similar over the years”.

Johansson also expressed frustrations that he, as the financial controller, was the only person in the entire project actively seeking to control expenditures and that the majority of the project worked on the principle of ‘spend, spend, spend’.

New attitudes clearly prevail in SLAMU today. From 1999, budgets were devolved to the nine sections and, by August 1999, the expenditure of most sections was close to their budgets, indicating the value of devolving responsibility. Staff commonly talked of targets and budgets, a far call from the unfocused and uncontrolled situation described by Johansson in 1996. Indeed, by 1999, the budget had been cut to about US \$1.2m compared to almost \$2m before 1996 (except in 1995 when the NORAD-GRZ agreement remained unsigned for a year). While SLAMU had not got to the stage of the visual monitoring of budgets outlined in Figure 6.3, by July 1999, sections were getting monthly budget printouts and beginning to reconcile their analysis with the central data held by the Accounts Section. The earlier reviews of LIRDPA had criticised its over-centralisation and the absence of responsible middle management. By 1999, this middle management and the financial acumen that was lacking in earlier stages of LIRDPA were beginning to emerge.

Improvements are also evident in an increase in work output and in the quality of the quarterly reports. The first quarterly report for 1999 was short and quantitative and closely linked to targets. This is illustrated by an extract from Law Enforcement Section:

“During the first quarter the number of patrols sent out in the field was 69 an increase of 11% compared to 62 patrols in the same period in 1997. The patrol days increased by 164% from 2,735 days in 1997 to 6,016 days in 1998... The total expenditure for Wildlife Section in the quarter was K135.9 million compared to a budget of K249.3 million”.

The salaries of SLAMU staff are closely linked to government pay levels. The continuing deterioration of conditions of service for civil servants in Zambia has been a constant and major constraint on retaining quality staff. The project was eager to put senior and middle managers on contracts, but was unable to do so until the new ZAWA was implemented. Nonetheless, job descriptions were developed for many positions, and in some sections performance monitoring was initiated.

The overall effect of the participatory planning was improved teamwork and performance management. The project began to steadily reduce its expenditure (see Figure 6.3) yet, judging from the quarterly reports, the output of most sections improved. For example, the number of patrols increased, road maintenance improved dramatically, the community programme began to work, accounts and purchases were more timely, meetings focussed on work and performance, etc. Unfortunately, the early record of LIRD P left it with a very negative image and stakeholders remained unconvinced that a corner had been turned.

Steady improvements in section performance was supported by structural changes. Comparing the status of SLAMU in July 1999 with the major targets set out in the March 1998 Phase 4 proposal shows these changes, and is indicative of improving performance (Table 6.3):

Table 6.3: Targets for change compared with outcomes

Target set in March 1998	Status by August 1999
Single structure based on functions;	Single structure in place by 1 January 1999
Reduce staff (from 380 to 250) to save US \$150,000.	Staff reduced to 308 by January and below 300 by June 1999. A further reduction to 220 for 2000 planned but prevented by ZAWA.
Headquarters relocated to Mfuwe (saving US \$150,000)	Despite long external delays, construction of the headquarters commenced in May 1999.
Improved management system (contracts, workplans, training and human resource development)	All budgets based on workplans, and financial and performance controls in place. The project suffers from insufficient budgets for on-the-job management training.

6.2.2 Ecological monitoring and management

The new planning and management systems described in the previous sections were also applied to ecological management with interesting results. Conservation managers seldom define ecological outputs and trade-offs. However, the use of LFA techniques forces managers to define biodiversity objectives in ways that can be measured and requires that trade-offs are made (e.g. between the size of animal populations and ecosystem health). Unusually, this provides a logical structure for making ecological decisions. The system is therefore described in some detail below.

(a) Management controls and biodiversity conservation

In Phase 4, biodiversity and the status and trends of key ecosystems and species is being treated like any other management function. The desired outcomes (with objectively verifiable indicators) are clearly defined and a means of verifying (measuring) them described. An adaptive form of management is being followed so that corrective actions are decided where events do not lead to these outcomes.

SLAMU's ecosystem monitoring approach uses a business-like management and control system rather than the more conventional research approach, which is often heavily influenced by the narrower interests of individual researchers. Thus, monitoring becomes a step in the management process rather than an intellectual end in itself. Thus, the terms 'monitoring' (in the ecological sense) and the 'control' (in the business sense) are effectively synonymous – both allow the manager to ascertain if the system is

progressing in the desired direction. However ‘control’ implies the addition of a feedback loop: actual status is compared to desired outcome, and actions are taken where there is divergence. A general criticism of ecological management is its failure to prioritise monitoring, and to use this to influence management. Ecological monitoring characteristically suffers from too much unfocussed data with the manager buried in the detail of research reports, with so many ifs and buts that a decision is difficult to make. Paradoxically, as Drucker (1974) states, if there are too many controls, control is lost. There is also a strong tendency for managers to “manage what they can measure”; so linking the monitoring system to ecosystem objectives using an LFA-based matrix is a useful tool for ensuring that priorities are set and effected.

(b) Key success factors for ecosystem management in SLNP

To avoid the temptation of micro-management, SLAMU has defined several key success factors that can be affordably measured, and their status is reported in quarterly and annual reports. This is building a biodiversity and ecological performance audit into the management process. Given its financial constraints, SLAMU had to devise indicators and measures that were cheap and useful.

Figure 6.4 shows the basic structure and priorities of SLAMU’s ecological/biodiversity ‘audit’ system and also suggest areas with specific problems that need to be assessed. The key resources defined in order of importance⁸ are listed in Box 6.4.

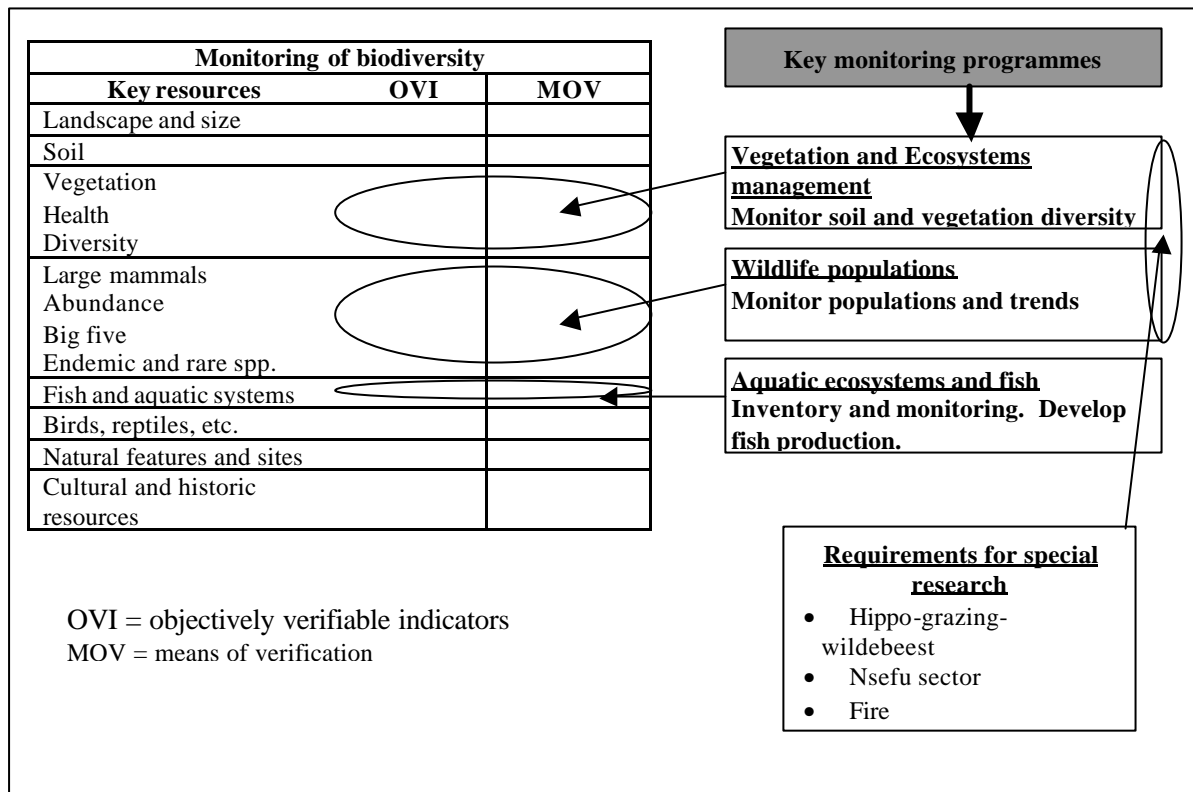
(c) The ecological monitoring system

The priorities set out in Figure 6.4 and elaborated in Box 6.3 dictate three primary monitoring programmes): the general health of the soil, grass and trees; wildlife population trends; and the aquatic systems. The specific monitoring programmes are described in more detail in Table 6.4. The targets set in the “Objectively Verifiable Indicator” column sets targets and therefore determines management priorities and defines how trade-offs should be managed. The “Means of Verification” column describes the monitoring activities required to support this decision-making framework. It is likely that this monitoring will define further research requirements such as the effects of excessive populations of hippo and buffalo on habitats and other grazing species, fire management, and the need to monitor rare and endangered species that are not easily measured using conventional survey techniques. The controversial issue of hippo culling is used to illustrate how this mechanism works (Box 6.4). The equally controversial trade-off between elephants and woodlands could also be used.

Thus ecological objectives and monitoring systems are built into the management process. There is an annual requirement for reports on wildlife populations (aerial survey, river count, walking counts in GMA) and for a simple vegetation assessment. Management can therefore react to ecological degradation, as shown by damaged habits or the loss of grazing species.

⁸ This was done by EDF/NPWS in a stakeholder workshop as part of the park planning process.

Figure 6.4: SLAMU's monitoring system for biodiversity and ecological health



Box 6.3 Key resources in South Luangwa National Park, listed in order of priority.

- **Large natural landscape.** The Luangwa Valley has little that is biologically unique – it has two sub-species of large mammals (Cookson’s wildebeest and Thornicroft’s giraffe) and one endemic species of grass (a *Hyparrhenia*). It is not a bio-diversity hotspot, and large areas of similar habitat are conserved in the Zambezi Valley. The true value of South Luangwa National Park is that it forms the core of a very large wilderness area and protects the Luangwa River, which is one of the very few unspoiled large rivers left in southern Africa. Thus, the conservation objective of the highest importance was to maintain large areas of natural habitat, including the Luangwa River, its aquatic system and river processes.
- **Soils and habitats.** Given the nature of savanna ecosystems, the second priority was to maintain the health of the soil and the grass layer that protects its critical moisture relationships. Vegetative health was given higher importance than herbivore populations because it conserves thousand-year soil processes, and because habitat recovery time is generally much longer than for animals. The practical outcome of this prioritisation is that herbivores are maintained at a level where vegetation and soil remain in a healthy and productive state, i.e. it sets the upper limit for some wildlife populations.
- **Large mammals.** The large mammals are obviously important (and, unlike habitats, are seldom ignored). They are important for two reasons – (1) tourism and financial viability, and (2) conservation *per se* – and, like any situation where there are multiple objectives, conflicts need to be resolved. The way the planning process deals with these inevitable and often-emotional trade-offs is discussed in Box 6.4.
(1) The maintenance of good populations of a range of species, especially elephants, lions, leopards, buffalo, giraffe and zebra, are important for tourism and therefore to fund the park. Commercial sustainability is a requirement for the preservation of the park.
(2) In terms of biodiversity and ecological conservation, the priorities for large mammal populations are slightly different. It is more important to maintain a representative population of all animals, especially the rare and endemic species, rather than higher numbers of fewer species (as will happen if habitats are allowed to degrade). This implies that high densities of the charismatic species should not be permitted where they have a significant effect on habitats and other species. For instance, a very large population of hippos would over-graze the herbaceous layer, damaging important grass-soil-moisture relationships, modifying the micro-geomorphology of critical riparian habitats, and leaving less grass for other species like wildebeest, puku, waterbuck and zebra
- **Aquatic ecosystems and river processes.** The aquatic system is important, and there are concerns about the general widening of the river and increasing silt loads (Sichingabula 1998), the disappearance of reed beds (including the rufous bellied heron that requires these habitats) and bank-living *ficus* species. These gross changes are likely to manifest themselves in the aquatic ecology but almost nothing is known about the aquatic systems. Additionally, the process of ox-bow lake formation, is an important characteristic of the Luangwa ecosystem and key to its productivity. Aquatic ecosystems and river processes are a big gap in the park’s biodiversity conservation programme.
- **Other species.** There is also a need to monitor birds, reptiles, amphibians and insects, but the ability to do so is limited by finite budgets and research capacity. In common with many national parks, it is believed that protecting the keystone elements of the park will conserve these species.
- **Natural and historical features.** There is general monitoring and management to ensure that natural features and cultural and historic sites are not damaged.

Source: adopted from LIRDP, Project Submission for Phase 4 1999-2002 (March, 1998)

Table 6.4: Important ecological and natural resources covered by SLAMU’s ecological monitoring programme

Important natural resources	Objectively verifiable indicator	Means of verification / actions to take
1. Landforms: <ul style="list-style-type: none"> • Large, unspoiled river, lagoon and riverine system; • Wild, unspoiled atmosphere and Park; • Large, intact ecosystem; 	Large areas of natural habitat remain intact. This includes areas outside the park	Remote sensing using satellite imagery or aerial photography every 5-10 years.
2. Soil	<ol style="list-style-type: none"> 1. No man-made erosion from roads, etc. 2. Accelerated erosion (from fires, over-grazing, etc.) does not exceed 0.2% of the Park and gullying is prevented; 3. Present erosion (e.g. caused by poor roads) is recovered within five years. 	<ol style="list-style-type: none"> 1. Roads and surrounds inspected annually (to deal with 1 and 3); 2. General erosion is monitored with vegetation condition and trend (see below)
3. Vegetation and vegetation diversity: <ul style="list-style-type: none"> • Trees • Grass cover (and soil-water relations) • Diversity 	<ol style="list-style-type: none"> 1. Loss of trees in any sizeable area or ecotype must not exceed 1% annually; 2. Cover of perennial grass maintained or increased above current levels with less than 10% of plots with declining ecological status; 3. Species diversity 	Annual rapid assessment vegetation transects to indicate the <u>status and trend</u> of vegetation <u>diversity and health</u> .
4. Large mammals <ol style="list-style-type: none"> a. General abundance; b. Big five; c. Endemic species; d. Rare species. 	Using concept of acceptable limits to change: <ul style="list-style-type: none"> • Upper limits set by status/trend of soils and vegetation (grass trees). • Lower limits are <u>minimal acceptable populations</u>. Elephant 5,000; buffalo 10,000; hippo 2,500; wildebeest 250; waterbuck, hartebeest, roan, eland 1,000; etc. The proportion of sensitive species on the floodplain must not decline by more than 20% from present levels.	<ol style="list-style-type: none"> a. Aerial survey b. Road counts on floodplain c. Walking counts in GMA d. River counts for hippo and crocodiles, e. Data collection on lions, leopards, hyenas and rarer herbivores using tour operators. f. Specific studies on uncommon species
5. Fisheries	<ol style="list-style-type: none"> 1. Inventory of fish and aquatic resources and setting of OVIs; 2. Identification of key aquatic processes and/or problems and setting of OVIs. 	<ol style="list-style-type: none"> a. Inventory of species and processes; b. Setting of OVIs; c. Development of monitoring and management processes.
6. Birds, reptiles, amphibians, insects, etc.	Assume health of above leads to health of these species (but source additional evidence)	Develop management plans for birds, reptiles and amphibians which indicates status and minimal acceptable populations

		for key / important / indicator species.
7. Natural features and sites: Salt pans, hot springs, fossils, petrified forest, waterfalls, important hills, etc.	Annual report on status	1. List of sites (with description) and condition of sites. 2. Annual visit and report on each site.
8. Cultural and historic resources.	Annual report on status	1. List of sites and activities (with description) and condition of sites/activities. 2. Annual visit and report on each site.

Box 6.4: Making ecological trade-offs: the example of hippo culling

Hippo culling is a controversial and emotive subject in South Luangwa. It provides an example of the trade-off between the desire for untouched wilderness on the one hand and ecological necessity on the other.

Hippos are large bulk -roughage grazers (mega-herbivores) with a high potential to impact on ecological systems. Expanding hippo populations consume grass, with primary and secondary effects. The primary effect is that over-grazing damages the critical soil-grass-water continuum upon which the rest of the ecosystem depends - including the possibility deepening hippo paths can drain and lead to the drying out micro-level basins. This might be termed a form of desertification. Herbaceous and other species can be lost (e.g. *Phragmites*). The secondary impact is that habitat modification displaces species (e.g. rufous-bellied herons which favour *Phragmites*) and severe competition for grass with hippos displacing other species such as puku, zebra, wildebeest and waterbuck.

In 1999, the first rapid ecological assessment was undertaken. It showed that vegetation/herbaceous plots in the Nsefu were clearly deteriorating. This was not the case elsewhere in the Park. Concern was expressed that hippo trails were deepening and acting like canals to drain and dry out some dambos (shallow, concave, grassy depressions), with a dendritic pattern of annual grasses replacing more desirable perennial grasses at the head of some such trails. The poor status of the vegetation appeared to be affecting some large mammals. In the vegetation plots, puku droppings were only 25% of the level of other areas in the park. There was also anecdotal evidence that there were only six zebra along the river in the Nsefu sector. Aerial surveys suggested that waterbuck, zebra and wildebeest populations had been declining for a decade. The weight of evidence suggested, with a high degree of confidence, that the large hippo population was causing habitat degradation and the displacement of sensitive grazing species.

There are 2,124 hippos in the 45km stretch of river in Nsefu Sector. This is a density of 47/km or, given that the meandering ratio of the river is 198%, a density close to 95 hippo/km. The total population of 5,200 hippos in the 165km stretch of river in the park that is surveyed (Iriyama, 1999) is well above the minimum accepted population of 2,500 set in Table 6.4.

Applying the management framework given in Figure 6.6 (Table 6.4) led to an ecologically-driven decision to reduce hippo populations because the indicators for ecosystem health and for some mammal species rang a warning bell that hippo populations were exceeding acceptable limits to change.

The habitat damage and loss of grazing species had been discussed in quarterly and annual reports, and the fact that these were judged to be out of kilter with the desired ecological outcome led to corrective action. Indeed, it has been suggested that the population of hippos in the Nsefu section of the river should be reduced to 800 to allow the vegetation and mammal species to recover. Further monitoring would then dictate whether this was a reasonable hippo population, and this would allow the objectively verifiable indicators to be refined.

6.3 The status of the project in 1999

6.3.1 Performance management and financial savings

Performance management was introduced in several ways. Workplans and budgets included clear targets. These targets were reviewed quarterly, sometimes in participatory workshops. And budgets were devolved to sections. A general improvement was visible as soon as 1999. Budgets were cut to \$1.2 million in 1999 and maintained at this level in 2000 (Figure 6.5, and it was apparent that in most sections work output was improving.

Figure 6.5: Summary of LIRD P Income and Expenditure (1992 – 2000, with projections for post 2000)

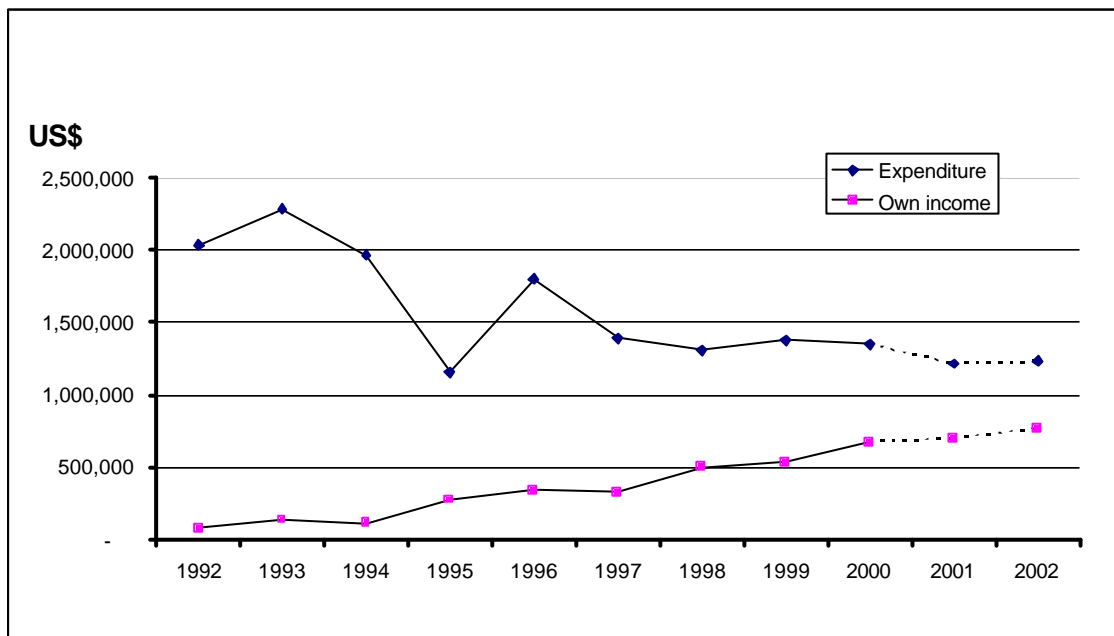


Figure 6.5 illustrates how LIRD P's budgets were cut from about US \$2m in Phase 2 to \$1.4m in Phase 3. The further slight reduction in Phase 4 under-emphasises progress because recurrent expenditure will be maintained below \$1m, with the remaining expenditure earmarked for capital equipment (e.g. replacement of vehicles and road-building plant) and construction, especially of roads. LIRD P only funded 4% of its own activities in 1992. This proportion is planned to increase to over 60% by 2002, with fewer commercial uncertainties, this target in the Phase 4 proposal could have been more optimistic. A precautionary window has been left open for a fifth phase.

6.3.2 Tourism and income

Up to 1995, the tourism sector was not well managed. Some operators had weak lease agreements that required the payment of few fees, while others somehow held sites without paying any fees or conducting any operations at all. A few reputable operators carried the burden of paying fees. In 1996, 21 tourism sites were allocated in and around the park. The average occupancy rate of all lodges and bush camps was 33% over the five-month tourism season, while eleven of the 21 sites operated below 20%, and several of these filled fewer than 10% of their bed nights. A few of the better operators were burdened with funding park activities, while non-performers suffered no sanctions. As a consequence, in 1995, the South Luangwa National Park earned only US \$160,000 from tourism.

Over the next four years, agreements were tightened and fee structures improved while, simultaneously, operators improved their occupancy rates. The steady increase in the number of tourists, higher fees, improved tourism concession arrangements and longer stays saw the park's revenue increase to some \$450,000 by 1999 from some 250 tourist beds.

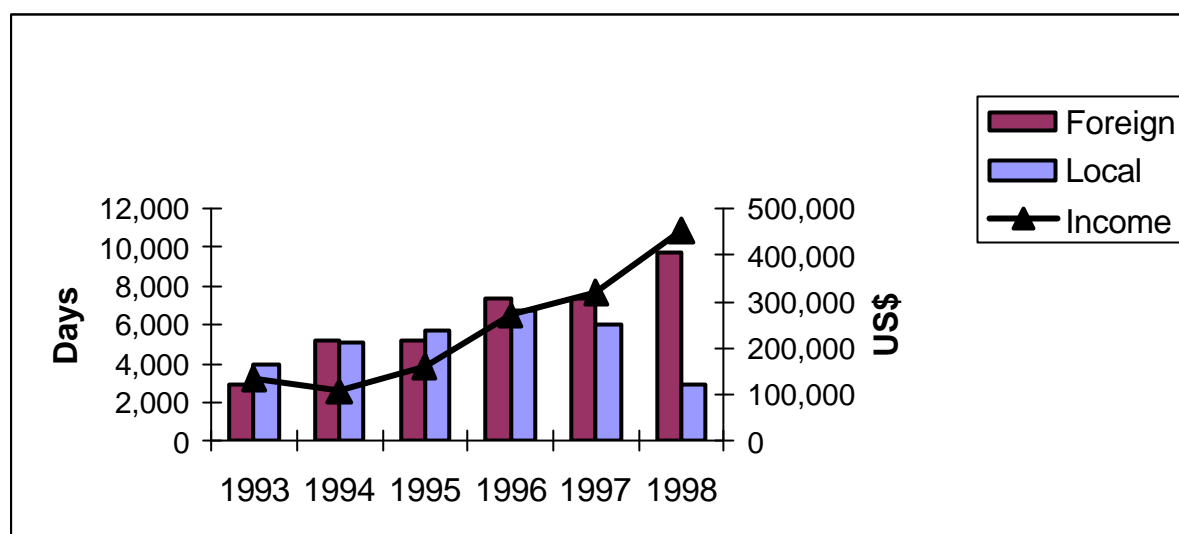
The privatisation and refurbishment/reconstruction of three lodges (Mfuwe, Lion Camp and Chichele) was initiated in 1995 and will provide another 90 beds. This, plus the sale of a further 80 beds in the 1999 tender, could lead to tourism income expanding faster than projected, but experience suggests that caution is needed. For instance, of the newly privatised lodges, only Mfuwe had started operating in 1999 (and is still struggling to develop its markets and has low occupancy rates) whilst both Lion Camp and Chichele Lodge were at least a year behind building schedule. Despite the quality of the wildlife resource, several potential large-scale regional tourism investors have expressed their unwillingness to deal with the bureaucracy and uncertainty surrounding the transition of NPWS to ZAWA, and SLAMU's financial future is dependent on ZAWA being able to develop a transparent and efficient commercial climate.

Table 6.5 and Figure 6.6 show the growth in tourism from 1993 to 1998. International tourism grew steadily, although growth was halted in 1995 by the collapse of Zambia Airways and in 1999 by the Congo and Kosovo wars. Local tourism grew steadily but collapsed after 1997, mainly as a result of the deterioration of the road from Lusaka via Chipata to Mfuwe (which increased travel time from a do-able 8 hours to an onerous 12 hours) and the opening up of the Lower Zambezi National Park, which is much closer to Lusaka.

Table 6.5: Summary of tourism to South Luangwa National Park (1993 – 1998)

	1993	1994	1995	1996	1997	1998
Foreign	2,897	5,145	5,167	7,350	7,373	9,777
Local	3,912	5,120	5,723	6,730	6,032	2,932
Income \$	133,811	106,855	159,573	270,686	320,890	453,419

Figure 6.6: Tourism trends in South Luangwa National Park (1992-1998)



The revenue to the park from the refurbished/reconstructed Mfuwe, Chichele and Lion Camp lodges should, in due course, approach US \$200,000 annually. The sale of a further 10 tour operating concessions worth a similar amount has also been in the pipeline for nearly three years. These delays in realising revenues led to LIRD/SLAMU facing considerable difficulties in meeting its targets for financial growth. The project did considerable groundwork to get these new commercial opportunities moving, but with limited success. Attitudes in NPWS towards such commercial ventures were unfriendly. Investors were available, but obtaining approvals was a long, tedious and easily derailed process. This has proved costly to both the project and to the country. It is a poignant example of market failure. On the supply side, Zambia has very considerable tourism potential and a great need for foreign investors while, on the demand side, tourism operators are searching for such opportunities. The failure is that, until very recently, tourism investment had to be channelled through a government agency (NPWS) that was neither accountable for the financial and developmental consequences of its inaction, nor technically equipped to manage such an important commercial sector. It remains to be seen how the new ZAWA will face these challenges.

6.3.3 Law enforcement in the LIRD area

All of the reviews of LIRD so far undertaken have identified the control of poaching as its major achievement - although surprisingly they have given little detail, nor elaborated many lessons or experiences. Therefore, in this section, we provide an overview of LIRD's law-enforcement efforts⁹. NORAD funding to the project in Phases 1-3, a significant proportion of which was focused on development within Mambwe District, saw a very low return on investment. But the entire investment can be justified by the impact of the project on law enforcement¹⁰ without which wildlife populations would

⁹ For those wanting detail, Jachmann (1999) has provided a comprehensive statistical assessment of law enforcement in LIRD.

¹⁰ NORAD has spent US \$25m on the LIRD project to date. Had this been invested in a Trust with an interest rate of 7%, it would provide an annual income of \$1.75m and SLAMU would be sustainable.

have become severely depleted. It must be recognised that the future options now available to the SLNP and Lupande GMA, such as tourism growth potential, would not have been possible without this effort.

(a) The changing elephant population

Aerial surveys were carried out regularly from 1970¹¹. These indicate a stable elephant population of 35,000 in the LIRD area from 1970 to 1975. Elephant numbers declined sharply after 1976 as the wave of elephant and rhino poaching spread southwards through Africa, accelerated by the declining economy, declining strength of the wildlife department, increasing prices for ivory and rhino horn, regional conflicts and their link with commercial poaching. By 1987 elephant populations had dropped to 15,000 in the LIRD area and, by 1988, were as low as 2,500 – a fall of 12,500 in one year (Figure 6.7). It appears that several thousand elephants emigrated to adjacent Game Management Areas and National Parks during this last surge of poaching but, with the protection of the LIRD area, some 2,500 returned and the elephant population in 1989 stood at about 5,000. It then increased steadily to some 7-9,000 in the late 1990's.

Prior to 1979, there was effectively no law enforcement effort with a park budget of only US \$4 per sq km. Six elephants were poached every day. From 1979 to 1986, NPWS was supported by 22 scouts of the Save the Rhino Trust (SRT) with an additional budget of US \$11km per sq km. This had a significant effect and slowed the rate of decline from 2,000 animals poached in 1979 to about 500 in 1986 (Figure 6.8). However, SRT was simply too small to fill the gap and elephant numbers in the LIRD area had dropped to about 15,000 by 1987.

The anti-poaching role of SRT was superseded by LIRD. Poachers took advantage of the year long vacuum between the phasing out of SRT in 1987 and the start-up of LIRD in 1988 and killed the last rhino and over 1,000 elephants (Jachmann and Billiow 1997).

With the onset of effective law enforcement by LIRD in 1988, illegal hunting of elephants dropped dramatically and some 2,500 elephants returned to the South Luangwa National Park. In 1989, the population stood at some 5,400 elephants and this increased steadily to approximately 9,000 by 1996. The number of elephants poached each year was always less than 40 and usually nearer 20, compared to the huge numbers in previous years. The annual budget varied between US \$25 and \$50 per sq km, or some \$500,000 annually.

(b) Law enforcement expenditure and the ivory ban

There is an emotive argument between advocates of the ban on ivory trading who believe this alone will conserve elephants, and its opponents who argue that only effective ground coverage and community involvement can do so (Hutton and Dickson, 2000). The experience of LIRD lends further credence to the argument that there is no substitute for on-the-ground management. In the LIRD area, elephant poaching was arrested two years before the ivory ban. This suggests that the level of law enforcement effort and expenditure controlled poaching, not the ivory trade ban. Two comparisons support this conclusion. Firstly, aerial surveys in 1994 (five years after the ban) showed that carcass ratios¹² in the (well-protected) LIRD area varied from 0.87% to 1.46%. This was easily sustainable and allowed for the steady increase in elephant populations described above. Immediately outside the project area (where there was less law enforcement), carcass ratios varied from 10.53% to 45.64%, indicating that elephant

¹¹ Caughley and Goddard, 1995; Leader Williams *et al.*, 1990; Jachmann *et al.*, 1995, Bell *et al.*, 1992

¹² The ratio of live elephants to dead elephant carcasses counted in aerial surveys.

Figure 6.7: Elephant numbers and losses to poaching in the LIRDP area (1973-1996)
 (Source: Jachmann 1998)

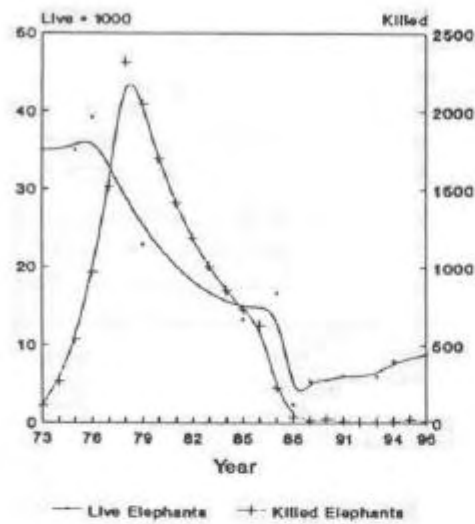
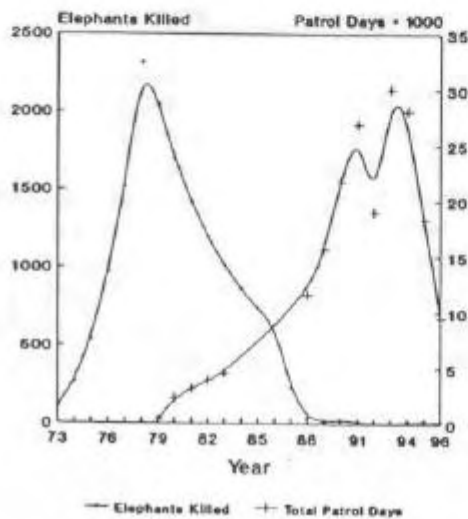


Figure 6.8: Projected elephants killed (1973-1996) and the total numbers of patrol days for the LIRDP area (1979-1983 and 1988-1996)
 (Source: Jachmann 1998)



numbers continued to decline. Secondly, the elephant population in Kafue National Park (where the lack of money prevented effective ground coverage in protection effort) declined from some 8-10,000 in 1990 to some 4-5,000 in 1996¹³. Thus, elephant populations increased in the well-enforced LIRD area but declined where protection effort was weak (both elsewhere in the Luangwa Valley and in Kafue National Park). Clearly, the ivory ban is not an important factor in determining the level of elephant poaching. Indeed, Jachmann (1998) provides considerable evidence that the level of law enforcement determines the level of poaching. Even within LIRD's area, moderate changes in law enforcement effort were reflected in changes in poaching of all species including elephants, suggesting that the relationship is remarkably sensitive.

(c) Law enforcement effort

Law enforcement is carried out by "Wildlife Police Officers" more commonly known as scouts. LIRD employs some 180 scouts, with 60-80 living centrally at the Mfuwe park headquarters, and some 100 living in 13 outposts spread over the park and Lupande GMA. Preventative law enforcement is carried out by foot patrols, which comprise 5-10 scouts with a similar number of carriers. Long patrols last from 7 to 14 days. The results of each patrol are summarised on a standardised form which provides data on the route covered, types of poaching and other offences seen, etc. (see Jachmann, 1999, for a detailed description). These records have provided invaluable information for assessing the effectiveness of law enforcement.

The number of patrol days increased steadily from 12,000 in 1988 to over 25,000 in 1994 (Figure 6.9). This rapidly reduced the amount of poaching, with the number of serious offences encountered per 1,000 patrol days falling from 40 to under 10 (Figure 6.10). Elephant poaching was brought under control with less than 40 poached in any year (Table 6.6). However, the death of the highly effective Warden, D. Chimbali, coupled with severe budget cuts due to the failure to sign the NORAD-GRZ agreement in 1995, severely disrupted law-enforcement efforts. For example, carriers were laid off, and patrol size reduced from ten to five people. This led to a significant increase in the number of poachers that were seen but who managed to escape. Patrolling rapidly declined to under 10,000 days (Figure 6.9), and poaching quickly increased to over 40 offences per 1,000 patrol days (Figure 6.10). The number of elephants poached increased slightly to about 15 each year, but still way below pre-LIRD levels.

The monitoring system was important in illustrating this decline and, from 1997, corrective measures were put into place. Carriers were reinstated and, as patrolling effort again reached 20,000 days per year, poaching levels dropped. At this time, LIRD introduced targets for all sections. This helped to guide law-enforcement, with the number of patrol days per scout increasing rapidly (Figure 6.11) despite serious problems including the arrest and imprisonment of 20 scouts after a shoot-out, the collapse of the radio system, and difficulties in obtain authority to purchase uniforms.

¹³ Unpublished findings of the EDF-funded aerial survey in 1996, the formal results of which are difficult to obtain.

Figure 6.9: The number of patrol days undertaken by LIRD P scouts (1998 -1999)

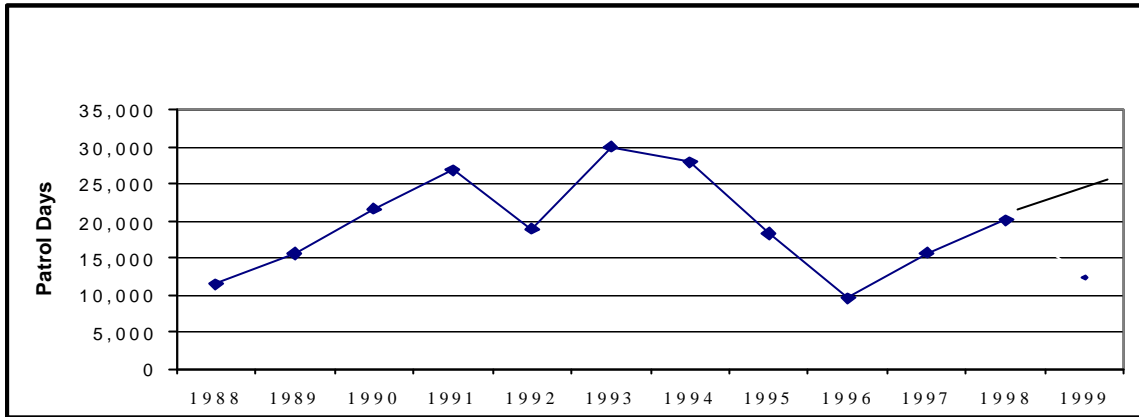


Figure 6.10: An illustration of poaching trends in LIRD P's project area using law enforcement indices

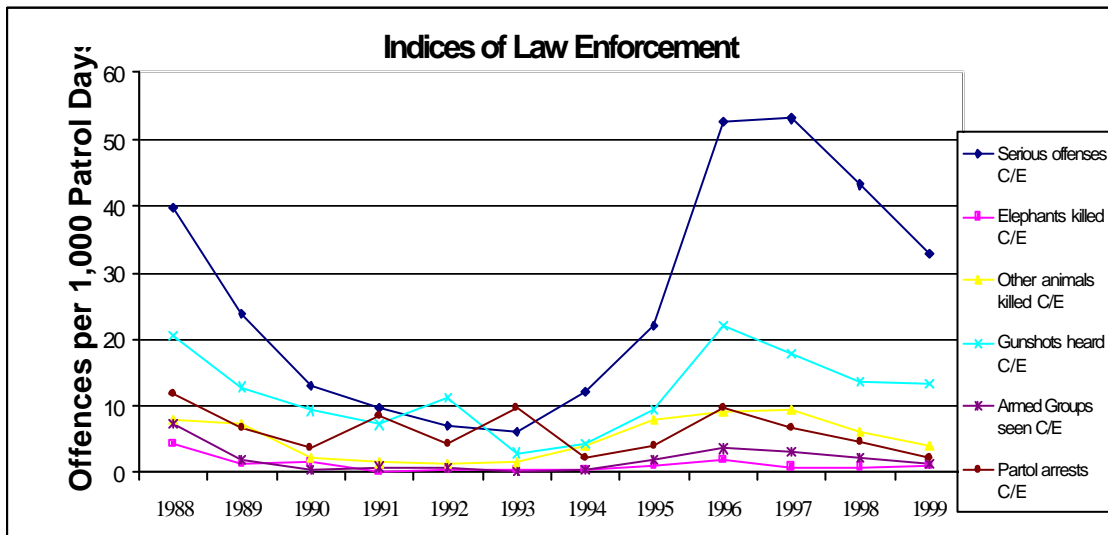
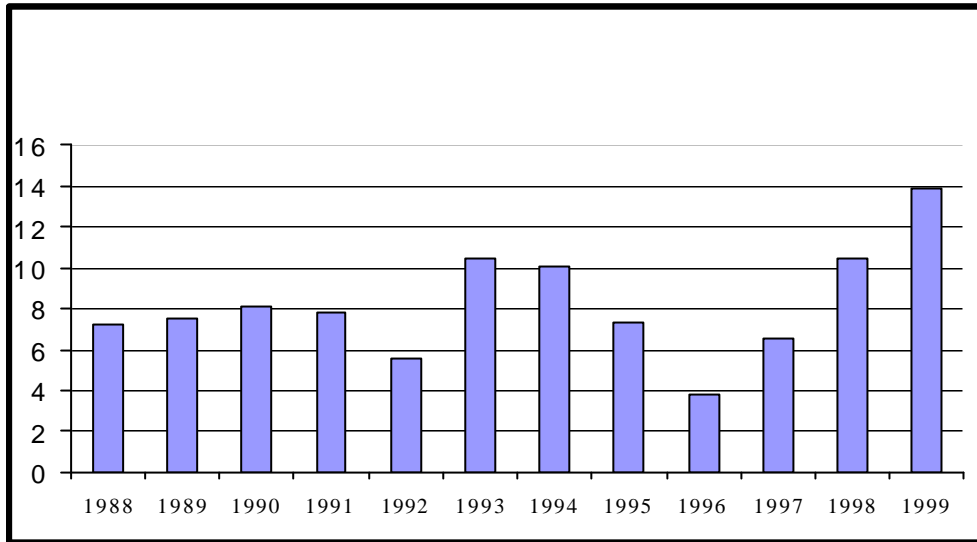


Table 6.6: Summary of Law enforcement statistics (1988-1999)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Amount of patrolling												
	to June											
Number of patrols	227	189	196	359	189	276	271	175	174	219	241	126
Patrol days	11462	15601	21703	26849	18929	30028	27931	18314	9514	15655	20150	12467
Placement days	2918	3529	3405	4406	4543	5508	5125	3168	1815	2864	4268	2162
Effective days	8544	12072	18298	22443	14386	24520	22806	15146	7699	12791	15882	10305
Investigations												
Staff	5	5	5	2	5	5	2	4				
Days	331	1554	250	2768	3110	661	1152	177	1815	860		
Personnel												
Scouts	133	172	222	286	286	240	232	208	208	200	160	150
Carriers	7	7	62	134	134	57	57	34				
Rangers	1	1	3	4	4	9	8	6	10	9		5
Vehicles	1	2	2	2	2	4	4	4	4	5	5	5
Frequency of offences												
Serious offenses	340	286	240	217	99	150	278	332	405	678	685	338
Elephants killed	36	16	27	6	7	9	12	17	14	12	15	10
Other animals killed	67	90	37	33	17	35	91	118	69	120	96	41
Firearms confiscated	110	283	243	212	641	76	36	235	419	211	38	11
Gunshots heard	174	156	168	161	161	72	98	145	169	225	216	137
Armed groups seen	63	24	8	17	8	3	8	30	28	40	35	14
All minor offenses	449	821	423	720	233	282	1007	1018	873	1570	1023	318
Results												
Arrests (investigations)	130	316	271	223	721	99	19	87	291	147	48	
Arrests (patrols)	100	82	70	188	60	235	52	61	75	87	75	24
Total arrests	230	398	341	411	781	334	71	148	366	234	123	24
Ivory recovered		125	62	79	11	13	13	20	16	7	5	1
Indicators (level per thousand effective patrol days)												
Serious offenses C/E	39.8	23.7	13.1	9.7	6.9	6.1	12.2	21.9	52.6	53.0	43.1	32.8
Elephants killed C/E	4.2	1.3	1.5	0.3	0.5	0.4	0.5	1.1	1.8	0.9	0.9	1.0
Other animals killed C/E	7.8	7.5	2.0	1.5	1.2	1.4	4.0	7.8	9.0	9.4	6.0	4.0
Gunshots heard C/E	20.4	12.9	9.2	7.2	11.2	2.9	4.3	9.6	22.0	17.6	13.6	13.3
Armed Groups seen C/E	7.4	2.0	0.4	0.8	0.6	0.1	0.4	2.0	3.6	3.1	2.2	1.4
Patrol arrests C/E	11.7	6.8	3.8	8.4	4.2	9.6	2.3	4.0	9.7	6.8	4.7	2.3
Expenditure												
Total Cost					528,993	500,296	412,619	368,908	586,832	421,292	529,825	
Cost/patrol day					36.77	20.40	18.09	24.36	76.22	32.94	33.36	-
Patrol day/scout/month	7.2	7.6	8.1	7.8	5.5	10.4	10.0	7.3	3.8	6.5	10.5	13.9
Crude cost/scout					1,850	2,085	1,779	1,774	2,821	2,106	3,311	-

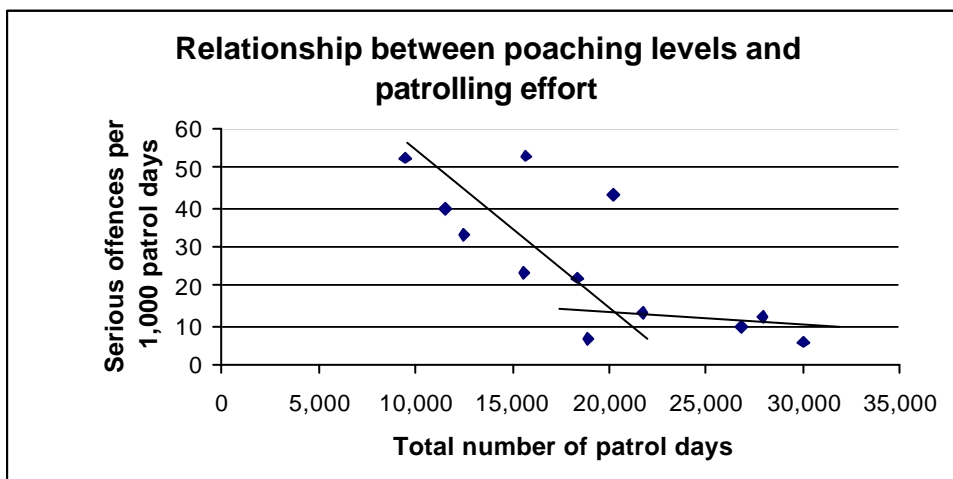
Figure 6.11: The number of patrol days undertaken by the average scout in a month



(d) Adequate levels of law enforcement

The experience of LIRDPA provides useful information for assessing law enforcement requirements of large protected areas in southern and eastern Africa. The operational area comprises the 9,050 sq km South Luangwa National Park and some 2,000 sq km in the adjacent Lupande GMA. Protection requires some 22,000 - 25,000 patrol days to maintain poaching below a level that damages wildlife populations (Figure 6.12) and increasing patrol effort beyond this results in only a marginal reduction in poaching.

Figure 6.12 The relationship between poaching levels and patrolling effort.



Reducing effort rapidly allows poaching to increase. This effort costs US \$350,000 - 400,000 annually, an annual cost of some \$35 per sq km. Thomson (1999) points out that this management system is based on a relatively large number of under-equipped and under-trained scouts and, while it works, there is considerable opportunity for improvement.

6.3.4 Community programme

During Phase 3, community institutions were established at three levels: 42 village action groups (VAGs), 6 Area Development Committees (ADCs) and the Lupande Integrated Resource Development Authority (LIRDA). VAGs had been emphasised as the primary building blocks of the organisation structure and had received 80% of wildlife revenues. This proved to be a wise prioritisation. The VAGs worked effectively. However, the ADCs did not – due in part to the weaker accountability of ADCs to their constituent communities, but mainly to the ‘confusion’ at this level resulting from the dominant role played by the chiefs. The core problem has been that chiefs are not accountable, while these local governance institutions clearly need to be. This problem is exacerbated by the absence of a clear national policy, guidelines, procedures and legislation to resolve this tension. The LIRDA has not been functioning.

In Phase 4, SLAMU’s objectives are to continue to strengthen the development of democratic, accountable, transparent grass-roots organisations, which have already demonstrated capacity to organise themselves, manage finances and implement projects (see below). Now that institutions are in place, the key area of emphasis has become the active management of wildlife and natural resources.

SLAMU’s Third Quarter report for 1999, compiles information on the financial status of community institutions and their projects. It provides evidence that VAGs, in particular, are beginning to work really well. It also shows that, now that institutions are in place, communities are beginning to actively manage wildlife.

(a) Audit report of community accounts

In the third quarter of 1999, all VAGs and ADCs were audited and a detailed summary of the performance of each VAG was prepared. This process provided financial information of a quality and standard not achieved by any CBNRM programme in the region. The audits show that VAGs have managed their finances well. Of ZK400m allocated to VAGs only ZK3,350,000 was unaccounted for (about 0.8%) (see Table 6.7). This suggests that VAGs are transparent and accountable structures and able to manage money. In most cases, measures had been taken to recover missing moneys. In contrast, the moneys held by two of the ADCs were not well accounted for, primarily because of interference from the Hon. Chiefs. In 1999, ZK35m was contributed by VAGs to ADCs for large multi-VAG projects. It was collected by the Chiefs but not accounted for. In addition, Nsefu ADC was unable to account for a further ZK10m¹⁴. This had a strong negative impact on community attitudes in these areas because it leads them to take the view that only a few individuals are benefiting.

¹⁴ The majority of unaccounted money was misappropriated in two particular areas – Kakumbi and Nsefu: (a) ZK24m was collected by Hon. Chief Kakumbi from VAGs and not paid to Kakumbi ADC (the ADC could not produce records nor explain the whereabouts of this money); (b) there was an unauthorised but recorded loan of ZK10.5m to the late Senior Chief Nsefu from Nsefu ADC. (c) ZK10m was unaccounted for in Nsefu ADC (the Treasurer was implicated in making false records.).

Table 6.7: Summary of Money unaccounted for from 1999 CBNRM disbursements

	ZK
VAGS	
Total income (42 VAGs)	400,000,000
Msoro	400,000
Malama	1,000,000
Jumbe	600,000
Mnkhanya	200,000
Nsefu	1,150,000
Kakumbi	-
Total money Missing	3,350,000
ADCs/CHIEFS	
Money unaccounted for	
Nsefu ADC	10,000,000
Senior Chief Nsefu (recorded loan)	10,500,000
Chief Kakumbi (no records)	24,000,000
Total missing	44,500,000

(b) Community Projects

Over 150 VAG and ADC projects (c. 4 per VAG) were initiated or completed by communities between 1996 and 1999 (the fourth year of the new system) (see Table 6.8). By comparison, there were very few projects prior to 1996 arising from a similar amount of expenditure. This suggests that the devolution introduced in establishing the VAGs and ADCs was encouraging people to plan and work for their own development. In-built checks-and-balances and proprietorial impulse has led to improvements in the selection of projects, community involvement and implementation.

Table 6.8: Summary of VAG/ADC projects (1996-1999)

Type of Project	Number
Teacher's houses	16
School block renovation or construction	36
Clinic or health projects	18
VAGs doing wells	26 (about 100 wells)
Other projects (maize, electric fence, sport, women's clubs, chief's vehicle, road maintenance, local court, ADC office, bus shelter, toilets).	60
Total Projects	156

(c) The emergence of active wildlife management in communities

In its project submission for Phase 4, LIRD had argued that it needed to get communities organised and benefiting from wildlife before it could expect them to become actively involved in wildlife management. By 1999, it was apparent that this was starting to happen and various pilot initiatives had begun.

(i) *Electric fencing*

After two years' discussion, SLAMU purchased three small (2km) fencing units in November 1998 and stored these in Malama. Kalengo VAG eventually pressurised Chief Malama into allowing them to construct an electric fence to provide protection against elephants. The VAG Committee surveyed the site, cut poles and initiated the fence project. A technical appraisal by Dr Richard Hoare (on a separate IUCN regional study of problem animals) indicated technical problems with the fence including short poles, the fence being too close to the Luangwa river, poor emplacement of poles, etc. Following his advice, the fence was realigned and poles re-erected. SLAMU then faced the problem of providing technical expertise to assist in setting up the electrical circuits. A radio technician (visiting the area on a separate SLAMU advisory consultancy) provided help. Under the supervision of the CBNRM section, the VAG complete a 4.5 km length of four-strand fence surrounding 5 villages with 45 households. The VAG recruited 4 fence minders and the work cost ZK1.8m.

So far the fence is working well. Not a single elephant has troubled people inside the fence. People left outside are now complaining that they wish to be included in the fenced area, and some people have already moved inside, consolidating settlement. Nearby communities have also expressed a desire for similar fences. Nevertheless there are some problems. People lack training in electric fence technology; and some animals, especially giraffe and puku, damage the fence. Additional support is required.

(ii) *Community-based scouts*

To date, communities in the project area have employed 76 community-based scouts: Msoro 17, Jumbe 16, Nsefu 9, Mnkhanya 12, Malama nil, Kakumbi 22. The proportion or revenue allocated to wildlife management by VAGs has increased steadily (see Table 6.9):

Table 6.9: Allocation of VAG Revenue to Wildlife Management

	1996	1997	1998	1999
Amount (ZK)		3,082,516	10,413,995	53,243,707
Percent		1.4%	4.4%	13.3%

Internal training was provided to community-based scouts (CBS) on CBNRM policy and basic law enforcement. Ten CBS qualified as Village Scouts at the Nyamaluma Institute (in Lupande GMA) in 1999, while six attended a one-week training course on monitoring of safari hunting. In several areas, the CBNRM section and the Warden have developed terms of reference for CBS, who began to patrol in teams with regular NPWS scouts. This was necessary because CBS are not authorised to carry arms. Community scouts had a number of successes in 1999 including: 12 poachers apprehended and handed to NPWS for prosecution; 25 fishing/water poisoning offences punished locally; 10 muzzle loading guns and some ammunition confiscated; 65 snares recovered. In January 2000, the CBS in Msoro area made 9 arrests and confiscated 17 muzzle-loading guns.

The introduction of CBS has, however, faced some difficulties. There has been jealousy on the part of some regular SLAMU (NPWS staff) scouts. There are problems over the cost and availability of training for CBS. Limitations on the powers of CBS arise from their lack of legal status. Six CBS were trained for

one-week at the Nyamaluma Institute and allocated to support the regular Escort Scout¹⁵, with the intention of passing these costs onto communities and improving the link between communities and hunting. Unfortunately, they were later withdrawn on instruction from NPWS which appeared confused about the purported aim of passing control of wildlife management to communities.

The integration of CBS activities with the work of SLAMU was planned as a priority in 2000. Targets were set for the number of patrol days to be supplied by each ADC, with community scouts working closely with SLAMU scouts.

(iii) Investment in wildlife production

Four small dams have been constructed in Msoro chiefdom, and are being used, especially by buffalo and elephant. The Mnkhanya community has constructed a road to a potential dam site, and approached Water Development for assistance in planning a dam, but costs of allowances etc. are prohibitive. Jembe community is also establishing similar plans.

(iv) Community involvement in the sustainable use of natural resources

The community in Kakumbi chiefdom has pioneered efforts to control the use of their natural resources. It is earning substantial money from the sale of grass, wood, stone, sand, etc. This is a positive move which is benefiting the community and controlling excess use of resources. But there is a problem concerning unsatisfactory accounting of finances by Kakumbi ADC. Other communities are considering similar initiatives. It is intended that this will be developed in co-ordination with Mambwe District Council and other relevant line ministries in 2000.

(v) Community involvement in tourism

Kawaza Cultural Village provides a good product (see section 5.9), though the number of clients was below expectations. Nsendamila Village faces serious management problems, and has had few clients.

6.3.5 Safari hunting

The performance of safari operators has been generally acceptable (Table 6.10). However, Baobab Safaris still does not provide game meat to local people and this is causing a major problem in these communities. Also worrying is the fact the income from safaris is not increasing. Yet there is a real potential to significantly increase such revenue in Lupande GMA - to at least US \$600,000 - because large areas are not utilised by hunters who concentrate near the park boundary along the Luangwa River. Exploiting the potential would require entering into long-term agreements with investors to use 'depleted areas' in both Upper and Lower Lupande GMA. Such investors would be encouraged to provide water sources (e.g. small dams) and to restock these depleted areas to provide a viable base for operating hunting and/or tourism businesses. There is also need to investigate the optimal combination of non-consumptive tourism and hunting, and the best contractual format, especially in Lower Lupande.

One of the primary factors limiting the CBNRM programme is the fact that the sale of hunting is highly centralised, and less transparent than it could be. Devolving this responsibility to local people, together with the requisite procedures to ensure transparency, would go a long way to strengthening a proprietary

¹⁵ Escort scouts accompany hunters and their clients to ensure that they hunt within the restrictions of their licences and concession agreements.

Table 6.10: Summary of Safari Income in Lupande GMA (1997-1999)

Year	Baobab Safaris US \$	Safari Expeditions US \$	Total US \$
1997	89,940	151,248	241,188
1998	115,803	124,558	240,361
1999	96,000	126,405	222,405

impulse. It would make operators responsive to community needs, drive up prices, and improve the imagination and entrepreneurial skills with which the wildlife resource is used. The wildlife resource in Lupande GMA, although relatively lucrative compared to other GMAs, earns US \$1/ha. This is significantly less than inferior wildlife resources on private land in Zimbabwe and South Africa.

6.3.6 The roads programme

The annual report for the Roads Section now provides fine detail on each of the minor and major works conducted, including a full list of quantities of materials used and the total cost of each project. This stands in stark contrast to 1996 when the Section could not explain how it had used its budget of ZK200m in the Lupande GMA, which caused some concern amongst the Chiefs. In 1999, SLAMU invested ZK63m on a bridge and culverts to provide access to Malama chiefdom, and ZK8m in making a long-awaited loop road accessible to tourists during the rainy season. The project's annual road programme (costing ZK93m) maintains some 400 km of tourist roads. These are closed during the rains when they usually become almost unpassable due to inundation and puddling by hippos and elephants. Since the start of LIRD, road-building has been an embarrassment to the project. But with these improvements in financial reporting, the project is now able to build and repair roads more cost effectively than contractors. Roads in the park now receive a larger share of the project's roads budget than in previous phases since they are essential to support tourism.

Investment in road infrastructure in and around the SLNP is a major requirement for long-term financial sustainability. To provide access for management and tourism into unused portions of the park, roughly 786 km of road need to be constructed, increasing the road network from 677 to 1,450 km. NORAD has funded a feasibility study for these roads to assess their cost:benefit and to draw up terms of reference for further development. However, there are no indications of where this large funding requirement (over US \$10m) can be sourced. During phase 2 (the initial investment phase of LIRD), road studies were commissioned, but were never converted into new roads in the park.

The primary trunk roads, including the main tar road from Lusaka to Chipata (570km), and the gravel road from Chipata to Mfuwe (130km) are in shocking condition - the latter despite NORAD providing the Department of Roads with sufficient funding to maintain this crucial road for several years. Now that this funding has been terminated, SLAMU has had little option but to grade the road, an expense not budgeted for.

In the past, the National Roads Board has not prioritised linkages between tourism attractions in the past, despite the fact that tourism has long been identified as one of the sectors with great economic potential in Zambia. This is a major constraint to the growth of Zambia's tourist industry.

6.3.7 New project headquarters

After ten years of discussion, construction of the new SLAMU office and senior staff houses commenced in June 1999 and is expected to be completed by mid 2000. This work was delayed due to disagreements with the Tender Board and the Building Department over the choice of contractor. NORAD is financing this construction work through a separate agreement. Two additional phases will provide housing for all staff, both in Mfuwe and in four sector headquarters located at each corner of the park.

The siting of the project headquarters and housing has been the subject of some conflict (see Appendix 3). Some local Kakumbi residents objected to its location at Mfuwe, possibly as a bargaining position and reflecting the general malaise between SLAMU and Chief Kakumbi's customary leadership. The Luangwa Safaris Association (LSA) also protested that siting the new headquarters and accommodation at Mfuwe would encourage more settlement in this area, which is seeing rapid and uncontrolled growth – ironically, this is mainly a result of the growth of tourism. Instead, the LSA urged that the HQ and accommodation be located either near the airport or at Mambwe. These difficulties indicate the urgent need for a mechanism for land use and peri-urban planning in the area.

Questions have also been raised concerning the environmental impact of these developments. SLAMU has argued that the project is actually reducing staffing levels and that, apart from senior staff who will relocate to Mfuwe from Chipata, it is merely replacing unacceptable housing (tin wall-tents). SLAMU is aware of the need to draw the centre of gravity of settlement away from the park, but its attempt to establish housing in an area formerly designated for Mfuwe town was refused by the chief on rather spurious grounds.

6.3.8 Park planning

There is still no approved plan for the South Luangwa National Park (SLNP). In 1995, NORAD provided funding (c. US \$350,000) and contracted IUCN to undertake a planning exercise to produce an acceptable and workable plan for SLNP. But this plan was found to be unacceptable. In 1998, the EDF-NPWS project initiated the preparation of another plan for SLNP (before any major policy development or master planning for the country as a whole). However, the EDF project ceased in June 1999, and only a draft plan is available. In common with previous such plans, it concentrates mainly on providing a description of natural resources and a zoning plan. Despite its title (Management Plan), it fails to provide for actual park management in the sense of the management cycle (plan-implement-monitor-adapt), though an important and late addition was a tourism development analysis and plan. Consequently, the key management document for the next few years remains the Phase 4 project submission, mainly because it can be operationalised. It was developed simultaneously with workshops to develop the park plan, and incorporates the goals of these plans. This experience suggests that traditional park planning needs to be seriously questioned, and that increasing cognisance is given to business and management planning techniques.

6.3.9 GMA and land use planning

The issue of land use planning was a priority during Phase 2 of LIRDPA when extensive background research was undertaken. Attempts were made to initiate planning process in the GMA as part of the 1995 proposed plan for SLNP but this approach was rejected by the Chiefs.

There is still no mechanism for land use planning in Lupande GMA, let alone a plan, and this problem now requires urgent attention. There has been significant growth of the tourism economy in the area and this can be taken as a sign of the general success of LIRDPA/SLAMU. But this growth, together with the

considerable in-migration which it has attracted, has led to a rapid escalation of unplanned, spontaneous development and settlement, especially around Mfuwe.

The Phase 4 proposal indicates the need (but provides for no direct action by SLAMU) for a study to establish the parameters for planning in Lupande GMA, outlining the legal status of institutions and clarifying responsibilities. In particular, attention is drawn to the need to carefully plan for the future Mfuwe town before the current haphazard expansion of untidy peri-urban settlement near the park entrance is entrenched as a reality.

The planning vacuum can be traced to the weakness of national institutions responsible for controlling land use. The responsibility and authority for land use in GMAs is very unclear, with confusion between the roles of District Councils, government planning agencies, sector departments, the wildlife authorities (ZAWA) and the chiefs. There is no clear lead agency with responsibility for land use and development planning. In areas like Kakumbi, where the chief is powerful and difficult to work with and has personal interests in the status quo, progress becomes exceedingly difficult.

SLAMU does not have direct responsibility for planning but initiated discussions on the need to plan land use in the area with Mambwe District Council and others. This led to the development of a project proposal to strengthen the Council's capacity to devolve responsibility to the community for land use planning, service provision to sub-district structures¹⁶, and revenue collection. Funding is being sought to implement this initiative. Surprisingly, however, given the exciting possibilities of such decentralisation, little interest has been shown. This is perhaps a reflection of the inability of donors to respond opportunistically.

The project plans to use the new provisions of the new ZAWA Act to convert ADCs into Community Resource Boards. The CBNRM programme is protected in its current form by the Phase 4 agreement between NORAD and the government. As a consequence, the revenue distribution system will not be changed. But the project intends to link revenue disbursements to performance. The main areas of performance will be whether finances are properly managed; participation by the whole community in meetings, decision-making and the monitoring of the committee; and patrolling effectiveness compared to targets agreed with the community.

In preparation for planning, new aerial photography was commissioned from a Kenyan company covering the SLNP and Mfuwe-Mambwe corridor. This was funded separately by NORAD. SLAMU has also had preliminary discussions Norway's Foundation for Nature Research (NINA) to establish a GIS-based management information system for land use planning and the monitoring of law enforcement, CBNRM, tourism, etc.

6.3.10 Community newspapers and conservation education

Increased attention has been given to providing information within the project area. In May 1999, SLAMU introduced a quarterly community newsletter, Malco News, targeted at people living in Lupande GMA. Contributions were written mainly by local people, and 13 local stringers were trained in basic journalism. 3000 copies were printed and it was sold (initially priced at ZK 200) to recover 25% of production costs with the intention that it becomes financially viable. There were some problems with marketing because, despite a demand for the newsletter, only 1,500 copies were sold. A considerable amount of positive feedback has been received in the form of letters, suggestions (e.g. advocating that

¹⁶Project proposal: Support of Mambwe District Council to develop its capacity to devolve sub-district capacity for economic planning and development, and to develop urban infrastructure in the Mfuwe area. August 1999.

adverts be included) and articles (by stringers and others). Despite this, a decision was made to discontinue the newsletter, largely on the basis of cost. Similarly, it was decided to substantially reduce the conservation education component of the project. Some staff considered this shortsighted, but abandoning non-income generating social services is a consequence of the drive towards financial sustainability. Restructuring of the donor agreement could preserve such services, but would require critical analysis.

6.3.11 Conclusion

From 1998, the conversion of LIRDPA into SLAMU was implemented with vigour. A cheaper, better organised and more effective project emerged. The methodology used for participatory planning, and then for performance management, proved effective, and provides lessons for other projects. Not surprisingly, the devolution of responsibility together with clear targets and section-based budgets was shown to be effective. Significant improvements were made in the former Technical Services Section by breaking it up into smaller and more accountable units, with a tidier workshop and better roads being visible indicators of progress. The CBNRM programme made steady progress and is discussed in detail in the next chapter. The Tourism Section was also reorganised and a Commercial Manager recruited from the private sector, and the business component of the programme began to improve.

In contrast to these improvements, a weak point was a deterioration in law enforcement caused by changes in leadership and by the confused employment status of NPWS/ZAWA employees – there were several strikes in 1999 when various allowances were not paid, and again in early 2000 when salaries were not paid.

All in all, by the end of 1999, the project was well on the way to sustainability, though it still required support, stabilisation and tenacity to see it through the turbulent and often confused transformation of NPWS to ZAWA.

CHAPTER 7

REFLECTIONS ON THE EXPERIENCE OF COMMUNITY BASED RESOURCE MANAGEMENT UNDER LIRD/SLAMU

7.1 CBNRM: a framework for analysis

7.1.1 *The emerging paradigm of sustainable use*

In recent years, conservation has been dominated by debate about the sustainable use of wildlife. Southern countries have begun to question the long-held Northern protectionist paradigms, and to fight for their rights to exploit their wildlife. They have made considerable progress, with sustainable use becoming a cornerstone of Agenda 21 (UNCED 1992). They have even been able to shift opinion amongst signatories to the Convention on International Trade in Endangered Species (CITES) towards supporting sustainable use. The Southern argument is undeniably about justice, and the rectification of past use rights. It has also correctly identified that the primary threat to wildlife has been its effective nationalisation making it uncompetitive in the eyes of landholders. As a consequence, wildlife has been replaced rapidly by other forms of land use where resources are scarce or, in countries with abundant resource such as Zambia, simply neglected as not worthy of sufficient expenditure to ensure protection.

The conservation community has been struggling to develop an understanding of sustainable use (e.g. Prescott-Allen and Prescott-Allen, 1996) but the gulf between Northern and Southern perspectives has been difficult to bridge (Child, 1996). Sustainable use was accepted in principle by IUCN at its General Assembly in Perth in 1990. Draft guidelines for sustainable use were submitted to by the next Assembly in 1993 but were rejected on the grounds that they were difficult to apply, did not reflect the great variety of social, economic, legal political and other people-centred factors that affect sustainability, and could be misused to prevent uses with potential conservation benefits. To date they have not been agreed. Much of the impetus for sustainable use emanated from southern Africa, and especially from the various community-based wildlife management programmes. They identified the key factors affecting sustainable use as utility and exclusivity or, alternatively, proprietorship and price (SASUSG, 1996). This translates into two questions: how much can wildlife earn? and how much of this value gets to landholders? Wildlife is likely to compete for resources only when the value reaching landholders exceeds the opportunity costs of wildlife, including alternative uses forgone plus management costs.

7.1.2 *CBNRM principles*

In parallel to the debate on sustainable use debate has been another about the practice and principles of community-based natural resource management. It has generated many conferences and considerable literature. At the core of the development of these principles was the CAMPFIRE programme in Zimbabwe, with principles spreading to community programmes throughout southern Africa (Metcalf 2000; Rihoy, *et al.* 1999). A sophisticated debate has developed and most intellectual effort has focused on the issue of property rights. Two other similarly important issues are policy and market distortions and the management of the devolutionary process, but these have not been accorded so much attention.

In drawing out the lessons of LIRD's community programme, we emphasise these two areas. First, we hypothesise that there is now sufficient conceptual understanding of community wildlife management to initiate a new programme with a high degree of confidence that success can be

achieved. We show how rapid progress has been made in the LIRDP programme in only four years, despite more than half this period being dominated by a conflict with chiefs when little community work could be done. We attribute this rate of progress to a sound system for managing the process of change, and suggest that the set of management tools developed is one of the most important contributions of the project

As a corollary, we are critical of the general tendency to ignore on-the-ground (field-based) management. It is a matter of concern that many emerging leaders in community wildlife management are being lured away from active CBNRM work by the more exciting and rewarding circuit of conferences, NGO politics and intellectual debate. Loss of quality personnel is symptomatic of a dying industry (Hamel and Prahalad, 1994) and we should be especially concerned that whilst on the one hand the devolution of management to communities is being emphasised, on the other there is a counter tendency to centralise managers (mainly by transfer to departmental headquarters).

One of the lessons drawn from an extensive study of community wildlife programmes around the world as part of IIED's Evaluating Eden project (1996-1999) that success is often linked to leadership or individuals (champions) who are prepared to struggle with great determination to overcome obstacles, adversity and opposition (Roe *et al.* 2000). Ironically, the conservation community that is driving devolution and community-based solutions has itself developed perverse incentives that make it unattractive for emerging high-fliers to work at community levels. If it is accepted that major breakthroughs have been achieved in establishing an enabling environment for community wildlife management (nationally and internationally), and that further progress will be driven by incremental steps at the local level (i.e., practice leads policy), it can be predicted that the centralising of leaders will lead to the stagnation of community programmes.

The LIRDP community programme has begun to implement some conceptually advanced institutional solutions to resource management (e.g., devolved planning; charging for natural resources; etc.). However, progress is slower than it could be because of the isolation of the Luangwa Valley and the absence of peer pressure from similar programmes. It also lacks sufficient critical mass to influence macro-level changes, which introduce limiting policies. As Agarwal (1997) notes, "critical to such attempts is the need to forge federated structures of community user groups that can negotiate with government officials and aid agencies on more equal terms than those prevailing today". The domination of the wildlife industry by the apparatus of the State (Gibson, 1999) means there are few NGOs to advocate on behalf of local communities.

The second area which we emphasise is the value of this case study in highlighting the importance of policy and market distortions. In common with many other ex-colonial territories, wildlife in Zambia was nationalised and control of this resource became dominated by government officials and politicians. Serious inefficiencies arose from this centralised and bureaucratised management regime and wildlife became a resource subject to patronage by officials and politicians, and of increasing importance to them as structural adjustment programmes removed regulations and privatised other sectors of the economy.

7.1.3 Principles of sustainable use: utility (getting prices right) and proprietorship

The LIRDP community programme can be interpreted as an attempt to de-nationalise the wildlife resource in the project area, to ensure the maximisation of benefits to landholders, and thus to improve the competitive advantage of wildlife. Before describing the community programme, we provide an analytical framework for evaluating its progress. It is well recognised in the literature on wildlife management that tenure is of central importance. Indeed, we would advocate that VAGs be given private ownership of their land and resources. But such tenure is difficult to achieve unless political circumstances are receptive. Consequently, we place emphasis first on how the centralisation of wildlife reduces its profitability and, second, on how the way in which revenue is channelled to communities radically alters its value. We show how the top-down revenue flow

associated with the early stages of LIRD P and other first generation CBNRM programmes (e.g., ADM ADE in Zambia, WINDFALL in Zimbabwe) *devalued* these benefits; and how the devolved and democratic process of household revenue distribution in the later stages of the project *added value*.

This two-step valuation hypothesis is presented in two diagrams. Figure 7.1 shows how the centralisation of wildlife reduces the magnitude of the benefits it generates. LIRD P's hunting concessions earn approximate US\$1 per hectare, whereas much inferior resources on private land south of the Zambezi River earn at least ten times this¹. LIRD P enjoys considerable financial advantages over ADM ADE and is able to retain all revenues from safari hunting. By comparison, in GMAs managed by ADM ADE, some 62.5% of safari revenues is captured by central government, a further 20% is used for employing and financing wildlife police officers in the form of 'Village Scouts', and only 17.5% is available for community expenditure (and decisions on its use is dominated by chiefs). In some areas in Zambia, a considerable amount of wildlife is killed by 'free-riders' using the system of district and special hunting licenses, which cost a negligible fee rather than the market price. But LIRD P has to some extent been able to protect wildlife from such exploitation.

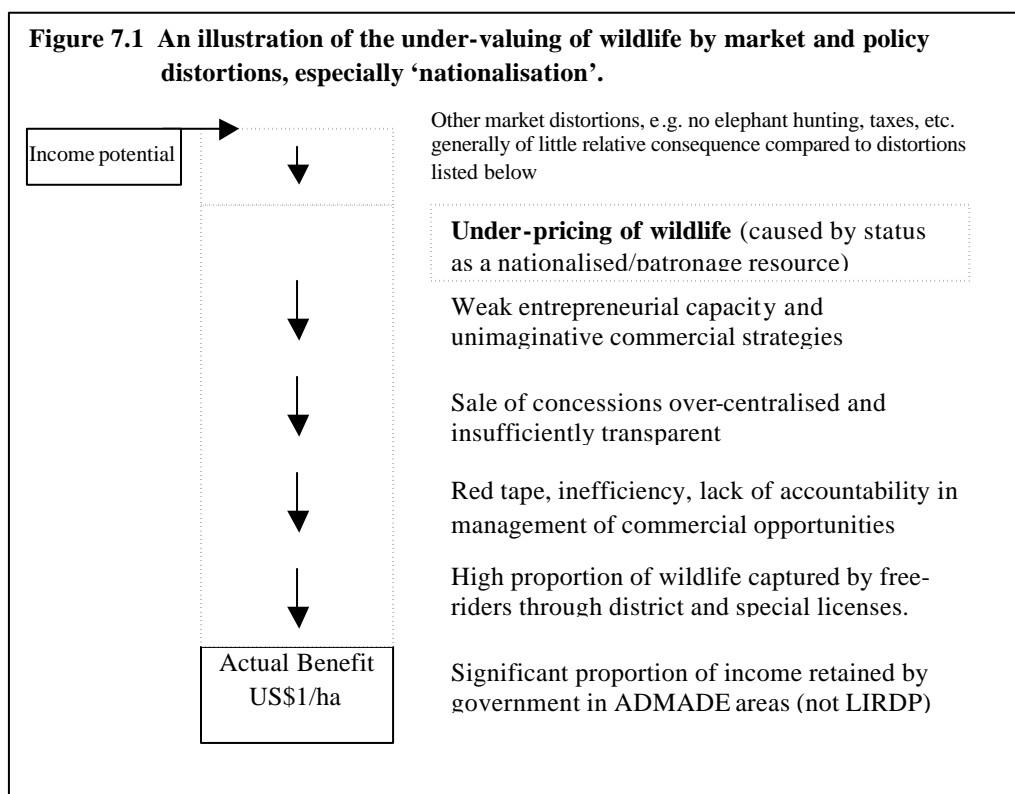


Figure 7.2 illustrates that the way in which wildlife revenues are returned to communities affects their value. They are devalued by top-down disbursement which precludes community choice and means that revenues are often allocated for lower-valued uses (albeit those favoured by officials). The lack of transparency and participation in this process detracts from its value. By contrast, distribution of wildlife revenues directly to communities as cash means that careful choices are made in their use.

¹ For example, Peter Johnson (pers. comm.) - one of the founders of game ranching in Zimbabwe - purchased a degraded cattle ranch near Bulawayo. He restocked this with wildlife and, despite having no access to the high earning potential of big-game (elephant, buffalo, lion), earns some US \$17 per hectare. This is from relatively poor land in a relatively disadvantageous geographical location. Some of the properties adjacent to the Kruger National Park in South Africa earn substantially more than this.

The democratising and empowering process involved in cash distribution is, in itself, an important additional benefit. For instance, more organised communities are able to develop social infrastructure and attract other investment. In terms of conservation objectives, devolution emphasises the critical linkages between wildlife and benefit. We suggest that the improvements in community attitudes towards wildlife revealed by a series of surveys in the LIRD area (i.e. Balakrishnan and Ndlovu, 1992; Butler, 1996, 1998; Wainwright, 1996; Tembo, 1999) are linked to the perception of benefit, and therefore to the process of fiscal devolution.

7.1.4 Framework conditions for CBNRM

In the previous section, we contend that the expertise now exists to implement a CBNRM programme with a high degree of confidence. But two key frame conditions are necessary:

- First, the wildlife resource must have a comparative advantage and thus the potential to create benefits that exceed its opportunity costs plus the transaction costs of organising community use. This is determined by the ratio between population on the one hand and the quantity and price of wildlife on the other. Where such advantage does not currently, there needs to be the potential to remove existing policy and market distortions so that it can be realised.
- Second, the political-economic system should least accept and allow, and preferably encourage and drive, a process of devolution and democratisation. Here, the end point is to devolve and delineate the rights to use resources to small communities (private-community ownership, or village companies being the present theoretical goal).

Since both of the above are not in place, a system for managing the process of improving them is a key requirement.

These conditions were partially in place in LIRD's programme. In a mirror image of CAMPFIRE's glory years, resource ratios were very favourable, but the main constraint was a reluctance to devolve or a failure to understand the importance of devolution. LIRD's success came from managing a process to better reflect comparative advantage and to devolve rights to communities. This process can be summarised as follows:

- (a) Frame institutions were developed – through a project policy to introduce a second-generation type CBNRM programme (in April, 1996) and subsequent project-level operational guidelines.
- (b) Community organisations were developed:
 - VAGs and ADCs were constituted and organised as transparent, accountable democratic organisations;
 - Financial management was put in place, with well-accounted financial records and by making committees accountable to their communities.
 - The management of projects and meetings was partially addressed.
 - After the third year, natural resource management was emphasised
- (c) Delivery of inputs to the community reflects the needs of community organisations. This was achieved by developing the capacity of a small section in SLAMU to assist community capacity-building.

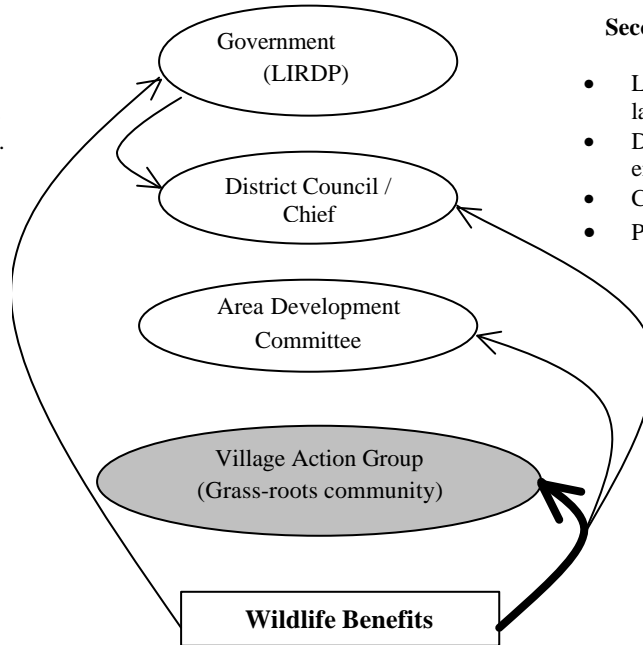
Figure 7.2 The hypothesised impact of fiscal devolution in second generation CBNRM programmes

First Generation CBNRM Programme

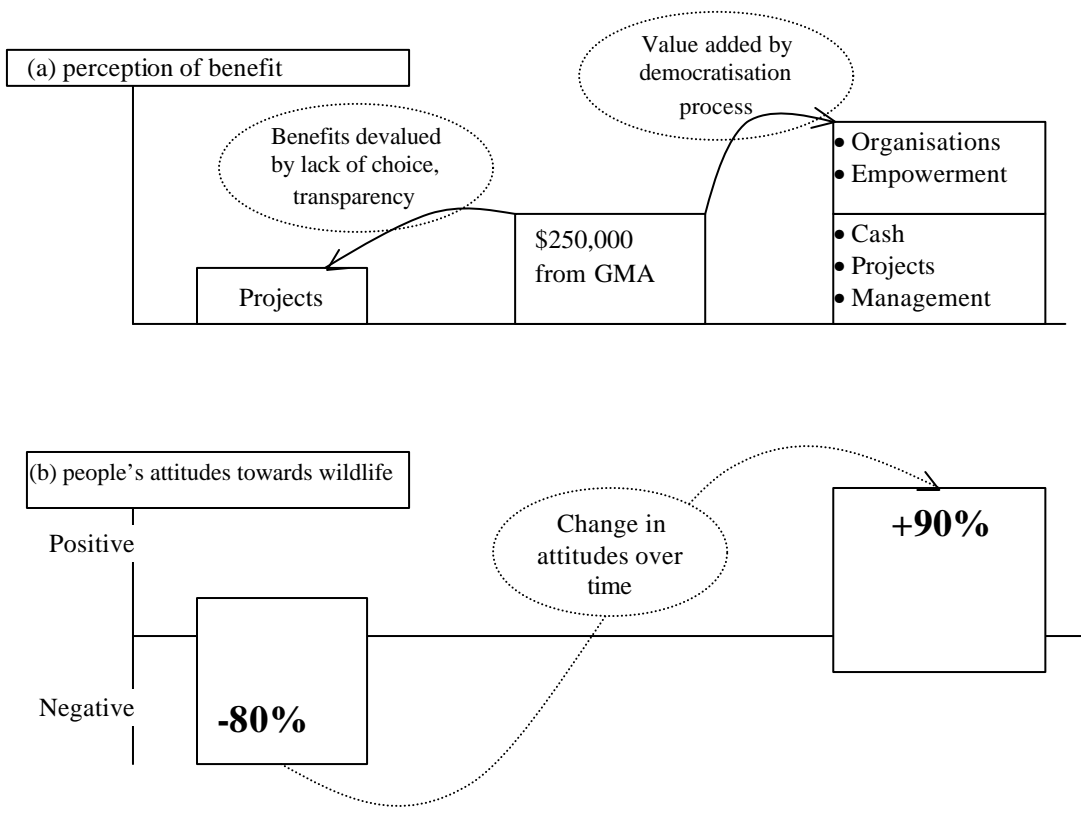
- Weak links between wildlife and landholders.
- Perpetuates dependency.
- People are “subjects”.

Second Generation CBNRM Programme

- Links wildlife and landholders.
- Democratisation and empowerment
- Capacity creating.
- People are “citizens”.



What is the impact of wildlife benefits?



- (d) A management-control process was put into place including monitoring of the following:
- Compliance with democratic and constitutional principles:
 - Financial accountability
 - Institutional growth (using the POMS monitoring system)
 - Wildlife populations

7.2 LIRD P's early top-down community development programme: a first-generation CBNRM programme

7.2.1 When community programmes meant the provision of services

When they were launched in the 1980s, both the national ADMADE programme and the NORAD-funded LIRD P project were based on the postulation that rural people and wildlife could only co-exist if wildlife was beneficial to them (see section 2.1). At this time, understanding of community empowerment and management was in its infancy. Zambia was also in its 'Second Republic' when government ran most major businesses and services. Consequently, LIRD P was established as what we would now consider to be a top-down, paternalistic community programme. It attempted to raise living standards by providing wide-ranging services, especially those aimed at improving agriculture such as agricultural research, extension and credit, and roads. Government-type service provision comprised 40% of LIRD P's 1993 budget, including roads (20%), agricultural services and extension (12%) water development (3%), and community projects (4.6%). The wildlife revenues were used to complement these services and the Local Leadership Sub-Committee (see next section) had the authority to decide how to use the 40% of LIRD P's tourism and hunting income allocated to the community. Capacity-building and institutional development has now come to be regarded as the core of community development, but in the early phases of LIRD P these aspects were hardly addressed. They received only received 2% of the budget, and much of this was spent on meetings with chiefs. The focus was on the provision of services and infrastructure, rather than on governance, devolution and empowerment – probably because this was perceived at the time to be the initial priority.

7.2.2 Community participation and the local leaders sub-committee

In Phase 2, the decision was taken to use traditional authorities (i.e. chiefs) as the 'primary avenue' by which local interests could be represented in the project. A Local Leaders Sub-Committee (LLSC) was established, but this provided for no inclusion of non-elites in decision-making processes. The LLSC comprised the six chiefs who each appointed an *induna* (adviser) and a women's representative (who were in a weak position to contribute to any debate) and elected councillors.

The structure of the LLSC (and, by implication, project management) came under strong criticism during project evaluations in Phase 2. But it is important to understand that this structure was one largely pushed by President Kaunda - the project Co-Directors at the time had little influence over it. Bell (pers. comm.) points out that the elected Ward Chairs were very active on the LLSC, but after the MMD came to power in the 1991 election, they were thrown off the committee by the new Regional Minister leaving the committee comprising only the chiefs and their *indunas*. Thus, political agendas and not management considerations determined the nature of the committee.

This structure, too, had fundamental problems of accountability. This allowed it to become, in many ways, a forum for the chiefs to leverage personal advantage, a situation that became almost intolerable under the leadership of one of the chiefs described locally as being particularly 'selfish'. In effect, the six chiefs made all the decisions and there were few checks-and-balances, so money was used

ineffectively and inequitably. The chiefs were greatly empowered by this process. In many ways, this situation perpetuated the old fashioned status quo, though at the local level. As Agarwal (1997) states:

“Regular and open elections in which decision-makers submit to choices made by their constituents are indispensable to ensure such accountability. Otherwise, instead of being agents for decentralising power to the local level [district and area-level institutions] may become yet another channel for centralising tendencies.”

There are several reasons why the LLSC was not accountable, and therefore failed almost totally as a mechanism of participation. First, was the fundamentally undemocratic nature of the somewhat feudal chief system. Second, the traditional checks-and-balances appeared to have broken down in some chieftainships, with chiefs being described as a mix between a businessman and a politician but with the unchecked powers of a chief. The situation deteriorated due to the inability or unwillingness of the government and political leaders to clarify the roles and boundaries of chiefs' authority. Without the political will to decisively and immediately tackle even some of the more blatant disregard of laws and justice, some chiefs manoeuvred themselves into positions that were, to all intents and purposes, above the law.

The conflicts between the chiefs and the project between 1996 and 1998 were almost entirely due to the project's attempts to redress this unsatisfactory situation, especially its efforts to introduce democratic processes to involve the local people. Resolving such conflicts is an integral part of any devolutionary process (Rihoy *et al.*, 1999). The eventual reversal of this inequitable situation is a credit to the integrity of some of the chiefs, and followed the introduction of more subtle decision-making 'controls'. This became possible in the evolving climate in which local communities in general are becoming more aware of their democratic and legal rights.

Over the past decade, there has been considerable evolution in thinking about how local communities can or should participate in resource management decision-making. The days of 'consultation' and taking community views into account (in the mid-1980s) have given way to a new paradigm of 'participation', which now 'requires' full stakeholder ownership of resources and decision-making processes. This change is reflected in the comments offered by LIRD P review missions. The changes of LIRD P focus and approach through its various phases mirror the evolution in thinking and accepted practice. Indeed in the field of CBNRM, LIRD P has been one of the pioneers of such change. There was awareness within LIRD P management in Phases 1 and 2 of the need for greater stakeholder empowerment but the project had an enormous struggle to put in place those structures that emerged. There was no political will or consensus then to go beyond this. In other words, what is regarded as normal, desirable or acceptable today was not possible then.

The first review mission (IUCN, 1982) commended the formation of the Local Leaders Sub-Committee, although it was concerned over the "difficulties of this committee as a channel for local participation". But it also noted that "however imperfect these traditional and political structures [i.e. chiefs and their advisers, and the then existing Ward Development Committees] are, as the main channels for local expressions of view, the project is correct in trying to use them".

By comparison, the 1993 review (of the Phase 3 proposals) mission condemned the Phase 2 project management structures as top-down, undemocratic, unaccountable, not transparent, not equitable, and recommended a major re-think to establish elected village-based committees to manage GMA wildlife revenues.

7.2.3 A comparison with ADMAD E

ADMAD E also established structures which gave chiefs a prominent role in controlling local revenues and programme benefits and suffered similar problems to LIRD P (Box 7.1).

Box 7.1: LIRDP and ADMADE: Implementation strategies compared

LIRDP and ADMADE have similar end-points, but use different implementation strategies. LIRDP focuses on grassroots institutional development as a foundation for wildlife management, which is expected to evolve later. ADMADE concentrates on wildlife management. Since it lacks effective community institutions, management is linked this closely to National Parks and Wildlife Services and the chief. For instance, Village Scouts are paid out of the NPWS revolving fund and are led by an NPWS person in the form of the Unit Leader. By comparison, LIRDP targets a much lower level of the community, and therefore engenders more widespread participation than ADMADE.

"In Lupande GMA, the initial emphasis of LIRDP's CBNRM program, introduced in 1996, was put into developing democratic, transparent, equitable and accountable grass-roots institutions (Village Action Groups, VAGs), and giving these the right to benefit from wildlife (as a first step in developing the proprietary impulse). Now that this structure is in place, its capacity to manage wildlife (and other community affairs) will be added - a process, which has already started.

By contrast, ADMADE first developed a central administrative structure (Wildlife Sub-Authority), which controlled wildlife benefits and management, and is now working on linking this structure to grassroots institutions (VAGs). Revenue enters the system at this second tier, rather than at the primary tier as in LIRDP where it is paid to individuals in VAGs and then flows upwards ensuring grassroots democratic control of resource benefits."

Source: LIRDP (1998, Annex 3: Managing New Parks, GMAs and CBNRM allocated to Eastern Region by ZAWA).

A three-tiered management structure was established for ADMAMDE:

- Overall responsibility for the design and responsibility of the programme lay with the ADMADE directorate, which included only senior officers of NPWS.
- Wildlife management units were established in certain areas of the country, each with a 'unit leader' appointed by NPWS to direct the implementation of ADMADE policy. For each unit capable of supporting its own wildlife management, a Wildlife Management Authority (WMA) was established, with the District Governor as chairperson and the District Executive Secretary as vice-chairperson. Members included the area's NPWS wildlife warden, the Member of Parliament, Unit Leader, Chiefs and Ward Chairmen. The managing directors of safari companies with a commercial interest in the area were also admitted as members. Thus, each WMA was broadly similar to LIRDP's Local Leadership Sub-Committee. However, with time, this layer became moribund.
- A Wildlife Management Sub-Authority (WMSA) was established for each chiefdom in a Wildlife Management Unit. It was chaired, and largely controlled, by the local chief. This became the main operational vehicle for ADMADE. Each WMSA made suggestions for development projects to be funded from the community's 35% share of ADMADE revenues.

Gibson (1995, p233-234) draws attention to some of the key problems associated with this arrangement (see Box 7.2).

Box 7.2: Chiefs' Influence on the Use of Revenues and Benefits under ADMADE

"NPWS and consultants regarded the chiefs' enthusiasm for ADMADE as an acceptance of locally - oriented conservation principles. Evidence demonstrates, however, that chiefs followed their historical pattern of trying to control the programmes' functions and benefits in order to augment their authority. Because ADMADE policy did not define well the composition or operation of the WMSA, chiefs controlled its agenda and membership; their ideas dominated the list of development projects submitted for approval to the Wildlife Management Authority (WMA). Although chiefs experienced difficulty getting their more flagrantly self-rewarding projects through the WMA such as their official residence (or 'palaces'), chiefs did significantly influence the kind and location of ADMADE-funded projects for their area. Chiefs located most new classrooms, houses for teachers, clinics, wells and maize hammer mills in their own village. In fact, chiefs had many of these projects built close to their own homes. And chiefs hired their closest relatives to staff grinding mills. Villagers complained about the chief's monopoly over these community benefits; the chief's monopoly over projects led some residents to believe ADMADE and LIRD-funded projects were actually the chief's personal property.

As the person responsible for selecting village scouts, the chiefs also managed access to another very valuable commodity: a salaried job with law-enforcement powers. Some consultants and villagers claimed that village scouts felt more loyalty towards their patron chief than their actual employer, NPWS. Chiefs sought to augment the enforcement powers of "their" village scouts by providing firearms to village scouts, using headmen to assist the ADMADE unit leader, constructing road blocks and cracking down on the illegal ownership of firearms. Predictably, villagers accused chiefs of favouritism in their selection of village scouts and their enforcement of the law.

In questioning policy, chiefs focused on those aspects of ADMADE that limited their authority. Chiefs protested the WMA's control over their community's ADMADE bank account. They disliked the WMA's ability to veto the WMSA's choices for development projects, and chafed over the cumbersome and time-consuming nature of the approval system. In contrast, chiefs spent little supporting the conservation and participation goals of ADMADE. In fact, even while belonging to ADMADE, some chiefs worked actively against conservation and formed secret hunting rings. In sum, chiefs spent their energies trying to secure more power and resource for themselves under ADMADE, relegating local participation and conservation to at best secondary concern".

Source: Gibson (1995, p233-234). See also Gibson (1999)

Matenga's (1999) analysis confirms the effects of faulty institutional design:

"A well intentioned programme, ADMADE has been the victim of faulty design right from its start to the extent that the philosophy behind its creation appears to have been lost. Contrary to its theoretical bases, ADMADE has operated as a 'top down' programme initiated, planned and implemented externally by the NPWS and facilitated locally by the all-powerful chiefs presiding over Sub-authorities"

Matenga notes that there has been little economic empowerment and "most of the GMAs have experienced very small economic returns from the programme", but, politically, the programme has disempowered ordinary people:

"The larger community is, therefore, simply told what has been decided by the Sub-Authority or the NPWS. This lack of voice in decision-making by the local community members have effectively disempowered them politically in voicing their concerns on issues that affect their welfare".

Matenga provides credible arguments that communities have been socially disempowered and divided with "resentment and hatred by those communities not in close proximity to the chief's palace [which has] resulted in loss of respect for traditional leaders". He also cites psychological dis-empowerment

related to the danger of animals, and loss of access to game-meat and traditional hunting. Perhaps the lesson here is that real empowerment only starts when the lowest tiers of a communities are entrusted with benefits and authority.

7.2.4 The need to advance beyond first-generation CBNRM

The earlier stages of LIRD P's community programme were very like ADM ADE (and indeed Zimbabwe's WINDFALL) with a well-intentioned attempt to involve local people. But this resulted in the empowerment and entrenchment of a local elite (in the form of chiefs) and therefore failed. All three programmes were devised by conservationists with little experience of economics and institutions. It was only with the prompting of development experts, social scientists and social advocates that a new focus on institutions emerged and these programmes began to work (led by CAMPFIRE). When this happened, community wildlife programmes surged ahead - even of other social development programmes - largely because they had the advantage that they could devolve power to manage a tangible and sustainable resource base. Communities could be empowered economically, and this economic empowerment led to other developments.

Under LIRD P's new focus established during Phase 3 (1995-1998), the system for distributing revenue was radically altered and democratised (see section 7.3) to take advantage of the possibility for economic devolution and grass-roots empowerment. As a consequence, community structures became functional. The project's CBNRM programme invested much of its time and effort in working with the communities to develop the capacity of democratic Village Action Groups (VAGs) (see Boxes 7.11-7.14). Devolving finances to this level overcame some of the problems of operating through the Local Leadership Sub-Committee. As pointed out in section 5.8.4, the Lupande chiefs have proved resistant and uncooperative in this matter (some much more than others) - largely because the changes were perceived to represent a wresting from them of power and access to revenues and benefits. They stated that this undermined their traditional roles and that this could lead to instability in their communities. Others opposed this contention claiming that it was the chiefs' selfish behaviour, not the new system, that was really undermining their credibility. There were also difficulties with the chiefs during the bridging phase (1993-94) when they walked out of meetings and demanded that LIRD P provide them with vehicles. Gibson (1995) argues that the chiefs' behaviour underscores the tendencies of most people with power to guard and reinforce their authority and to act in a self-rewarding manner (see Box 7.2). Such behaviour was often rewarded and became the norm. Thus re-instating a more mature, balanced and responsible system of relationships caused some conflicts with the traditional leadership in Phase 3.

Metcalf e (1994) points out that Zimbabwe's WINDFALL programme failed because it was ill-structured, and this then led to the development of CAMPFIRE. LIRD P's early community programme and ADM ADE suffered the same problems, failing to involve people, failing to link benefits to wildlife, and failing to grasp the opportunities implicit in economic devolution and empowerment.

In 1996, a series of workshops with the community leaders at the Area Development Committee (ADC) level showed that the LIRD P CBNRM programme was not working. Few projects were being implemented and, even where they were, there was much suspicion about finances. A community mapping exercise involving all Village Action Groups (VAGs) showed a surprising lack of appropriate projects. Few benefits had accrued to the communities since 1992. Invariably, the use of revenues, including those from the sale of LIRD P's so-called community enterprises like Malambo Transport, could not be explained - a euphemism for suggesting it had been appropriated by the chiefs. Overall, LIRD P was heavily criticised by the community for failing to deliver projects. Local people perceived themselves as the recipients of donor aid, rather than as dignified wildlife producers, referring to benefits and the project as 'NORAD'. This impression perpetuated dependency and subservience. It was readily discernible in people's psychology, as they adopted strategies targeted at

soliciting benefits from donors, presenting themselves as victims (i.e. complaining about their sorry situation) and compiling wish lists. The project was debilitating. It rewarded “begging” strategies while offering few options for self-improvement. Moreover, the link between benefit and wildlife was weak. Despite considerable expenditure by LIRD on infrastructure and services, wildlife was not associated with these benefits, indicating a failure to achieve one of the primary objectives of the project - conservation. The only component of LIRD in which people participated regularly was the Women’s programme, initiated in 1997, but even this was not sustainable (Box 7.3)

Box 7.3 The women’s programme in LIRD

At the end of Phase II, it was claimed that Women’s Clubs were the only viable institutions in the community. These were later transferred to the line ministry (Department of Community Development) and few are now visible in the communities. Once donor funding was withdrawn, most clubs collapsed.

These clubs assisted crop, poultry and vegetable production, and provided information on health, nutrition, literacy and family planning. By 1994, there were 68 clubs with 2,000 members. The profit-making schemes appeared to fail. The agricultural credit scheme issued 261 loans but had a default ratio of 45-80%. The poultry scheme failed, raising 1,000 chickens in five years, with 25% of loans were not recovered. Social infrastructure fared better: 40 wells were provided and 53 grain storage bins were constructed. Social programmes were also funded: over three years, the number of women using some form of contraceptive increased from 700 to 1,351, but funding was then discontinued, and 973 women attended mobile and adult literacy courses. This description suggests that the programme, while addressing many important issues, was neither targeted nor sustainable. Much aid money is spent in this way.

There were serious weaknesses in the institutional set-up of the project, and ordinary people were seldom involved and had a poor understanding of the programme (Box 7.4). In the view of local people, benefits seldom trickled below the ADCs, causing significant resentment and suspicion of the traditional leadership (i.e. chiefs). The attempt to develop two tiers of local institutions, the ADCs and VAGs, failed: having no financial base they soon became moribund. The purposes, roles, responsibilities and operational relationships of these three layers of institutions (LLSC, ADCs and VAGs) was not clarified and formalised. Furthermore finances were not transparent. Consequently, despite the rhetoric and expenditure, little community development occurred, few projects were implemented, and wildlife was not conserved (except by effective law-enforcement).

These outcomes mirror the general failure of wildlife programmes based on partial devolution. Such programmes invariably avoid fiscal devolution and revenue distribution and, as a result, they have no mechanism for grass-roots empowerment and participation. However, they often assume that getting revenues to an area authority (e.g. chief, district council) is symptomatic of success, sometimes deluding themselves for years. LIRD is sensitive about this issue, because its revenue distribution has regularly been criticised by officials. It is timely at this point to make an observation about the philosophy and practice of ‘development’. LIRD follows a philosophy that ‘development’ is a process whereby people and communities transform themselves (Hope and Timmel, 1984; Bergdall, 1992) and that development requires altering people’s psychology and capacity to help themselves. Although the revenue distribution process is the key tool for catalysing a process of grass-roots economic (and other) empowerment, institutional growth and self-development, it is constantly criticised for not delivering development. It clearly does. Perhaps the critics associate ‘development’ with concrete structures, and their criticism is borne of the fear that people satisfy their own personal needs leaving less money for such structures. The evidence from LIRD (see below) confirms that

Box 7.4 An independent assessment of the effects of LIRDP's "first-generation" community programme (1988-1995)

LIRDP's close association with former President Kaunda during Phase 1 and 2 gave it significant press coverage. Despite this media spotlight, the level of knowledge of the LIRDP programme within Lupande GMA itself was low. Balakrishnan and Ndhlovu (1992) noted that residents of Lupande GMA had a poor understanding of the purpose of LIRDP caused by minimal interaction between LIRDP and local communities. Wainwright's (1996) subsequent questionnaire survey supported this:

"Only 10% claimed to have a good understanding of the programme, despite 47.5% of respondents having known of LIRDP for more than three years. There was, however, a significant difference between men and women in this category, suggesting that women generally have a lower knowledge of LIRDP. The majority of people have heard of LIRDP through friends and relatives (32.0%); however, LIRDP employees and development projects also featured prominently as sources of information (21% and 25%, respectively)".

The same survey also looked at Lupande residents' perceptions of LIRDP, and revealed some interesting opinions:

" 'Conservation' was classed as the most important factor of LIRDP (29.8%) followed closely by 'development' (29.0%) and 'control of problem animals' (12.8%). 'Focus on the individual' and 'compensation', however, were chosen infrequently. There was consensus that 'employment', 'local development' and 'conservation' were the 'three best things about LIRDP'.

Respondents said that "the worst things about LIRDP", were 'poor management' (23.8%), 'no benefits to individuals' (16.5%) and 'corruption' (14.7%). When asked 'if LIRDP stopped tomorrow, what would change?', respondents suggested that poaching would increase (27.8%) and that development would cease (25.7%). 17.7% claimed that nothing would change and 19.4% didn't know what would happen, suggesting that fully a third of the community was unsure of the impact of LIRDP.

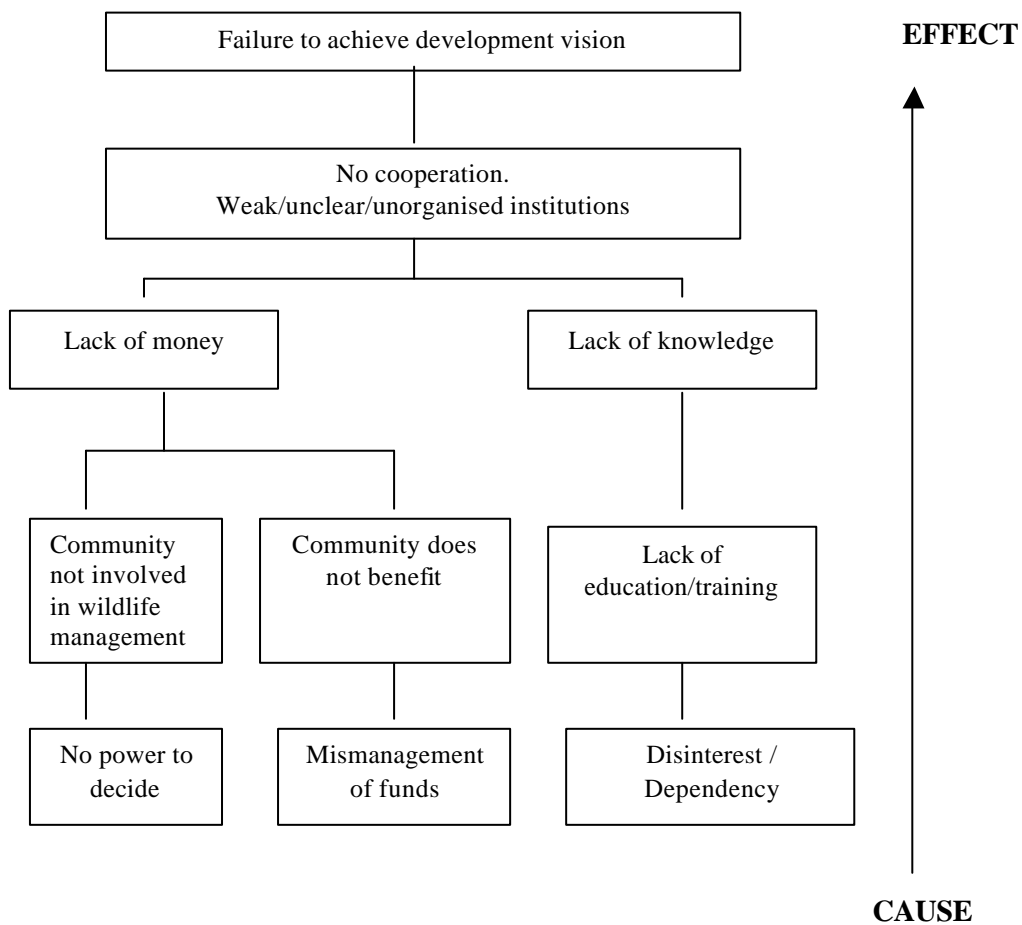
These results suggested that LIRDP needed to explain its purpose, objectives and potentials to local communities². With the introduction of the CBNRM programme in 1996 (after Wainwright's survey), over 40 formal 2-day workshops were held annually (at revenue distribution), and these were reinforced by regular community meetings. Tembo's surveys in 1999 indicated much improved awareness, with over 90% of people valuing wildlife.

ADC members identified a range of problems inhibiting LIRDP's development vision (Wainwright op. cit.)(Figure 7.3). "A pervasive feeling of displeasure with the [LIRDP] programme [mainly in Phase 2] can be found in all six chiefdoms" which suffered from poor management, lacked accountability (i.e. misappropriation of funds was thought to be common), and did not involve communities in any decision-making processes. Wainwright comments that "it is not surprising that the majority of respondents have failed to find an increase in their standard of living through LIRDP activities".

Gibson and Marks (1995) reveal similar findings in respect of the ADMADE program, noting that little economic benefit from the program was experienced by most rural residents. To date, employment has offered one of the few opportunities for direct personal benefit, but has been available to very few individuals (i.e. game scouts).

² Great care is needed in reading too much into the results of questionnaire surveys. Experience has shown that people often respond to questions with the answer that they feel will most please the interviewer. And great skill is required on the part of the interviewer (especially if a hired individual rather than the survey designer himself/herself) not to lead the interviewee or suggest the appropriate answer, or even to invent the answer. There have been cases where unsupervised hired interviewers have filled in questionnaires themselves, claiming to know what villagers think! Interviewee answers can also be guided by some assumption (correct or incorrect) about why the survey is being carried out. For example, the interviewee may think that the survey is a part of the planning process for a new development which he/she may or may not want, and therefore shapes their answers accordingly.

Figure 7.3 Causes of failure to achieve LIRD's development vision:
(Source: Wainwright 1996)



people do retain about 40% of the income as household cash. However, it also suggests that more concrete structures get built because the institutional development associated with financial devolution introduces efficiencies (e.g. transparency, vigour, proprietorship, leadership). Gibson's (1999) political analysis helps to explain such criticism. The critics of revenue distribution are usually officials who control and benefit from the (paternalistic) status quo, and devolution threatens their power base.

7.3 Implementing a second generation CBNRM programme

7.3.1 Policy changes for devolved community development

The necessity of a sound community programme was highlighted in project appraisals but it was also noted that "no real attempt has been made at implementation ... and there are also some critical flaws in the approach proposed, particularly the local institutions" (Scanteam 1993). In 1996, a Technical

Assistant was recruited³, the CBNRM Section re-organised, and a new policy was devised following the recommendations of the project appraisal (see Chapter 5). The Inter-Ministerial Policy Committee and the Project Review Meeting in April 1996 approved LIRD P's policy recommendations, providing the institutional underpinnings for the community programme.

7.3.2 *The process of changing policy*

A coalition for change was built within the project. In 1996, the workshop results mentioned above⁴ were provided to challenge the efficacy of the status quo in support of the recommendations of the 1993 project review. This was supported by an 'exposure' visit to CAMPFIRE in Zimbabwe for senior management, community section staff and two chiefs. Alternative, and conceptually advanced, options for community wildlife management were seen and informal discussion held with some of the managers and others involved. These experiences converged in an important, albeit ad-hoc⁵, "Vision" workshop in April 1996, which served to kick-start the process of change both in the community programme and in LIRD P as a whole. As described in chapter 5, this resulted in a statement which began to focus the project on two outputs – managing the park, and a community wildlife programme in the GMA. It was agreed that decentralised community-based management must replace the former, relatively paternalistic, type of management. Formal approval of this new direction was obtained from the Review and Policy Committees in April 1996.

7.3.3 *Summary of the new CBNRM policy*

The new policy defined the roles of the various institutional layers (Table 7.1). It also defined the conditions for the devolution and release of funds (Table 7.2) which reflected the emerging southern African CBNRM principles. The exception was that whilst the idea of the 'producer community' had been raised, wildlife revenues continued to be shared equally between the six areas.

The fiscal and institutional effects of the new policy are summarised by Figure 7.4.

In the early stages of LIRD P, 40% of the income collected by the project from wildlife was channelled into communities via the Local Leader's Sub Committee, dominated by the chiefs (Boxes 7.4 and 7.5). This top-down approach provided few benefits and did little to stimulate institutional or physical development by local people, and it did not improve attitudes to wildlife.

³ Brian Child

⁴ These workshops used visualisation techniques and situational analyses. Participation and problem analysis from the Logical Framework Approach (LFA) proved valuable for tracking down the cause-effect relationships of problems. For instance, on more than one occasion, people blaming their problems on the fact that they were "lazy, drunkards or jealous". Tracking these problems indicated that the root causes were accommodation to long-term dependency. The use of cards and LFA circumvented the tendency for long, and repeated, circular arguments. It also allowed more people to participate, even where people were only partly literate. Unfortunately, LIRD P's plans to quantify the improvement in participation and content resulting from the use of cards were never completed. This methodology appears to offer potential gains and needs to be more widely used and proved.

⁵ Relatively small events can often catalyse major changes -- this one day meeting eventually led to both the much more focussed Phase IV plan and a restructuring of the project, and to the transformation of the project's CBNRM policy.

Table 7.1 LIRDP Policy Guidelines for Community Based Wildlife Management agreed in 1996 by LIRDP's inter-ministerial Review and Policy Committees.

DEFINITION OF ROLES	INCOME
<p>Chiefs (6)</p> <ul style="list-style-type: none"> • Patron • Overall advisors, and maintain traditional values • Neutral arbitration • Guide decisions on broad land use issues • Non-executive, non-administrative role 	<ul style="list-style-type: none"> • 6% of wildlife income from Lupande GMA (1% to each chief) plus ZK 1.5 each (agreed after a long wrangle). About \$2,500. <p>Purpose: personal use (non-auditable)</p>
<p>Stakeholder Committee (proposed)</p> <ul style="list-style-type: none"> • <i>To be defined</i> 	<p>Purpose: Administer wildlife programme (see roles)</p>
<p>Area Development Committees (ADCs) (6)</p> <ul style="list-style-type: none"> • Coordinating level • Maintain bank account and financial records • Coordinate development plans for area • Monitor and oversee implementation of plans in VAGs • Plan, implement and monitor large multi-VAG projects • Monitor and oversee wildlife management and safari hunting in area 	<ul style="list-style-type: none"> • 4 % of wildlife income from Lupande GMA (divided between the 6 ADCs) <p>Purpose: Administration and coordination. Where the ADC is expected to undertake project implementation (e.g. clinic) or activities (e.g. employ game guards), money must be voted to it from VAGs</p>
<p>Village Action Groups (VAGs)</p> <ul style="list-style-type: none"> • Action level • Involve all people by holding general meetings to prepare, prioritise and agree all plans and budgets • Allocate wildlife revenues to projects, activities or household cash (<i>tyolela</i>) at general meetings • Hold quarterly general meetings to report on performance • Plan, implement and monitor VAG level projects and activities • Maintain bank account and financial records • Manage wildlife at the local level (e.g. employ game guards or punish poachers according to by-laws) 	<ul style="list-style-type: none"> • 70% of wildlife income from Lupande GMA <p>Purpose: equivalent to income from crops or livestock except that the community must decide its use. May be used for any purposes decided by the community, including household needs (cash), projects and activities</p>
<p>SLAMU (LIRDP + Mfuwe Command)</p> <ul style="list-style-type: none"> • Monitor performance (finances, wildlife, institutional development) of CBNRM • Develop managerial capacity of community institutions (i.e. design systems and provide training) • Ensure compliance with conditions by which wildlife revenues are devolved including: <ul style="list-style-type: none"> * 80% of income to communities; * Full community participation in decision-making; * Revenue distribution guidelines 	<ul style="list-style-type: none"> • No income from Lupande GMA

Table 7.2: Conditions for the devolution and release of funds generated by wildlife in Lupande GMA

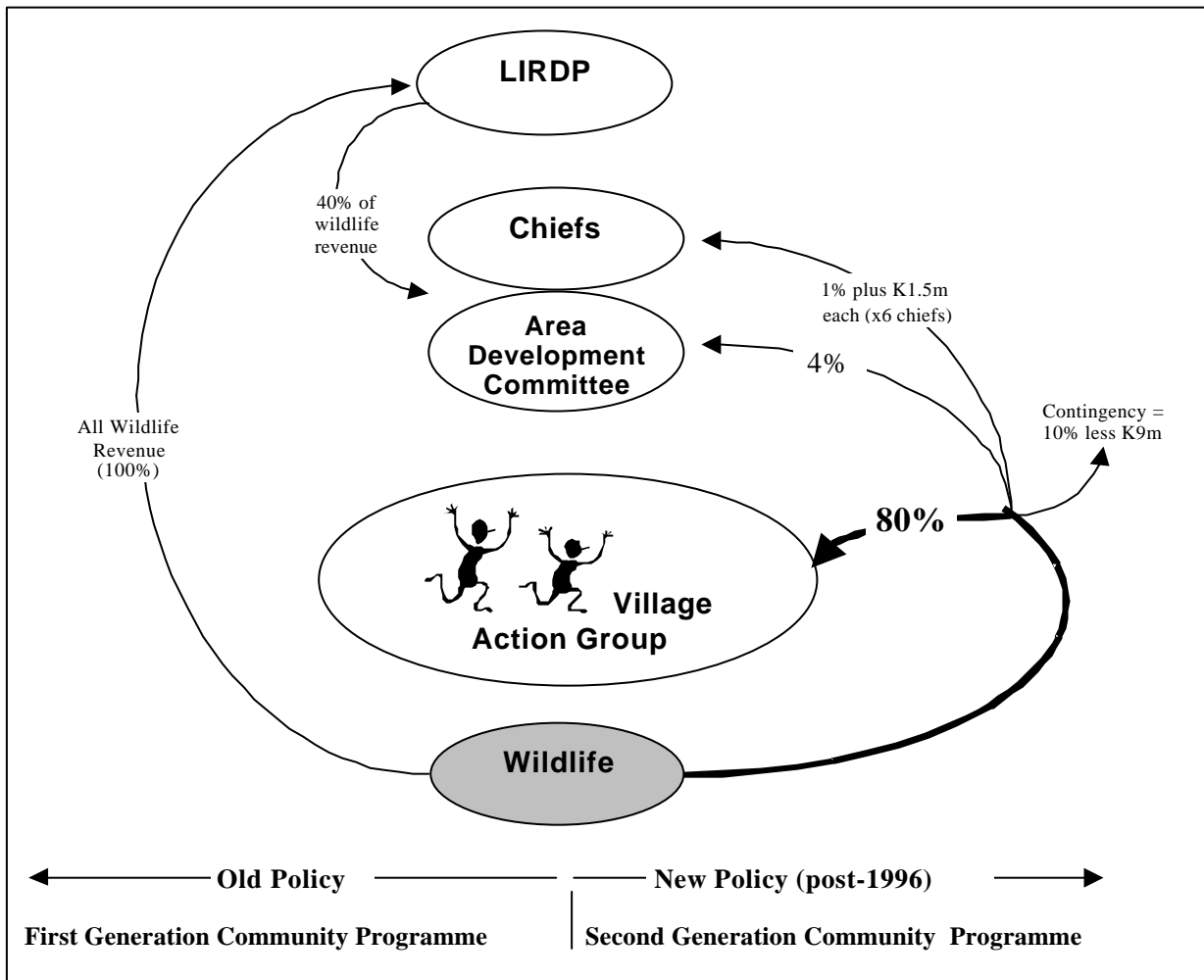
Conditions	Means of verification
1. Decisions regarding use of wildlife revenue (80%) must be democratic, transparent and participatory	Decisions must be made at general meetings attended by at least 60% of household heads and confirmed in written minutes
2. People must have full choice of the use of their money, including household dividends (cash), projects and activities.	Confirmed by minutes and attendance of SLAMU at General Meetings.
3. All finances must be used in the manner agreed at general meetings, and must be fully accounted for by keeping proper financial records. This does not apply to the 6% allocated to chiefs.	Full financial records will be compiled and submitted quarterly by VAGs and ADCs to SLAMU. They must also be presented to general meetings.
4. Each body should report regularly to its constituents (i.e. downwards) and to its supervising body (i.e. upwards).	Committees must report regularly on project implementation and finances at general meetings, and must also submit quarterly written summaries to their parent body and ultimately to SLAMU.
5. VAGs and ADCs must be properly constituted and democratically elected.	Each ADC and VAG must have a constitution, and hold regular elections.
6. Money should be allocated according to the principle of producer communities. This is a contentious issue. The Chiefs have ruled that money will be shared equally. However, efforts are being initiated to develop wildlife everywhere in anticipation of the eventual implementation of the principle of producer communities	<i>Monies will continue to be shared equally amongst Areas until such time as there is adequate consensus to change this situation.</i>
7. Revenues should be disbursed by May in the year following that in which it is earned	

Under the new approach

- All wildlife revenue from the Lupande GMA (i.e., the 100%) would accrue to the people because they ‘owned’ the resources on their land; and
- The majority of this money (80%) would be channelled directly to the lowest institutional tier, the Village Action Group, and the remainder to ADCs and chiefs as follows:
 - 80% to VAGs;
 - 6% to the six chiefs (1% each), plus an additional K1.5m each;
 - 4% to ADCs;
 - 10% was earmarked for an elected central body, which never evolved, so this money was used for contingencies or re-cycled back into the next years’ revenues.

One of the key aspects of the new policy was scale: it focused the programme at the level of the VAG where face-to-face participation of all 20,000 adults in the area was possible. While this required a greater commitment by LIRD for monitoring and capacity-building, it was to prove a turning point in the programme. Scale issues are discussed in detail in section 7.5.3.

Figure 7.4 Illustration of the change from a top-down to a bottom-up democratic, transparent and accountable institutions introduced by LIRDp's 1996 policy changes



Policy thus defined ‘participation’ as the fiscal empowerment of grassroots organisations within a procedural framework designed to ensure a very high degree of transparency, democracy and accountability⁶. Without the transparency built into the revenue distribution process, the programme would have continued to be dominated by suspicion, and an atmosphere in which little progress could occur. Some of the chiefs, as the primary beneficiaries of wildlife revenue under the previous status quo, fought hard and sometimes dirty to maintain the former system. This was the underlying cause of the conflicts that beset the first three years of the new system (late 1996- early 1999) when LIRDp was under considerable pressure from the local chiefs to reverse this process. It is has now been generally accepted and its value proven by a high level of community support and development. In five of the six chiefdoms, the chiefs are beginning to find a new and positive role as arbitrator and wise elder, though the temptation to dominate is still there.

⁶ There is a misplaced mythology that devolution to communities in itself will bring about success. As Agarwal (1997) notes “community-based conservation would be founded more profitably on principles of checks-and-balances ... than on faith... Unchecked authority in the hands of community-level decision-makers is as likely to lead to perverse conservation outcomes as when external actors possess unbridled power”.

Box 7.5 Utilisation of the '40%' community allocation in the early phases of LIRDP

Throughout Phase 2, review missions expressed concerns about the utilization of the 40% of LIRDP earnings allocated to communities (see Box 3.6). The remaining 60% was retained by the project for management of the LIRDP programme and project operations. Questions were also raised about the fairness of distributing funds equally amongst the six chiefdoms in the area rather than on a per capita basis so as to take account of population differentials.

In Phases 1 and 2, the LIRDP co-Directors assumed responsibility for setting the agenda and taking the minutes for meetings of the Local Leaders Sub-Committee. The second review mission report (IUCN 1990) records that committee members were unhappy about not receiving agendas in advance of meetings and complained about not receiving minutes (see section 3.3.2). As a consequence, local leaders' preferences did not dominate to the same extent as they did in ADMADE (see Box 7.4). And as Gibson (1995, p237) notes, "nor could chiefs completely manipulate the programme's benefits at the local level, since they were only one of many signatories on LIRDP accounts".

The second review mission also revealed that members of the Local Leaders Sub-Committee were unclear as to the derivation of their 40% share of revenues and complained that they never saw accounts. In early 1996, workshops held in communities to discuss and plan projects indicated that remarkably few had been completed, and there were many insinuations and accusations surrounding this failure. Similarly, Gibson (1995, p182) records that the "NPWS kept their revolving fund remarkably insulated from both external and internal scrutiny. Few NPWS officers other than members of the ADMADE directorate, knew anything about its total revenues, expenditures or procedures".

7.3.4 Implementing the new policy

The key step in initiating the new policy was to start the distribution of revenues at VAG level. The small community in Malama chiefdom was the first to be selected because the relatively high levels of individual benefit would make the strongest impact. For several days in June 1996, project staff met with the entire community and the chief to discuss how to allocate the money from wildlife, and eventually agreed on a household benefit of ZK100,000 and a large contribution to build a clinic. Project staff later returned to Malama with the money. To herald in the new era, the Director of NPWS and a NORAD representative also travelled to Malama to attend the planned revenue distribution meeting. However, in response to concern expressed by several other chiefs about losing their rights to channel and control wildlife revenue funds, Chief Malama boycotted the meeting. Although people in his chiefdom were highly excited by the large amount of money on view, the meeting was delayed in deference to the chief. This could have killed the new policy.

Fortunately, the new policy was welcomed by Chief Msoro and almost immediately implemented in Chivyololo VAG where, after a three-day planning workshop (24-16 June 1996), the first wildlife cash dividends in Zambia were paid. On 28 June 1996, at a ceremony attended by the entire community and Chief Msoro, a cheque for ZK2m was handed to the headmaster of the Secondary School, ZK498,000 was given to the Chivyololo Primary School, the VAG itself retained ZK303,000 for administration, and the 166 registered members each signed for and collected ZK26,500. Table 7.3 provides an illustration from the household list.

News of this distribution spread very rapidly through the communities in all six chiefdoms in Lupande GMA. However, continued strong opposition to revenue distribution from the other chiefs caused considerable confusion for several months and necessitated the intervention of the Minister of Tourism. The pressure from the communities to receive benefits eventually resulted in revenue being distributed in all six chieftainships, and secured the future of the new policy. But the wrangling did not stop. The next three years were a stressful time with cancelled meetings, delays, extraction of

Table 7.3: Illustration of household list used for revenue distribution

Revenue Distribution. Msoro. Chivyololo VAG Household List (28 June, 1996)							
#	Name of the head of family	Signature	Total income	Msoro Secondary School Laboratory	Renovation of Chivyololo Primary School	VAG Admin	Take home cash
1	Mr Leo Mbewe		43,000	12,000	3,000	1,500	26,500
2	Mr Rodgers Lubilo		43,000	12,000	3,000	1,500	26,500
...		43,000	12,000	3,000	1,500	26,500
16	Thomas Phiri		43,000	12,000	3,000	1,500	26,500
6							
GRAND TOTAL			7,138,000	1,992,000	498,000	249,000	4,399,000
US\$			\$5,490	\$1,532	\$383	\$192	\$3,338
						+ rounding balance	

revenue from the communities by the chiefs, complaints, demands for more money, and personalised verbal attacks on project staff. Even a written agreement arbitrated between chiefs and the project by the Provincial Minister, politicians and senior officials was broken by the chiefs when they extracted money over and above what was agreed. But the communities strongly supported the programme though they were usually too intimidated to say so in public, indicating just how powerful is the traditional system of control. In one incident, a community held an impassioned vote with over 130 people supporting the new policy and only seven (mostly old women) opposing it in line with the chiefs. Even in this instance, revenue distribution was delayed several months while the project negotiated and re-negotiated with the chiefs.

The project stood behind the principles embodied in its new policy, though it was not always able to enforce them, sometimes because it could not rely on support from high government authorities. Eventually, in 1999, with the strengthening character of the new Senior Chief Nsefu (who tragically died in November of that year) and the wise council of Chief Msoro, the relationships improved and the project began to run relatively smoothly. The exception was Chief Kakumbi's area. Here finances were never properly accounted for. Consequently, institutions remained weak, almost no projects were implemented even when money was allocated to them, poaching increased, and working co-operatively remained extremely difficult (see section 7.3.10).

7.3.5 Institutional development

In the first three years of the revised CBNRM programme (1996-1999), the primary focus was to assist communities to develop accountable, transparent, democratic organisations (VAGs and ADCs). The basis of this was a constitution, giving communities clear procedural rules and empowering them by defining their rights.

(a) Constitutions

When VAGs and ADCs were re-established in 1996, communities modified a draft constitution (prepared by LIRDPA) according to their specific needs. Constitutions were defined as "a set of rules agreed by a group of people by which they have agreed to govern themselves". They were also used to reverse the conventional perception that people are subservient to their organisations (i.e. committees being bosses). The constitutions embodied the concept of citizenship and emphasised that constituents owned the constitution and, through general meetings, gave instructions to the committees (VAGs), not the other way round. This has required constant reinforcement to reverse the very strong culture of subservience and dependency. The constitutions define membership, as well as rules of association such as when and how elections should occur, the regularity and content of reports to communities, and the roles and rights of members, elected officers and committees.

(b) Membership

Part of the constitution is a clear definition of membership, including age, sex, residency and other criteria, plus an obligation for the membership list to be approved only after a public reading. Initially, membership was usually defined as a household but, over time, many VAGs have redefined it to be adults over the age of 18.

(c) Accountability

The constitutions also place a strong emphasis on accountability. They require an Annual General Meeting to allocate revenue funds and elect the VAG committee, as well as quarterly general meetings to report and discuss finances, projects and progress. To ensure that the committee remains accountable to its constituency, there is a requirement for minutes of four general meetings to be submitted to SLAMU before the next year's revenue is disbursed. The system is reinforced by SLAMU, which checks that meetings are held, and attends many to provide technical and procedural advice. An important function of SLAMU is that it audits all accounts twice annually, and presents these audits and opinions to the community at general meetings. While there has been interference from chiefs, and some resistance from committee incumbents, committee elections have mostly been accomplished satisfactorily.

(d) Operational rules

The constitutions also define rules for removing committee members, procedures for agreeing by-laws (especially for natural resources), election procedures, sitting allowances and the roles of VAG committee members.

Because of its central importance, the constitution is discussed annually at general meetings and training is provided. The understanding of the constitution by the committee and individuals is also monitored using the process-oriented monitoring system (POMS). Constitutions have become the backbone of the CBNRM programme, with committee members referring to it and their rights when problems have arisen (e.g. the extraction of money by chiefs). The constitution has given the people's institutions a real foundation. For the past three years, the legal basis of these constitutions has been unclear, but it has worked nonetheless. It will be strengthened under the new Zambia Wildlife Authority Act (see Appendix 1), and probably even through Mambwe District Council which is planning to use the ADCs and VAGs as its sub-District structures, since these are not defined in local government legislation.

7.3.6 Village Action Groups, participation and the issue of scale

The number of VAGs in the six chiefdoms varies between three and eleven. For largely illiterate communities, the goals of transparency and accountability depend upon institutions being defined so that everyone can regularly meet face-to-face. This was the underlying justification for the fiscal empowerment of VAGs. They were encouraged to subdivide wherever their large size made full community meetings unmanageable, since the key to democracy, accountability and transparency in such rural settings is face-to-face meetings. The number of VAGs increased from 28 in 1996 to 42 in 1999 as they were split up to make full participation possible.

The VAG is the fundamental building block of SLAMU's CBNRM programme. VAGs usually consist of some 100 to 300 households in a defined geographic area. Each has a constitution (see previous section) and functions through a ten-person committee which is obliged to report back to the community quarterly. The major annual event is the Annual General Meeting where formal reports (financial, projects, wildlife management) are submitted, elections held, and decisions about the use of revenue made. Most participation and activity occurs at this level.

7.3.7 Area Development Committees

There are six Area Development Committees (ADCs) corresponding to each of the chiefdoms. ADC membership usually comprises two to four officers from each VAG, depending on the number of VAGs. ADCs receive relatively little money, sharing 4% of wildlife revenues. Their primary function is co-ordination. They were not designed as implementing bodies. Having focused on VAGs, SLAMU still has to develop the capacity of ADCs.

Despite being at a 'higher' level, practical experience shows that ADCs are less effective than VAGs. They have more financial problems, and are weaker at implementing projects. The underlying weakness is a lack of clear accountability. Inherently, ADCs have defective checks-and-balances caused by:

- Scale difficulties, especially the obstacle of answering directly to communities of up to ten thousand people;
- The problems that VAGs have in holding the ADC accountable to them – possibly arising from the historical tendency for the organs of local government to act as conduits for passing instructions from the centre to the margins;
- The domination of the ADCs by chiefs (having been an organ of the chief), who are themselves not accountable, and the fact that chiefs have been slow to accept and pass power to ADCs.

With the introduction of the new CBNRM policy in 1996, all six ADCs adopted democratic constitutions. However, following conflicts between the chiefs and the project, five of the chiefs re-imposed themselves as chairmen, although all but one of the chiefs (Kakumbi) have now accepted that this needs again to be reversed. Msoro and Jumbe VAGs now have elected chairmen. In Zambian culture, chiefs are not elected or accountable and cannot be audited, and so there is an obvious difficulty in having a chief as an ADC chairman.

The decision to devolve the majority of revenues to VAGs, and to empower this level was a wise one. Although ADCs were the only (partially) functioning local institutions before 1996, VAGs have already proved to be more effective. They are closer to the people and inherently more participatory and accountable. The project has been able to insist on proper financial reporting from VAGs without the complication of involving chiefs. Access to financial resources and responsibility for implementing projects has given VAGs a tangible function and a strong rationale for existence. In contrast, the ADCs have a more esoteric 'co-ordinating' function. They are also less transparent than VAGs (four are still chaired by chiefs) and suffer from limitations of scale - a VAG can easily and regularly report back to its constituency, but this is far more difficult for an ADC (some represent ten VAGs).

7.3.8 Generating revenues from wildlife

Following the principle that communities 'own' the wildlife in their areas, all revenues from wildlife in Lupande GMA is paid into the community account. The primary source of this revenue is safari hunting. A small amount of money is generated from a relatively large number of animals sold on district licences. The community is also allocated half of the money from hippo culling in the Luangwa River, which forms the boundary of the South Luangwa National Park.

(a) The high opportunity cost of communities' having weak commercial rights

A serious weakness of the CBNRM programme is the way the wildlife-hunting quota is allocated and marketed. The rights of communities to sell their wildlife is an important component of proprietorship, and is missing in Zambia. In CAMPFIRE, a great deal of effort was made to pass this responsibility to communities, with very positive results. Communities used tenders to shortlist potential commercial partners and, after being trained for a day, interviewed up to 12 operators with

considerable skill (Child and Bond, 1993). The results were dramatic: incomes increased by 160% in US\$ terms compared to government tenders and four-fold in Zim\$ terms (Child, 1995b); direct negotiation in a competitive environment allowed agreements to be refined to add mutual value; and the process changed the power relationships between operators and communities. WWF has produced a series of manuals reflecting these lessons (WWF, 1997a, b, 1998).

Communities in Zambia have no control over the way their wildlife is sold. Hunting areas are allocated at high levels in Lusaka, so operators are neither responsive nor accountable to the communities. The process lacks transparency.

(b) Ineffective use of quotas

Wildlife quotas are used ineffectively, for similar reasons. The setting of quotas is controlled in Lusaka and is not responsive to local conditions. A high proportion of potential income is lost because quotas are allocated to low-value uses. Significant numbers of animals are allocated on district licences, which are 20-100 times cheaper than safari licences. Others are allocated with free special licences (see also Appendix 5). As Gibson (1999) argues, the underlying cause of this inefficiency is that wildlife is a resource of patronage. 'Frontbenchers' (i.e. senior people in privileged positions such as politicians and ministers) benefit through hunting concessions, while 'backbenchers' (i.e. junior politicians and officials) get special licenses which they can use to obtain and sell meat - a single buffalo is worth a month's wages to a civil servant.

Communities are beginning to question these 'wasteful' licensing practices, as they become aware of the value of trophy hunting. They have requested the transfer of the majority of the high-value species on the district quota to safari hunting because this will generate much more meat and considerably more money. In theory, district licences are for local people. However, in practice, they are used by people with guns and therefore benefit only a few, and by people with vehicles so that the meat leaves the area and is sold commercially. The opportunity cost of allocating quotas in the area is equivalent to the value of safari hunting (see below) despite LIRDPA making considerable efforts, with partial success, to persuade NPWS to improve quota allocation. In addition, LIRDPA and the chiefs have lobbied successfully to prevent special licences being granted in Lupande GMA. In other areas, just as many animals can be killed on special licences as on safari licences. The use of the hunting quota in Lupande is very inefficient, but in other GMAs the situation is considerably worse.

(c) Safari hunting

There are two hunting concessions in Lupande GMA, Upper and Lower Lupande, and rights to hunt in them are sold to a concessionaire every five years. Every February, the concessionaire travels overseas, usually to the USA, to find clients. They come to Lupande in the dry season (June to October) for periods of from five to fifteen days. The shorter hunts usually comprise a buffalo and some plains-game (impala, warthog, zebra, etc.) while the longer hunts are more expensive because they include a lion or a leopard. The client pays two types of fees. Trophy licence fees and concession fees accrue to the communities. An outfitter fee compensates the outfitter for his camp, vehicles, guiding skills, etc. With good negotiating skills, a community should derive about 33% of the total fee paid by the client.

For the reasons explained above, and in marked contrast with other CBNRM programmes in the region, safari outfitters operating in Lupande GMA do little to develop their concession areas and have very weak relationships with the communities whose wildlife they are hunting. Safari operators have little interest in the local communities because their future depends on their relations with officials in Lusaka. Moreover, because of weak agreements, the communities bear the commercial risk, and are not protected where safari operators fail to perform. In 1996, the opportunity cost of the Lupande operators' failure to fully utilise their quota was about US\$50,000 (Table 7.3). The fact that the officials setting quotas are not accountable is also costly. In 1998, confusion related to the setting of the quotas (quotas were set after marketing was completed, and there were several different quotas)

cost the communities about US\$150,000 - a very substantial loss considering that wildlife income was about US\$200,000. The late ratification of quotas, for instance, meant some 25 buffalo were shot for meat because clients had not been booked, equivalent to throwing away \$50,000. While the operators must shoulder some blame, the over-centralised and unaccountable administrative environment is the underlying cause of this wastage. The views of local communities on safari hunting tourism are discussed in Appendix 5.

(d) District licence hunting

The allocation of quotas to district licences carries a heavier opportunity cost than shown in Table 7.4 because of the difficulties of controlling the use of such licences. People with

Table 7.4: Estimate of the opportunity costs of poor quota management in Lupande GMA: an example from 1996

Types of use	Potential income (calculated using current trophy fees)	Actual income	Opportunity cost
Safari Expeditions (hunted 88% of their quota by value)	\$148,510	\$132,425	\$16,085
Baobab Safaris (hunted 65% of their quota by value)	\$119,600	\$77,125	\$42,475
District licenses	\$21,183	\$1,155	\$20,028
Problem animals and special licences	\$26,979	Nil	\$26,979
Problem elephants (13 shot)	\$97,500	Nil	\$97,500
	\$413,772	\$210,705	\$203,067

district licences often shoot more than their allocation. In theory, district licences are justified as providing hunting for local residents which benefits the community. In practice, only relatively rich people, often from outside the area, get such licences. Consequently, few benefits flow to local people because the meat is usually sold in urban areas to make the hunting profitable⁷. When LIRD held community quota-setting workshops, communities requested that this quota be allocated to safari hunting which would yield 20 times more income as well as meat, which could be delivered to them since international hunters have little need of it.

(e) Problem animals

The failure to utilise problem animals (e.g. those destroying crops or killing humans) commercially is also a costly lost opportunity, though, in practice, this can be difficult to implement. The biggest wastage concerns problem elephants - an emotive and highly politicised subject. About ten elephants

⁷ The policy of issuing District licences was introduced by the colonial government which took the view that people had the right to cheap hunting. It has been a major cause of the decline of wildlife in some countries (e.g. Botswana), effectively creating an open-access resource. The policy is highly inequitable since it benefits relatively rich people (with guns and vehicles) at the expense of villagers. It also undermines the value of wildlife, making it exceedingly cheap, and does not benefit landholders. The twin problems of price and proprietorship have challenged successful conservation in southern Africa. The problem could be easily solved by ensuring that the price of the license exceeds the value of the carcass so as to remove the financial incentive for hunting.

are shot each year by SLAMU officers in response to complaints about crop raiding. The only benefit derived from them at present is the meat, which is made available to the community. Simply changing the person behind the rifle from a Wildlife Scout to a fee-paying client could earn an additional US\$100,000 annually in Lupande GMA. However, in response to international pressure, elephant hunting is still banned in Zambia. Indeed, communities are fully aware that although elephants cause them considerable problems, it provides them with negligible benefits, and they resent this situation.

(f) Elephant policy

Marginalised rural people bear the cost of international elephant policy, both through crop damage and lost income. So do the elephants, since communities see little incentive to conserve these destructive animals which have no commercial value. Current policy for managing elephants stands in direct contrast to the lessons of the successful management of wildlife over the past 30 years which has seen threatened wildlife make a comeback after being converted into a commercial resource.

In the project area, annual expenditure in law enforcement of some US \$500,000 has ensured that elephant populations, once under severe threat, are again increasing. Much of this increase is occurring in the Lupande GMA where the human population is also growing rapidly and where cultivation is spreading into marginal areas. Elephant numbers are expanding at the same time as their preferred habitats are declining. The clamour amongst the people to kill elephants is increasing and even becoming aggressive. The failure to resolve this conflict is poisoning relations between the wildlife officials and the communities and is having a negative impact on the CBNRM programme. In isolated cases, communities even support poachers simply to get meat and rid themselves of a menace, which they blame the project for failing to deal with. Measures such as monitoring problem animals, introducing electric fencing and generally giving people wildlife benefits are attempts to address this age-old conflict. However, there is little doubt that - emotions aside - the official hunting elephants would reduce the number of problem animals that are killed, and would significantly raise their standing in the community. This has worked before. For instance, by formalising elephant hunting and problem animal control, the CAMPFIRE programme in Zimbabwe reduced the number killed to only 25% of previous levels - by converting them into a valued and husbanded resource rather than a dangerous menace.

(g) Conclusions: the opportunity costs of poor quota management

By simply reallocating the quotas, the income from wildlife could be doubled (Table 7.4). This is only a rough representation of the opportunity costs of the present systems. With more intricate management, wildlife revenues could be even greater. Unfortunately, red tape and vested interests limit the project's ability to improve this situation. The introduction of more flexibility in the allocation of concession areas could also raise considerable income as discussed in the next section.

(h) The opportunity costs of unimaginative commercial strategies and the failure to respond to the high-value market for wildlife areas

Lupande GMA has some 250,000 hectares of unsettled and quality wildlife land. Because of weak commercial agreements with hunting operators, only 70,000 hectares is used for hunting, generating less than US \$250,000 annually, an amount that has not increased in ten years. Apart from the important input of law enforcement provided by LIRDPA, there has been no investment in increasing the commercial productivity of this land. Hunting camps are temporary, professional hunters do not extend themselves beyond guiding clients show no interest in community relations and wildlife management, and no commercial innovation is occurring. This contrasts markedly with private land throughout the region, and even with communal lands (Box 7.6). The financial return from Lupande GMA remains at US \$1/hectare when it could be increased ten-fold. The root cause of these lost opportunities is the failure to set an enabling framework that encourages investment and innovation in using these large and potentially valuable areas of wild land. This is related to the over-centralisation

and exclusion of local communities from the process of making their own commercial partnerships with investors.

Box 7.6 An illustration of the positive impact of devolving the rights to make commercial partnerships to communities.

Murphree (1999) describes Mahenye community in south-east Zimbabwe. They earned Z\$68,800 from hunting in 1991 but, with the introduction of community marketing, immediately increased this income to Z\$180,000 in 1992. The community then added a tourism joint venture which, by 1997, was earning an additional Z\$429,804. Over six years, therefore, this community increased its income ten-fold. There are a number of similar examples from CAMPFIRE of joint ventures with innovative operators adding considerable value. These include the hunting of problem elephants using clients, innovative uses of hunting, fishing safaris, horse and walking trails, and tourism joint ventures.

Botswana has made even more progress than Zimbabwe through its highly commercial and formalised policy for joint ventures (Govt. of Botswana, 1998). By being imaginative, Namibia is also beginning to make money from areas where this was considered extremely difficult. In both countries, policies have encouraged communities to tap the entrepreneurial spirit and imagination of the private sector, and community income and investment in the resource base have both increased rapidly. Zambia, with a much better quality resource, has not tapped this energy.

Richard Branson recently purchased a 2,000 ha game ranch in South Africa for some US \$6.7m. It was argued that he paid about 50% over the market price. The interest on Branson's investment is, conservatively, US \$170 per ha. Well managed, but inferior, wildlife land on game ranches in Zimbabwe nets US \$16-17 per ha (Johnson, pers. comm.).

In Lupande GMA, the yield is only US \$1.00 per ha, and even if we do the calculations only for the prime areas of the GMA (50-70,000 ha), the return is still only US \$4 per ha.

Some rough estimates indicate the potential of the GMA. Lower Lupande concession has some 35,000 ha of prime wildlife land along 50km of the Luangwa river. Judging from the new tourism fee arrangements in the park, this area alone could earn US \$600,000 each year or \$17/ha. At present, the other 100,000 ha of land in this concession is not being used, although it has moderate wildlife populations. If this area was developed through a long-term contract (say 25 years) with an investor who paid only US \$5 per ha (about one third of its actual potential), it would generate US \$500,000 annually. The income from Lower Lupande GMA would thus be increased from \$150,000 to \$1.1m per year, and the communities would be almost ten times better off as a consequence. The same situation applies in Upper Lupande GMA. These rough calculations show that, with improved commercial conditions, the now highly valuable wildlife land could be exploited to provide a ten-fold improvement in community wildlife income. Moreover, the employment and economic multipliers associated with this growth would double these gains. Such is the opportunity cost of the present centrally-controlled system that is unresponsive to both the communities and market opportunities.

Having discussed how money is earned, and quantified some of the inefficiencies illustrated in Figure 7.1, we turn now to assess how well this money is used (Figure 7.2). This is a more successful story, which, from the perspective of the project, has fewer external factors.

7.3.9 Spending wildlife revenues: Devolution using revenue distribution

This section describes the system for community-level distribution introduced in 1996. It then assesses the impact of this system and compares it with the top-down approach inherent in first

generation CBNRM programmes. We show that direct disbursement to grass-roots communities is a powerful tool for adding value to wildlife benefits and for creating proprietorship, and speculate as to why such an obviously successful approach is opposed by officials.

(a) The amount of money paid to communities

In the early phases of LIRD, the community was allocated 40% of wildlife revenues and the Local Leaders Sub Committee decided which projects to support. The problems with this approach are discussed in Section 7.2. Table 7.5 shows the proportion of the income generated from wildlife in Lupande GMA allocated to communities since 1992. It illustrates that, prior to 1997, wildlife was still heavily 'taxed' compared to other products of the land (e.g. cotton or cereals) from which people retained all the income for themselves. This taxation had two components. First, government (LIRD) extracted between 6% and 60% of the revenue from their wildlife. Second, prior to 1996, communities had no option but to use this money to build social infrastructure, which represents a local tax. As we have discussed, there were also considerable leakages and inefficiencies associated with this process.

Table 7.5: Summary of revenues accumulated from wildlife in Lupande GMA and allocated to the community, 1992 – 1996 (Zambian Kwacha, millions)

Source: Child 1997

	Income from GMA (ZK millions)			Amount returned to communities	Percent returned
	Hunting licences	Hippo culling	TOTAL		
1992	104		104	80	77%
1993	161		161	151	94%
1994	182		182	73	40%
1995	228	73	301	200	66%
1996	258	49	308	200	65%
1997	280		280	280	100%
1998	500		500	500	100%

Note: The percentage calculations given in the table reflect the amount of money allocated to the communities compared to the amount earned in Lupande GMA. However, until 1996, the community share was not calculated in this way but as a percentage (mostly 40%) of the total income from both the South Luangwa National Park and the GMA. Only from 1997, did the policy change so that communities received 100% of the wildlife revenue earned in the GMA, but none of the park revenues which, instead, were retained by SLAMU for use in park management. It should also be noted that no benefits were disbursed between 1993 and 1995. This money was retained by LIRD and helped overcome the cash flow problems in 1995. It was paid to communities in 1996.

The colonial and post-colonial state expropriated the wildlife resource from communities. The wildlife resource was, in effect, nationalised. The fact that, through LIRD, communities were able to get some money from their wildlife, albeit in a highly restricted format, was a very important step in correcting a highly inequitable and uneconomic system and de-nationalising the wildlife resource. Nonetheless, this new system was still highly inequitable and uneconomic, and still differentiated very strongly against wildlife. It also did little to change attitudes (see below).

It is important to question the idea that wildlife is a state asset. Especially amongst officials, there is still an over-riding sense that wildlife is a state asset, despite the negative consequences of this ideology. A useful way to illustrate these consequences is to contrast wildlife with one of the agricultural commodities with which it has to compete for resources, for instance cotton or livestock. If government allowed cotton or livestock producers to receive only 40 - 94% of the sale price of their

animals or crops, and then they could only access this money by applying for a school or clinic, they would be very unlikely to keep livestock or grow cotton and would switch to other crops. The difficult question is why there is often so much difficulty in applying this logic to wildlife?

(b) Revenue distribution meetings

The CBNRM literature advocates proprietorship. Revenue distribution has been a primary tool for engendering a sense of community proprietorship over their wildlife and natural resources. Fiscal devolution has been the vehicle for institutional devolution and community participation. This section describes the revenue distribution process in LIRD.

Each time a hunting client buys a licence, the money is deposited in a joint community-SLAMU account. In April of the following year, the entire amount is divided up and distributed according to the formulas shown in Figure 7.4. 80% of wildlife revenues are channelled to VAGs. Ideally, the revenue distribution process involves meetings over at least four days in each VAG:

- Committee planning: At general meetings well in advance of the formal AGM, communities indicate their preferences for their expenditure. VAG committees discuss these possible projects and draw up workplans and budgets that are clear and reasonable. They are supported and trained by SLAMU, and are increasingly expected to run the annual general meeting (AGM) at which these proposals are presented and discussed.
- Community training: The first day of the formal AGM, attended by all members of the community, is used by SLAMU to provide training and education on a wide range of topics from wildlife management to institutional development and procedures.
- Committee reporting and community decision-making: The second day is a formal AGM again attended by the whole community. It is obligatory that reports on the previous year's activities are presented including: Chairman's report, financial expenditure, wildlife management report, and a report from the ADC if it has used some VAG funds. The SLAMU CBNRM Section also presents an audit report. Following this, the committee is dissolved and elections held. The membership is confirmed by a public reading of the list. Potential projects are then presented, and the community formally allocates its money to member's dividends, projects, administration and wildlife management.
- Individual benefits received: A few days later, all members gather to be paid their cash dividend (if they decide to use some of their revenues in this way).

Prior to revenue distribution, the CBNRM Section of SLAMU meets to discuss and draw up a series of flip-chart presentations and role-plays relating to the important issues. This provides the material for the training workshop in each VAG where the whole community attends. The usual topics are related to institutional and wildlife management issues such as policy, the constitution, safari hunting and income, problem animals and wildlife management.

Community Liaison Assistants (CLAs) run the meetings in teams of no less than two, with support from senior staff, who are on hand to deal with difficult issues. This was especially important in the first years of implementing the new CBNRM policy, and when there were conflicts with the chiefs. Latterly, the CLAs have undertaken most activities related to revenue distribution very competently with limited supervision, an indicator of sustainability. In further pursuit of sustainability, the VAG committee is urged to assume more responsibility for preparing and running the AGM each year.

(c) The results of revenue distribution

The results of revenue distribution are summarised in Table 7.6 and illustrated in Figure 7.5. In the

Table 7.6 Summary of the allocation of VAG revenues in each ADC: 1996 - 1999

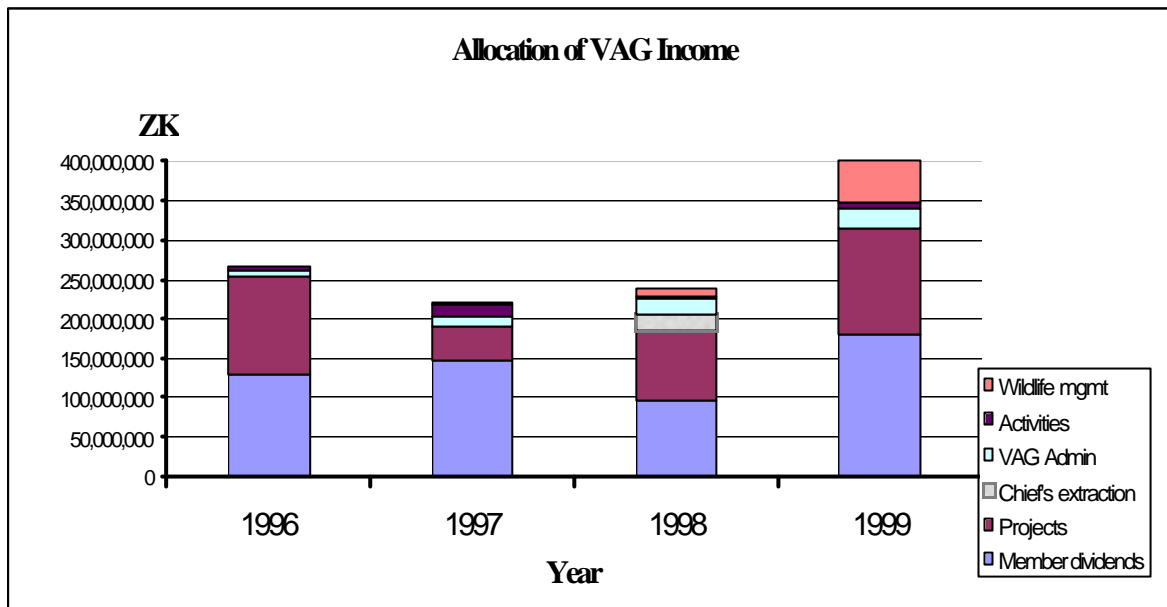
Summary of use of VAG Revenues (1996 to 1999)								
	TOTAL	(%)	Msoro	Nsefu	Jumbe	Mnkhanya	Kakumbi	Malama
1996								
Total Income	266,589,500		45,700,000	45,889,500	49,000,000	45,900,000	35,100,000	45,000,000
Member's dividends	129,040,000	48%	20,861,000	13,888,000	21,981,000	24,762,500	29,347,500	18,200,000
VAG Administration	9,069,358	3%	2,042,000	483,000	1,843,870	3,878,488	822,000	
Activities	3,973,000	1%		3,486,000			487,000	
Projects	124,535,800	47%	22,796,000	28,032,500	25,201,800	17,262,000	4,443,500	26,800,000
Wildlife management								
Total Income	266,618,158		45,699,000	45,889,500	49,026,670	45,902,988	35,100,000	45,000,000
1997								
Total Income	223,999,998		37,333,333	37,333,333	37,333,333	37,333,333	37,333,333	37,333,333
Member's dividends	146,589,900	67%	19,073,000	31,597,000	28,502,400	25,428,500	25,729,000	16,260,000
VAG Administration	13,855,913	6%	5,041,830	1,478,748	2,631,368	3,098,434	705,200	900,333
Activities	13,356,091	6%	205,000	121,752			7,255,339	5,774,000
Projects	43,400,047	20%	8,308,500	4,000,500	5,402,903	8,145,148	3,542,996	14,000,000
Wildlife management	3,082,516	1%	1,000,000	135,000	796,665	661,250	100,601	389,000
Total Income	220,284,467		33,628,330	37,333,000	37,333,336	37,333,332	37,333,136	37,323,333
1998								
Total Income	237,507,830		39,728,837	38,666,667	39,571,323	40,883,336	39,991,000	38,666,667
Member's dividends	96,599,000	41%	12,492,500	11,354,500	19,421,500	11,601,000	23,554,500	18,175,000
Chief's extraction	22,498,500	9%	2,448,500	6,950,000	6,000,000		5,000,000	2,100,000
VAG Administration	19,440,816	8%	3,865,994	1,512,167	3,236,155	4,090,000	4,936,500	1,800,000
Activities	1,250,000	1%	600,000	25,000	625,000			
Projects	87,305,519	37%	16,455,183	18,825,000	7,741,333	24,192,336	5,000,000	15,091,667
Wildlife management	10,413,995	4%	3,866,660	-	2,547,335	1,000,000	1,500,000	1,500,000
Total Income	237,507,830		39,728,837	38,666,667	39,571,323	40,883,336	39,991,000	38,666,667
1999								
Total Income	399,999,996		66,666,666	66,666,666	66,666,666	66,666,666	66,666,666	66,666,666
Member's dividends	180,848,819	45%	26,050,000	31,694,003	27,933,816	24,705,000	38,736,000	31,730,000
VAG Administration	25,658,360	6%	6,249,999	3,641,701	6,666,660	4,500,000	2,500,000	2,100,000
Activities	7,908,602	2%	1,565,333	4,138,269	504,000	500,000	700,000	501,000
Projects	132,782,021	33%	24,505,671	23,192,666	24,769,086	28,353,332	1,725,600	30,235,666
Wildlife management	53,243,707	13%	8,330,329	4,000,000	6,785,180	8,598,333	23,429,865	2,100,000
Total Income	400,441,509		66,701,332	66,666,639	66,658,742	66,656,665	67,091,465	66,666,666
Overall summary of the allocation of VAG revenues (1996 to 1999)								
	1996	1997	1998	1999				
Total Income	266,589,500	223,999,998	237,507,830	399,999,996				
Member's dividends	129,040,000	146,589,900	96,599,000	180,848,819				
Projects	124,535,800	43,400,047	87,305,519	132,782,021				
Chief's extraction			22,498,500					
VAG Administration	9,069,358	13,855,913	19,440,816	25,658,360				
Activities	3,973,000	13,356,091	1,250,000	7,908,602				
Wildlife management	-	3,082,516	10,413,995	53,243,707				
Total Income	266,618,158	220,284,467	237,507,830	399,999,996				

first year, 1996, the process was undertaken by the project. Each household was given its entire share in cash and, to symbolically illustrate that they owned the projects, members then immediately paid back the requisite amount to fund the projects that they had jointly agreed. Some 48% was retained by community households as cash (*tyolela*⁸), with 47% being allocated to projects.

By 1997, it was evident that people recognised that wildlife conservation was beneficial to them, and there was some evidence, largely anecdotal, to show a decrease in poaching. LIRD P then hit its first major hurdle. As discussed in Chapter 5 (section 5.4), a major conflict arose when the chiefs

⁸ Locally, the process is referred to as '*tyolela*', this signifying the folding of notes and placing them in a person's pocket.

Figure 7.5 Summary of the allocation of wildlife revenues (the 80%) by Village Action Groups, 1996 – 1999



requested an additional 9% of the revenue. All meetings in communities were stopped and revenue distribution was delayed by several months. The chiefs rejected a ruling of the inter-ministerial Policy Committee, and the senior politicians and officials in the province were asked to arbitrate. LIRD management was not strongly supported and an agreement was signed whereby each chief would receive an additional K1.5m annually.

The conflicts, delays, and the apparent weakness of LIRD in defending the CBNRM Policy, had a serious impact on the community. Having little faith in their traditional leaders, they took 67% of the revenues as cash dividends and invested only 20% in projects. Despite the agreement reached with the chiefs, two of them extracted an additional ZK15m from the communities to repair their vehicles – the same vehicles that had been handed to them in 1996 by LIRD. LIRD had paid each of the chiefs ZK3m to rehabilitate their vehicles⁹. To the project’s staff, it seemed that the more the chiefs were helped, the more they demanded, and the more the project was castigated by them.

Problems continued in 1998. As a consequence of the previous year's difficulties, many VAGs did not hold their quarterly meetings and little preliminary planning was done. Furthermore, some chiefs disallowed elections, so the people lost even more faith in their new institutions. Several of the chiefs blatantly disregarded the agreement on the revenue allocations brokered by the Minister and, altogether, they extracted ZK29m from communities¹⁰. This money was taken without the knowledge of the community, or against their will. In several cases, this money was appropriated after budgets and work plans had been completed, with the effect that projects were seriously disrupted. In Mnkanya chieftom, where the chief took no money, his last-minute imposition of an expensive

⁹ A large proportion of ADC revenues was used to fund these vehicles. These vehicles were officially the property of the ADCs but, in practice, were used as the chief's personal property except that the communities were required to pay for the running costs. This open-ended commitment was removed by transferring ownership to the chiefs. LIRD encouraged the chiefs to take them over privately, and to expedite this process provided each chief with an additional ZK3m from project funds to rehabilitate them.

¹⁰ K22.5m was taken by the chiefs from the wildlife revenues. Chief Kakumbi extracted a further K6.5m from the Kakumbi Natural Resource Committee where fees accrued from the sale of wood, grass and sand.

clinic electrification project was nonetheless disruptive and disempowered the community. It also meant that VAGs had little cash remaining for their own projects and, with little work to do, they vegetated. Later, the VAGs came to accept the project when the benefits to all community members was realised, but on the tacit understanding that similar problems would not occur in the future.

Nonetheless, progress was made in 1998. Overall, the communities in Lupande GMA allocated 37% to projects (this would have been 46% if the amount taken by the chiefs is included). Some ZK10m (4%) was allocated to wildlife management, marking the beginning of active participation in conservation.

Not surprisingly, after three years of such conflicts, LIRD staff were becoming despondent. But, to their credit, they tenaciously adhered to the CBNRM policy and principles, even when these were regularly undermined or almost impossible to enforce. The project's determination to keep the finances transparent was also a critical factor. Where money was misused, the exact amount was made public, even where there were no channels to correct the problem. This transparency was a new factor. Prior to 1996, use and misuse of money was neither quantified nor publicised, and records of expenditure are impossible to obtain. The political winds were also shifting against the chiefs and, even amongst them, an enlightened faction was gaining influence. An article describing the chiefs' extraction of ZK29m appeared in the project's newsletter and was picked up by the national press. A complaint by the chiefs meant that this newsletter now has to be edited by the Permanent Secretary, but the impact on the CBNRM programme was very positive.

The new Senior Chief Nsefu emerged from months of sickness to wrest control away from a negative faction (sadly he passed away on 1st November 1999). He wrote a letter to NORAD apologising for some of the problems, thanking them for the development they had provided, and noting that the chiefs no longer wanted to withdraw from the project. He even begun quiet negotiations for the recovery of some of the amounts he personally had extracted in 1998.

As a consequence, the 1999 revenue distribution went well. The most serious problem was the imposition of projects by the chiefs. However, the community has begun to exert some of the authority vested in them by the new policy and have fought some of this imposition. In some cases they have won, in others they have lost, and compromises have also been reached. For example, the late Senior Chief Nsefu demanded ZK25m to build a primary school, but the community reduced this to ZK18m, supporting their position with a detailed budget. Some of the frills, such as solar power, were completely rejected. The late imposition of a clinic electrification scheme by Chief Mnkhanza has been mentioned above. In two cases, the community bowed to the chief only after strong arguments and even threats. The tension between the more enlightened chiefs and their communities is, in some cases, creative. The chiefs certainly think much more seriously about imposing projects because of the potential opposition from their communities. For instance, Chief Mnkhanza has ruled that he will not interfere with the 2000 revenue distribution, and that he would favour VAG-level expenditure after three years of heavy centralised capital projects (the clinic). The communities are also more careful about the way they use money because failure to undertake at least some projects will arouse the interest of their chiefs. With training and co-operation, this tension could provide a useful checking-and-balancing mechanism, provided that transparency is maintained.

7.3.10 The impact of revenue distribution

The revenue distribution process is at the heart of the democratisation and empowerment of LIRD's community programme which has often been criticised for "handing out revenues for nothing". It is therefore critical to assess the effects of this policy, especially as this is the only programme in Zambia where people benefit individually from wildlife. Data from surveys by Nasson Tembo's in 1999 (Box 7.7) show that the area is poor and traditional.

Box 7.7 Socio-economic status of communities in Lupande GMA

Data from 185 individual questionnaires were collected in 1999 by the Warden, Nasson Tembo, as part of his M.Sc. dissertation (in preparation) at the University of Aberystwyth. The survey covered all six chiefdoms, three of which have a high human populations and therefore relatively low individual benefit. Wainwright and Wehrmeyer (1998) do not describe their sampling frame for the earlier surveys. Tembo's results from the three populated areas around Mfuwe, where per capita benefits were higher, show that 74.1% of respondents judged wildlife to be of value (i.e., minor + important) to their household economy.

- Only 6.3% of people have received secondary education.
- Traditional leadership is very strong.
- Annual household income (cash and kind):
 - Less than \$40 = 39.9%
 - \$40-80 = 22.7%
 - \$80-160 = 12.7%
 - more than \$160 = 24.7%.

Surveys conducted in 1990 showed that some 82% of local people opposed safari hunting (Balakrishnan and Ndlovu 1992). Similar surveys in 1999 show that by far the majority of the population now supports wildlife (Phiri, in prep; see Appendix 5). Tembo (in prep) indicated that 97.8% of respondents considered it important to conserve wildlife, presumably because it is valuable to them (93.4%). This represents a major shift in attitudes towards wildlife and is presumably a reflection of the fact that the new policy made wildlife more valuable to people. A comparison (Table 7.7) shows that 63% of respondents in 1999 considered wildlife to be beneficial compared to only

“Do you think that your living standard has been improved because of LIRD activities?”		“What is the importance of wildlife cash in your household economy?”	
Wainwright and Wehrmeyer, 1998 Survey done in 1996, n=200		Tembo (in prep) Survey done in 1999, n=185	
Not at all	38.8%		
Not very much	19.0%	37.2%	Not important
Neutral	15.0%		
Somewhat	16.0%	37.8%	Minor
Very much	12.0%	25.0%	Important

28% in 1996, and this probably under-estimates the shift. This change coincides with the introduction of a bottom-up CBNRM approach after 1996, and the fact that people now benefit directly from wildlife and are fully involved in the decision-making process. In 1999, some 19,859 registered community members (households or individuals) received a wildlife cash dividend (*tyolela*), and most sat in several community meetings to discuss how to allocate this money.

Surveys during the early stages of the new policy showed that people most valued the employment opportunities linked to wildlife (Butler 1996) (see chapter 5). However, Tembo's 1999 survey revealed that the primary value of wildlife to people is now revenue (49.6%). The second most important reason is now the creation of job opportunities (17.2%), but way behind cash in importance. Community projects, while highly favoured by officials, were scored only third by communities

(12.1%). This supports the hypothesis presented in the introduction to this chapter that personal benefits and choice are valued more highly than community benefits. It also supports LIRDPA's devolved approach, since the programme's main objective is wildlife conservation. The equity of the revenue system is illustrated by the fact that 99.5% of respondents received revenue as a community, and 97.3% as individuals (19,859 individuals received cash in 1999). Research in Binga District in Zimbabwe has shown that revenue distribution promotes egalitarianism by not marginalising disadvantaged groups like women and the really poor (Mickel, pers.comm.).

For Mambwe District as a whole, the average income per member¹¹ in 1999 was US\$8, with individuals averaging less than US\$ 4 in cash. Nevertheless, this was considered to be important by 25% of respondents and minor by 37.8%. However, in the poorer and more remote areas where agricultural production was lowest (Nsefu, Malama), the relative impact was higher. The average member got \$14 and \$78 respectively and 30% and 60% considered this to be important to household income.

It was also apparent that whilst the programme was initiating democracy, a number of problems remained. Over half of respondents (54.3%) felt that they had made their own decisions in public meetings, while others felt decisions were imposed by the VAG Committee (15.4%), ADC (13%) and chief (17.3%). There was much differentiation between areas, with Malama (86.7%), Jumbe (82.8%), Nsefu (62.5%) and Msoro (53.3%) being considered to have become more democratic, and Mnkhanaya (7.7%) and Kakumbi (21.7%) perceived as remaining autocratic¹². A second set of questions supported these conclusions, and illustrated that the level of participation was high. 41.5% of respondents felt that they were involved and their decisions were respected, 25% were involved but often over-ridden, and 33% had not been involved, presumably because they had chosen not to.

The data also confirmed that VAGs were more democratic than ADCs. 91% of respondents considered that VAGs were elected, compared to 3% (all in one chief's area) who thought VAG members were appointed by the chiefs. In contrast, 36% felt that ADCs were elected, 32% that they were appointed by the chief, and the rest did not know. In no cases did any respondents consider that any committees were appointed by SLAMU.

There is a close relationship between transparency and democracy on the one hand, and financial accountability on the other. VAGs are also far better at accounting for their revenues than ADCs and, in 1999, only ZK3.35m out of ZK400m allocated to VAGs was not fully accounted for (0.8%). This testifies to the efficacy, transparency and accountability of obligatory face-to-face accountability and the new institutional structures. By contrast, one ADC and two chiefs had misappropriated ten times as much (ZK44.5m) (Table 6.7). The fact that audited accounts were available for all 42 VAGs is a remarkable achievement in itself.

While the data are not yet available, project staff confirm that the same differential is reflected in project management, where VAGs are generally much more effective and accountable than ADCs. Compared to the pre-1996 period, the whole system is more productive in terms of projects. Tembo found it difficult to identify projects implemented before 1996 (Chapter 6) but in the four years after the new policy was initiated, communities have initiated 156 projects (Table 6.8). This is revealing, and counteracts official criticism that allowing people cash is wasteful. Although less money has been spent, far more projects have been undertaken. There are several reasons for this. People implementing projects are accountable. Communities provide free service (e.g. bricks, sand, labour) more willingly for projects they own and understand. And participation and proprietorship are crucial.

¹¹ When the programme started, membership was defined according to households. The communities then gradually modified their constitutions to define membership as adults, so membership today refers to adults. There are probably two to three members per household, and household income can be calculated accordingly.

¹² It is difficult to ascertain whether this means that (a) people were unsatisfied with the level of democracy, (b) things had indeed become less democratic or (c) people had become aware of democracy, or the lack of it.

The information from Tembo's surveys provides a powerful validation of the decision to fully devolve revenues and the institutional systems developed to support this process. When viewed as a wildlife conservation project, attitudes towards LIRDPA have shifted from almost wholly negative to almost wholly positive. Democratisation is certainly occurring. The employment of 76 community-based scouts demonstrates a progression from passive to active wildlife management. This contrasts markedly with the conclusions drawn in the study of Wainwright and Wehrmeyer (1996) just before the first revenue distribution occurred which suggested that LIRDPA had "generally failed to achieve its conservation and development objectives" and the programme had "achieved few community benefits"¹³.

Communities are also evolving their own institutional mechanisms. For instance, in order to deal with the allocation of income, since 1988 communities in Msoro chiefdom have used their own formula for the use of the 80% share:

- 40 % of this money is allocated to community projects;
- 10% is earmarked for wildlife management (e.g. hiring Community-Based Scouts and constructing dams);
- 40% as tyolela (member's cash dividend);
- 10% for VAG administration

Chief Jumbe and the Jumbe ADC have suggested an identical system be introduced in Jumbe chiefdom for the use of VAG funds.

A summary of the allocation of the 80% VAG revenue is provided in Figure 7.6. This suggests that, given sound information, communities tend to act wisely, though this is not always the case in the excitement of revenue distribution. An important trend is the increase in the allocation for wildlife management to 15% in 1999 as people realised that wildlife is an important asset. The fact that communities allocate wildlife revenues as cash dividends, even when the amount each member receives is negligible, is often used against them. It may be true that a mere ZK5-10,000 (US\$2-4) appears trivial, but surely this is a choice that only communities themselves can make. The evidence suggests that they are generally sensible. There was criticism in 1997 - a year when there was intense conflict and uncertainty related to the chiefs - when communities took 76% of revenues as cash. In the following year, communities were persuaded to act more responsibly, but their earlier choices were vindicated when the chiefs subsequently extracted 9% of revenues, almost one quarter of the money set aside for projects. The 1999 figures represent a maturing of the project, and reflect the lower level of conflict. 45% of revenues were used for cash and the remainder for projects, wildlife management and administration.

7.3.11 Active community management of wildlife and natural resources

The most positive impact of the programme in terms of wildlife management has been a massive shift in community attitudes in support of wildlife. For the long-term survival of wildlife, this support is essential. There are even indications that such "passive management" has reduced the social acceptability of poaching, and poaching itself. Surveys by SLAMU staff, based on judging the supply of meat in the villages and sightings of more animals, indicate that there is a general reduction in

¹³ The use of questionnaire surveys that are not backed up by other data (e.g. group methods) must be viewed with extreme caution. Gordon (1993), in a survey over six months in Mahenye in Zimbabwe showed that responses changed over time as his relationships with these people deepened. This, surely, must seriously question the accuracy of questionnaires though, for the purpose of a Masters degree study, the precision allowed by such data, albeit faulty, is almost impossible to resist. Further, the use of enumerators is fraught with difficulties, and in the case of the Wainwright study when one was caught filling in questionnaires (not to the knowledge of the researcher) his response was that he, in any case knew, what the community would answer!

poaching. However, there are also areas where poaching is still happening, and even isolated areas where it has become worse. Social pressures alone will not stop poaching, especially if (as is claimed) the majority is by outsiders. The withdrawal of SLAMU's scout force from anti-poaching patrols even in the GMA would have negative consequences.

The good news is that communities are beginning to initiate "active management" (Box 7.8). They have employed and paid for over 70 of their own community-based scouts, and the amount of money allocated to wildlife management has increased to over 13% of VAG budgets (Table 6.9). The present

Box 7.8 A chronology and summary of the uptake of active measures of wildlife management by communities

Community tourism (chapter 5, chapter 6)

- 1997 – Kawaza village experimented with cultural tourism
- 1998 – Kawaza village built a cultural village within a real village and received guests
- 1998 – Nsendamila day-visit cultural village built, but by 1999 was still not operating well.

Community based scouts

- 1998 – Msoro ADC recruited 17 community-based scouts
- 1999 – 12 community-based scouts trained at Nyamaluma
- 1999 – 76 community-based scouts in place. Only those in Msoro chiefdom effective, with teething problems elsewhere
- 2000 – Workplans, budgets and targets for community-based scouts developed. Co-ordination and acceptance of CBS by regular wildlife officers improves.
CBS divided into patrols naming each one after an animal (i.e. elephant, lion), and went out on patrol on alternate weeks. This system appeared to work well, and even continued while regular scouts stopped working due to confusion over the ZAWA transformation (see Appendix 1).

Monitoring of safari hunting

- 1997 – Workshop to train communities to set quotas (see below)
- 1999 – Each ADC provided a scout (trained at Nyamaluma Institute) to assist the regular scouts to monitor safari hunting, and to report back to the communities so they could see how their business was progressing. This initiative was not recognised by NPWS (chapter 6) and community scouts had to be withdrawn.

Investment in wildlife areas

- 1998 – 3 dams constructed in Msoro wilderness area for wildlife (chapter 6)
- 1998 – Wildlife area demarcated in Msoro chiefdom by the chief
- 1999 – A further dam constructed in Msoro chiefdom, and road built to dam site in Mnkhanya chiefdom – dam construction plans developed by the line ministry. Jumbe ADC developed plans for a dam.

Electric fencing and problem animals

- 1999 – Electric fence constructed in Malama chiefdom after two years of debate.
- 1999 – Malama ADC started monitoring problem animals
- 2000 – Fence minders trained by WWF in Harare

Controlling and charging for natural resources

- 1998 – Kakumbi ADC constitutes a natural resource committee. Fees charged for all resources, and rules on use set. Problems with transparency of finances.
- 1998 – Nsefu Fishing Association formed. Some progress is controlling fishing, but some problems in collecting fees and managing monitoring.
- 1999 – Discussions with Mambwe District Council on making by-laws to extend this to all areas.
- 1999 – Permanent Secretary, Ministry of Natural Resources, visits area, is impressed by the CBNRM programme and natural resource charges although they are technically illegal, and in 2000 places a forestry officer to work along-side SLAMU.

challenge is to make community-based scouts effective by defining their roles, their relationships with ZAWA, training them, and developing systems and procedures for the community to manage them effectively. By 2000, community initiatives for law enforcement were being improved through work plans, budgets and targets, and through operational agreements with SLAMU. Because community-based scouts cannot legally carry arms, and arms are necessary for some aspects of law-enforcement, the present solution is to manage joint patrols in the GMA comprising three armed regular scouts, three community scouts and three carriers. The new ZAWA act has provisions for legalising 'Village Scouts'. If this system is established successfully, it will be a first – no other rural communities effectively police and protect their own wildlife. ADMADE has moved further in this direction than SLAMU, though its Village Scouts are still tightly linked to NPWS and are officially government employees supervised by a wildlife officer.

In order to control unsustainable harvesting of the area's natural resources, Kakumbi ADC has set up a system of fees for grass, sand, firewood, timber and other natural resources (described in detail in section 5.9.3). Conceptually, the pricing of natural resources is an important breakthrough in reducing resource depletion that results from open-access. Kakumbi Natural Resources Management Business (KNRMB) started successfully, with a constitution that lays out how revenues are to be split between resource management costs and community dividends. To date it has raised some US \$5,000 for this purpose. Unfortunately, the ADC has failed to follow its constitution, communities are not benefiting as was agreed, and the good will on which it was based (because it has no real legal basis) is dissipating. Learning from this, SLAMU aims to negotiate guidelines to be administered jointly by SLAMU and Mambwe District Council. The underlying philosophy will be very much the same as the KNRMB constitution, but the agreements will be transparent and enforceable. Interestingly, the Forestry Department is initiating some progressive legislation to empower community-based management of forest products and has visited SLAMU to learn from the project's guidelines and experiences. However, this legislation currently insists that all revenues are first centralised in Lusaka before being disbursed.

Another attempt to organise the use of natural resources was the Nsefu Fishing Association. This was established to register and control the fishermen who use the Luangwa River, mainly to protect this lifestyle by preventing some of the negative but easily avoidable practices associated with it (see section 5.9.2 for details).

In terms of potential economic growth, the restocking of the large, wildlife-depleted areas in the GMAs is important. Good law enforcement will help this. So will the introduction of water supplies (e.g. small dams), as some communities have begun to do. But the technical expertise, financial capital and entrepreneurial capability needed to convert these into highly productive wildlife areas can, realistically, only come from private enterprise. Partnerships therefore need to be established between communities and the private sector. These should have a broad set of objectives: conserving wildlife and simultaneously providing financial benefits to local communities – through employment and by providing the opportunities for individual growth. With all these objectives, trade-offs will need to be carefully made.

There are questions as to whether community organisations are appropriate for implementing the technical aspects of wildlife management. They are certainly good at managing community affairs and projects. However, they are less good at entrepreneurial ventures. The few attempts to buy and sell grain and to run shops have all failed. This suggests that the role of communities as wildlife managers might need to be reviewed. There is no question that they should control their wildlife business, but it may be time to consider the outsourcing (probably by links to commercial joint ventures) the technical aspects of this management such as law-enforcement, habitat management to increase wildlife populations, marketing, commercial development, etc.

There is increasing conflict between the expanding elephant populations and people in the Lupande GMA. This causes loud complaints and is a source of tension between the project and the community. SLAMU shoots about 10 problem elephant a year in response to these complaints - often in the fields

they are raiding -- but this does little to solve the problem and animals often return the next night. The project is consistently berated for not shooting more elephants. The elephant problem will never be 'solved' while people and elephants live together. At best it can be ameliorated. A range of complementary measures is needed including:

- The use of community monitors to collect information for analysis and feedback to better define the issue (initiated in Malama chiefdom);
- The payment of compensation for elephant damage is fraught with difficulties, but may work at a local level;
- Ensuring that wildlife, especially elephants, benefits communities. LIRDOP was encouraged to submit proposals to hunt elephants (or at least problem animals), and while these proposals were apparently accepted at all technical levels, they were rebuffed politically - another case of the lack of accountability to rural people;
- Careful zoning of land;
- Physical barriers such as electric fencing to protect major assets like fruit trees, fields, and huts (e.g. Malama chiefdom);
- One measure communities take is to encourage new settlement as a buffer between themselves and the elephants, but this has negative consequences for the wildlife resource.

The support of the community programme from NPWS (its parent department) has been inconsistent. The then Director (Achim Mwenya) enthusiastically supported the first revenue distribution in Malama chiefdom. However, attempts to use community scouts to monitor safari hunting were rebuffed. Support for a community quota-setting process in 1997 was also disappointing. Communities were brought together to analyse the information on wildlife populations and safari hunting¹⁴. They converted data into graphs, discussed the implications, and then modified hunting quotas accordingly. The results were sent to NPWS (now ZAWA) in the form of a booklet which included recommendations important changes such as (a) the reallocation of high-value trophy animals from the low-value district licences to the more beneficial safari hunting licences, and (b) the formation of a new hunting area to force the operator to use a greater portion of the wildlife area. To date, this effort has yielded few positive responses with the result that the community is losing revenue and becoming disenchanted with the central wildlife authority (see Section 7.3.8).

7.4 Lessons for managing and implementing CBNRM programmes

7.4.1 CBNRM and the emerging paradigm of sustainable use

Child and Bergstrom (in prep) suggest that the process of making use more sustainable has three components:

- (1) Establishing proprietorship and property rights
- (2) 'Getting prices right', by correcting policy and market failures, and
- (3) Management of the resource, and the processes of getting (1) and (2) into place.

The literature has focused heavily on property rights. The introduction to this chapter provides a framework for analysing the community programme in general, and the revenue distribution process in particular, mainly in terms of its impact on 'price', although it also has considerable proprietary implications. The forgotten element is management - the 'M' in CBNRM. In the introduction, we hypothesised that there is now the conceptual understanding to put a community wildlife programme into place with a high degree of confidence and we believe that this is validated by the description of the LIRDOP programme presented above. This leads us to suggest that the factor limiting the advance of successful CBNRM is now management. This section therefore looks at how LIRDOP's CBNRM programme was managed.

¹⁴ Training and materials were provided by WWF Regional Office.

But first, it is important to highlight a serious concern. The macro-conceptual basis of CBNRM is now well understood, suggesting that further progress will now happen through on-the-ground innovation rather than in the academic laboratory. Indeed, our conceptual knowledge is now moving well ahead of practice¹⁵, and in most southern African countries the enabling institutional framework is also in place (Rihoy *et al.*, 1999). The central ingredient of progress will now be management and leadership, primarily through skilled and motivated individuals working at the field-level. Peters and Waterman (1982) believe that a truly adaptive organisation evolves in a very Darwinian way. They argue both theoretically and empirically that “most of the big new business breakthroughs have come from small bands of zealots operating outside the mainstream” and that the “mutation itself, even the big one, occurs pretty far down the line and invariably under the tutelage of outside-the-system zealots”.

The way the small pool of talent working in the field in community wildlife management is currently used is predisposing the CBNRM movement not to create the favourable ‘mutations’ that are obviously required. As this small pool of individuals is increasingly being attracted by city-based and international jobs (e.g. to head NGOs) there are fewer remaining in the field along with a few zealots. This loss at the cutting edge is the sign of a dying ‘industry’. At one recent CBNRM workshop attended by skilled practitioners, 18% were from international organisations, 73% worked in capital cities, and only 9% were field-level managers. Yet these field-level managers will be the leaders of the future and the source of Darwinian evolution (Figure 7.6). There is a market failure: incentive structures are placing people in lower value-adding positions. From these trends we can predict little progress in CBNRM in the next decade, or until the incentives that centralise talent are changed to encourage small groups to work together in the field.

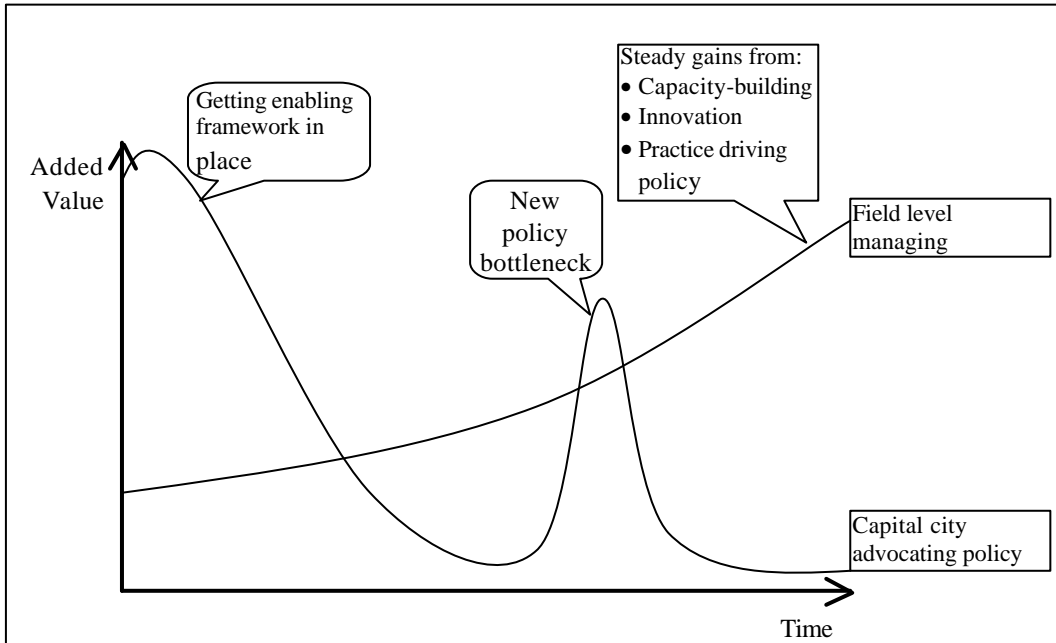
7.4.2 Progress implementing the CBNRM programme

The implementation strategy for the CBNRM programme is summarised in Figure 7.7. It describes the programme in a linear fashion though, in practice, it is both more complex and iterative. Step 1 has been achieved administratively through project policy as entrenched in the NORAD-GRZ agreement. The ZAWA Act may entrench this legislatively depending on how it is interpreted and what subsidiary legislation or procedures are agreed. Steps 2, 3, and 4 are well in progress and, as illustrated in Box 7.8, there is progress with step 5 (active wildlife management). The rapid rate of progress must, in part, be attributed to the development of a supporting institution (the CBNRM Section) within LIRD (step 6).

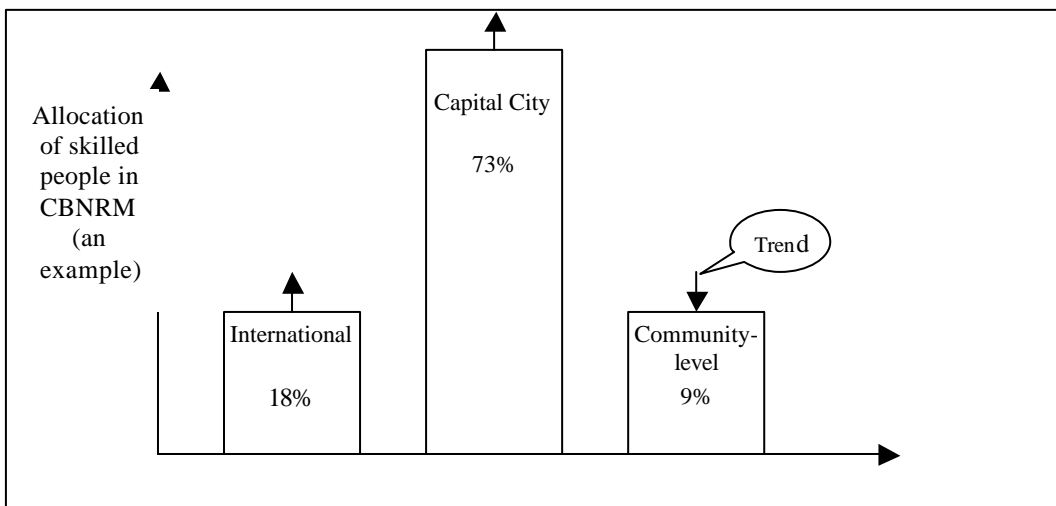
While implementation of the new CBNRM policy has not been smooth, it is taking root. With fewer conflicts, institutional progress could have been twice as fast, with twice as many projects implemented. This lose-lose situation (what Murphree (2000) might term a ‘socially-constructed stalemate’) is unfortunate in an area where people are starving, or dying from lack of simple and cheap drugs. The project is paying for past mistakes which empowered traditional leaders without expecting or ensuring either accountability or responsibility (though it must be said that some especially selfish personalities have contributed to this situation). Until 1999, a classic lose-lose relationship existed between the chiefs and the project. The chiefs were losing power, respect and were probably suffering financially. They reacted by undermining institutional progress and community projects. The late Senior Chief Nsefu, gradually took control and asserted his power (at the expense of Chief Kakumbi who has been described by many people as ‘selfish’ and ‘only wanting money’), with a positive impact on the programme. Paradoxically, enlightened chieftainship can accelerate the gains of a devolved and democratic process. By defining their roles, chiefs could play a powerful and productive role and gain real respect from their people. This bears similarities to the

¹⁵ It is vital to link academic research to actual progress on the ground, otherwise there is no way of knowing whether the direction of such research is diverging from reality – just as did much of the 1960’s research on game-ranching (Child, 1988).

Figure 7.6 Are we putting our CBNRM skills in the right place?

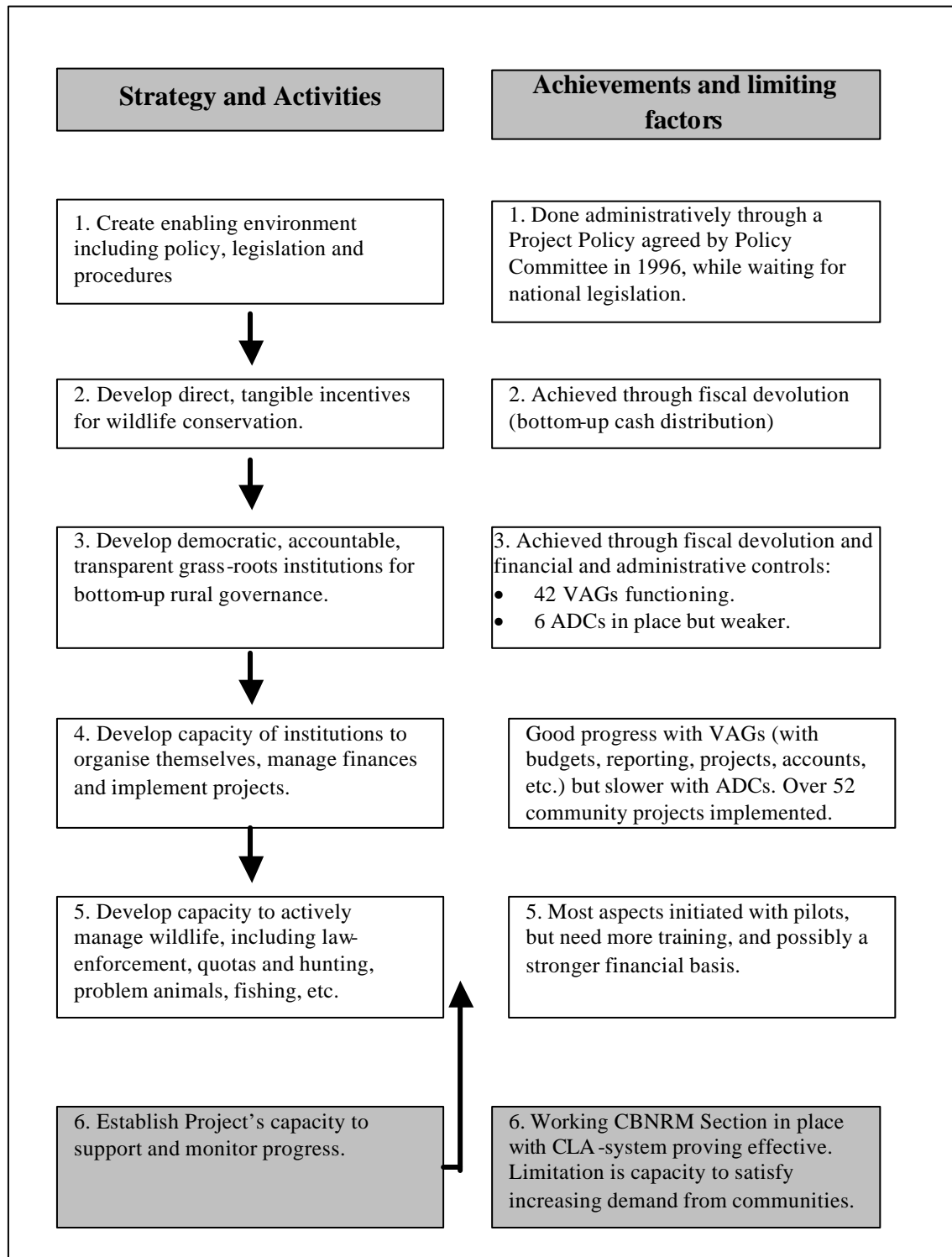


A comparison of the relative added-value of a highly competent individual on the process of implementing CBNRM if place (a) at the policy level in a capital city and (b) working with communities: an hypothesis



The bars indicate the allocation of skilled CBNRM personnel. If the hypothesis in the upper figure is correct, there is a serious mis-match between the allocation of skills, and where these skills would add most value.

Figure 7.7: Summary of strategy and progress in implementing the CBNRM programme



importance of boundaries in raising children as responsible and productive adults, and clarity of roles in job descriptions.

A comparison of two areas illustrates the impact of personalities in a traditional system. Chief Msoro, while strong and traditional, is well educated. He encouraged the new programme when it was rejected by the other chiefs, partly to shore up his popularity in a leadership wrangle. In contrast to all other chiefs, he refused chairmanship of the ADC. He also adopted a strategy of persuading communities about the benefit of projects, rather than simply imposing his choices. By contrast, Chief Kakumbi dominated his community. In Msoro chiefdom, ZK76m has been invested in projects and wildlife management, three times as much as in Kakumbi chiefdom (ZK16m). Intangible benefits, such as democracy and empowerment, are of a similar or greater magnitude. Chief Msoro is highly respected, and VAGs and ADCs meet regularly, report competently and generally work well. Msoro ADC has also led the move towards active wildlife management, being the first to employ community-based scouts and to invest in water supplies for wildlife. The reverse has occurred in Kakumbi area. Institutional development has been slow, very few projects have been implemented, poaching has increased, and people would oppose their chief if they were not scared.

7.4.3 Practical aspects of managing the CBNRM programme: some examples and lessons

(a) The importance of improved operational management

The principles of CBNRM are fairly well understood. However, skilful and opportunistic management of change is necessary to introduce a system that reflects these principles. This requires building relations and coalitions as well as tenacity and persistence.

Considerable flexibility is needed to implement change and, at the same time, operational management needs to be well organised to deliver inputs such as capacity-building and monitoring. There is a paradox between the opportunism required for policy development, and the structure for effective task management, the loose-tight paradox described by Peters and Waterman (1982).

The management cycle is an essential framework for making systematic and efficient progress: clear visions and values; a strategy, workplans and budgets with targets; regular monitoring in relation to targets; and the ability to take corrective actions. Ecologists would call this “adaptive management”.

By achieving a level of advancement that is in many ways post-CAMPFIRE in only four years, the LIRD community programme has validated the CBNRM principles. In doing so, it has also made a major contribution by developing and describing management systems and tools that can operationalise a community programme with a high degree of confidence (the ‘tight’), provided an enabling policy environment is in place (the ‘loose’). This is timely since countries throughout Southern Africa have developed sound CBNRM policies, but now face the challenge of providing cost-effective management to institutionalise and develop their CBNRM programmes and projects. As a guideline, SLAMU’s community programme costs about US\$2 annually for every person in the community (the ‘tight’). The start-up cost was approximately double in the first two years, when it included change management and policy advocacy, plus the training of project staff and the development of management systems.

(b) Designing the CBNRM programme

The CBNRM programme was designed around general CBNRM principles (e.g. Murphree, 1993; Metcalfe, 1994). Participatory situational analyses with ADCs and other stakeholders confirmed that there was no reason for these principles not to apply to local conditions. LIRD developed a new policy for the community programme and this was agreed at national level before implementation

began. In many ways, the bottom-up approach was imposed, though it was received enthusiastically (chiefs apart). Once the major change was achieved (i.e. the fiscal empowerment of the grassroots within a reasonably clear set of operational procedures), the system was allowed (even encouraged) to evolve in its own direction within the framework of the policy (Box 7.9). For instance, communities began to modify the definition of membership in their constitutions from the household to the individual. The new approach did not emanate from within the community itself, and it is doubtful if it ever would have done so. It was 'imposed' on willing recipients by a well-meaning project with the communities' best interests in mind.

Box 7.9 Thoughts on social intervention, and a response to criticism of outside intervention

In most post-colonial states, the wildlife resource has been nationalised. In some it has become an important resource of patronage (Gibson, 1999). This reflects a more general situation where people are treated as subjects rather than citizens.

Top-down, and largely unaccountable, governance systems have an in-built resistance to change. This is combined with the dis-empowerment of rural communities and their lack of exposure to ideas about governance. Such systems are pre-disposed to maintaining the status quo. They appear unlikely to evolve without outside intervention, or revolution. Thus, the "imposition of a bottom-up approach" was an essential step in getting local institutions to begin to evolve, indeed in providing a framework of transparency, accountability and debate that fostered evolution.

However, once this major intervention was made, and local people were fiscally empowered within a mostly democratic framework, the project no longer needed to 'interfere' in the evolutionary process. Its role was to ensure compliance with democratic principles and the maintenance of fiscal devolution and grass-roots empowerment - in other words to ensure that a framework that encouraged evolution remained in place. Having established largely transparent mechanisms, the conditions for locally-driven institutional evolution were in place, and the responsibility for driving this evolution further was left - as it should be - to the local communities themselves. For instance, when communities asked the project to intervene where they had 'problems' with their chiefs, the project refused to champion the people and insisted that they address these issues in their own way. The assumption was that solutions developed in this way would be more refined and self-defined, and consequently longer-lasting.

(c) Building an effective team to support the communities

LIRD has demonstrated the effectiveness of a combination of a highly experienced implementer (an expatriate CBNRM Technical Adviser, TA¹⁶) working with and training locally-recruited staff. Judging by the overhead costs of similar programmes in the region (largely funded through the USAID Natural Resource Management Project), it would also appear to be efficient. The programme is cheap and effective, costing about US \$90,000¹⁷ annually to service some 45,000 people (US\$2 per individual). By comparison, a rough estimate for CAMPFIRE is US\$10/ individual per year and for Namibia's Life programme is \$48¹⁸. The LIRD programme was more expensive for having to develop as a pilot, and also because of historical opposition from NPWS.

¹⁶ Brian Child

¹⁷ This excludes the cost of the Technical Adviser whose full-time input was essential in the first two years of the programme, but who now supports other components of SLAMU. 25% of his time is still devoted to the CBNRM programme and is essential, especially for training, reviewing progress, and dealing with serious problems.

¹⁸ CAMPFIRE has a four-year budget of approximately US\$21m for about 500,000 people. LIFE has US \$10m over three years for some 70,000 people.

The engagement of the TA was an important factor in the rapid progress of the community programme to establish a sound framework for CBNRM and to mentor young and motivated staff, sharing both values and an understanding of the community development process. Two years after initiating the programme, the TA passed primary responsibility to a small team of young Zambian counterparts. This team manages, coaches and supports the seven motivated young Community Liaison Assistants (CLAs) who undertake the majority of the community work. There is one CLA in each of the six chiefdoms and they were recruited from and live in the communities they serve. Ideally, there should be one CLA for every five VAGs, or 6,000 people.

The capabilities of CLAs improved rapidly through on-the-job mentoring and experience, and short internally-run training sessions. The experience with formal training was not positive. The improvement in performance after two-year diploma courses was hardly detectable, with the primary reasons for providing such training being to get the CLA a recognised qualification so as not to retard prospects for promotion.

The experience of LIRDPA has been that staff developed their potential when given considerable operational freedom within a disciplined performance management system. Results count. For instance, the prevailing management culture at the start of the programme was one of excuses: "I was late for the meeting because there was no transport". This was replaced by a culture epitomised by output performance: "We don't want to hear excuses or long stories, or to tell you how to do your job. We want to know what have you achieved". Instilling an attitude of output- or performance-management, supported by supervision, coaching and feedback, improved the operational culture and results considerably. The programme is now managed almost entirely by these 30 year-old Zambians (now that the major changes have been accomplished).

As the programme grows, the demand for capacity-building is outstripping the project's financial and technical capacity to deliver.

The involvement of an experienced Technical Adviser (TA) was important at the beginning of the new CBNRM programme to introduce new ideas, develop the new policy and to drive the process of change. TA requirements would be lower if national policies and procedures or institutional support were in place. The TA's input was used mainly for the CBNRM programme in its first two years. It was then apparent that the sustainability of the CBNRM programme would, in turn, depend on the sustainability of LIRDPA. Consequently, the TA was increasingly occupied with planning and managing change to ensure the sustainability of the organisation and South Luangwa National Park, and later in the commercial development of the park to fund this sustainability.

Zambia has no central policy for CBNRM nor a team to manage the programme. There has also been historical animosity between the conceptually similar ADMADE and LIRDPA programmes. Consequently, there was no stable core around which to build and support community programmes. Had sound central leadership been in place, the community-programme could have been managed by the Zambian-staffed CBNRM Section after about three years, with only new steps forward needing TA advice or experience. However, in the circumstances, the TA's continued support to the CBNRM programme was still important four years later, albeit needing only some 25% of his time. This was mostly used for developing new management systems (e.g., community based scouts) and for defending the programme against external changes related to the transition to ZAWA. One of the primary problems faced by the TA was that four different Community Co-ordinators were trained, but three found work elsewhere. For the sustainability of a CBNRM programme, suitably motivated individuals must be recruited and managed properly, and conditions of service need to be sufficiently attractive to retain them.

In summary, effective technical skills and experience are important in implementing community projects. The tendency for people acquiring such skills, both expatriate and local (almost as soon as they become competent), to be tied up in capital cities is a mistake that seriously afflicts development programmes. Community programmes require leadership, commitment and dedication. They also

require relationship-building and in-depth understanding of the local situation, and these aspects need time to develop. When expatriate skills are needed (sometimes unavoidably), it is a mistake to use short-term contracts. An expatriate needs at least two years to understand an area, a further two years to develop sound management systems, and more time to wean these systems off to local management¹⁹. Competent people must be willing to work under often difficult and remote field conditions. Special thought needs to be given to identify and develop these skills, to use them effectively, and then to retain them (Box 7.10).

Box 7.10 Some thoughts on the use of technical assistance in CBNRM programmes

A high proportion of Technical Advisers (TAs) working on CBNRM programmes simply lack sufficient experience, motivation or are not suited to their jobs. The recruitment process does not appear to seek excellence. Once in place, TAs tend to be managed badly and used ineffectively and apologetically. They are placed in positions of responsibility, but are given very little authority. While they can have a considerable influence on the effectiveness of a project, this requires a great deal more energy than would be necessary if their role within an organisation were better thought through and defined - here we are referring to the mismatch between responsibility and authority. One of the problems in many CBNRM projects is the lack of genuine leadership and management 'values'. In most businesses, such qualities are developed through mentoring, something that a person in an advisory or counterpart role cannot provide.

The management of TA's is also extremely poor. They receive little performance-related feedback except where they are failing, and certainly little effort appear to be devoted to their development as individuals. TA's are treated as short-term mercenaries, which engenders little loyalty and does not provide for career advancement. So their skills and institutional memory are usually lost, something no business could afford to do. TAs often float in organisations, somewhere between the partner they work with and the donor who pays them, and have little sense of belonging. Despite difficult circumstances (i.e. intellectual and social isolation, inadequate schools and housing, etc) little cognisance is given to staffing practices that would be considered normal in most jobs. Finally, TAs often work in difficult and remote social circumstances. They work outside their own culture, and in environments where they are constantly 'giving', with little nurturing of themselves. Tenacity is vital in such positions, especially given the general opposition to change. There is a lack of mental stimulation and the supporting professional cross-fertilisation of peer groups is invariably missing. As a result, TAs lose intellectual competence, confidence and breadth compared to their peers. The net result is burnout.

We are entering the age of knowledge workers, self-managed teams, flatter organisations, complexity and flexibility. In other words, an age where people and their skills are paramount. Yet the development 'industry', including that part which supports conservation initiatives, is managing the skills of people in exactly the opposite direction. This situation needs to be reversed with recognition that support community programmes requires special people working under special conditions of service - the limitation will seldom be salary levels.

(d) Management planning, participation and control

CBNRM represents a revolutionary change in the political and economic relationships between people, and with their resources. Clear vision and values are essential for implementing such changes, which must usually be accompanied by a transformation of management culture. Within LIRD, vision was developed, and culture transformed, by nurturing staff of the Community Section through a highly participatory goal-setting and team-building process. Logical Framework Approach (LFA)²⁰ and visualisation techniques were invaluable for understanding situations and cause-effect

¹⁹ This suggests that the ideal contract should be for five years and implies that a high level of dedication is necessary. Naturally, such contracts should be performance-linked.

²⁰ The Logical Framework Approach (LFA) is an analytical tool for objectives-orientated project planning and management much suited to participatory techniques.

relationships, and for identifying inputs, setting targets, and designing the systems for monitoring and managing the implementation process. The Technical Adviser acted as both facilitator and resource person, and all staff were involved in describing the situation, and setting annual plans and budgets. Work was described using targets, and managed using a matrix with the several columns: milestone, responsibility, status, problems faced, and corrective action. This planning approach combined the CLAs' local knowledge with the broader, conceptual knowledge of senior staff.

To ensure the system is responsive to opportunities and threats, objectives and problems are re-assessed each September as part of LIRD P's planning and budget process. Progress has been co-ordinated through these workplans, and expectations defined with quantifiable indicators. Participatory planning created collective vision and commitment, has empowered staff as full and valued members of the 'team', and has provided the knowledge to operate independently and proactively, rather than through detailed instructions.

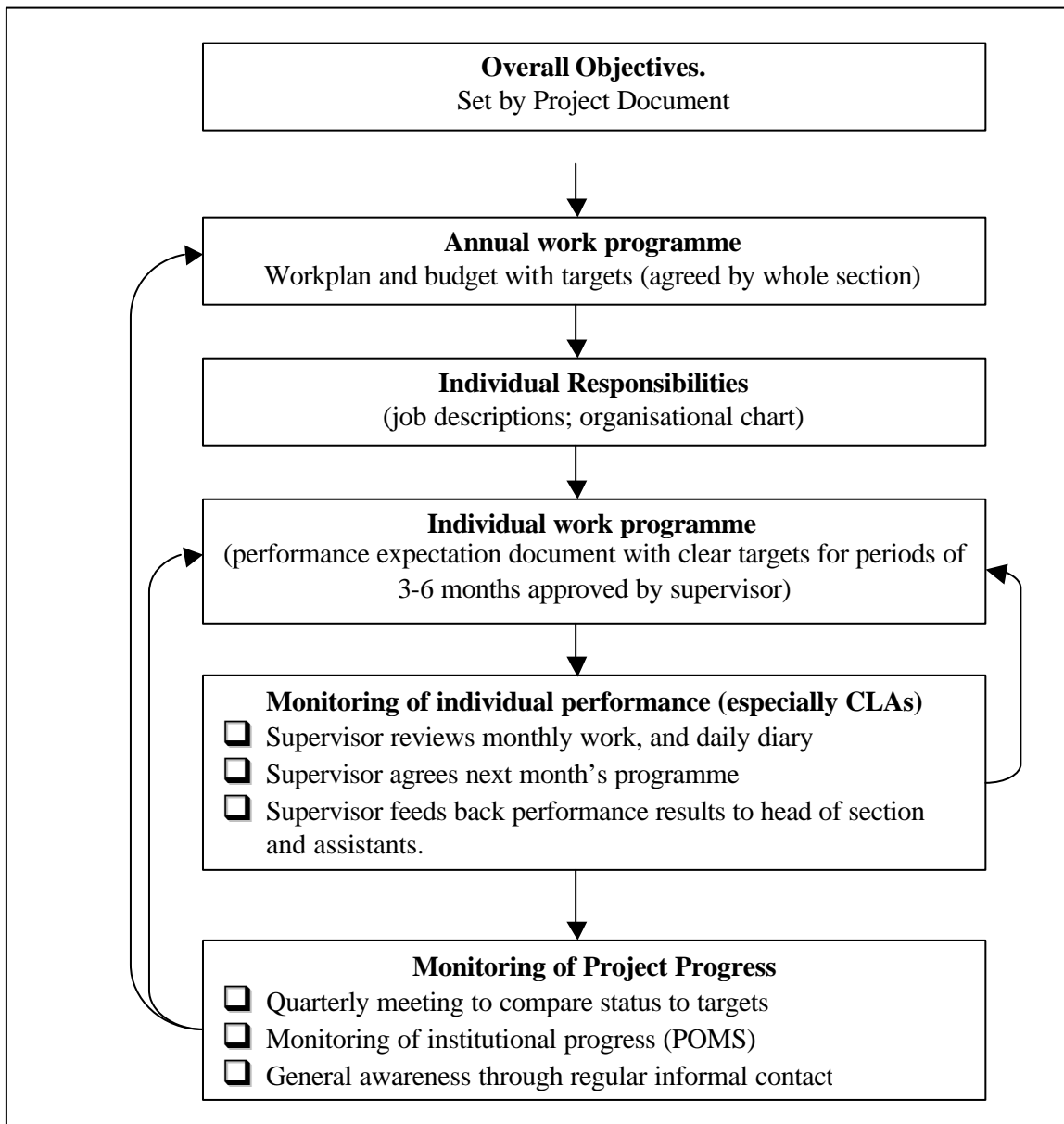
Progress has been reviewed regularly against workplan targets using the work plan matrix. These targets proved instrumental in maintaining a focused programme in a situation where there has been pressure for the project to expand in many directions - most of which, on their own, have appeared worthwhile. Indeed, the shotgun nature of the early LIRD P programme reflected these pressures. Much learning occurred in the debates about progress (or the lack of it) and corrective action. Initially, the participatory methodology was time-consuming, but it was important for building a team with similar values and for developing staff to implement the programme with understanding, commitment and limited supervision.

As the workload has grown, and as experiences has refined tasks, management has become more formalised (see Figure 7.8). Management relies on clear definition of milestones and indicators, and control²¹ is achieved by monitoring status of progress compared to these goals. This is codified in an internal operations manual, which also indicates the purpose and regularity of meetings and reports. A standard management approach is used to manage personnel. Each person has a job description, and then negotiates clear expectations for the work to be done in a period (Performance Expectations Document) with the supervisor. When CLAs began to keep daily diaries and to be appraised monthly against targets, performance doubled. Regular monitoring also identified problems such as the unintentionally biased support of some communities and the neglect of others. Monthly and quarterly reports from all nine Sections of LIRD P serve to summarise the overall project. This is sometimes done in a workshop forum, where peer review is valuable for improving performance, and for improving co-ordination with other sections.

Contact and team-building occurs in the field, and formally at quarterly meetings. The latter cover administration (1 hour) and progress reports (several hours) and are usually accompanied by a workshop or training day. General progress is reviewed half-yearly using a standardised monitoring system that uses score sheets to assess each VAG (POMS). This tool is still being developed but is proving to be useful to monitor general progress, to highlight specific problems, and to identify general needs (often for new management systems and supporting training, e.g. managing meetings and projects more efficiently). A continuing problem is that staff are always over-stretched. Another lesson is that CLAs work far better in pairs, since they reinforce and support each other.

²¹ "Control" is used in the business sense to mean mechanisms to guide a process towards its objectives.

Figure 7.8: Management framework for Community Liaison Assistants



(e) Control systems

To manage a process effectively, it is important to identify a small number of critical success factors and to monitor them. Having too many of these ‘controls’ results in excessive complexity and, ironically, in the loss of control. The community programme designed a control system based on four components:

- (i) Monitoring revenue distribution, including reporting, elections and budgeting processes;
- (ii) Financial monitoring;
- (iii) A process-orientated monitoring system (POMS) that looks at progress in institutional development and natural resource management;
- (iv) Annual wildlife surveys.

Over time, there is a temptation to become more sophisticated. This tends to lead towards a loss of control because too many variables are measured, and a conscious effort is necessary to continually simplify monitoring.

(i) Monitoring of revenue distribution

At each VAG annual revenue distribution meeting, the CLA compiles a two-page summary which records:

- Attendance of men and women;
- Whether finances are properly reported and the community approves these explanations;
- Whether elections were held (and election results);
- The agreed budget;
- Any 'hot' issues.

This report provides a short, valuable summary about the key issues in the community, including financial management and transparency, democracy, and how money is used.

(ii) Financial monitoring

Each VAG and ADC manages its finances using a double entry system. The key to the effectiveness of the financial systems is reinforcing checks-and-balances. The primary check is a requirement that the VAG committee reports its finances to its constituency through quarterly verbal reports (using flipcharts). LIRDPA provides a second check by auditing these VAG accounts twice each year and presenting an independent audit report to the community at their annual general meetings.

This face-to-face reporting introduces the essential element of social control, and works well. The one page audit and financial summary is generally sufficient for LIRDPA to judge progress and identify problems. All in all, less than 1% of the money leaks (not taking into account the problem associated with the power-play between the chiefs and the new system). The presence of 50 organisations (VAG and ADCs) with proper accounts, regular audits, and minimal leakage is a significant achievement of which the project should be proud.

Financial accountability and competence gives people confidence in their institutions, and progress is accelerating as this confidence grows. Without such confidence (as in the communities in Kakumbi chiefdom), people opt to take as much money as possible as cash. They have little faith that any money they allocate to projects will be used properly or for the purpose for which it is given.

Although the community programme is ultimately concerned with wildlife management, the primary focus of the first three years (1996-1999) was to ensure that financial management was accountable and transparent. This is an essential platform for any community institution and has been achieved, except in respect of a few cases involving the extraction by some chiefs of VAG funds and a few cases of misappropriation or mismanagement. Most such problems are identified by the communities themselves who take corrective action, including the involvement of the police. In a typical example, one VAG Treasurer loaned himself ZK300,000. After general discussions, and reference to the ADC, he was dismissed by the community, required to pay back the money, and given an opportunity of manual employment to do so. Social controls also maintain balance where it is difficult for outsiders to make judgements. For instance, some committees have been criticised for overspending on food for meetings, travel costs, etc.

(iii) Process orientated monitoring system (POMS)

A monitoring system has been implemented to track developments in all 42 VAGs. It is based on the

use of evaluation forms twice a year²² and has proved useful in summarising progress and in identifying weaknesses, strengths and needs. The idea was adopted from Zimbabwe Trust's Institutional Development Unit (which supports CAMPFIRE), but the system has been modified considerably and shortened. It consists of:

- An assessment of community participation (1 page);
- An assessment of VAG Committee performance (1 page);
- An assessment of natural resource management (1 page);
- Three individual questionnaires (1 page each);
- An assessment form for each project;
- A financial summary.

These assessment forms are filled in by CLAs as they visit the VAGs during their normal work. The results are presented in a visual format by each CLA at a Section workshop and, as Figure 7.9 demonstrates, they quickly show what is happening in each VAG. This provides a good basis for deciding management actions, for tracking progress, and for identifying weaknesses or training needs. POMS has proven useful for reinforcing the programmes' objectives which are embedded in the monitoring criteria (e.g. levels of participation).

The methodology for devolving POMS-monitoring to ADC level is currently being developed, and has been greeted with satisfaction. It provides ADCs with a formal system for reviewing VAG progress. Community members attending workshops have confirmed that peer review, and the rating of progress relative to the objectives implicit in the scoring system, is likely to accelerate institutional progress and debate.

(iv) Wildlife monitoring

Since LIRDP was redefined in Phase 3 as a conservation project with development by-products, the overall indicators of project success have been the maintenance of intact habitat and increasing wildlife populations. The project does not monitor habitat at the scale of the landscape – and is an important omission that needs to be corrected, possibly using satellite imagery or air-photos. Wildlife populations are counted annually. Aerial surveys are used to count large, visible species like elephant, complemented by walking transects²³ in the Lupande GMA to count all the other species. Preliminary results show that wildlife populations in the Lupande GMA are stable or increasing, contrasting with trends in nearby GMAs where wildlife populations appear to be declining²⁴. While much of this is due to good law-enforcement, it is still too early to measure the effects of the community programme since active management has only been taken up very recently (Box 7.8).

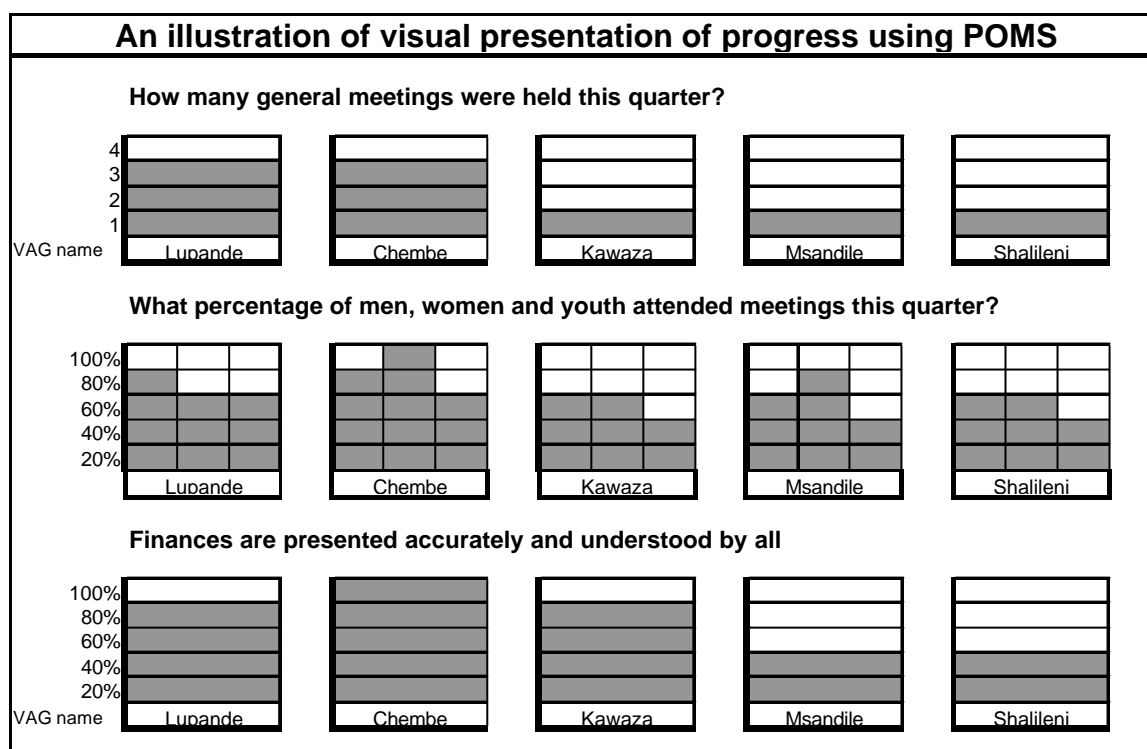
Safari or recreational hunting is also monitored by SLAMU. Information on trophy quality and hunting success rates is needed to manage trophy hunting. Hunting fees are collected and reported to the community since this is the financial foundation of the CBNRM programme. In 1999, the project tried to add a community representative to the monitoring team which accompanies each hunting client, primarily to provide feedback to the communities and to increase its level of involvement in the hunting industry (this proposal was rebuffed by NPWS).

²² It proved onerous to carry out POMS quarterly, and it is now undertaken twice each year in March and September.

²³ There are twenty transects, each 15,000 paces long, and they are walked three times each, mainly by community members, usually in the second week of August.

²⁴ Jachmann (1998b) states that wildlife populations in the Lupande GMA have remained relatively stable. The nearby Munyamadzi GMA, however, is moving towards depletion, but not as fast as the Lumimba GMA. He suggests that the difference between the GMAs is probably largely explained by the much higher investment in law enforcement in Lupande GMA.

Figure 7.9: An illustration of visualised monitoring of institutional progress using Process Oriented Monitoring System (POMS)



(f) Building the capacity of communities

For the first few years of the CBNRM programme, training mainly involved financial and institutional management. The CBNRM Section developed in-house capacity for this, assisted by an MS-Zambia²⁵ Development Worker who focused on providing financial training. Most training was provided by CLAs in their day-to-day support of VAGs and ADCs. However, some formal training was also provided (Box 7.11)

With community institutions now working, the demand for training, particularly specialised training, exceeds the capacity of the CBNRM Section to supply it. Appropriate training is difficult to source, expensive, and is often not available - especially as the CBNRM programme extends into new fields for which techniques have not yet been developed. As a consequence, LIRDPA has not used any external training, except for sending village scouts to the Nyamaluma Institute for training and a short technical training course in the planning and construction of electric fences, provided by WWF²⁶.

²⁵ MS-Zambia is the Danish volunteer service.

²⁶ Fortunately, the WWF programme in Zimbabwe (which is also sponsored by NORAD and WWF Norway) is developing techniques for some technical components of wildlife management (e.g., problem animals, electric fencing, quota-setting). ADMADE has developed training for Village Scouts.

Box 7.11 Financial training of VAGs and ADCs

In 1996, LIRD P developed financial procedures and a financial manual (*Managing Community Finances*) This 28-page manual is heavily used and describes how to keep a double-entry system, illustrated by self-explanatory examples.

All treasurers are trained (twice a year). An MS-Development Worker (Jane Sundenaes) used the manual to train LIRD P staff as trainers and then ran a number of workshops to train treasurers in the use of this financial system. These workshops were codified in a Training-of-Trainers manual (Sundenaes, 2000) , and can now be run entirely by the CLAs. This mechanism creates sustainability. The Development Worker can now move on to developing the next set of training courses and manuals.

The financial training also uses a *Monopoly*-type game developed by WWF (Bond, 1999) but adapted to local circumstances.

Appropriate training for community institutions is an emerging constraint also faced by other NORAD-supported local government initiatives in northern Zambia, in CAMPFIRE in Zimbabwe, and indeed by the plethora of emerging community-based programmes in southern Africa. Finding the capacity for capacity-building is difficult. Moreover, good, reliable training and materials are not available. This suggests the need to convert experience gained in community programmes into accessible training materials. However, for some activities, there is very limited experience, and management systems need first to be developed and tested. Unfortunately, financial and capacity constraints in SLAMU mean that an opportunity for the project to develop such materials is being lost²⁷. A list of the training materials developed by LIRD P/SLAMU is provided in Box 7.12. The various forms of training undertaken by the project are described in Box 7.13. We have suggested that one of the biggest contributions of LIRD P's community programme is the management systems and techniques it has developed. Most of these were borrowed from other programmes and then adapted to local conditions, and often improved (Box 7.14).

²⁷ SLAMU could provide a valuable contribution towards filling this gap if it had additional capacity specifically devoted to developing some of its experience into training manuals or toolboxes that could be used more widely in CBNRM programmes. Examples include: constitutions; financial management; institutional monitoring; operational management of a CBNRM programme; developing community-based scouts; teaching communities how to manage their affairs effectively using targets.

Box 7.12 Materials produced by SLAMU to improve the management of the community programme

Policy

1. Policy Guidelines
2. Procedures and guidelines for the distribution of revenue in the Lupande GMA
3. Guidelines for Community Resource Boards (in preparation).
4. Policy and guidelines for charging for and managing other natural resources including fishing, firewood, timber, grass, sand and gravel, etc. (in preparation)
5. Policy and guidelines for devolved economic planning, revenue collection and service provision (to be prepared by Mambwe District Council)

Constitutions

6. Village Action Group constitution and by-laws.
7. Area Development Committee constitution and by-laws.
8. Kakumbi Natural Resources Management Sub-Committee constitution for charging for and managing natural trees, grass, firewood and sand.
9. Constitution for Nsefu Fishing Association.

Financial management

10. Managing community finances (manual).
11. Financial training manual for trainers
12. Games for practising financial management

Institutional Monitoring

13. Monitoring summary for VAG revenue distribution
14. Quarterly monitoring sheet for VAG performance (participation, committee, natural resources, financial statement, project status).
15. Visual presentation format for POMS (process-orientated monitoring system).

Training Manuals

16. Revenue distribution manual (including procedures, planning and managing projects, reporting on wildlife management, etc.)
17. Chairman's duties
18. Secretary's duties
19. Treasurer's duties
20. Committee members' duties
21. Executive officer's duties (to be prepared)
22. How to run meetings, manage work and keep action minutes (in preparation)
23. Draft guidelines: policy and management of community based scouts
24. Problem animal monitoring and management (in preparation)

Operations and Management

25. Operations manual for the management of CBNRM Section

Box 7.13: Training provided by LIRD/SLAMU CBNRM Section

Community-based trainer

The full-time presence of a CLA in each chiefdom has been the project's most effective method of training and is the primary tool for capacity-building. CLAs deal with a wide range of issues and need to be generalists, though with some knowledge of technical issues (e.g. setting quotas). CLAs are trained internally. They work with the senior staff to run meetings, financial training courses, etc., before this responsibility is passed on to them entirely. Gaps are filled using short internally-run courses. Mentoring works well for generalised training such as financial management, auditing and running meetings. Short courses are better for more specialised topics, e.g. WWF training for the planning and construction of electric fences.

Written materials

Written materials have proven to be effective and fulfil a strong demand for information and general reading material. For example, about 100 copies of VAG constitutions were produced in 1996, and project surveys suggest that their contents are widely understood. The financial manuals are widely used, and are one reason that financial management is working. The use of posters has also been positive. For instance, the POMS monitoring system showed that some 60-80% of people knew the price of buffalo and lions in most communities. The exception was Malama chiefdom where the figure was 40%, although it was subsequently discovered that animal posters with prices on them had not been distributed in this area. However, continual reinforcement is needed as evidenced by a recent questionnaire survey which showed that only 16% of respondents now knew the price of safari licence for a lion (Phiri, in prep; see Appendix 5). Because of these findings, SLAMU is making greater efforts to distribute simple written materials. Other organisations (e.g. WWF) produce high quality booklets but these are prohibitively expensive. Simple internally-produced materials appear to have worked well and more are needed, but producing such materials is a constraint as project staff lack time to prepare them.

Workshops

- *General exposure.* Once each year, generalised training is provided to the entire community as part of the revenue distribution process. This ensures that everyone is made aware of key issues;
- *Training of community institutions.* Specialised workshops are provided to community leaders covering specific topics. These have been used largely for financial training and, judging by the standard of book-keeping, have been effective. A need to provide training to the 420 VAG representatives on leadership and basic management has been identified, but affordable training is not available. While such training is offered, it is difficult for a field project to obtain information on the reliability of the organisations providing it. SLAMU remains unconvinced about the quality of most of the training on offer.

A problem with workshops is that the people attending them expect to be fed. This creates a logistical burden, reduces the resources for other activities, and runs counter to the project's objective of weaning communities from dependency. Consequently, workshops are offered under the slogan that "we bring only knowledge" and communities must use their own budgets for food if they consider it a priority. Meetings are normally scheduled to end in time for lunch at 13:00 hours.

- *Quarterly internal workshops* are held to train CLAs or assess progress.
- *Technical workshops.* These are held when people with useful skills are available. For such training (e.g. quota-setting), the CLA and one or two members from each ADC are usually invited in the belief that messages are carried better and reinforced by two or more people. Such workshops have been effective and motivating for the participants, but the spread of the knowledge/skills imparted is difficult to measure. The technical knowledge and materials provided by WWF have been especially valuable.

External training

Recently, SLAMU placed 16 community wildlife scouts at the ADMADE training school at Nyamaluma to be trained in law-enforcement and to monitor hunting.

Several CLAs have been sponsored to seek external training at various Zambian institutes, but the effectiveness of this is difficult to judge (see above). There is a general need for improved training of community trainers. This requires a reliable certification system by which to judge the ability of the person to provide training. This should be done in a way that recognises experience and not just formal education, since the use of formal training disrupts programmes and also appears to be inefficient.

Box 7.14 Summary of innovations in the community programme

Fiscal devolution. As with most CBNRM programmes in the region, the revenue distribution system first developed by CAMPFIRE was adopted. However, devolution has gone a step lower (to the VAG) to ensure face-to-face participation of all adults in the community, and the management of this system has been improved. A far higher share of the revenues (80%) is guaranteed at this level, and effective and transparent system of checks-and-balances for financial management have been developed. We are not aware of another programme where 43 village-level institutions have financial autonomy, and where regular auditing shows it is working.

Financial accountability. The financial recording system was designed around an amalgam of tested ideas including those from (i) Gokwe District in Zimbabwe from where the first MS Development Worker was recruited, (ii) the World Bank's Micro-Projects programme, (iii) CAMPFIRE (Child 1995) and (iv) Zambia's co-operative movement. However, the decentralisation of accounts and management to VAGs, and the development of accountability through quarterly reporting to the community and regular auditing, is an innovation that provides the important conclusion that lower levels manage finances better.

Institutional monitoring. The institutional monitoring system (POMS) was borrowed from the Zimbabwe Trust, but has been simplified and improved considerably. An innovation is that it is in the process of being transformed into a community management tool, rather than a method of extracting or generating data. It has proved to be an invaluable tool for identifying specific problems (e.g. a VAG with financial mismanagement or a weak committee). At a more general level, it is useful for training (e.g. all VAGs have mediocre scores for managing meetings, so a training programme was developed to address this) and assessing the needs of systems.

Constitutions. The comprehensive community constitutions have proved invaluable. This is a meaningful innovation that other projects would do well to copy.

Quota-setting. Community-based quota-setting has been introduced, and is very similar to systems used by both ADMADE and CAMPFIRE (Martin and Thomas 1991). The project has some work to do to get these working properly - a constraint has been the lack of response from NPWS. It is hoped to introduce an innovative system whereby quota-setting and the monitoring of hunting is institutionalised with regular feedback to communities.

Counting animals. The statistical theory of animal census has been converted into walking counts that are conducted annually by communities. Jachmann's (1996) manual is an important contribution to community wildlife management.

Active natural resource management. To date active wildlife management has been passive, but there has been an improvement in attitudes towards wildlife. Financial empowerment and training have laid the foundation for more active wildlife management and the project is beginning to make innovations. Truly local tourism has started. Systems for charging for natural resources are being developed. Community monitoring of hunting has been initiated. And there is currently experimentation with community law-enforcement. While drawing on the ideas of ADMADE, it is hoped that the project can maintain a situation where scouts are employed by the community (not NPWS), although some form of joint patrolling is envisaged because of the issue of arming people. Community scouts have caught a number of poachers. They also patrol to monitor tree-cutting/charcoal-burning, fishing and snares and to enforce by-laws.

Entrenching face-to-face participation. Perhaps the major innovation is the focus at VAG level. Most other projects have, for logistical reasons, focused at a level similar to the ADC or even the District Council, and are weaker for this. LIRDIP has demonstrated that if appropriate functions of local government can be pushed to this level under the right framework, they work. And in working, they capture the energies of people who are often marginalised but sufficiently competent to contribute at this level.

7.5 Evaluating CBNRM principles and practices using the LIRD P experience

7.5.1 Strengths, Weaknesses, Opportunities and Threats (SWOT Analysis)

(a) Strengths

The strength of the community programme (Table 7.8) arises from the application of sound principles of democratic management embodied in the CBNRM principles, and innovations to translate these principles into practice (e.g. revenue distribution, constitutions, financial systems and auditing, quarterly reporting and accountability, etc.). The provision of a reasonable level of support by NORAD, and a good wildlife resource base with high commercial potential, gives the programme added strength. Consequently, it has made rapid progress: there are 43 active and accountable VAGs, they manage finances and projects transparently, democratically, accountably and with some competence; attitudes towards wildlife have improved considerably; and there is the beginning of initiatives to actively manage natural resources.

(b) Weaknesses

There are several weaknesses. The project is facing an emerging constraint in its technical ability to develop the capacity of the communities to manage their wildlife. Many of these systems have not been tried before, and both the methodology and enabling legislation is missing in Zambia. An example is the devolution of all natural resource management and planning to communities.

The funding of SLAMU, and the pressure to become financially self-supporting, is a powerful incentive for the improvement of the project. But it has negative implications for the provision of social services, especially the CBNRM programme and conservation education. The project cannot afford social investment, and has been forced to prioritise revenue-generating activities. Consequently, the budget for community work is shrinking at a time when new opportunities are emerging, and the demand for training is growing. The budget (US\$80,000 in 2000) is barely sufficient to administer and maintain the programme, and includes no reserve for investment in capacity-building or for physical infrastructure such as electric fencing. The financial structure of SLAMU is not suited to its role in community development, and should be restructured. The *regulation and monitoring* of the CBNRM programme should be funded out of LIRD P's budget, much as at present. However, the *development and capacity-building* budget should be separated, and possibly managed by an NGO (or a component of SLAMU acting in the role of an NGO). The former will ensure compliance with procedures and that the programme is at least maintained, while the latter will provide for innovation, social investment and further progress.

One of the major challenges has been to develop a second-generation community programme in a macro- and political environment that is not wholly supportive of such trends. General bureaucratic inefficiencies and macro-economic constraints have made the process slower and more expensive. The enabling environment is weak and does not legally empower communities to manage their wildlife or natural resources. The general management culture is unaccountable and inept, treats communities as subjects, and is unconvinced that they can manage their own affairs. To address these issues, the project has devoted substantial resources (both cash and time) to lobbying, relationship-building and persuasion to develop an enabling environment and the institutions for community governance in the project area. It has had considerable success, but still faces problems. For instance, communities have no authority to negotiate the sale of their wildlife and cannot to control their income stream or commercial partners. Neither are they permitted to maximise the financial value of their wildlife (as discussed in section 7.10.4).

Table 7.8: SWOT analysis of the CBNRM programme

Source: Child *et al.* (1999)

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Institutional structure built on VAGs • Policies and procedures that entrench fiscal devolution and CBNRM principles • Good financial systems with dual controls (community participation plus auditing) • Effective system for monitoring and supporting communities • Good wildlife resource • Communities retain 100% of wildlife revenues • Linkages to a well-funded project and a potentially viable park that ensures a reliable resource base. 	<ul style="list-style-type: none"> • Conflict between project's self-sufficiency objective (short-term financial goal) and the provision of social-services and capacity building (a long-term social goal). • External control of hunting concessions are commercially inefficient and disempowering • Communities do not control their revenue base (i.e. hunting) reducing proprietary impulse • Unsupportive macro-environment that is often unresponsive (uncaring?) to communities. • Legislative, legal and administrative framework, including tenure, local governance, operational procedures, etc. generally weak and/or confusing.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • High potential to increase income from wildlife in GMA with joint ventures and private investment • Potential to work with the newly formed Mambwe District Council to consolidate grass-roots governance • The improving relationship with chiefs allows an acceleration of progress 	<ul style="list-style-type: none"> • Unplanned growth of populations coupled with unplanned settlement. • General economic problems • Absence of effective line ministries and NGOs to provide services • Deteriorating education • The new ZAWA may be tempted to take a greater share of wildlife revenues • Governance and corruption. • Declining government capacity (without fully accepting decentralisation).

(c) Opportunities

LIRDP has laid the foundation for important opportunities. First, there is considerable potential for economic growth built on wildlife and tourism provided the local enterprise managers and communities are free to develop the necessary commercial partnerships.

Second, a framework is now in place from which to expand the progress in decentralising local governance to cover planning, general development, taxation and other resources. This framework is supported by a new and willing Mambwe District Council, which has stated its willingness to empower community-based institutions (VAGs, ADCs) so that it could become a leading example of sound participatory rural governance. The constraints here are the capacity of council to devolve capacity, and the difficulties of finding (donor) support to grasp this opportunity²⁸.

The much-improved relationships with the chiefs adds to these possibilities.

Successes (sometimes) attract more investment, so this may draw in support to fill the gaps – especially infrastructure, education, and health. This combination, with some financial priming, would provide a real chance to develop Mambwe District. The critical question is whether this technical opportunity is politically feasible and sellable – can one district or project develop in relative

²⁸ While many donors are looking to assist improvement in local government both in Zambia and elsewhere, and most are frustrated by the lack of progress, here there is a real opportunity to develop a cutting-edge example, but it has so far proved impossible to secure donor support!

isolation; can it be allowed to experiment; and can a suitable donor be found? The corresponding question is whether development will ever occur unless led by the creation of such opportunities – progress is usually led by pilot initiatives which have the effect of pushing the entire frontier forward (Peters and Waterman, 1982).

(d) Threats

The creation of ZAWA may be seen as both a threat and opportunity, depending on what it becomes. ZAWA will threaten the programme if it centralises authority over wildlife and captures a greater share of community revenues. It will be an opportunity if it encourages greater empowerment of the communities and allows and enables them to maximise revenues by the proper use and marketing of wildlife.

The over-riding threats are macro-economic and political. Macro-economic threats include growth of human populations, poverty, ineffective governance, a weak economy and regional instability. Political threats are related to corruption and governance issues. Wildlife is a resource of patronage and the wildlife industry is highly political. It can be remarkably difficult to make policies and decisions which are economically sensible.

Even if considerable progress continues to be made in developing institutions and a wildlife-based economy, unless these larger threats are tackled we cannot be confident of maintaining this progress.

Population growth and poverty are a huge threat. Can the project succeed if it fails to lift the whole area above a threshold of development where women are educated, family planning occurs, economic growth is organised, and people have reasonable and sustainable livelihoods? In other words, unless the system breaks out of the poverty trap. This suggests that additional inputs are required to achieve this threshold (e.g. improved education, health, strengthening of local government, business development, etc.), and that the real achievement of the project to date has been the creation of institutions through which these potential inputs could be delivered effectively.

Interestingly, this would return the project to its original aims and all the ‘mini government’ activities initiated in Phase 2. The difference, however, lies not in the needs, which are basically the same, but in the possibilities for a better, focused and democratic delivery system. This is now a real opportunity.

7.5.2 A experimental test of CBNRM's principles

LIRDPA's community programme represents an experiment in implementing the CBNRM principles developed in southern Africa (Box 7.15). The 1993 project Review Mission presented 12 principles that the programme should adopt and, to the extent possible, the community programme followed these. They are summarised in Table 7.9 together with an assessment of how well they have been fulfilled. The rapid success of the programmes validates these principles, though the challenges were to develop the mechanisms to apply them in practice.

A comparison of the principles in Box 7.15 and Table 7.9 shows that LIRDPA's community programme is closely aligned with current international thinking on CBNRM. This includes revenue distribution, and the emphasis on promoting village-based democratic institutions to manage these revenues and the projects funded by them. Critics claim that the CAMPFIRE model has merely been imported to Luangwa. Indeed, the programme has learned from these principles, but the challenge has been to operationalise them and to adapt the principles to the specific circumstances in Zambia and the Luangwa Valley. While implementing similar principles, LIRDPA differs from CAMPFIRE in the following ways:

Box 7.15 The CAMPFIRE principles

The southern African network of CBNRM programmes (Botswana, Namibia, Zimbabwe, Zambia) through its own work, and through travel and consultancy both to East Africa and internationally, developed a cutting-edge understanding of the principles that might underlie successful community programmes. One version of these is the CAMPFIRE principles which, while specific to Zimbabwe, is a distillation of these experiences. These principles are:

1. The unit of production should be the unit of management and benefit.
2. 'Producer communities' should be small enough that all households can participate face-to-face.
3. Community corporate bodies should be accountable to their constituency.
4. Functions should be conducted at the lowest appropriate level (Handy's 'subsidiarity principle')
5. The link between wildlife production and benefit should be transparent and immediate.
6. Communities must have full choice in the use of wildlife revenues.
7. All marketing should be open and competitive and done by the wildlife producers themselves.
8. The rate of taxation for wildlife should be similar to that for other resources.
9. Activities or investment should not be undertaken unless they can be managed and sustained locally.
10. Government is the ultimate authority for wildlife, but should accept the principle of subsidiarity.
11. Devolving authority and developing community management capacity is a process (that must undo decades of alienation from wildlife and authority)
12. Co-management is often necessary, but should also accept the principle of subsidiarity.

While most of the principles outlined apply to a wide range of institutions, much of the challenge in CAMPFIRE has been to develop methods that enable rural communities to fully participate in and understand them.

It should be noted that these principles had a significant bearing on the development of community programmes in Mozambique (Simon Anstey, pers. comm.) and Namibia (Brian Jones, pers comm.) and, together with the success of CAMPFIRE, were a major factor in ANC thinking in the New South Africa, although modified to the peri-urban circumstances here (Eddie Kock, pers comm.).

Sources: Child, 1996; Murphree, 1993; Metcalfe, 1994, DNPWLM, 1989, 1995

- The programme is managed directly by a project (LIRDP) of the National Parks and Wildlife Service. In Zimbabwe, wildlife policy is managed through District Councils and the Ministry of Local Government.
- There is no enabling legislation equivalent to that underlying CAMPFIRE (e.g. Parks and Wildlife Act, Zimbabwe, 1975, as amended in 1992 to give "appropriate authority" to district councils); nor are there clear policies and guidelines (e.g. DNPWLM, 1989, 1995). LIRDP has had to develop these institutions and guidelines administratively. Moreover, LIRDP is an isolated programme. There are historical conflicts with the 'national' ADMADE programme, which can be categorised as a first-generation CBNRM programme because of its failure to fully devolve benefits and authority. Consequently, LIRDP does not have the strong support and devolutionary pressure from an enlightened parent department (NPWS) that was so important in getting CAMPFIRE going.
- Unlike CAMPFIRE, District Councils have not been directly involved, and there have been no sub-district structures to work with. LIRDP has had to build these from scratch.

Table 7.9: A comparison of the CBNRM principles recommended in the 1993 project review and the present status of implementation

Principles of CBNRM	Does programme fulfil principles?
1. Producer community. The unit of production should be the unit of management and benefit. (The principle of 'producer communities'). [B]	Partly achieved. All (100%) wildlife revenue from Lupande GMA is returned to communities in a bottom-up manner. It is shared equally in the six chief's areas, not apportioned in relation to wildlife production and/or problems.
2. Scale. Producer communities should be small enough that all households can participate face-to-face. [C]	Achieved through fiscal devolution of 80% of wildlife revenues to VAGs plus a large investment in developing VAGs as the primary level of participation, decision and accountability.
3. Accountability. Community corporate bodies should be accountable to their constituency. [C]	Achieved through requirement that VAGs report quarterly to their constituency to ensure democracy, transparency and accountability. More difficult to achieve with ADCs.
4. Decentralisation. Functions should be conducted at the lowest appropriate level. [C]	This is not embedded in the guidelines, but is a working principle.
5. Production responsiveness. The link between production and benefit should be transparent and immediate. [C]	Partially achieved by returning income to communities at general meetings, but linkages with commercial 'partners' are very weak. Better records of wildlife off-take and income, and control over partners are necessary improvements.
6. The right of choice. Communities must have full choice in the use of wildlife revenues, including household cash. [C]	Achieved by allocating income at general meetings. Some problems of dictatorship and financial extraction by chiefs. Much effort has been expended (e.g. conflicts with chiefs) to maintain this principle.
7. Commercial devolution. All marketing should be open and competitive and should be done by the wildlife producers themselves. [A]	The major weakness, which significantly weakens the programme. Reduces income by an order of magnitude. Weakens critical relationship between safari operators and community. Loses opportunity for community empowerment through community-based marketing.
8. Differential taxation. The rates of taxation of wildlife should be similar to that of other resources. [C]	Wildlife was heavily taxed by LIRD. The new policy now returns all income to communities. However, pressures to capture this income are constantly being contested (e.g. ZAWA, Councils, SLAMU itself).
9. Sustained capacity. Activities or investment should not be undertaken unless they can be managed and sustained locally. [C]	When starting, this was a serious problem given the paternal-donor nature of the programme (e.g. roads and ADC vehicles that were difficult to maintain). Now, all investments are funded out of the communities' own income, and all programmes are run by the communities. LIRD only provides capacity-building and a tiny matching-funds grant.
10. Government's responsibility. Government is ultimately responsible for wildlife but can best achieve societies' goals by devolving authority, operational management and benefit within an enabling framework while maintaining direction with the minimum essential regulation. Government has a role as a development agency. [C]	In support of the devolution of management to communities, LIRD backstops law-enforcement and provides training while community capacity develops. As a regulating agency, it ensures compliance with policies and guidelines. It also monitors progress (e.g. financial, wildlife, institutional) to verify the efficacy of this new approach. As a development agency, it provides inputs such as training (though outsourcing many of these should be considered).
11. Process. Devolving authority and developing community management capacity is a process. [C]	Enlightened management accepts mistakes provided a genuine effort is made by communities to avoid mismanagement.
12. Co-management. Co-management is necessary, especially in the shift from central to community management systems. [C]	LIRD cannot drop management such as law enforcement, but is phasing-down in response to uptake by communities. Community benefit will be matched by responsibility (and targets) in the forthcoming Community Resource Board agreements.

Key: A = Not followed; B = Partially followed; C = Largely met.

- Devolution of finances under LIRD P has been to a lower (grassroots) level with a higher proportion (80%), reaching Village Action Groups. This is a major advantage. In CAMPFIRE District Councils extract some revenues, and the remainder is often allocated to Wards rather than Village Development Committees. This failure to devolve to sub-district levels is emerging as CAMPFIRE's primary and fundamental constraint.
- CAMPFIRE follows the concept of the 'producer community', applying this at the level of the Ward or Village Development Committee. In the LIRD P programme, chiefs have insisted that all ADCs benefit equally, at least for the present. While this must be a long-term goal for LIRD P, there are operational advantages for delaying the full implementation of this principle.
- Under CAMPFIRE, communities are able to sell hunting rights themselves and control safari operators. This is not the case in LIRD P, and is another major weakness and constraint to progress.

While LIRD P's community programme differs from CAMPFIRE in the way it is operationalised, it follows similar principles with two exceptions. The critical problem is the failure to devolve commercial rights to communities. On a lesser scale, it has not yet implemented the concept of 'producer communities' although this is being debated and is likely to evolve within a decade. Consequently, the success of LIRD P's programme can be seen as a test of these principles and a validation of their efficacy. This is a very important conclusion. It suggests that the CBNRM principles are robust, and that new CBNRM programmes can be implemented with some degree of confidence if these principles are followed. The manuals and operational procedures produced by SLAMU are valuable in this regard. That such programmes can be repeated methodically in other areas with some confidence, with a lower requirement for innovation and champions, is a real breakthrough. The implementation of these principles has provided information to address a number of issues.

7.5.3 *Scale issues*

The importance of scale is not always appreciated in the design and analysis of community programmes. The CBNRM literature in southern Africa argues strongly that producer communities should be small enough to meet face-to-face. For instance Murphree (1993) suggests that "the unit of proprietorship should be as small as practicable within ecological and socio-political constraints" and goes on to advocate the importance of face-to-face scale. CBNRM appears to be co-evolving with emerging business principles as far as this and other issues are concerned. For instance, Handy²⁹ notes that "smaller units are faster, more focused, more flexible, more friendly and more fun" and that "the unit [must be] small enough so that we can know everyone in it and they can know us". Micklethwaite and Wooldridge (1997) confirm the importance of "empowering the front-line people so that we can perform". However, despite theorising that this is the optimal approach, some of the important CBNRM programmes in southern Africa have actually worked at a higher level. ADMADE has worked with chiefs, and CAMPFIRE at the level of Ward or Council - levels which comprise at least a thousand adults where people do not know each other.

²⁹ Handy (1994) provides persuasive and eloquent arguments for devolution, or what he terms 'subsidiarity', going so far as to quote a papal encyclical of 1941: "It is an injustice, a grave evil and a disturbance of right order for a large and higher organisation to arrogate to itself functions which can be performed efficiently by smaller and lower bodies". Indeed, the trend in business towards flatter organisations, self-managed teams, knowledge workers, etc. is a response to managing complexity - the same challenges that community resource management face. The most recent gains in conservation have arisen from invoking lessons from the social sciences, primarily concerning tenurial issues. Clear property rights provide the basis for sound management, and it is likely that that management and business theory will contribute to making the most of new opportunities presented by clearer, devolved property rights.

In its early phases, LIRD submitted to the same temptation. Operationally, it was much easier to deal with six chiefs, or perhaps six ADCs (with 60 members). In 1996, following the emphasis on revenue allocation, LIRD took on the harder but better route. Seeking to ensure a high level of community involvement, it elected to develop a large number of small, local institutions (VAGs) despite the heavier logistical challenge. It encouraged VAGs to divide themselves into units small enough so people could meet face-to-face. These 42 VAGs had 420 officer-bearers, who were changed at regular elections, and over 20,000 people attended general meetings.

Taking on the much larger responsibility of dealing with numerous VAGs and the entire populace was a critical factor in the success of the CBNRM programme. This has been the strength of the programme, giving it a strong and broad-based grassroots base. Now that communities are empowered, technical training of ADCs can commence in a positive environment, and with less likelihood of power becoming stuck at this middle level. The grassroots platform also makes the programme far less susceptible to changes in personalities both within SLAMU and in leadership positions in the community. Donors, NGOs or others designing community programmes would be advised to ensure adequate financial resources to achieve similarly high levels of community involvement.

7.5.4 Producer communities

Wildlife revenues in Lupande GMA are shared equally between the six chieftainships, regardless of their level of wildlife production. This position is maintained by the chiefs (albeit with strong opposition from one of them) for the sake of unity amongst the Kunda peoples. While accepting this situation in the short term, Child *et al.* (1999) argue that maintaining this situation is inefficient and inequitable in economic terms and for wildlife conservation. For example:

“People in good agricultural areas away from the park suffer few depredations from wildlife, do almost nothing to protect or promote it, yet still get the same dividends as people [closer to the park] under constant threat from wildlife. They don’t share the revenue from their crops; yet expect people with wildlife to share their hunting incomes. The dilution of benefits, and the failure to reward production, reduces the incentives for those with wildlife to put in stronger measures to protect their wildlife. It also reduces the incentives for those with only a little wildlife to invest in producing more. Indeed, the primary incentive driving the Msoro community (which has some wildlife) to invest in increasing their wildlife populations to usable levels, is their judgement that, in the long term, the concept of producer communities is inevitable. When this happens, they intend to be ready to make money with their own wildlife”.

For two reasons, they accept that the time is not yet ripe to make these changes. First, the social conflict associated with changes may not be compensated for by increased efficiency. Second, an immediate change would cut three communities (Mnkhanya, Msoro and Jumbe) out of the majority of the benefits, and these communities are investing a portion of benefits in protecting potentially high value wildlife areas. If they did not get benefits, it is difficult to see how these areas would be developed for wildlife.

Changes in tenure, and therefore over who controls access to and the benefits from the wildlife resource, are necessary to raise efficiency (to grow a bigger pie). Such changes over how the pie is shared invariably increase the level of social conflict. Child *et al.* (1999) suggest a two-fold strategy for introducing the concept of the producer community while also maintaining social cohesion:

“If the concept of the producer community were to be introduced through a negotiated, clearly defined and phased agreement that coincided with an improvement in the financial returns from wildlife, there would be no reduction in any community income and it would also allow effective producers [of wildlife] to increase their earnings. In its detail, this might entail that the dividend accruing to communities that produce wildlife increases at 10-20% per year relative to those that do not, while a

commercial partnership between communities, SLA MU and business interests invest in improved water, lodges, wildlife protection and restocking. Preliminary results of ecological surveys suggest that the park is over-stocked, including by large herds of buffalo. Translocated to the GMA, they would solve an ecological problem in the park and an economic one in the GMA, providing the basis for a viable hunting concession and the long-term protection of an economically productive ecosystem”.

7.5.5 The economic and proprietary importance of commercial empowerment

All the hunting areas in Zambia were reallocated in 1995. An attempt was made to increase participation by communities in the process, and a representative of each was invited to a preliminary technical meeting at which the offers from safari outfitters for the whole country were assessed. Unfortunately, the final decisions were by (or above) the Ministry of Tourism in Lusaka, and differed from the recommendations for reasons never explained. Consequently, neither communities nor operators had much confidence in the process.

Hunting safari outfitters do not have to answer to communities, nor do they believe they ever will. They have little incentive to develop relationships with the communities in which they operate. Outfitters do not believe that good performance will increase their likelihood of retaining the concession, and so they invest little in the area and use it with an extractive mentality.

Communities have no say over their commercial partners, nor control over outfitter performance or behaviour. This creates conflicts and inefficiency, and detracts heavily from proprietorship. It is also a reason why outfitters can get away with not delivering meat to communities. This is a serious problem in the Upper Lupande concession and a situation resented by the communities. It makes the control of poaching more difficult. As discussed in section 7.5.5, empowering communities to sell their own wildlife has many advantages where government retains two roles: to provide technical advice and support; and, as part of its regulatory responsibilities, to ensure that the marketing process is transparent and competitive. The net result might be to increase the annual revenues to communities in Lupande GMA by as much as US \$1m, spurring communities to manage their wildlife, and those without wildlife to produce their own.

Within LIRD, there is constant pressure for the project to give communities only a portion of the wildlife revenues. It has been suggested that some wildlife income should be retained to pay for services like training and wildlife protection. This overlooks the fact that the net effect of the government's actions is already prejudicing the communities' revenue earning potential, and that government's obligation to provide services to marginalised people is the reasons for NORAD's considerable support.

7.5.6 CBNRM principles and enabling legislation

The success of the CBNRM programme implemented by LIRD shows that the principles described in Table 7.8 are sound. It took a great deal of effort from the project to negotiate and defend these principles. Difficulties in enforcing them between 1997 and 1999 led to the slow progress during this period.

Murphree (1995) and others insist that the most important factor for successful community wildlife management programmes is legislation that empowers communities and establishes their rights to wildlife and other resources. However, LIRD succeeded without such primary legislation, using its status as a 'pilot' project to develop a similar framework through 'administrative arrangements'. Fortunately, publicity from the ADMADE programme, meant that the policy environment was not hostile to community management. All the same, sound, enabling legislation and enlightened central leadership would have substantially accelerated progress. If the lessons of this pilot programme are

accepted by the new Zambia Wildlife Authority Act, similar projects elsewhere will not have to waste energy building their enabling environment.

7.5.7 Isolation of LIRD

The project is isolated geographically in eastern Zambia, and is one of the few community wildlife programmes in southern Africa not funded by USAID. It has also suffered long-standing rivalry with ADMADE, which has isolated it within Zambia. This has reduced opportunities for networking, feedback and innovation, and the project's ability to learn from and contribute to the further conceptual advancement of CBNRM.

7.5.8 Tackling LIRD's original challenge: co-ordinated district development

LIRD's original objective was to co-ordinate and pump-prime the development of Mambwe District. The integrated resource development project approach proved unequal to the task. However, the project is now poised to accept this challenge for three reasons:

- The expanding wildlife industry could provide a powerful economic driver, generating a turnover of US \$30m if managed competently;
- There is now a system of grassroots governance in place which could co-ordinate development in a participatory manner (instead of the somewhat paternalistic structure of LIRD's first years). With some help, Mambwe District could add further legitimacy to the process;
- The project has learned a great deal about effective planning and improving the performance of implementation.

There is an important opportunity to use this foundation to re-tackle the original and broad-based development objectives. The question is whether anyone will rise to the opportunity.

7.5.9 Conclusion: CBNRM Works

The philosophy of participatory, community-based development is sound, and we have an idea what the end-point might look like. What we do not have are the tools for managing the process of change from present circumstances to this end-point. The real contribution of LIRD is to develop management systems that turn theory into reality, partly filling this gap. Such innovation, (the ability to turn ideas into reality) is the real challenge facing the CBNRM movement. LIRD's primary achievement has been to bring this theoretical framework, plus a number of ideas from the region (many borrowed and adapted), into a management framework, and to show that a functioning system can be developed and CAN begin to work within only a few years. While the programme started with wildlife, it has validated Marshall Murphree's (1995) prediction that, if successful, a programme will inevitably begin to address fundamental issues such as rural governance and resource tenure. As we have seen, communities are already tackling the management of a wide range of resources, and are debating wider issues of devolved governance, mainly with Mambwe Council. While tenure is the critical policy issue to which other community programmes are tending, this debate has not really emerged in rural Zambia. However, circumstances are very favourable for implementing village-based tenure with relatively few conflicts because resources are not yet perceived as scarce. Zambia is in the near-unique position of having an opportunity to be proactive in developing tenurial systems. It would be worth investing in advocacy to help this to happen.

Despite some serious conflicts concerning devolution (particularly with the chiefs) that have slowed progress, there is strong evidence to show that the community programme is working. There are 42 working VAGs, meeting regularly, managing their accounts, and implementing projects. Awareness of the programme, its principles, and the value of wildlife, has increased dramatically in only four

years. All individuals attend meetings, and most understand their institutions to some degree. Almost 20,000 individuals received direct financial benefits from wildlife in 1999. There is also evidence that this is translating into active wildlife management. The amount of income invested in wildlife management increased from ZK3m in 1997 to ZK10m in 1998 to ZK 51m in 1999, and preliminary budgets for 2000 suggest it will approach ZK100m (US\$40,000). While still limited by training, the management of wildlife by communities is improving. Kakumbi ADC, for example, has set targets for 1,176 patrols days for 7-day anti-poaching patrols, 1,440 days for day-patrols to check snaring and fishing along the Luangwa river, and 2,000 days to control forestry and tree-cutting. Having clear targets and expectations is an important step towards sound management. While LIRDPA's wider efforts have ensured that wildlife populations are stable in the Lupande GMA, increased patrolling efforts, the delineation of wildlife areas, and the development of water supplies should lead to a rapid increase in wildlife. It remains to be seen if the new ZAWA will allow communities the commercial freedom to make commercial partnerships to sustain this growth.

Governance is proving to be an important determinant of 'development'. At least at the local level, there is cause for optimism as communities entrench their understanding and confidence in practice, holding regular elections, and insisting on transparency and accountability. Some chiefs are even beginning to see how valuable this can be in freeing and energising people.

Nonetheless, the programme is still very new and will need continued support in the form of technical assistance, training, monitoring and seed finance to develop the capacity of local people to govern themselves and to invest in the wildlife economy. It will also be necessary to defend these new systems and practices, as they become fully part of the local culture, especially from the general bureaucratic impulse to maintain rural people as subjects. Providing this level of support will be difficult during Phase 4, because the main thrust of the project is to develop a financially self-sustaining national park as quickly as possible. Despite its long-term benefits to Zambia, the associated social programme (i.e. CBNRM) remains a costly add-on to SLAMU. Serious consideration must be given to removing this structural flaw in the funding mechanisms.

7.5.10 The importance of management controls

The CBNRM literature places considerable emphasis on the need to build the capacity of local communities. This is an important requirement. However, the LIRDPA programme has shown that management controls are critical for ensuring that steady progress is made towards achieving the goals of CBNRM. Perhaps the most important lesson is that effective progress requires a sound management framework. We postulate that recognition of this fact will be the next major breakthrough in understanding community-based management, and the process of devolution.

7.5.11 Sustainability of the CBNRM programme

The community programme is certainly sustainable if LIRDPA maintains its current level of support for the foreseeable future, and especially if communities are given more power and commercial autonomy in particular. More progress will be possible if an effort is made to plan and fund the offer of Mambwe Council to further devolve planning authority, and to devolve the powers to tax and related responsibility to provide services.

Two major issues are of concern. The first involves the general management-political culture of Zambia: will the centre see the benefits of devolution and allow this to happen, or will it continue to exert control?

The second is related to the poverty threshold. The project has evolved from a mini-government approach (in Phase 2) into a much more focused, potentially self-sustaining and devolved community programme. This has placed wildlife in a position where it can become an economic driving force.

However, some fundamental problems are not being addressed which pose moral dilemmas. It is hard to concentrate on institutional development and wildlife management when people are hungry, sick or illiterate. It is also difficult to sustain a community wildlife programme if other development needs are not being met. The educational system is weak, especially for women. What future does an uneducated community have in the global, knowledge economy? The human population is growing rapidly, and in-migration is undermining the very resource base that is attracting these migrants. It will be very difficult for the demographic situation to stabilise when there is dire poverty³⁰ and women are relatively powerless and uneducated. HIV/AIDS is also a serious constraint with, for instance, noticeable mortality amongst trained community leaders. Land ownership systems are too ill-defined or undisciplined to deal actively with the problem of unplanned settlements and businesses, and with land use planning in general. In short, can a single-sector rural programme work, if the other sectors are weak or absent and the macro-economy is facing dire problems, including governance issues?

This combination of challenges has often posed a dilemma for LIRDP. In the absence of effective line ministries and NGOs, there is constant pressure for the project to diversify beyond its mandate, capacity and core competency (and budget). Thus, the project needs partners to achieve the overall goals of broad-based development and conservation envisaged in the original LIRDP project proposal. In particular, people must encourage their District Council to fill the role of lead agency to co-ordinate this growth³¹.

The project has made considerable progress to the extent that other agencies (e.g. government departments responsible for water and agriculture, and the District Council) are beginning to use the new institutional structures. But, in the face of poverty and illiteracy, is this enough? As was recognised when LIRDP was first proposed in the early 1980s, to lift the entire area out of poverty will require much help, investment and support for all components of the socio-economy. If this is lacking, progress is likely to be undermined by population growth, poverty and illiteracy. There is a critical paradox: can it be justified to provide support to Lupande GMA when areas around Lupande are in even worse conditions? And how the socio-economy of Lupande GMA break out of its downward spiral, unless wide-ranging support is available?

This is a political question involving equity. A business manager would not face this dilemma. Business recognises that progress depends on leadership, and that leadership generally occurs through example. Thus the development of a working model in Lupande would be an important step to fostering progress in other GMAs.

The reality is that the Lupande community programme is only 'beginning' to work. While it provides an optimistic foundation for further progress, this will not happen automatically. Without help, training and monitoring, the resource base will be depleted further, particularly wildlife - the only resource capable of fuelling an economic engine to drive development in the area. Poverty and malnutrition will escalate and the area will fall into an economic down slide, dragging the even more impoverished surrounding areas with it.

Money is a partial constraint, but probably not the most important one. Devolved authority, coupled with enlightened, decentralising, enforced norms and rules could bring about rapid development (Box

³⁰ The people in Lupande GMA suffer greatly from poverty, although they are better off than those in neighbouring GMAs within the Luangwa Valley. This is why people from these areas are migrating to Mfuwe where (while far from satisfactory) there are schools, clinics and shops.

³¹ SLAMU has worked closely with Mambwe District Council to develop a draft project proposal for this purpose, and to address the immediate concerns of unplanned settlement around the park gate: "*Support of Mambwe District Council to develop its capacity to devolve sub-district capacity for economic planning and development, and to develop urban infrastructure in the Mfuwe area*". August 1999. SLAMU has also developed a concept proposal to run a trial of this in Mnkanya ADC: *Concept Paper: "Development Planning in Mnkanya ADC"*, July 1999. By August 1999, MS-Zambia had agreed to fund and provide a Development Worker in this position.

7.16). Given the right policy environment, coupled with a few good leaders, some management training, and a sound socio-economic and business plan, it would be possible to mobilise the area's resources to generate rapid socio-economic progress. The wildlife resources are ripe for commercialisation, and the new institutions, including Mambwe District Council, are ready for progress. The constraints are external: poor infrastructure and social services, and especially an unenlightened and unaccountable central authority unable or unwilling to proactively grasp this potential. Indeed, in these circumstances, great tenacity has been necessary to make progress and to maintain whatever progress that has occurred.

In conclusion, this chapter provides evidence that community-based wildlife programmes can work to achieve the dual objectives of wildlife conservation and socio-economic empowerment and development. The success catalysed by the fiscal devolution of control over wildlife revenue inevitably creates a demand for the further evolution of governance and devolution including tenure. However, progress is constrained by the larger governance issues and the unenlightened nationalisation of the wildlife resource, and by macro-economic problems and the related failure of other sectors to address fundamental problems (e.g. education and health). Progress can only be maintained in the long-term if this demand for better governance and basic services (especially education) is fulfilled. While the challenge to escape the poverty trap is huge, real progress is possible in a relatively few years provided there is careful planning and sound implementation (Box 7.16), a few million dollars if provided, and especially if there is strong and committed central support and leadership and an enabling policy.

Box 7.16 The importance of principles, and enlightened, decentralising, tough rules.

Drucker (1995) provides useful insights on how to make donor aid work. The Marshall Plan was the most successful aid-funded development, and the forerunner of development aid. It gave seed money only to business or services with a convincing track record and a realistic plan with clear performance goals. Support and money was immediately withdrawn the moment a business – whether government run or privately owned – either diverted the money from the agreed plan or failed to meet agreed performance goals. The Salvation Army, arguable the most successful social programme in any developed country, spends hardly any money in rehabilitating the homeless, addicts or the disadvantaged. It explains its success as being based on discipline, hard work, minimum subsistence pay, a demanding programme of skills teaching, and unlimited compassion. Any participant who breaks the Salvation Army's draconian rules is out, no matter how needy. The highly successful Green Revolution in India searched out and worked with competent small-scale farmers, funding those who were prepared to work. Like the two previous examples, co-operation and funding were based on tough rules, and this disciplined generated sustainable self-development.

The need to be uncompromising about principles is borne out by the community programme. Indeed, North (1990) goes so far as to blame under-development in Africa on an inability to define and enforce rules of transaction, which raises uncertainty to the extent that transactions, and therefore economic growth, do not occur. Uncompromising principles includes the importance of clarifying responsibility. As Kay (1990) argues: "Where there is ambiguity about responsibility, there is no real accountability. And where there is neither accountability nor responsibility, there is inefficiency and incompetence".

CHAPTER 8

ISSUES AND LESSONS FROM LIRDP

8.1 Purpose of this chapter

The international development community has been struggling to find solutions to the challenge of alleviating rural poverty in countries like Zambia where the macro-economy is weak and dominated by the state which, in turn, is characterised by poor governance. At the same time, there has been the search for sustainable development. The LIRDP project was an ambitious attempt to address these issues, costing NORAD some US \$25m since it was initiated in 1986. That fact that the project still survives, and has developed the conditions that now provide the possibility for it to become financially self-sufficient, can be viewed as a significant achievement in itself, and something we can learn from. However, getting to this point has been expensive. There have been mistakes, there has been mismanagement, and the project has sometimes proceeded in the wrong direction.

This chapter comprises three main sections. Section 8.2 looks at the evolution of the project and sets it within the context of Zambia's economic and political progress, noting the impact of President Kaunda's personal involvement in the project, and describing the historical animosity between LIRDP on the one hand and NPWS and the ADMADDE programme on the other.

Section 8.3 provides lessons and experiences relevant to the management of protected areas, summarising some of the major components of the project concerned with law-enforcement, financial management and sustainability, and tourism development.

In Section 8.4, we focus on project management, performance and finances. Here we range more theoretically, using the experiences of LIRDP to comment on issues that challenge the development and conservation sectors. One of the primary goals of LIRDP was to co-ordinate and 'pump-prime' development in the project area. So we assess what was achieved and what has been learned, including the dilemma of how to sustain the provision of services. Chapter Seven has provided a detailed assessment of the community programme. Here, we review this programme in relation to the management of the broader LIRDP project. Protected area management has been generally neglected in southern and central Africa, and is becoming rather moribund intellectually. This subject has not been invigorated by debate about objectives and management. We attempt to provide some ideas and stimulation about the future role of parks in rural Africa, about how management systems might relate to these objectives, and about the appropriateness of conventional park planning. The recent progress of LIRDP, including its transformation into SLAMU and the increased likelihood of financial sustainability, is related to improving management practices. A brief review is therefore provided of some of the inherent problems of managing service institutions in the public sector, and a few practical lessons from LIRDP on strengthening performance are given. Reviews are an important component of management, and we look at what happens and what works. We also look at the role of NORAD, including its policy of "recipient responsibility" and question the very concept of one-way responsibility.

Finally, in a concluding section three questions are asked and briefly answered:

- Was the investment worth it?
- What did we learn (CBNRM, law enforcement, park management, management of donor projects)?
- If we did it again, what would we do?

8.2 An analysis of the historical evolution and background of LIRD

8.2.1 Economic and conservation history of Zambia

(a) Economic and political history of Zambia

Europeans first heard of what is now Zambia through the explorations of David Livingstone in the 1840s and 1850s, who was appalled by the human misery caused by the Zanzibarian slave trade. As European nations scrambled for a share of Africa, Cecil Rhodes used the money and zeal from diamond and gold strikes in South Africa to extend his and Britain's influence northwards. Through his British South Africa Company (BSAC), he made treaties with chiefs in Zimbabwe, Zambia and Malawi in exchange for protection and aid. In the early years of the 20th century, the BSAC did little in Northern Rhodesia, except introduce taxes to promote 'native labour' and develop a rail link. In 1924, the British colonial office took over the administration of Northern Rhodesia. Huge copper deposits were discovered in 1928, promoting urbanisation of local people and European immigration. In response to the take over of power in South Africa by the Nationalist Party, the three British colonies in central Africa formed the Federation of Rhodesia and Nyasaland in 1953. The administration of Northern Rhodesia remained under the colonial office, while Southern Rhodesia dominated the Federation and began to diversify and develop rapidly. In response to inequality, black Zambians became politically active and, in 1964, Zambia became independent with Kenneth Kaunda as the first President. At this time Zambia was classified as a middle-income country, though its fortunes rested entirely on the state of the world copper market. Despite this, fewer than 100 Zambians had university degrees at independence, and only one thousand had completed secondary school.

As black people in Rhodesia, South Africa and South West Africa struggled for their own independence, the region fell into turmoil. Kaunda supported many of these movements, at some costs in terms of destabilisation, and communications as Zambia closed its southern trade routes. Zambia's debts grew steadily, and copper revenues were spent on education, a huge expansion of the civil service and food subsidies for urban areas. Kaunda failed to diversify Zambia's economy or to reduce his debt load. In the early 1970s, the world copper price fell dramatically, and Zambia's weak and state-controlled economy was unable to respond. There were shortages and queues for everything, and food riots when subsidies were withdrawn made economic restructuring difficult. By the late 1980's, Zambia was one of the world's poorest countries with a chronic debt burden, high inflation, a weak currency, and a reputation for corruption at the highest levels of government.

These economic problems lent strength to political opposition and Kaunda and his ruling UNIP party were replaced by Chiluba and the Movement for Multiparty Democracy (MMD). The end of 27 years of rule by Kaunda rule and his one-party-state, and Chiluba's stated intentions to liberalise the economy and address corruption, received widespread international support. Chiluba succeeded in some areas of liberalisation, including introducing a freely floating currency, but debts and widespread corruption meant that the economy grew slowly. Exports now total about US \$800m annually, while donors contribute \$2,000m to support the economy. Zambia has excellent natural resources, but investment and growth is limited by weak systems of justice, a bloated but ineffectual civil service, corruption and the absence of a vigorous entrepreneurial spirit. The country remains poor, and its people suffer periodic hunger, abysmal health services, and have few opportunities for a meaningful education or gainful employment.

All this has consequences for LIRD. Compared to other southern African countries, inputs are expensive and often difficult to source. The private sector is weak and lacks diversity, and contracts and standards are often difficult to enforce. This uncertainty raises the transaction costs of most markets and hinders exchange, and therefore also the economy (North, 1990). One effect is that input costs for tourism-related business in Zambia are about twice those elsewhere in southern Africa.

Another effect is that LIRDPA has been unable to outsource many services. Even when it has much management time has been spent chasing suppliers and debtors.

The impact of this high transaction-cost economy and the poor communications infrastructure can also be seen by comparing tourism in Zambia and the rest of southern Africa. Zambia has superior wildlife resources which remain uncrowded and mainly unused. In contrast, parks such as Hwange and Kruger, the Okavango area and game-ranches are brimming with visitors. One only has to compare the tattered and empty towns on the Zambian side of Victoria Falls or Lake Kariba with the invigorated expansion on the Zimbabwean side to see the commercial opportunities that are being squandering.

(b) A short history of wildlife conservation in Zambia

The importance of wildlife is nowhere more apparent than in Zambia. The abundance, variety and use of wildlife has coloured Zambia's history. The slave trade was linked to ivory. Livingstone's mission was to stop this trade, and he and other explorers and adventurers caused much of central Africa to be opened up for commerce and Christianity. Even today, 30% of diets in Lupande GMA are satisfied by wildlife or wild products. Wildlife also subsidised early white settlement and administration.

Northern Rhodesia's colonial administrators sought to gain control over wildlife. The British South Africa Company sought to control the ivory trade, and to prevent widespread hunting by restricting African ownership of firearms and establishing game reserves and regulations. Sportsmen and conservationists persuaded colonial administrators to expand these reserves and protect some species. The Legislative Council of Northern Rhodesia adopted the 1925 Game Ordinance to create game license and protected areas that limited both African and European hunting. The Department of Game and Tsetse Control was established in 1942 with priorities to control elephants and protect cultivated land and to control animal diseases. Reflecting the mentality of the time, game would only be preserved in "suitable areas" for the benefit and enjoyment of the public. There were pressures to control, though not to stop, African hunting - even in what were, in sociological terms, hunting communities.

The colonial government designated vast tracts of land as protected areas. By 1959, 43 percent of the country had some form of restriction: Kafue National park covered 8,650 sq. miles; game reserves (in which no hunting was allowed except by special license) occupied 10,090 sq. miles; and controlled hunting areas (where licensed hunting was permitted) were vast and covered 105,530 sq. miles.

As Gibson (1999) explains, Africans, who were sometimes moved out of these areas, hated these laws and broke them consistently, causing continual conflict between Game Department staff and rural residents. Conservation policies became an important issue that local African politicians used to incite opposition to colonial rule. However, with Independence in 1964, wildlife policy did not change. The political institutions of the First Republic had too many incentives not to do so. Few Zambians besides Kaunda favoured conservation at this time. Despite much hope, the safari hunting and tourism industries had not yet begun to earn much revenue. The National Parks and Wildlife Bill of 1968 continued the colonial legacy of centralising wildlife and, by claiming this authority, the ruling party (UNIP) was "free to use it with discrimination, rewarding its followers with employment, licenses, and access to wild animals". To overcome the dilemma between telling Zambians not to hunt and its earlier promises to free Zambians from colonial oppression, UNIP allowed the then Department of Game and Fisheries to degenerate, so that detection rates for poaching became extremely low. This had few domestic political costs, international conservation had not yet gained prominence, and the wave of poaching that enveloped the continent did not start until the early 1970s.

When the world copper price plummeted in 1975, its effects reverberated throughout Zambia's single product economy. The subsidising of urban livelihoods and the under-pricing of agricultural products played havoc with rural incomes. Simultaneously, rising oil prices stimulated Asian demand for ivory

and rhino horn. Ivory prices increased dramatically. The wildlife department (by then the National Parks and Wildlife Service, NPWS) continued to decline, Kaunda became increasingly disenchanted with its effectiveness and sought NGO partners (WWF, Wildlife Conservation Society of Zambia, Save the Rhino Trust) as a backdoor route to pursue his conservation agenda. Like LIRD, these were undermined by the NPWS.

Between 1975 and 1990, NPWS became more emasculated and maliciously protective. There was increasing rural poverty and armed conflict in much of the region. In this period, poaching killed 75% of Zambia's elephants and all its rhinos (Gibson, 1999). It was in this environment that LIRD was conceived and developed.

(c) Presidential involvement

One of the major criticisms of LIRD by many observers concerns the direct involvement in, and patronage of, the early phases of the project by former President, Dr Kenneth Kaunda. The relevant departments of the civil service saw the direct involvement of State House in an operational project as cutting across their responsibilities and competencies. NPWS was angry at having the SLNP (its flagship national park) removed from its management and placed under the authority of LIRD. This issue, perhaps more than any other, led to persistent conflict and non-co-operation between NPWS and LIRD which was vital for LIRD to make significant progress. Similarly, other line departments were reluctant to accept what they saw as the 'imposition' by State House of LIRD as the co-ordinator of activities in the project area. In these circumstances, LIRD was never able to fulfil effectively its envisaged co-ordinating and enabling functions and was criticised for playing an increasingly dictatorial role.

It is, however, important to see the role of Dr Kaunda in perspective. Kaunda pursued a conservation agenda when this was a low priority for many politicians (Gibson, 1999), and established LIRD as a response to serious poaching and what he perceived as the rottenness of the NPWS. LIRD was also initiated at a time of considerable change. It followed the end of civil war and civil conflict in southern Africa, and the emergence of peace and democracy. It occurred at the end of the cold war when democratic change began to affect Africa. Economies were restructured by the Bretton Woods institutions, and a period of privatisation and open economies was ushered in. In the environmental arena, protectionism was beginning to give way to an acceptance of the necessity of sustainable use. Considerable innovations in resource management practices were occurring, with southern Africa instrumental in pioneering experimentation with CBNRM and sustainable use. Donors and governments across the world now support such approaches as almost 'normal' or accepted practice but, in the early 1980s, when ideas for LIRD were first being discussed, support for such approaches did not exist. They were seen by many as 'too radical', 'too big' and 'unworkable'.

The main reason why the ideas for LIRD generated at the Lupande Development Workshop (Dalal-Clayton & Lewis, 1984) and the subsequent outline proposal (Dalal-Clayton & Oscarsson, 1984) progressed at all was the persistence of individual members of the Chipata Interim Planning Group in promoting the concept. Also crucial was the championing of this new approach by an individual desk officer in the Lusaka office of NORAD (Erik Berg) who was a strong supporter of the concept of community resource management. He responded favourably to a request from the National Commission for Development Planning and arranged for a consultancy to evaluate the proposal (Larsen and Lungu, 1985). But without the subsequent direct intervention of Dr Kaunda in committing the government to the project and in putting his personal support behind a request to NORAD to provide financial assistance, it is unlikely that that LIRD would ever have been financed and implemented.

A consequence of close Presidential involvement and support for LIRD was that senior management had unparalleled access to State House, which they were able to use to overcome difficulties and

barriers. They were seen as wielding "enormous power". In practice former Co-Director Fidelis Lungu met with President Kaunda far more frequently than did Richard Bell. It has been argued that many of the project's difficulties, which thwarted progress, might (in terms of long-term project sustainability) better have been resolved through more investment in diplomacy and dialogue, even though this would have meant a slower rate of progress. There are counter-arguments (e.g. Gibson, 1999) that the political-economic system was structured to perpetuate patronage, and that persons attempting to clearly delineate responsibility would threaten the status quo (Box 8.1). Those involved faced a difficult dilemma in this regard.

Box 8.1: Accountability weaknesses inherent with a 'nationalised' wildlife resource

It is possible, though by no means certain, that greater investment in 'relationship building' at this stage would have benefited LIRD. Clearly, working within the 'system' was slow and frustrating. The benign interpretation is that the system was weak, with unclear goals, few resources, excessive bureaucracy, etc. There is little doubt that the 'buck' circled almost endlessly, acting against change and improvements. Moreover, with little accountability to outputs, a bottom line or constituencies, bureaucratic politics became a dominant force and the system was prone to patronage.

The more sinister interpretation is that the deliberate demise of transparent and effective management systems and the simultaneous centralisation of power, would allow those in the right places more scope for personal enrichment. Indeed, LIRD was initiated at the end of a period when a great deal of wildlife capital (e.g. ivory, rhino horn) was illegally taken from the system, indeed from under its eyes.

The tendency to treat wildlife as a state resource, in other words to 'nationalise' it, unfortunately leaves it prone to such problems, especially in a system where government bureaucrats are paid and treated badly. Weaknesses in accountability are inherent in the nature of state resources, and especially so where officials and politicians themselves are not accountable - as in emerging African countries where democratic responsibilities are still over-shadowed by patronage. This leads to serious policy and market failure, and usually to the gross under-valuation of wildlife. As Gibson (1999) illustrates, the benefits of state-owned wildlife can be captured by free-riding politicians and officials without their being accountable for such efforts to maintain and re-investment in the resource. The sad consequence is that, for the sake of a few dollars, an economic sector is lost. Thus, officials maintain a status quo of confusion where they can make small profits through the allocation of licenses or permits. Instead of pro-actively developing a commercial strategy that could earn Zambia millions of dollars, many parks have a few small, under-financed operations that are not part of an over-arching strategy. Serious investors ARE needed to put Zambian tourism on the map, but they avoid the risks inherent in doing business in a patronage-dominated system.

This might be termed a 'parasitic' economy, with a few people in the right places able to make small gains by 'milking' the resource base. It contrasts with a productive economy in which profit is related to the production of value (and therefore to innovation and effort) and in which free riding is more difficult.

Thus, the involvement of the former President was the catalyst for the launch, existence and early direction of LIRD, but it was also a major inhibitor of progress. It is difficult to see how LIRD could have resisted the involvement of the President once he had given instructions that he would chair the Steering Committee personally. Western governance theory suggests that politicians should stick to politics and strategic policy-making, and leave the day-to-day business of on-the-ground resource management to the professionals and the people¹. However, for better or worse, this is not

¹ Against this Goldman (1998) notes that "all of these disparate processes having to do with the environment are, first and foremost, profoundly political acts", and warns against the dangers of these political process being captured by 'anti-politics' technocrats. Given the impulse of newly independent colonies to rectify the past, the politicisation of management and projects like LIRD is hardly surprising. Unfortunately, in reality, these emerging nations have not achieved this rectification (except for the elites) and have often failed both politically

how the One Party State governments of Africa's newly independent nations functioned, and project implementers had to work through this system. Given the politicised nature of the system, the survival of the project was as much an outcome of loose, changing alliances of politicians, donors and officials as it was the result of its competence and technical merits. Circumstances were messy, but project management held the important cards: high level connections, independent finances (the LIRDPA revolving fund) and significant NORAD funding.

A further danger of high-level patronage is illustrated by the fate of the project following the election of the MMD government in October 1991. LIRDPA was seen by many people in the new government, and by the public, as a personal initiative of the former President and his UNIP Party. It was therefore a target for very close scrutiny and 'take over' by NPWS. Emotions were running high at the time and there were calls for it to be shut down. In the event, the two co-Directors, who had enjoyed the close personal support of Dr Kaunda, were replaced by a single Director (Flywell Munyenembe) and the project went through a period of rationalisation.

(d) Relations with ADMADE and NPWS

(i) Origins of the conflict

Throughout much of its history (and particularly during Phases 1 and 2), LIRDPA 'enjoyed' a difficult relationship with both NPWS and the ADMADE program. The origins and nature of this problem have been discussed partly in section 3.3.1. The two programmes both emerged following the Lupande Development Workshop in 1983, but were promoted by different factions who had different visions and aspirations, and who worked in different political circumstances. LIRDPA had the support of President Kaunda and NORAD, but there was some ambiguity about its legal status. NPWS, by contrast, strived to insulate itself from Kaunda because he viewed it with some scorn (Gibson, 1999) but, nevertheless, was the agency officially empowered to manage Zambia's wildlife.

The Chipata Interim Planning Group favoured a large-scale project incorporating the management of all natural resources in the Luangwa Valley. They hoped this would address the neglect suffered by the people of the valley and, in doing so, reduce the severe pressures on key resources (particularly commercial poaching). It was envisaged that this might best be provided through an integrated resource development project (eventually this became LIRDPA), with overall control of resource management to overcome the failures of line ministries.

NPWS (supported by Dale Lewis) opposed this approach. They criticised it on technical grounds, but this criticism was tempered because NPWS and individuals were seen to have much to gain from criticising. The early support for the proposed LIRDPA by President Kaunda also reflects his expressed distrust of NPWS. NPWS was clearly worried that LIRDPA posed a threat that would remove its authority as principal wildlife manager, initially in the Luangwa Valley, but also throughout the rest of the country if the LIRDPA model proved successful. NPWS therefore established ADMADE as a counterstroke to LIRDPA and "tried to insulate themselves from Kaunda's interference" (see Box 8.2). (Gibson 1995).

(ii) Conflicts over the control of South Luangwa National Park and Wildlife

The original concept proposal (Dalal-Clayton & Oscarsson, 1984) did not explicitly include the SLNP in the LIRDPA project, although it would have been a logical consequence of an integrated planning project covering the entire Luangwa catchment (watershed). For pragmatic reasons, the project was structured as a 'pilot' project with its boundaries reduced (but not the scale of its activities) and the

and technically. Politically, little has been done to enrich and empower the disadvantaged rural people, and efficient management systems have been simultaneously discarded.

Box 8.2: The Independence of ADMADE

Clark Gibson (1995, p154) argues that ADMADE (Administrative Management Design for Game Management Areas) was initiated as a response to LIRDP, and its support by President Kenneth Kaunda:

"Dale Lewis and NPWS responded by creating their own pilot conservation programme that aimed to increase their control over wildlife resources, while simultaneously shielding these efforts from political interference. NPWS possessed a resource that critically influenced its strategies: it already enjoyed a share of public authority. The department had a legislative mandate to manage Zambia's wildlife estate. Further, it controlled an organization that, while weak, still existed nation-wide. These assets allowed NPWS to develop and implement a new programme under its own auspices, without forming alliances with other public agencies or politicians [i.e. as LIRDP had to], which might foster future intervention or takeover. These assets also marginally reduced politicians' ability to intervene in NPWS's affairs, since they would incur transaction costs if he [Kaunda] decided to change the department's policy or structure. NPWS's share of public authority allowed it to construct a new programme that, at least in its infancy, was relatively insulated from political meddling. Most importantly, these assets allowed NPWS to pursue its programme without direct dependence on President Kaunda".

There was rivalry between LIRDP and ADMADE. At times, both 'sides' complained that the other had "trespassed on its legitimate terrain", particularly over the control of wildlife in the project area (see section 8.2.1.d). Unfortunately this rivalry was seldom manifested in a positive manner in which competition could have accelerated progress. While this meant there was close scrutiny of both LIRDP and ADMADE, criticisms were interpreted according to the atmosphere of mistrust. Relationships were tense, with severe breakdowns in communications between the two initiatives.

inclusion of the SLNP was as a fundamental element of the final project proposal (Larsen & Lungu, 1985). This included plans to develop park roads and tourism, and to manage wildlife in the park. During the initiation and development stages of the project in 1985-1986, there were intensive discussions and disputes between LIRDP, NCDP and NPWS on whether the SLNP would be included in the project area, and whether NPWS staff working in the area would come under LIRDP control. It was resolved in favour of LIRDP assuming control (LIRDP, 1987) but, to this day, the reporting structure of NPWS staff is ambiguous. Richard Bell (pers.comm.) indicates that the decision to include SLNP was taken by the Steering Committee at its one and only meeting. The Phase 2 proposals, which included management of SLNP, were approved at the Chichele lodge workshop in 1987. This suggests that there was some measure of broad consensus for including SLNP, although it is difficult to know to what extent participants agreed rather than openly oppose an approach favoured by President Kaunda. The scope of the project area led to the criticism that SLNP and LIRDP were only benefiting one community, and that this was unfair to the park's other neighbours (Box 8.3).

LIRDP was established to co-ordinate development in the Luangwa Valley but, during Phase 2, sought to increase its control over wildlife in the project area. These efforts reflect the tensions and antagonisms between LIRDP and NPWS, and LIRDP's desire to by-pass NPWS. The co-Directors prepared a draft statutory instrument which would provide LIRDP with complete control. This was approved by the Executive Committee and forwarded to the Steering Committee. When NORAD officials, who apparently supported LIRDP in this matter (see Gibson, 1995, p192), met with Kaunda in April 1989, they are reported to have been assured that LIRDP would be granted the powers it sought. However, the Ministry of Legal Affairs argued that this would require an amendment to the 1972 Wildlife Act in the National Assembly, and the idea of a statutory instrument was not pursued.

Box 8.3 Comment: LIRDP supported Lupande GMA but not other neighbours of SLNP

LIRDP comprises South Luangwa National Park (SLNP) and some 50,000 people in the Lupande GMA. The project has been criticised for ignoring communities on the southern, western and northern boundaries. It has been suggested that some of these neighbours, including the well-studied Bisa people in the Munyamadzi corridor between the North and South Luangwa National Parks (Marks, 1984), have been alienated, and that this inequity is a part reason for poaching. Consultants (Mano, 1998; EU evaluation of tourism potential of northern Zambia) and others have complained that people outside Lupande GMA bemoaned the fact that they have not benefited from LIRDP and the park.

There are two arguments against this criticism. First, the ADMADE programme services these communities, and ADMADE and NPWS have actively excluded LIRDP from these areas. For instance, a tentative proposal by LIRDP to expand in order to service these areas in a newly organised ZAWA, was rejected by NPWS. It was perceived as a threat to ADMADE.

Second, the SLNP has not generated any surpluses, so sharing park revenues would entail sharing a deficit. Even in Lupande GMA, communities have been taxed a portion of the wildlife revenues earned within the GMA (Table 7.4), though this taxation has been far lower than in ADMADE areas. Indeed, this shows that, before the new policy was initiated, these communities were actually subsidising the project.

Instead, during Phase 2, LIRDP proposed amendments to a draft National Parks and Wildlife Bill to enable the establishment of Integrated Resource Development Committees (IRDCs). These bodies would have powers to manage national parks and GMAs and to retain wildlife revenues generated in their areas, and responsibility to promote integrated natural resource management and development. The proposed IRDC structure closely mirrored that of LIRDP. The amendments were incorporated in the new Act, which was passed in 1991, creating legal grounds for the existence of LIRDP. Effectively they placed IRDCs in a more powerful position than the Director of NPWS with respect to the control and management of national parks and game management areas.

In Phase 2, LIRDP also investigated the idea of seeking autonomous 'authority' status for itself (along the line of the Sri Lankan Mahaweli Authority). In this model, the responsibilities of line ministries for natural resources and development in the LIRDP area would be transferred to the authority through amendments to relevant Acts of Parliament. Review missions expressed their opposition to this idea. Another proposal advanced during this period by the co-Directors to the Steering Committee was the idea of establishing a national version of LIRDP - a National Integrated Resource Development Programme (NIRDP). This would have extended the LIRDP model across the country, incorporating ADMADE in the process and assuming control of Zambia's entire wildlife estate. A feasibility study was suggested, but never undertaken.

It is not surprising that these various efforts to gain control over wildlife in the SLNP and Lupande GMA, and even elsewhere in the country, generated deep resentment and a feeling of being 'hijacked' within NPWS - thus exacerbating the already considerable tensions between LIRDP and NPWS.

This tension suggests that the wildlife sector had weak institutions and leadership, no clear policies, uncertain administration, etc. - a situation that allowed massive destruction of elephant and rhino populations by poachers. With no enabling environment, no clear roles, and no real leadership, it is hardly surprising that there were so many squabbles, territorial disputes and opinions and so little real progress in the wildlife sector.

(iii) Some costs of the long-standing animosity between NPWS and LIRD

Past barriers proved hard to break. We have mentioned the tortuous approval process undertaken by LIRD in gaining approval to expand commercial partnerships, and have hinted at the difficulties of improving quota setting. That these problems were general, is illustrated by the determination of senior staff in NPWS not to learn from the LIRD experience. As late as 1997, Goran Johansson, former LIRD Assistant Director of Administration, records:

"When it comes to transforming the department [NPWS], virtually no interest is shown in the experience gained by LIRD and apparently information about the project is being withheld. How serious are the Ministry and the NPWS about benefiting from the support given to LIRD?"

This unfortunate situation hindered progress by LIRD. Opportunities to alleviate human suffering and to conserve wildlife were squandered to rivalries, suspicions, and personal agendas. An opportunity for improved relations arose when LIRD (and the SLNP) was brought under the responsibility of NPWS in 1992 but was again wasted. According to Johansson, in 1997, there was "still hardly any dialogue between the project and higher authorities" (i.e. the Ministry of Tourism and NPWS) and tensions continued between LIRD and these authorities:

"At various occasions, the Ministry's insensitivity to market demands has cost the project and the local communities several hundred thousands of dollars. Reference is made to delays in issuing special licenses for hippo culling, etc.

The exercise of entering into lease agreements for lodges and campsites in the project area was done in splendid isolation by the Ministry of Tourism without involving the project. Yet we are the revenue authority in the area and we are very dependant on the income generated from these leases. We also know the area and the market and I am convinced that we would have been able to negotiate better deals than the Ministry officials.

What is very disturbing is that up to now, we have not even been given copies of the agreements. Supposedly, they are with the Commissioner of Lands for approval (for more than five months now). This is very embarrassing since tour operators are willing to pay but we can not issue any invoices in the absence of the lease agreements. And so the project loses out again.

The way the park entry fees and other fees are determined is also totally without consulting the project. The most recent change was made in September [1996] although nobody was informed until December"

Johansson (1997)

Relationships between LIRD and NPWS remained little changed with the latter keeping LIRD at a distance. Consequently, LIRD focussed on internal project matters and Luangwa-focused issues, although recognising the necessity of addressing these 'external factors' in a more targeted way. However, recognising the need to become part of the national organisation, and the experience it could provide, SLAMU took advantage of the transformation to ZAWA to try to move closer to its parent organisation, though it was seldom welcomed.

(iv) The European Development Fund Project to restructure NPWS into ZAWA

From 1996 to 1999, the European Development Fund (EDF) supported a project to assist in the transformation of the NPWS into the new Zambia Wildlife Authority (ZAWA). The enabling legislation, the Zambia Wildlife Authority Act, was passed by parliament in April 1998, and the Authority became operational in November 1999. However, at the time of writing, senior management have still not been recruited (see Box 5.7).

Recognising its alienation, LIRD made a serious (and often unappreciated or unwanted) effort to become part of NPWS-ZAWA. For instance, it even called itself an Area Management Unit, though

it reduced the risk of this approach by maintaining its financial autonomy. Worried about the inefficiencies of the present ad-hoc and unstructured reporting, SLAMU recommended formal quarterly reporting to ZAWA, thus building performance accountability.

In 1998, LIRD management participated in several meetings to discuss the establishment of ZAWA (SLAMU News, 5, 1999). While donors and consultants saw LIRD as offering a credible mechanism for managing parks and communities, resistance from NPWS continued. Recently, however, there have been significant staff changes in the Ministry of Tourism, and many of the former NPWS officials have been sidelined. The Interim Management Team of ZAWA has inherited a situation of general disorganisation. It has, however, expressed its relief that, in SLAMU, they at least have one working organisation from which to learn and adapt management systems. But the political process of establishing ZAWA has still to unfold and, while there are positive signs, it is far from certain that it will become a credible and professionally managed organisation. If it does, LIRD/SLAMU provides a readily adaptable system for managing parks and communities. This new approach distinguishes between conservation and park management in SLNP, and CBNRM and sustainable development in Lupande GMA.

(v) The ZAWA Act and community resource boards

The new Act allows “a local community ... with common interest in wildlife and natural resources in that area [to] apply to the Authority for registration and a Community Resources Board”. After defining the composition of this Board, including defending it from accountability problems by making Chiefs ‘patrons’, it gives the Board functions. Thus, a Board “shall be to promote and develop an integrated approach to the management of human and natural resources” by:

- (a) “in conjunction with the Authority [negotiating] co-management agreements with hunting outfitters and photographic tour operators;
- (b) manage the wildlife under its jurisdiction, within quotas *specified by the Authority*;
- (c) appoint village scouts to exercise and perform the duties of a wildlife police officer *under the supervision of a wildlife police officer* in the area falling under the Board’s jurisdiction [who may be an honorary officer confirmed by Gazette];
- (d) in *consultation with the Authority*, develop and implement management plans which reconcile the various uses of land...”.

Our added emphasis shows that ZAWA could maintain considerable authority over Community Resource Boards. But, equally, if ZAWA adopts an enlightened approach, the Act allows it to be highly devolutionary. The Act is similarly discretionary about financial devolution. It gives ZAWA the authority:

“to pay out such money into a fund established by a Community Resources Board from revenues payable under this Act in respect of licences issued, concessions granted and services rendered from the use of wildlife resources within an area of a Board as the Minister shall prescribe by regulations after consultations with the Authority”

Given that ZAWA does not have the financial resources to pay even its own staff salaries, it will be an exceptionally far-sighted and principled organisation if it devolves all of the wildlife revenues earned in GMAs to the ‘producer communities’. LIRD/SLAMU’s community programme provides critical experience which can significantly assist the new ZAWA to facilitate and oversee these new arrangements. Anticipating that the new ZAWA would be cash-hungry when it re-placed NPWS, and might be tempted to expropriate wildlife revenue from SLAMU, the Phase 4 NORAD-GRZ agreement (1999) sought to protect the progress made by LIRD/SLAMU and included protection for the project by specifying conditions that “allow the Community Based Natural Resource Management (CBNRM) approach to be continued”.

8.3 Lessons and Experiences in managing protected areas

8.3.1 Contributions to protected area management

In the 1990s, fashion has emphasised community participation in wildlife management and LIRDPA has made pioneering contributions to this field (see Chapter Seven). But it is important to recognise that the project has also made significant contributions to protected area management, especially as the majority of LIRDPA's efforts have been focused on this function. It is timely that we reflect, in this section, on this aspect of the project's experiences given the demise of protected area management in much of Africa over the same period². It is hoped that resurrecting protected areas will become a theme in the new millennium. If it does, LIRDPA will be well placed to contribute to this challenge.

We first look at law enforcement, where the project's monitoring systems provide a unique set of data to assess this important aspect of park management. Tourism in the SLNP is also briefly described as it will ultimately pay for managing the park. The recent improvements in the project follow a paradigm shift in which the park becomes technically and financial self-sustaining, rather than a grant-funded entity. This is a rare approach in park management. But the fact that conventional park management systems are faltering in much of Africa suggests that this pioneering approach being pursued by SLAMU, if successful, could become the dominant paradigm for protected area management in Africa's emerging economies³. LIRDPA provides important lessons in terms of organisational structure, commercialisation, linkages to communities, etc.

SLAMU has developed systems to manage performance. Such systems are an important contribution to protected area management in Zambia, and even in the region. Performance management is not new, but the discipline of "managing-by-objectives" leads to important conceptual developments, e.g. the ecosystem monitoring and management system developed for Phase 4 (described in Chapter Six). By taking much of the ambiguity out of setting ecological objectives, and forcing managers to define and make trade-offs, many of the internal contradictions long associated with protected area management are removed. However, this results in a substantially altered paradigm of park management. The model is likely to define and achieve ecological goals but, paradoxically, it is also likely to be more economic in nature. This leads us to suggest that 'local' parks could achieve all the ecological objectives of state protected areas while simultaneously stimulating rural economic development and improved local governance (Box 8.11). These dual possibilities are exciting, but it needs to be emphasised that they must be managed in an unambiguous policy and management framework (as LIRDPA has done recently). Otherwise, this approach will only serve to increase the ambiguities that already afflict protected area management.

Within SLAMU, Zambian managers have undertaken most of the work of improving efficiency and effectiveness of management (though organisational transformation has been facilitated by technical assistants)⁴. This is an important breakthrough and lesson. The relatively well-managed SLAMU is run, in the main, by the same people who presided over the inefficient LIRDPA. This shows that it is the management systems and business culture, and not the culture and capability of the managers, that

² This is perhaps not a co-incidence since many of the key players in CBNRM were people who started their careers as park managers, became frustrated and cynical with these bureaucracies, and diverted their careers to the more fulfilling challenge of CBNRM.

³ The alternative – and possibly technically superior solution – could be to directly outsource parks (i.e. allow them to be managed by the private sector but under a clear, performance-related mandate), but the colonial heritage of alienation and disempowerment will make it difficult for new nations to give up this degree of perceived power.

⁴ Drucker (1993) argues that "no institution can possibly survive if it needs geniuses or supermen to manage it. It must be organised in such a way as to be able to get along under a leadership of perfectly normal human beings". However, in an assessment of the impact of management, Micklethwaite and Wooldridge's (1996) conclude "in other words management theory seems to have flunked Drucker's challenge: to come up with an institution that does not need to be led 'by geniuses or supermen'."

has impeded progress since Independence. Replacing a widespread culture of non-performance, and the arrogant attitude spawned by command-and-control and patronage-dominated systems, with a culture of service and adding-value has been a challenge for the project.

8.3.2 Law enforcement

Conservation authorities are engaged in a constant battle against the illegal killing of wildlife. Subsistence hunting and small-scale commercial meat poaching provide are widespread in Zambia and provide important sources of protein. Commercial poaching for high value ivory and rhino horns is a serious problem. The fact that the much poaching is for food or supports a very meagre standard of living leads to a conflict of interest between the public and conservation legislation. It also creates fertile opportunities for ivory and rhino poaching. LIRD P and other CBNRM programmes have attempted to reduce this conflict of interest by devolving wildlife benefits to communities in order to introduce incentives so that communities support and participate in the sustainable use of wildlife. The traditional approach was to control illegal use by strengthening disincentives through effective law enforcement. The best approach is likely to be a combination of both approaches and this is the route that has been followed by LIRD P.

(a) LIRD P's law-enforcement programme

Law enforcement takes two forms – patrolling and investigations – with a combination being optimal. Ground coverage requires considerable manpower. Scouts undertake ten-day patrols to ensure coverage of even the most inaccessible areas. Data from LIRD P operations show that these lightly armed groups are most effective when comprised of ten people⁵, including five or six scouts plus carriers to transport tents and food. Investigations use informer systems to gather information on illegal activities, and also follow up on information gained from captured poachers. Once poachers are apprehended, it is essential that they are competently prosecuted. All this requires transport, equipment and manpower, and costs money. Indeed, LIRD P's law-enforcement operations cost about US \$500,000 annually, or some \$37 per square kilometre per year. The data show that controlling poaching in the project area requires about 22,000 patrol days per year (Figure 6.11). The marginal return from increased patrolling above this level is relatively small. Poaching still happens, but well within the sustainable capacity of wildlife populations. Since a hard-working scout can do approximately 150 patrol days per year, this suggests a patrolling manpower requirement of some 150 scouts. LIRD P has, at various times, employed between 160 and 270 scouts, some of whom undertake other duties

(b) Monitoring law-enforcement

One of LIRD P's important contributions is this remarkably precise data which increases our understanding of law-enforcement. Every patrol is monitored, (see Jachmann, 1988, for a detailed description of this). For park management purposes, the key indicator is the number of encounters per patrol day. The goal is for the average ten-day patrol to encounter no more than one incidence of poachers - be this footprints, a gunshot or a poached animal. This is measured with catch-per-unit-effort (C/E) indicators. Monthly reports summarising patrol days, poachers seen, gunshots heard, poachers captured, prosecutions, dead animals found, and the C/E indicators are the central management tool for law-enforcement operations.

The law enforcement efforts of LIRD P have been praised consistently and claimed as a major success

⁵ An analysis by Dale Lewis of ADMAD E patrol data comes to the same conclusion. Presentation to MS-Zambia workshop on CBNRM, Siavonga, February 2000.

of the project - reducing poaching by as much as 90% (LIRDP, 1994) (see Boxes 4.1 and 5.1). Indeed, LIRDP's law enforcement programme has been described as better than any similar efforts anywhere in Africa (Scanteam, 1993). Without the launch of LIRDP when commercial poaching was at a peak, there is little doubt that the elephant population in the area would have been reduced to very low numbers (section 6.5.2). The main reason why LIRDP was able to bring such commercial poaching under control was the investment it made in law enforcement. This is clearly shown by the fact that cut backs in expenditure in this area in 1994 and 1995 (due to temporary financial restrictions) led to a small resurgence in elephant poaching from 12 to 23 animals (Figure 6.7, Table 6.7, and Box 5.2). An effective law-enforcement system is essential for the survival of parks and of wildlife, since more hands-off measures such as the ivory ban, while attractive in theory, do not work in practice (section 6.5.2).

Jachmann (1998) explains that the main components of an effective law-enforcement system, and the reasons for the success of LIRDP in the 1988-1994 period, are:

- The allocation of sufficient resources and staffing for ground coverage and investigations (enabling an effective staffing density of one scout per 48 sq km in the LIRDP area during 1988-1994);
- An incentive system (bonus payments to informers, carriers and scouts for positive law-enforcement returns, e.g. arrests and confiscations of firearms and trophies, and information leading to the same);
- The effective use of monitoring.

In general, the law enforcement effort under LIRDP improved rapidly from 1988, but has been gradually deteriorating since 1994 (section 6.5.2, Figures 6.8 and 6.9). In response, SLAMU hired an experienced wildlife manager to assess these problems. The resulting report (Thomson 1999) confirmed that the law-enforcement operations had been neglected. Staff were demoralised. The management system was weaker than in other sections of SLAMU and the dual reporting systems with NPWS were still not clarified. This was one of the few sections that had failed to introduce performance management systems. A strategy for upgrading these systems and staff morale was put in place.

Jachmann (1998) provides a detailed description of the monitoring system for law enforcement established for LIRDP, and shows that this was a key element for its initial effectiveness. Monitoring was achieved using patrol reports to summarise information on law enforcement input and related levels of illegal activity. With the exception of LIRDP and Kasungu National Park in Malawi (two areas where Richard Bell and Hugo Jachmann both worked), monitoring systems have seldom been studied in conservation areas in Africa. However, while effective wildlife organisations in the region may not have reported on monitoring scientifically, it has been an integral part of operational management with confidential operations rooms, mapping of incidences, etc. Indeed, whereas LIRDP has good monitoring, it has been weaker at integrating this 'research' into its operations. We should also point out that the LIRDP model refers to a situation that uses a large number of under-trained and poorly equipped scouts. This controls poaching when adequately financed and managed. The alternative approach of using fewer, but better trained, motivated and equipped men, has worked for other parks in the region but has not been tried in LIRDP (Thomson, pers.com.).

(c) Subsidence poaching

In a questionnaire survey, Wainwright (1996) confirms a reduction in poaching: 71.5% of respondents in the Lupande GMA claimed that, under LIRDP, poaching had decreased in their area. However, she also points out that participants in LIRDP workshops felt that only a slight reduction in poaching had

occurred and that it was still widely prevalent in the communities. This discrepancy may reflect subsistence poaching of small game, whereas LIRD P's data deals mainly with bigger animals, especially elephant. Moreover, the source of the most serious poaching was the Mpika area above the escarpment to the west of the South Luangwa National Park.

It is possible that local hunters are continuing to poach but, due to increased law enforcement, have tactically switched their focus and are now concentrating on small prey (which disappear relatively un-noticed). Such a possibility is also suggested by Gibson and Marks (1995) and by Gibson (1995, p203 and p252):

"Even with ADMADE and LIRD P in place, rural residents continued to kill, consume and trade wild animals illegally. Although wildlife scouts made more arrests for poaching-related activities, and while both programmes seemed to stem the killing of large mammals, locals kept hunting - at rates comparable to the days before ADMADE and LIRD P's operations. ADMADE and LIRD P also failed to defuse the long-standing hostility between scouts and residents.

Data suggest that ADMADE and LIRD P have not stopped illegal hunting. Rather than cease their poaching, local hunters maintained off-take levels by using snares rather than firearms to hunt and by targeting smaller mammals such as warthog, impala, and occasionally buffalo. Both NPWS officials and conservationists contend that snaring is increasing rapidly in both ADMADE and LIRD P areas.... killing smaller animals by less-detectable methods is the most-preferred choice of the rural resident".

(d) Wildlife population trends

The data from aerial surveys show that wildlife populations in the SLNP are generally stable or increasing, confirming that law-enforcement is minimising the impact of poaching. However, wildlife populations in the Lupande GMA are lower than in the park, though they are stable and, in some cases, increasing. From 1992 to 1999, walking counts of wildlife were conducted in Lupande GMA by communities using the line-transect methodology under the supervision of an NPWS biologist show the following trends. These counts provided more precise data on wildlife population trends:

<u>Increasing:</u>	buffalo, giraffe, hippo, impala, puku, waterbuck
<u>Stable:</u>	bushbuck, eland, elephant, grysbok, kudu, warthog, zebra
<u>Declining:</u>	duiker, wildebeest
<u>Insufficient data to judge:</u>	hartebeest, roan.

Together with distribution information (Jachmann and Phiri, 1999), these trends suggest that poaching may be preventing the growth of these already lowered populations, but is not threatening their survival. Jachmann's maps of the geographical distribution of animals show that there are large areas of suitable habitat in the Lupande GMA that have few animals. This suggests that poaching, and other factors like settlement patterns, have in the past seriously depleted wildlife populations, but that this decline has been halted recently. The next question is whether or not the community programme will now allow the repopulating of these areas over the next decade. This will depend on active community efforts to manage wildlife, as well as communities gaining authority to develop commercial partnerships to re-stock and utilise depleted areas. Anecdotal evidence from the CBNRM programme suggests that the improved attitudes towards wildlife brought about by revenue distribution has led to some reduction in poaching through social pressure. However, active management is still required to protect and develop these resources, something which appears to be starting (see chapter Seven).

(e) Community scouts and the control of poaching by communities

It is difficult to collect data on illegal activities like poaching, and therefore to draw accurate

conclusions. Tentatively, the lesson appears to be that the receipt of benefits radically improve attitudes towards wildlife, and create a much better social environment for conservation. There are certainly examples where smaller antelope like bushbuck are more common than they were five years ago. However, such 'passive management' may be inadequate to control poaching, especially by outsiders and in areas remote from where villagers live. The new attitudes also provide a better social environment for active management, and the community-based scout programme is improving rapidly. In negotiating agreements for the new Community Resource Boards, the performance of community scouts will be linked to revenue allocations to entrench these improvements in responsibility. Thus, communities that do not reach patrolling targets may have revenue deducted on a pro-rata basis.

A number of reasons have contributed to continued illegal hunting by residents of Lupande GMA. Firstly, during Phase 2, there were relatively few community projects and only a limited number of income-generating jobs resulted directly from LIRD. Opportunities for individual gain were small. Secondly, those projects initiated by LIRD brought unequal benefits. For example, Malambo Milling provided more benefit to people living near to it than those far away. The same could be said for schools, clinics and wells, etc. financed by project revenues, though few of these were completed. Thirdly, those who chose to hunt illegally were still able to 'enjoy' the 'benefits' of LIRD's development projects. In effect, these projects could be seen as a 'public good', benefiting individuals whether they engaged in illegal hunting or not.

The main threat to wildlife in areas covered by Zimbabwe's CAMPFIRE programme is rapid (human) population growth, in-migration and the consequent pressure to convert land to agriculture. While the beginning of a similar situation is apparent in Lupande GMA, the primary threat to wildlife in the Luangwa Valley has been poaching. Consequently, the community programmes are structured differently to CAMPFIRE, with a greater emphasis on law enforcement. Both LIRD and ADMAD have developed a system of village scouts to control illegal hunting and monitor wildlife populations. This has provided a mechanism for local participation in wildlife management and also for gaining economic reward through employment. It was also assumed that this system would foster project-community links and encourage a positive attitude towards conservation of wildlife. But, in practice, these scouts have been very unpopular in many communities:

"Village scouts received the greatest benefit from their anti-poaching activities, and consequently they directed their efforts toward capturing illegal hunters. Where unit leaders monitored scouts, zealous enforcement of wildlife regulations quickly estranged the village scout from his or her community. The invigorated pursuit of poachers led to an increase in villager complaints about harassment by scouts, just as enforcement activities [by NPWS] had done for decades. In those areas without effective unit leaders, village scouts' commitment waned and residents indicted scouts for their poaching, tree cutting and drunkenness" (Gibson, 1995, p242-243).

There are also some continuing concerns about village scouts. The intention is that they should operate in their own areas so that communities are self-policed. There are arguments both for and against this. Scouts living in their own areas can be excessively influenced by kin connections. On the other hand, they may be better informed about what is happening, and therefore can be more effective. In the earlier stages of LIRD, it adopted the system of Village Scouts advocated by ADMAD. However, there was no legal basis for this, Although such scouts were nominally 'Village Scouts' they were actually NPWS or LIRD employees. Consequently, the Village Scouts first employed by LIRD cannot be differentiated from normal NPWS/LIRD scouts. The model for community involvement in law enforcement adopted in Phase 2 was not as effective as hoped.

The CBNRM approach introduced during Phase 3 placed project revenues directly in the hands of local communities and their elected representatives, and created more equitable and attractive incentive structures whereby individuals were rewarded directly. It remains to be seen whether this will alter patterns of illegal 'subsistence' hunting. An escalation in the use of snares has been reported, especially along the banks of the Luangwa River around fishing camps. It is difficult to ascertain

whether this is a real change or whether it reflects improved enforcement efforts - a normal quandary when interpreting law-enforcement data.

Under the new CBNRM programme, communities have employed 76 community-based scouts (CBS), using this new name to differentiate them from the previous Village Scouts. At the 1999 project annual meeting, SLAMU reported that CBS had handed over 12 poachers to NPWS for prosecution, had punished 25 fishing and water-poisoning offenders locally, had recovered 10 muzzle-loading guns, and had found 65 snares. By 2000, the effectiveness of CBS was improving rapidly. In January alone, they worked with SLAMU to apprehend nine poachers and confiscate 17 muzzle-loading guns in the Msoro area. CBS in both Jumbe and Kakumbi areas made their first arrests. Clearly, the system was beginning to work, with CBS participating in the majority of patrols in Lupande GMA.

However, there two constraints became apparent: how to train CBS; and what authority will they hold in the new ZAWA? For instance, CBS are not able to carry weapons legally, and cannot therefore lead their own patrols. This makes it impossible to completely transfer the responsibility for law enforcement to communities. The most effective balance and relationship between SLAMU and CBS is likely to evolve over the next few years.

8.3.3 *Financial strategies and management*

Criticism has been levelled at the high level of donor funding afforded to LIRD. A central part of the logic of LIRD, as originally conceived, was to invest in basic infrastructure (such as roads) and services (such as agricultural extension, credit and marketing) - all of which were lacking or weak in the area. It was also intended to invest in basic research and data gathering to enable sound land use planning and decisions on resource management. Without substantial 'pump-priming' investment, it was argued, development in the Luangwa Valley would remain difficult. But such investment was inevitably going to be expensive.

As NORAD was only able to provide about half of the budget required to satisfy implementation of the Phase 2 proposals, the original plans were restricted. Half of the Phase 2 budget (c. US \$ 14 million out of total US \$ 25 million) was intended to development an all-weather road network, but it was never possible to implement this. Similarly, it was not possible to establish a project headquarters in the valley.

The fact that LIRD (in Phase 2) was unable to implement its full range of envisaged activities limited the ability of the project to satisfy its objectives - especially given the critical interdependence of many of the activities. However, the budget limitation was not the only factor at play. The bottom-line is that almost US \$20m was spent, and little infrastructure was developed. The balance between capital and recurrent expenditure was clearly not properly addressed, and nor therefore was the project's sustainability objective. There is evidence that the two Co-Directors were vastly over-stretched, and that the project had little capacity to absorb a higher level of funding. The real problem was too much money with too little management to direct this expenditure, and insufficient controls to ensure that it generated real output. For instance, the project was unable to provide accounts, or to analyse its income and expenditure in phase 2. Accounts were only systematised in 1992 when a computerised accounting package was introduced⁶. It is not surprising that allegations of corruption surfaced. All this resulted in a proliferation of wasteful practices, some of which are only now being ironed out.

⁶ A problem in analysing the economics of LIRD during Phase 2 is that the financial data for the project are not reliable. A local Chipata-based accountancy company was asked to undertake an income and expenditure analysis of Phase 2 but was unable to provide a clear picture.

Weak management prevented LIRD from investing and performing as hoped. However, criticisms of LIRD for its poor performance during Phase 2, need to be tempered by an understanding of the limitations under which it had to operate (see section 8.2). That the project survived, and that it protected the wildlife populations, was an achievement in itself.

(a) Summary of project finances

In 1997, outgoing LIRD Assistant Director of Administration, Goran Johansson, undertook an analysis of financial flows for the period 1992-1996. During 1992, the last year of Phase 2, NORAD assistance amounted to NOK 15 million (US \$2m). During the bridging years of 1993 and 1994, NORAD support was reduced to NOK 12 million (US \$1.6m) and NOK 10 million (US\$1.4m), respectively. But in 1995, the project had to struggle on its own until a new financing agreement with NORAD was signed in December 1995 and NOK 6 million (US \$0.8m) was disbursed. Thus NORAD support declined by more than 50% between 1992 and 1996.

The project was unable to attain financial sustainability during Phase 2 and, by the end of 1996, it was still nowhere near achieving this aim. Johansson (1997) analysed this. To detect any changes in policy, he compared the financial situation in 1996 with that in 1992, and with the average for 1992-95. His basic conclusion was that although some improvements in income were offsetting the reduction in donor funding, continued high expenditure, coupled with increasing overheads, showed that the project was moving in entirely the wrong direction. It was not tackling the issue of self-sufficiency seriously, nor even thinking about it. He notes that NORAD grants had been reduced by one third and project income had 'boomed' with a doubling of income from park entry fees. However, expenditure fell only marginally (by 2-3%), with overheads increasing by some 15.5% (see Table 8.1) although the responsibility for agriculture, roads, water,

Table 8.1: LIRD Overhead Expenditure: 1992- 1996

(Figures: Zambian Kwacha)

Section	1996	Av.1992-1995	1996 less aver.	Variance %
Inst. & M/ment	100 561 833	83 198 324	17 363 509	20.9
Administration	233 841 153	220 024 205	13 816 948	6.3
Accounts	142 433 803	130 015 178	12 418 625	9.6
Tech Serv Admin	210 058 200	161 266 095	48 792 105	30.3
Total	686 894 989	594 503 802	92 391 187	15.5

Source: Johansson (1997).

the women's programme, buildings and forestry had reverted to line ministries. Admittedly there had been an increase in the provision to local communities, and of expenditure for wildlife management. Johansson (1997) commented that:

"Once the implementation of Phase 2 started, the objective of financial sustainability was not taken seriously by anybody, including the donor, and we have seen that during the last year of Phase 2, the project received more grants than it could spend"

and

"The previous exaggerated donor generosity has greatly impacted on the attitudes prevailing among project staff. In short, very few seem to take the objective of financial sustainability very seriously. In 1996, the project resumed its old spending patterns. Despite all the meetings between the project, Ministry of Tourism, NPWS and NORAD, there has never been any serious attempt to discuss the future financial sustainability of the project. Project management has also failed to address this issues".

Taking up this challenge to achieve financial sustainability, 30 (mainly junior) staff were made redundant in 1998 as part of efforts to cut costs. Figure 6.1 illustrates the continued high costs of the project, and the huge gap between income (mainly from tourism) and expenditure at this time. This figure featured prominently in project management debates from 1997, when it was used to make staff uncomfortable with the status quo - the first step in change management (Kotter, 199*). As Figure 6.5 shows, LIRD then began to take seriously the notion of cutting budgets. Staffing levels had exceeded 600 in Phase 2, were around 350 in Phase 3, but by the first year of Phase 4 had fallen below 300. At this time, the concept of the “One Million Dollar Plan” was introduced.

Table 8.2 summarises the financial status of the project from 1992 to 1999. This table should be seen as indicative for two reasons. First, although finances are standardised in US\$ terms, this does not always accurately reflect the real situation because of the combined effects of rapid inflation and weakening of the Zambia Kwacha. Secondly, the allocation of expenditure to budget lines should be analysed with some caution because the responsibilities and activities related to many of these functions were changing.

From 1996, LIRD then began to take cost-cutting seriously (Figure 6.5). Costs were cut from about US \$2m to \$1.3m annually, and self-sufficiency increased⁷:

<i>Year</i>	<i>% Self-sufficiency</i>
1992	4%
1996	19%
1999	39%
2002	62% (est.)

In the last year of Phase 4 (2002), NORAD’s contribution will be US \$350,000. Budget cuts of the magnitude undertaken, were accompanied by an improvement in management systems, ensuring that performance actually increased significantly. In parallel with the implementation of planning and performance review mechanisms that included clearly defined targets, systems for budgeting and cost control were improving. In 1996, for instance, budgeting was done on a very coarse level, and there were few controls to prevent cost overruns. By 1999, finances had been decentralised to each section, were more detailed and logical, and regular reporting on expenditure and variances was introduced. This was allied to performance management so, for the first time, project management had measures of both how much was spent and what was being achieved.

In 1997, 1998 and 1999, senior and middle staff did a lot of planning, as well as developing systems and re-organising the structure and objectives of the project (Chapter Six). The Phase 4 project agreement which emanated from this work, for the first time put in place a budget that would lead to financial self-sufficiency (Table 8.3). It was able to reduce the recurrent budget below US \$1m. However, when investments in consultancies, technical assistance or capital were included, the project was unable to reduce budgets below about US \$1.3m. Given the amount of time and effort spent trying to cut these budgets, this provides a realistic cost for managing a park like South Luangwa.

Part of the reason for the increasing success of the project has been the recruitment of a few individuals from the private sector on salaries that exceed the general levels. Such discrepancies are not socially sustainable. To overcome this, to correct salary structures that have many inefficiencies and inequities, and to raise salaries to prevent the steady loss of skills (staff had, for a long time, been on low and steadily falling real wages), the project worked to develop a new salary structure. This raised costs by US \$200,000. However, this budget was rejected by the 1999 project annual meeting pending new introduction of new ZAWA conditions of service. Since there was little fat in operational budgets, and a general agreement to maintain

⁷ Self-sufficiency is calculated as the percent of expenditure covered by own income. The income from the Lupande GMA is excluded following the philosophy of devolution.

Table 8.2 Summary of LIRDP Income and Expenditure (1992 to 1999)
(Figure: US \$)

Summary of LIRDP Income and Expenditure (1992 to 1999)								
Expenditure	1992	1993	1994	1995	1996	1997	1998	1999
Wildlife mgmt	528,993	500,296	412,619	368,908	586,832	421,292	529,825	341,373
Research	55,017	88,270	128,702	49,412	78,645	115,385	57,810	68,610
CBNRM	41,610	26,086	70,475	34,631	133,735	138,923	86,293	91,353
Technical services & v	37,717	222,315	126,998	109,173	161,583	103,923	17,611	51,890
Roads in GMA	297,351	378,237	388,050	122,688	150,188	111,154		245,790
Overheads	425,280	507,512	370,751	250,239	366,798	277,385	381,309	290,606
Public relations	18,226	8,283	2,293	6,222			39,177	57,083
Other government fur	301,989	194,311	233,322	44,810	26,109			
Technical assistance	328,783	359,070	205,055	169,977	257,862	213,462	172,618	183,700
Tourism								46,300
Capital								
Planning			30,993		37,194	11,154	27,309	
Expenditure	2,034,966	2,284,380	1,969,258	1,156,060	1,798,946	1,392,678	1,311,953	1,376,705
Income								-
Income form tourism	76,248	133,811	106,855	159,573	270,686	320,890	453,419	475,000
Hippo culling				112,641	65,151		44,483	60,000
Other income	53,463	90,249	50,535	28,814	52,982	23,077		-
Donor grants	2,055,912	1,855,660	1,433,746	875,395	1,103,375	914,279	776,722	685,000
GRZ contribution	175,532	121,584	153,974	140,927	148,731	168,741	170,363	175,000
TOTAL INCOME	2,361,155	2,201,304	1,745,110	1,317,350	1,640,925	1,426,986	1,444,987	1,395,000
% own income	4%	6%	5%	24%	19%	23%	38%	39%
Income from GMA	79,784	123,490	140,333	175,578	198,838	241,807	227,273	225,000
Share to communities	61,737	116,014	56,133	153,495	153,846	241,807	227,273	225,000
Own income	76,248	133,811	106,855	272,214	335,837	320,890	497,902	535,000
Grants	2,231,444	1,977,244	1,587,720	1,016,322	1,252,106	1,083,019	947,085	860,000

Table 8.3 Budget estimates for Phase 4 (from Project Submission)
(Figure in US \$)

	1999	2000	2001	2002	Phase IV
Manpower Cost	335,300	313,900	296,000	299,900	1,245,100
TA & Consultancy	159,800	161,100	151,900	153,900	626,700
Operational costs	631,100	636,500	600,000	607,900	2,475,500
Capital expenditure	175,800	177,200	167,100	169,300	689,400
TOTAL Expenditure	1,302,000	1,288,700	1,215,000	1,231,000	5,036,700
Tourism	410,000	508,400	564,300	628,200	2,110,900
Culling	80,000	80,700	84,700	88,900	334,300
Other income	44,000	45,700	48,000	50,500	188,200
NORAD Grant	685,000	550,000	410,000	350,000	1,995,000
GRZ Grant	103,000	103,900	108,000	113,400	428,300
Total	1,322,000	1,288,700	1,215,000	1,231,000	5,056,700

capital expenditure at 20% of budget, SLAMU was left with little alternative but to further reduce staff⁸. To pay staff better, the project had no option but to employ fewer personnel. SLAMU intended to use the window of opportunity offered by the transformation of NPWS into ZAWA to make these redundancies⁹. In 1998 and 1999, all section heads and senior management were, for the first time, involved in budgeting and the budgeting process improved greatly. Thus, whereas Johansson cursed the universal disregard and ignorance of finances, by 1999, SLAMU had a sound financial strategy and disciplined planning. People were beginning to talk about output targets, finances and variances, and peer pressure was used to emphasise performance.

In Phases 3 and 4, many of the weaknesses introduced during Phase 2 had to be corrected. The project has also now set itself on a realistic path towards sustainability. However, the primary constraint to sustainability has been the lack of investment in the project area. It was only in Phase 4 that construction of the long-needed headquarters began (Box 8.4). Similarly, despite all the

Box 8.4: Project headquarters

The project HQ was initially established in Chipata using offices made available by government. At the time, this was sensible since much work was being undertaken on elaborating the operational modalities of the project with government authorities in Chipata and in Lusaka. In addition, funding from NORAD had not been fully secured and communications in the Luangwa Valley were still poor (telephone links were not established at Mfuwe until 1987). Nevertheless, it was always intended to locate the project headquarters in the Luangwa Valley when funds became available to construct offices and accommodation to be close to the people the project aimed to serve, and to avoid dislocation between project activities and its administrative centre.

In the event, NORAD support for Phase 2 amounted to only about half the budget required to put all proposals into effect, and it was not possible to construct the new HQ as planned. Several proposals for this headquarters were developed and submitted, including a large, expensive development at district headquarters in Jumbe. None were approved, possibly because they were expensive (US \$12m in one case). From 1996, LIRDPA made a concerted effort to get agreement for a new headquarters because of the considerable cost and efficiency implications of having headquarters isolated from the area of operations. In April 1996, NORAD finally agreed to the principle of funding a new HQ at Mfuwe. It took another three years to reach formal agreement for funding construction. Construction finally commenced in mid-1999. Part of the delay was that LIRDPA was required to look very seriously at its future requirements, so that a great deal of institutional planning was required. However, the major delays were external. The project was put on hold for over a year awaiting the new park plan, which was never finalised anyway. A decision was taken to use government architects to save money and to support the government. This proved expensive and time-consuming decision, with cost overruns and delays, and absorbed considerable management time to keep the process going. For instance, the buildings are now at wall-plate level, but the architectural drawings for the roofs are not ready. Another serious delay was caused by the tender process. NORAD objected to the initial award, having had serious problems with this contractor on another project, and this caused considerable friction. The present delays can be partly attributed to this friction. The latest problem is that the contractor is way behind schedule. Many of these problems are indicative of the difficulties of doing business, and are related to the weaknesses in the Zambian economy and legal system noted at the beginning of this chapter.

The movement of the HQ to Mfuwe will be undertaken in three stages: first, new offices and houses for senior staff to allow management staff to relocate; secondly, houses for junior staff at Mfuwe; thirdly, barracks for scouts at sector headquarters at the four corners of the park. There have been strong objections to these developments by the tour operators, who fear further unplanned economic growth in Mfuwe, and who are generally antagonistic towards the project in any case. They wanted it to develop its headquarters at least 25km from the park. Project management countered these arguments saying:

(1) The project's Chinzombo and Cropping offices had been established in the early 1960s, whereas most

⁸ At the time of writing this conclusion has been agreed but no action has been taken.

⁹ The cost of having staff retire is prohibitively expensive and, in the short term, it is often cheaper to maintain staff. However, the European Union agreed to provide the funds necessary to retire all staff in NPWS and related projects, prior to the re-staffing of ZAWA.

lodges had only developed after 1980;

- (2) As park managers, staff need to be located close to the park;
- (3) The developments would not bring extra staff into the region; rather they would facilitate a retrenchment exercise;
- (4) The primary aim was not to add new houses, but to replace the deplorable structures in which staff were already living. Scouts had been housed in tin wall-tents since the 1960 FAO project, and these were unbearably hot;
- (5) The growth of Mfuwe was primarily related to the growth of tourism businesses rather than the project (which had been shrinking), and that this land-use issue needed to be dealt with separately. However, the project suggested that moving some staff to the airport area was desirable, but that it and tour operators should jointly make this sacrifice.

The attempts to develop a headquarters site illustrate some of the problems of planning controlled development. LIRDP surveyed a site 5-8 km from the main park gate that was eminently suitable. It was not prone to flooding; would only have displaced five families (the present arrangement displaces far more, of course with compensation); the land was not suitable for agriculture nor indeed farmed seriously; and it was far enough from the park, yet close enough for reasons of transport. Despite the support of all relevant government departments (physical planning, town and country planning, District Council, etc.), Chief Kakumbi rejected this. Most businesses in the problematic Mfuwe area are partly owned by the Chief or his family.

The decade-long separation of Chipata HQ from the project area has been the focus of consistent criticism by review missions and others, including people in the area. It has eroded communication and unity within the project. It has been expensive, requiring much travel (especially when phones have not been working), but the major cost has been the difficulties of building teamwork, co-ordination and reducing response times.

expenditure, the project entered Phase 4 with few improvements in roads, and certainly insufficient roads to support the tourism growth necessary to fund this self-sufficiency (Box 8.5). Consequently, NORAD agreed to fund studies to provide more detailed assessments of the requirements, costs and economics of roads. It is difficult to understand why so little of the US \$25m provided by NORAD to the project since its initiation was invested in infrastructure, and how such a deplorable and unsustainable financial strategy was allowed to continue for so long.

(b) A rough cost:benefit analysis of LIRDP

An analysis of LIRDP, including its present financial status, shows that the project has been a poor financial investment. Its total cost to date has been approximately US \$25m. Given that the annual income is currently about US \$500,000, this represents a return on investment of only 2% (even ignoring the decade when returns were negligible and costs high). If the US \$25m had been invested in a trust fund, a conservative estimate is that the project would earn US \$1.25m annually (assuming an interest rate of 5%) and would be financially self-sustaining. This raises an important question: if parks are to be developed to be sustainable, would it not be better to establish a trust than to follow a conventional donor-funded project approach?

The above financial analysis, however, is too simplistic. It summarises only income and expenditure to date. The longer we project the income stream into the future, the better the NORAD investment appears. The project is also now moving towards financial self-sufficiency. When the envisaged income stream of US \$1.5 annually from tourism is projected into the future, financial measures of costs and benefits such as net present value and internal rates of return improve, though they still remain negative. However, if annual tourism earnings can be raised to US \$2.5m, the project becomes a good investment.

In summary, the project has so far been a marginal financial investment. But from a conservation

Box 8.5: Roads and road improvements

Road access to the Luangwa Valley and road communications within the area are critical for development and conservation. Early LIRDP plans therefore placed great emphasis on developing, improving and maintaining roads. However, due to a much lower NORAD financial contribution than requested for Phase 2, the road building program had to be severely cut back. The programme started well enough, and LIRDP achieved some success in Phase 2 with its road building and maintenance program in the GMA. However, implementation deteriorated from 1995 to 1997. Furthermore, although an expensive investment, road-building did not follow the priorities of a plan. The end result was that a few roads were built in Lupande GMA, but despite the size of the project, almost nothing was done in the park with serious implications for its long-term sustainability.

Following the recommendations of the 1993 appraisal (Scanteam 1993), responsibility for maintaining roads in the GMA officially reverted to the Provincial Roads Engineer. The exceptions were roads to Malama and Chibembe that provided access for tourism and wildlife management purposes. The Roads Department proved unable to take up this responsibility, so LIRDP continued to maintain some GMA roads until 1998 and, by default, is likely to grade at least some of the main road to Chipata because of the importance of this linkage.

The latest review (Scanteam 1998) strongly criticised the sub-standard performance of LIRDP in maintaining the roads under its control. As a result, the Roads Section was re-organised and, in 1999, was probably SLAMU's most efficient unit. By using harrows, it completed the seasonal grading (some 400km of road) to a higher standard at less than half the previous cost. It also developed the capacity to construct 4m-wide roads and concrete works to a high standard. To again illustrate the impact of the Phase 4 management improvements, improved performance was effected with the same equipment and people (with one key individual removed) as had been heavily criticised by Scanteam. The difference was that authority was clarified and devolved, interest was shown in the personnel, and clear targets were set. A joint Roads Committee was established with tour operators so they could participate in these operations. This was also important for improving the roads and for breaking down the hostile relations between LIRDP and tour operators.

Phase 4 plans major investment in road infrastructure in the SLNP to facilitate tourism growth and park management. The expansion of tourism to undeveloped areas, and the decentralisation of law-enforcement by the construction of four sector headquarters, depends on these roads. With additional money from NORAD (about US \$140,000), two consultants have been hired. One will prepare an overall analysis and plan for park road infrastructure, enabling the project to develop a road investment portfolio. The other will prepare detailed designs for 27km of all-weather game-viewing roads in the Mfuwe area. The critical factor will be whether these plans will be able to attract funding because road-building is expensive (about us \$10-45,000 per km).

perspective, the investment has enabled the South Luangwa National Park and its elephants to be saved and, from this point of view, the investment has been well made. Furthermore, the social, economic, governance and conservation gains from the community programme are very valuable. Finally, the project now has reached a point where it has the potential to become self-sustainable. Overall, therefore, the support of NORAD has been critical for the future of the Luangwa Valley and the project has achieved more than most donor-funded projects.

Nonetheless, from an investment point of view, criticism can be leveled at several aspects of the project. First, the initial planning of the project was not sufficiently rigorous – here, we refer to its formative years, not specifically to the original proposals and concepts. It did not consider important aspects such as sustaining the provision of services (see below). It did not provide an adequate analysis of costs, and the benefits to be derived from them, and was generally weak at prioritising. It was especially deficient in business planning, doing little to address the growth of tourism that was supposed to fund the project and the region's development. Second, criticism must be made of the operational inefficiencies and financial problems that were allowed to fester, and of the related failure to develop management systems and middle managers. Third, a serious question is why the donor

and those individuals supervising the project either did not understand these fundamental financial and managerial issues, or address them? As a consequence, we suggest that the project was allowed to cost almost twice as much as it needed to, with this laxity entrenching numerous bad habits and inefficiencies. Finally, we note that many of these problems have been resolved and that the project is now quite efficient, though we ask why this was not done sooner. The lessons of LIRDP, and especially issues of service provision and sustainability (see section 8.4.1g), if taken on board by donors and government officials, would allow a similar project to be established much more quickly and efficiently (Box 8.6). The discussion in section 8.4.1k on project management sheds some light on the managerial problems underlying these inefficiencies, as well as some of the practices used to address them.

Box: 8.6 Hindsight re-planning of LIRDP

With the benefit of hindsight it is interesting to speculate on how, if the project began tomorrow, we might use the US \$25m so far invested. Having suggested that the sustainable provision of services is contingent on financing from a sound local economy, the first investment should be in this economy. Thus the \$25m might be used to develop a sound conservation, institutional and infrastructure environment for external investment in tourism. This would include roads and other infrastructure, law-enforcement, ecosystem monitoring and management, an institutional framework that reduces bureaucracy and investor perception of risk, and management systems accountable to clearly defined constituencies.

It is likely that the park could soon turn over \$25m annually, while the GMA could generate \$10m. If park management charged investors 10% of turnover (as at present), the \$1m required to manage the park would soon be met, leaving \$1.5m for capital investment, the servicing and development of local people, and cross-subsidisation of other less commercially viable parks.

Using a portion of the park surplus for district development

To promote district development, the same philosophy that has transformed LIRDP should be followed: investing in value-adding functions, and using performance management. Assuming \$250,000 is available from park surpluses, a small annual grant might be used to develop Mambwe District Council as a lean, effective co-ordinator of district development. However, the majority should be used to promote economic growth. Heeding the lessons of LIRDP, services should only be funded through the tax base that this investment generates. These grants should be provided for only two purposes: (1) co-ordination of inputs from line ministries, NGOs, donors and the communities themselves, and (2) the provision of economically viable infrastructure. All grants should be made against strict criteria and withdrawn immediately these are not met. To ensure sustainability, services should be provided from local 'tax'. To improve the efficiency of service provision, they should be decentralised, for instance, to the present sub-district structures.

GMA income

By using the GMA's wildlife properly, community income would be some five times present levels. This would provide considerable incentive for further improvements in wildlife areas. The income would also enable communities to take considerable responsibility for providing their own services.

To facilitate the above, the donor could use its \$25m investment to leverage the necessary institutional changes, including (1) the definition and entrenchment of community rights to land and resources (i.e. the sound land/resource tenure system upon which development has proved so dependent), (2) clear management goals, and (3) a mechanism to hold the project and Council accountable to its (informed) constituency, investors and the broader Zambian aspirations.

The end result would be a \$35m tourism industry, some 1,500 direct jobs, a multiplier economy related to tourism, a sustainable park and district authority, and a new model for protected area conservation.

8.3.4 *Developing tourism as the basis for financial sustainability of the park*

As donor funds are progressively reduced, the major source of income for managing SLNP is expected to come from increased tourism, with some marginal income from culling and game capturing. All income from hunting within the Lupande GMA is earmarked for local community use.

In 1997, Goran Johansson recommended that LIRDPA devise a "Million Dollar Programme" as a "very simple and cohesive target for the future management of SLNP. He suggested that it was reasonable to treble tourism income in a further five years to reach this US \$1m target. He also argued that project spending could be reduced by half through "attacking the types of expenditure that constitute 70% of current outgoings: personal emoluments, transport and travel, and vehicle purchases" and cutting the number of staff and project vehicles to about half 1997 levels. As we have seen, many of these cuts were implemented and the project budget was reduced from some \$2m to \$1.3m annually. Control over budget cuts was largely in the hands of the project and was achieved. Increasing tourism income, however, was more complicated, as it was affected by the general state of tourism in Zambia and the region, the macro-economy and, especially, the attitudes of a commercially naïve or even hostile NPWS.

In 1996, the average occupancy rate of the 350 beds in camps and lodges in the Luangwa Valley was less than 20%. A few operators were carrying the burden of supporting the park, while others did little to develop their businesses. This poor performance reflects the weak or non-existent agreements, absence of commercial discipline, patronage and general inefficiencies in this government-dominated sector.

Steps were taken to address this issue, though progress was time-consuming and frustrating. By 1999, there were some 20,215 bed nights in 374 beds, showing that occupancy rates had been doubled to 36% for the 5-month tourism season. This was achieved by improving lease agreements, and by beginning to sell sites that had remained empty (see below).

Figure 6.6 shows the growth in tourism from 1992 to 1998, with income trebling from US \$133,000 in 1993 to \$453,000 in 1998. Part of this growth was the result of an increase in tourist numbers, but the majority resulted from a rationalisation of leases, a re-allocation from non-performers to better operators, tightening of collection systems, and higher prices. In 1999, income is expected to reach about US \$600,000.

Notwithstanding this positive news, SLAMU could have been further ahead. Bureaucratic problems delayed the sale of bush camps by almost three years (Box 8.7). There were also serious delays during 1998 and 1999 in agreeing a lease for Chichele lodge to the "Star of Africa" company - to some relief of the operator who, in the interim, lost his financial backers. These delays are estimated to have cost SLAMU between US\$ 200,000 and 500,000 per year in lost revenue, meaning less money for investment in SLNP and less to pay salaries. An article in SLAMU News (March 1999) commented:

"It could bankrupt the project and undermine all that we have achieved over the past ten years - just at the critical point when we are the road to self-sustainability."

After three years in the pipeline (Box 8.7), SLAMU is in the process of finalising Tourism Concession Agreements for a further 118 beds in 9 small camps, while two new and large operations (72 beds) are in the process of completion. Given that SLAMU is guaranteed about US \$1,975 per bed per annum¹⁰, this should raise an additional \$375,000 annually, pushing revenues very close to the \$1m mark.

¹⁰ This is calculated as follows:

\$80 per bed per month (with most calculations done on the basis of a five month season) plus \$30/bednight, with a guaranteed minimum occupancy of 35% over the 150 day season.

Box 8.7: Investments in tourism and bureaucratic delays

In 1998-1999 there was significant investment in tourism, and competition encouraged improvements to existing lodges:

- Kafunta River lodge with 16 beds opened in 1998;
- Foreign investors from Malawi pumped about US \$2.5m¹¹ into refurbishing Mfuwe lodge to create an exclusive location with 36 beds. This also opened in 1998.
- Lion Camp was completely re-built as a 16-bed luxury lodge to open in 2000.
- Chibembe lodge and Nsefu camp were sold to serious operators prepared to boost their operations, and were extensively refurbished.
- Chichele Lodge was sold to Star of Africa for a 40-60 bed development, to open in 2001.

The project also sold ten new tourism packages. This was initiated in 1996. The first tender was conducted in mid-1998, but was revoked, (it is rumoured this was caused by an influential business-man who was to lose a site that he was subleasing, despite having no agreement and not paying fees). These sites were finally tendered in 1999 and, by 2000, the Tourism Concession Agreements were in the final stages of negotiation. The annual opportunity cost of these delays exceeded \$150,000.

The climate for tourism has become more competitive and international operators are showing increased interest in the Luangwa Valley. In late 1999, Sun International signed a multi-million dollar deal for the construction of some 600 rooms near Victoria Falls, and this is bound to give a very significant boost to tourism in Luangwa and elsewhere in Zambia. Furthermore, negotiations between the Anglo-American Corporation and the government regarding the sale and refurbishment of the copper mines were being finalised, with rumours of an immediate US \$200m investment followed by substantially more later on.

The plan for the next four years is to allow new camps and lodges to be developed, particularly in the extensive areas of the park which are currently not utilised, increasing the number of beds in and around SLNP to 750 (Figure 8.1). This ambitious plan will require major investment in roads and other infrastructure.

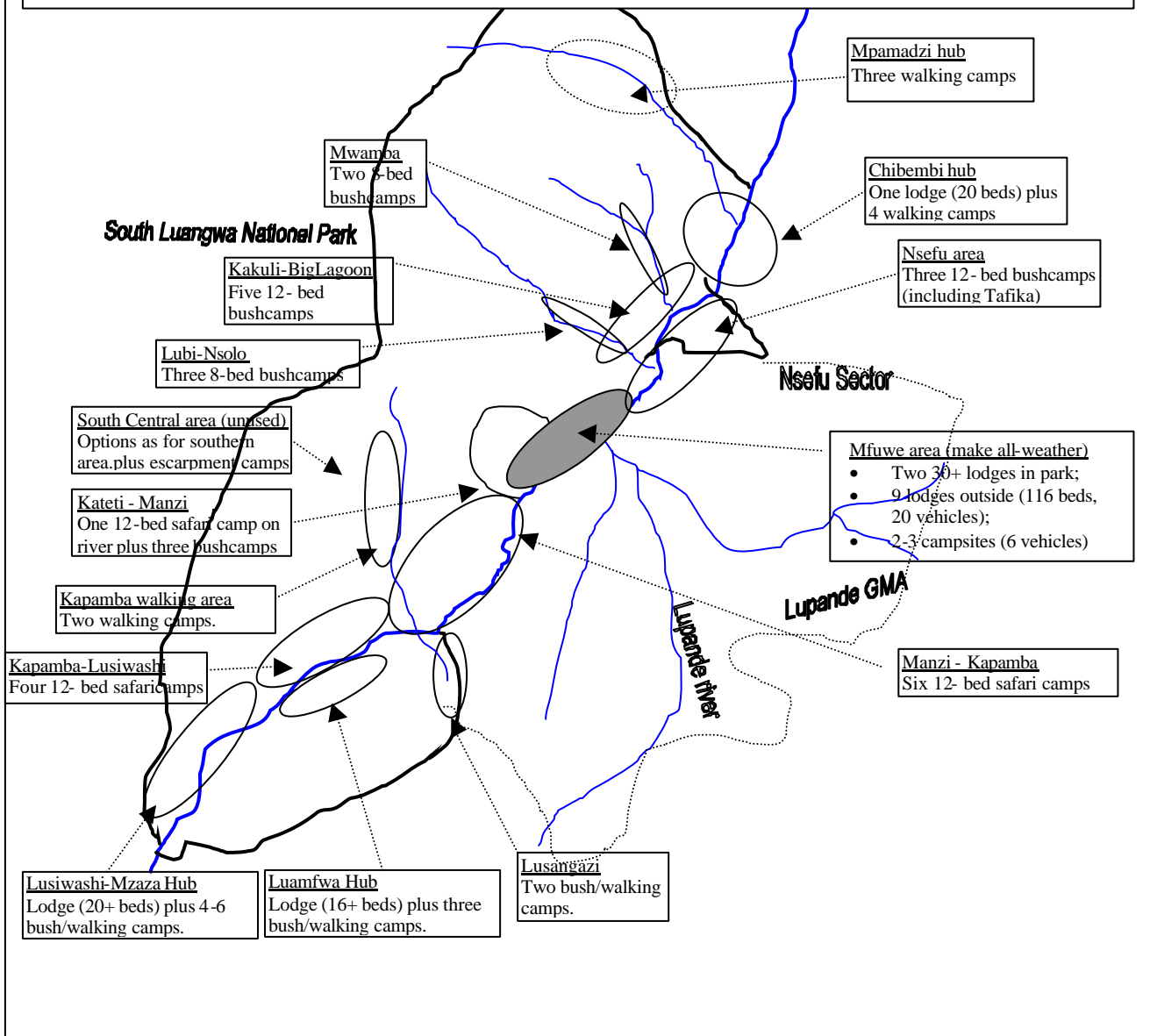
This experience provides some useful financial indicators for park managers. Tourism operators pay an all-in fee of approximately US \$20 per bed night. Good operators (i.e. those who maintain good occupancy rates) contribute some US \$1,800 - 2,000 per year per tourism bed to the park in a 150 day season. The project's tourism records show, without sound agreements with operators, many of them pay less than US \$1,000 per bed per year and some pay less than \$500. This emphasises the importance of monitoring and sound commercial agreements, and of replacing weak operators with good ones.

We have shown that it costs approximately US \$1m per year to manage South Luangwa National Park, or \$100 per square kilometre per year. Assuming the figures mentioned in the previous paragraph, the fees paid by a 'good operator' can support 20km² for every bed, whereas weaker operators can support only one quarter of this area. These rule-of-thumb data will be useful to park planners.

Using these 'rules', South Luangwa National Park (9,050 km²) requires a minimum of 500 fully operational beds to break even. In 1999, there were 206 operational beds in the park, which earned

¹¹ This included c. US \$1m in cash, with the balance absorbed by inter-company transfers between the investor's other companies (pers. comm., Simon Wilde, General Manager Mfuwe Lodge)

Figure 8.1
Sketch-Vision of Tourism in South Luangwa National Park



Indication of tourism operations and income potential

1. Present income (320 beds)	\$ 320,000
2. Potential income if present sites / contracts are well managed (\$30 inside \$20 outside x 35% x 362 beds)	\$ 900,000
3. Potential income with planned sites (680 beds) (with effective operating contracts)	\$ 1,436,500
4. Potential income with planned sites plus extended access / seasons	\$ 2,211,000

Source: LIRD Project Submission for Phase IV (March, 1998)

US \$443,603. A further 124 beds were being developed, while 82 new beds were in the process of allocation. This suggests that the park will soon have 412 operational beds. From these it can expect to earn about US \$800,000 to \$1m depending on the assumptions used. This underscores the need for new sites need to be allocated in the unused southern portion of the park (Figure 8.1).

If we take the most optimistic strategy in which all 750 of the planned beds are developed, and prices are increased by 50%, the park can expect to earn US \$2.25m. Naturally, roads that extend the season beyond 150 days will increase this figure.

8.3.5 Contributions to CBNRM

Throughout its history, LIRD P has been alienated from the NPWS mainstream in Zambia, and it has had few linkages with the regional CBNRM movement. As a consequence, the project's community programme has been kept out of the limelight. By 1993, the conceptual foundations of CBNRM were in place. These were developed largely by CAMPFIRE, and later corroborated by the experience of the regional CBNRM network. The LIFE programme in Namibia, which is implementing programmes to establish conservancies, is now setting the pace in the region regarding devolution policy. LIRD P was not a major player in the early development of the CBNRM principles, though its later contribution to testing these principles and to operationalising them is likely to be important.

LIRD P evolved through exactly the same processes as the Zimbabwean CAMPFIRE programme. The project's initial goal was to use wildlife revenues to provide social projects chosen by representatives of the people (in this case, the Chiefs and Local Leaders Committee), though implementation was still administered largely by government. When these benefits did not revolutionise community attitudes and practices towards wildlife, the programme evolved. The critical importance of 'ownership' and control became apparent. It was recognised that people's affairs were still being governed from above (albeit at a lower level) and that real progress would necessitate participation, devolution and democratic and fiscal empowerment. This transition was made in CAMPFIRE between 1989 and 1991, and in LIRD P in 1996. It therefore took LIRD P five years, or half the length of the project's life (at that time), to heed the lessons developed by CAMPFIRE. Namibia's LIFE programme, better integrated into the regional CBNRM network, adopted and built on these lessons much faster. This illustrates the importance of a good network in accelerating progress.

ADMADE, unlike LIRD P, had far greater opportunities to participate in this network because of its USAID funding, yet appeared to be too defensive to learn and adapt emerging lessons (Matenga, 1999). Thus, networks are valuable for programmes that are progressive (e.g. LIFE), but of limited use for programmes that are inward looking, defensive or motivated primarily to advocate their own philosophy (e.g. ADMADE). Likewise, it is interesting to note that programmes outside the regional network, such as the Serengeti Regional Conservation Strategy in Tanzania (Rusten Rugumayo, 1999) - also NORAD funded, are conceptually and managerially very immature.

The national programmes like CAMPFIRE, LIFE and ADMADE have dominated the CBNRM movement. The conceptual framework for CBNRM is in place, and the challenge lies in implementing these ideas in practice LIRD P has learned from these, but has made important additional contributions in two areas. First, by operationalising these principles in a new geographical area, it has tested and proven their general validity¹² and has demonstrated the conceptual strength of the southern African CBNRM philosophy. Second, and perhaps of more importance, LIRD P has shown that when these principles are used, progress can be remarkably rapid, especially if

¹² The CBNRM principles developed in southern Africa (e.g. Child B. 1996) advocated a scientific and experimental approach. These were embedded in the 1993 review of LIRD P and in the project's Phase 3 community programme.

management is sound. It has developed, tried and tested management systems which are broadly replicable. It has demonstrated the efficacy and importance of management, and has designed and tested management systems that reflect these concepts. The resulting procedures and manuals are useful for other projects wanting to implement CBNRM (Box 7.13).

Drucker (1974) stresses the importance of institutions and management in development, defining innovation as the task of “endowing human and material resources with new and greater wealth-producing capacity”. He emphasises its particular importance for “developing countries...which have resources but lack the capacity to make these resources wealth producing. While they can import technology, they have to produce their own social innovations to make it work”. Drucker argues that cutting-edge ideas are important, but the key to harnessing resources towards development lies in getting systems to work (i.e. innovation as opposed to inspiration). Such interventions can only be considered successful when these are understood and implemented by the majority of people and have moved beyond the domain of the gifted elite, indeed when they are no longer exciting.

What LIRDPA has done is to create and implement such management systems, both for the community programme and for the park. The bright visions of the planners are now being implemented and evolved by Zambians (who are paid abysmal salaries). The systems are far from perfect, but they have shown remarkable progress especially when contrasted to other management systems in Zambia. Indeed, the mundane might be described as the successful. One of the problems with development, especially in pursuing the sustainable use of natural resources, democratisation and governance, has been its inability to hold the attention of the initiating champions. They leave after this transition from intellectual challenge and excitement to the consolidation phase, where work is methodical and requiring dedicated management, rather than intellectual skills. But they mainly leave because fashions change, donors lose interest, personal circumstances are challenging with limited intellectual stimulation and domestic discomfort, and there is no career development path that maintains them at this cutting-edge. The loss of these leadership skills will prevent progress, and should be considered an important market failure that the donor-project system needs to address (see also Box 7.10).

All of the major CBNRM programmes in the southern African region are managed entirely separately from protected areas. LIRDPA, by contrast, has encompassed a major and important national park. The community programme for some 45,000 people in Lupande GMA can be maintained with a budget of US \$80,000 annually. This represents 6% of the park budget. If the theory that good neighbours reduce costs proves correct, this is a wise financial decision as far as the park is concerned. The corollary is that the community programme has indefinite funding and technical support. Donor-funded projects cannot guarantee such support in perpetuity.

The project is beginning to develop experience of the value of a park-community partnership and can start to evaluate this. While there are still more questions than answers on the efficacy of this relationship, and evidence is limited and anecdotal, it appears that a good community wildlife programme can reduce the amount and cost of a park's law-enforcement efforts. The next question is whether we are looking at parks in the right way, and whether they should be managed not only for conservation but also as a catalyst for socio-economic development in remote rural areas (Box 8.11). The next few years should provide answers to these questions.

The economic justification for this arrangement is even stronger. For only 5-7% of its overall budget, SLAMU has been able to make a big difference to rural development and conservation in the Lupande GMA, which contains about 30% of the people in the entire Luangwa Valley. Notwithstanding this, the current tight financial regime has placed strong pressures on SLAMU to reduce its CBNRM activities and it is expected to provide services before it is profitable. Two questions arise: (a) from philosophical stand point, should a park have wider development responsibilities beyond its conventional conservation functions? and (b) from a more narrow perspective - and following from the financial situation outlined above - is it in the short-term financial interest of SLAMU to support the community programme?

Pressure, whether financial or of other kinds, is important (provided it is applied in the right circumstances) in bringing about intellectual debate and progress. But it does not necessarily lead to the right decision being taken. But even if the narrower view that SLAMU's first and only responsibility is to conserve the park is taken, it is still likely to be concluded that the project should support CBNRM. There is a need to properly evaluate the financial costs and benefits of the CBNRM programme to SLAMU. But it is very likely that it will be positive. However, most of the benefits to the project of its CBNRM programme are intangible and cannot be assessed readily by hard financial figures. As a consequence, they are likely to be under-valued in any evaluation. Nonetheless, they will need to be communicated within the project. On the wider question, the positive nature of the economic and conservation costs and benefits of the project are not in dispute. However, SLAMU's responsibility for continuing to promote this more general development is. This dichotomy, which manifests itself through the budget, needs to be resolved.

8.3.6 Dealing with gender

NORAD was concerned about the role of women in rural areas and insisted, at the outset, that a women's program be established within LIRD. This provided extension services dedicated to women's needs, small-scale credit, and experimented with women's clubs - with limited success (Box 7.3). But the review missions, particularly the third mission in 1991, saw this program as 'isolating and marginalising' women's issues and suggested that it be phased out and efforts made to involve women in all project activities through a gender program. Richard Bell (pers .comm.) admits that no one in LIRD at the time fully appreciated the problem and suggests that the process of addressing gender issues needed a life of its own. In the planning process leading up to Phase 4 there was considerable discussion about gender, but the project found it difficult to formulate concrete actions to address this issue. It agreed that some progress had been made, with women reaching senior positions in administration, CBNRM, PREI, and even the Workshop and Roads Sections, but the difficulties of employing women in the more military law-enforcement roles appeared insurmountable.

The issue of paying special attention to women as opposed to addressing gender issues as part of wider development efforts has been a feature of the 'women in development' debate over the last decade, and this continues in the Luangwa. In an academic evaluation of LIRD (based on questionnaires and workshops), Wainwright (1996) notes that "women were much less informed about LIRD and CBNRM than their male counterparts". She identified the lack of an adequate women's programme within the Phase 3 framework as a major weakness, commenting:

"Although LIRD, in its original multi-sectoral approach, included women's groups, they were inefficient and ineffective (Kunda 1995). The gender program [as outlined by LIRD, 1994] does not clarify what the gender issues or policies are. The creation of a 'gender' program does not recognise women as a distinct group needing special access to development initiatives, as one assumes that a 'gender' program will be responsible for issues that affect both men and women. In addition, the Vision Statement [LIRD, 1996c] does not include a section on women or gender. This is unfortunate, as many local women in both the questionnaire and workshop surveys expressed the desire for LIRD to create women's groups and to assist to establish enterprises. Ultimately, the lack of adequate resources and support for women in the Lupande GMA can be seen as a detriment to the CBNRM program, and may impede development goals".

In its review of Phase 3, Scanteam (1998) noted that whilst LIRD still had no defined gender programme and no officer responsible for developing a gender strategy and plan, project management was trying to achieve a 30% female employment level - a target that proved difficult to reach for practical reasons such as lack of qualified candidates and unwillingness of females to move out of the Mfuwe area.

However, an effort was made to recognise gender issues in the community programme. A significant number of women are now participating in community committees, though often in more passive

roles. The monitoring of attendance showed that at least as many women and men were attending general meetings. Participation of women was also monitored and, although meetings are still dominated by men, women are becoming more active and certainly participate regularly. Nonetheless, women are seriously disadvantaged by fundamental problems, including the early marriage of girls, their heavy household responsibilities, and the fact that they tend to be withdrawn from schools at an earlier age than men and are therefore significantly less educated. It is difficult for the project to address such fundamental societal problems. Nevertheless, it is hoped that the modernisation and democratisation of community institutions may have a positive impact.

8.3.7 Monitoring and assessing change

(a) Baseline socio-economic monitoring

The overall impact of the project on local communities has not been measured, although in-migration is a good indicator of its relative progress. Assessing the environmental, social or economic impacts of community programmes is always difficult because of complicated cause-effect relationships and external factors, and because few baseline surveys were conducted at the outset against which to measure changes. In considering an approach to integrated resource management planning in the Luangwa Valley in 1983, the need for such baseline information was identified (particularly for the natural resources and agricultural potential of the area, and for livelihood strategies of its peoples). Strong emphasis was placed on 'plugging the information gap' in the original project concept (Dalal-Clayton and Oscarsson 1984) and subsequent project proposal (Larsen and Lungu 1985).

A detailed base-line survey of Mambwe District was undertaken in May and June of 1997 by the Provincial Planning Unit, Eastern Province, LIRDPA and Save-the-Children Federation in collaboration with Chipata District Council. At this time there were 6,147 households in 699 villages, and roughly 43,000 people. However, this information is seldom used. It could form the basis of a later evaluation of the programme, provided the information is repeatable.

(b) Ecological and monitoring

LIRDPA has conducted regular censuses of animal populations. These includes aerial counts of elephant and other species (1993-1999), an annual assessment of hippo and crocodile numbers (which first started in the 1960s), and annual walking transects in the GMAs to count large mammals (1993-1999) in which local communities are active participants. This provides a comparatively good data set. However, no method adequately tracks changes in populations of the middle-sized herbivores. This is important given that there are indications that expanding populations of bulk-roughage grazers (hippo, buffalo) are out-competing the more sensitive grazers (wildebeest, puku, waterbuck, etc.). Vehicle counts would plug this gap.

The biggest weakness in the ecological monitoring system has been the failure to monitor changes in the vegetation. There is a vegetation map of the park (Astle, 1998). A landscape classification and soil survey of the Lupande GMA was also completed (Van der Meeren, Commissaris and Chindida, 1987). However, the health and status of the habitats was not monitored until a preliminary survey in 1999 (Kunda and Child, 2000). Given the propensity of the bulk-roughage grazers to damage the herbaceous layer and soil, and of elephants to obliterate trees, and the fact that these populations are increasing, this is a serious deficiency. Another is the failure to monitor the river and aquatic systems, because the presence of a large, undamaged river is South Luangwa's primary claim to ecological uniqueness.

(c) Monitoring agriculture and forestry

There has been some monitoring of other resources. In addition to the soil surveys and soil erosion studies, agricultural research in Phase 2 provided information on improved crop varieties, farming and livestock production methods, and means of integrating these into existing farming systems. Trials of various drought-resistant food and relish crops were continued during Phase 3. Unfortunately, the results of this work are not available to farmers. Similarly, an analysis of forestry inventories was undertaken in 1987-88 to assess the availability of hardwoods, fuel woods, building materials, etc., but this was never completed by the Forestry Department (due to persistent capacity and technical limitations in that department).

(d) Monitoring CBNRM

The progress of the CBNRM programme is better monitored than most similar programmes. Finances and projects are audited annually, and all annual general meetings are recorded on standard forms. Twice a year, an institutional assessment is made of each VAG (using a Process Orientated Monitoring System). This data has been computerised, but is seldom used in this form. It is also presented to each community in a visual format to enable them to compare their progress (in terms of a range of variables) with that of other communities (see section 7.4.3.e). Unlike much of the survey data mentioned above, this is proving useful because it is available to people and incorporated into management process, not simply extracted for academic studies.

(e) LIRD as a Study Site

LIRD has attracted a great deal of interest and attention, especially given the length of time it has been operational. Gibson (1995) looked in some detail at LIRD as part of a doctoral study of the political economy of wildlife policy in Zambia between 1964 and 1991. Masters students from the Durrell Institute for Conservation and Ecology (DICE) at the University of Kent, England, have undertaken dissertation studies in the area. Wainwright (1996) looked at the impact of LIRD at the community level in the Lupande GMA, using a survey involving 200 questionnaires and four workshops (see also Wainwright and Wehrmeyer 1998). Butler (1996) investigated how tourism in the SLNP could be developed for the benefit of conservation and the development of the local communities around the park and repeated elements of the study on community attitudes towards LIRD in 1998 (Butler 1998 and in press) (see section 5.6). Jackson (1998) studied fishermen's views on the use of common resources

In the past, a number of Zambian students based their Masters dissertations and other studies in the area. Several of these studied at NORAGRIC in Norway: Njobvu (1987) investigated local community views on wildlife utilisation; Mwinga (1989) evaluated local people's participation in LIRD; and Chundama (1990) studied the contribution of non-consumptive tourism to rural development and conservation. Others have looked at resource use and management (Kalyocha 1990) and community land use planning (Phiri 1994).

Currently two SLAMU staff members are undertaking research on aspects of the project in support of their MSc studies. Elias Phiri (Community Co-ordinator) is investigating the contribution of safari hunting to conservation and rural development (see Appendix 5) whilst Nasson Tembo (Warden, Mfuwe Command, NPWS) is studying local people's involvement in conservation. Manando Mvula of Robin Pope Safaris is also undertaking M.Sc. research on aspects of tourism management in the SLNP and Mfuwe area, while Helen Ross (M.Sc. student at the University of Abersytwyth) is looking into the contribution of women in conservation in Lupande GMA.

The fact that the LIRDP area has a wide range of activities covering the park and a community programme in the GMA, that it has already been studied, and that it is an innovative programme that is addressing some of Africa's fundamental conservation concerns, make it an interesting area for further research.

8.4 Project management, performance and finances

8.4.1 An assessment of “Integrating resource development”

(a) Initial objectives of the project

Prior to LIRDP, the development needs in the Luangwa Valley had been neglected for many years compared to other areas of the country. Very weak planning or co-ordination between government agencies exacerbated this neglect. Inter-institutional tensions and rivalries meant that some ministries and the District Council failed to co-operate, while others were unable to do so effectively because of capacity, financial or technical weaknesses - factors which had contributed greatly to the pre-existing problems in the Luangwa Valley.

In phases 1 and 2, LIRDP was therefore designed to co-ordinate and support integrated land and resource use. The original vision of a catchment-wide co-ordinating project was scaled down to a pilot project covering just the Lupande GMA and adjacent SLNP. Because of the weaknesses in co-ordination and capacity, LIRDP gradually took over the roles of some line ministries, resulting in its much-criticised role of a 'mini-government' in the area.

LIRDP set out to manage wildlife and other resources in the project area (aiming to take over responsibility for these functions from NPWS), to involve local communities in decision-making, to establish ways in which communities could benefit from revenues earned in the area, and to co-ordinate and support the activities of other line ministries in the area across a wide array of activities to promote general socio-economic development (e.g. road-building) (see Box 3.2).

(b) Project structure and initial political-economic situation

The elaborate system of committees established to manage LIRDP during Phase 2 (see section 3.1) have also been the subject of considerable criticism, both by review missions and other observers (see Box 8.8, for example). But it is important to note that these committees were not the construct of the project concept or original proposal. Rather, they were the result of a complex, protracted and difficult process during Phase 1 (1986-1987) to establish an organisational structure acceptable to the main line ministries concerned with and affected by the project, and to other political stakeholders. Various models were proposed by the LIRDP co-Directors to the Advisory Committee of Permanent Secretaries (subsequently the Executive Committee) during this period. The aim appears to have been to 'bind in' the line ministries and other interests groups, and to overcome the resistance of government departments to LIRDP assuming a coordinating role in the project area – something which characterised this preparatory phase. The committee rejected the suggestion that all district-level government officers in the program area be seconded to LIRDP. To link the project to government personnel operating in the area, technical sub-committees to the Executive Committee were established (section 3.1). This structure, agreed by the Permanent Secretaries, was confirmed by a workshop at Chichele lodge in June 1987 attended by representatives of government, politicians, donors, local administrators, local leaders and others. It was then fixed in the funding agreement between NORAD and the government. Reflecting the domination of the process by political compromise rather than efficiency criteria, it is difficult to know how genuine their support for this

Box 8.8: A critical perspective of LIRD^P's organisational structure

In his doctoral thesis on the political economy of wildlife policy in Zambia, Clark Gibson (1995, p197-188) observes that:

"LIRD^P's organisational structure focused control of the programme in the co-Directors. The programme's cumbersome committee structure prevented functional management or oversight of LIRD^P's co-Directors. The Steering Committee, chaired by President Kaunda, did little after its first meeting on 13 July 1988 to follow its mandate of giving policy guidance to the programme. The Executive Committee, composed of Permanent Secretaries, did not perform its role of implementing the programme. Neither committee had any legal standing, and no functional managerial relationship or coordination seemed to exist between the committees, their sub-committees and the project's regular administration. The co-Directors filled this administrative gap, and assumed significant personal control over both short- and long-term operations, dominating decision-making about LIRD^P's planning, staffing and finance. ... LIRD^P's institutions quickly became identified with the persons of Bell and Lungu".

Gibson (1995, p181), seeing political intrigue into every turn of the LIRD^P story, and disingenuously reading self-servicing intentions into the efforts of both co-Directors, goes on to assert that:

"They [inferring the co-Directors] hoped the institutions agreed to by the Zambian government with Norway would help mitigate Kaunda's possible intervention. They had placed Kaunda in a largely ceremonial position within the LIRD^P hierarchy. They had secured a revenue base distinct from the Zambian government and Kaunda's direct control. They had agreed to annual meetings with NORAD which would help prevent Kaunda from hijacking the programme's activities. Most importantly, they successfully linked President Kaunda's personal reputation with the survival of institutions designed by Bell and Lungu".

model actually was. According to Gibson (1995, p179), "many of these same Permanent Secretaries would recommend the dismantling of LIRD^P's institutions after Kaunda's electoral loss in 1991".

The complex committee structure (which excited all shades of opinion over the years) absorbed a high proportion of the co-Directors' time during Phase 2. Simultaneously, review missions asserted that inadequate attention had been given to developing middle management with delegated authority, so senior staff were continuously and unnecessarily over-burdened by day-to-day management responsibilities. As Gibson (1995, p189) observes:

"Eventually, lower level administrators relied on the co-Directors for all initiatives, implementation and decision-making. So dependent was LIRD^P on its co-Directors that NORAD officials feared the project would not survive if Bell and Lungu left their positions".

However, according to Richard Bell (pers.comm.), the co-Directors did identify suitable candidates but NORAD was not prepared at the time to provide funds for positions such as an administrative officer and a research co-ordinator. Administrative burdens conspired to prevent senior management from focusing on many important issues. For example, Phase 2 review missions consistently criticised the lack of progress with land use planning. Richard Bell points out that the review missions pushed for the Lupande GMA to be formally zoned for wildlife management, but adds that if this zoning process had been undertaken in a genuinely participatory manner, it is doubtful that the people would have allocated much of the area to wildlife.

A serious problem was the ambiguity of reporting structures. Who did the project report to? As we have seen, the Steering Committee only met once. In Phase 3, the project regularly reported to the Policy Committee (comprising government ministries) on one day, and on the next day to the project annual or review meeting at which the only new participant was NORAD. Thus the project had two

'boards', but with the additional problem that the composition of these 'boards' was not defined and there was little continuity. The uncertainty about the reporting relationship between the project and NPWS staff confused matters further. It is no wonder that the project could not move in a unified direction.

We again emphasise the importance of clear delineation of roles and goals for creating accountability. The slimming down and re-focusing of the project in Phase 3 enabled these structural difficulties to be partly addressed. Since the transformation to SLAMU, the project's annual and review meetings have performed far more effectively as a pseudo-board. Some credit goes to the project for ensuring that these meetings have been well prepared and therefore more able to make decisions based on facts, and less prone to diverging from key issues. Credit also goes to individuals in both NORAD and the Ministry of Tourism who, of late, have become more professional in their approach. Another improvement is that key stakeholders, including chiefs, elected community representatives, the District Council and the Luangwa Tour Operators' Association, now participate.

The sector co-ordinating committees also failed to work. The same is true of the (Mambwe) District Development Co-ordinating Committee which is similarly a forum where all government and several other agencies sit. Indeed, the failure of district-level co-ordination is a regional problem in southern Africa. This suggests that it is the co-ordinating model, rather than the individuals, that are the problem. A co-ordinating body like a District Council cannot fulfil this mandate unless it also controls the finances - and, therefore, has the power to prioritise (Roe, 1992). This is something which southern African governments have been slow to concede. Unless the tax structure is changed so that districts retain revenues, and control the flow of revenues to service sectors, co-ordination will not work. The next problem is that few districts have a local economy that can produce sufficient taxes.

(c) Did LIRDPA achieve its initial integration objectives?

Box 8.9 compares the main project elements proposed during Phase 1 (1986-87) (see Box 3.2) with their status 1999. The budget proposed for Phase 2 (Table 3.1) illustrates the very broad-brush approach taken - which sought to address all the main problems of the Luangwa Valley. In the event, progress occurred in these initial stages of the project only in a few key areas (particularly wildlife conservation through anti-poaching efforts). One can speculate on why this was the case. Clearly, the fact that NORAD provided only half of the required budget severely restricted what could be done (particularly limiting the proposed roads programme - a vital linchpin for development take-off in the area). But the limited progress in many sectors also suggests that the money allocated was largely wasted, either in overheads or in inadequately executed programmes. There is no evidence that to indicate that inputs to these sectors and their sustainability were analysed or prioritised.

The overall conclusion is that the project either set out in the wrong direction, or it failed to establish mechanisms (or was unable to do so because of prevailing circumstances) to ensure that it achieved what it set out to do, or that it was weak on both counts. It can be deduced that this situation arose for two main reasons. First, in its initial stages, the project was strongly influenced by external effects. It was having to operate in complex circumstances with the high profile involvement of the then President; a degenerating, ineffective and hostile NPWS and antagonistic ADMADE programme, an ineffective civil service, corruption, etc. (see discussion in section 8.2). Second, there were internal problems - deficiencies in the management systems that characterise donor-funded projects (see section 8.4.2). It is interesting to speculate whether the more disciplined LFA approach now used by the project for both planning and performance management would have made a difference to performance.

Several review missions were critical of the tendency of LIRDPA to by-pass institutions with which it was difficult to co-operate, and to take over specialised functions such as agricultural credit distribution and recovery, co-operative formation, agricultural marketing and supply, etc. They warned against the dangers of the project becoming autonomous (see Box 3.5). They suggested that

Box 8.9: A comparison of the main project elements proposed for Phase 2 and their status in 1999

[Note: Box 3.2 sets out the main proposed project elements for Phase 2. These are summarised in square brackets below for each element]

LIRDP HQ *[To be relocated from Chipata to within the project area]*

Long delayed because of lack of finance. Building work was finally initiated in 1999, following intensive planning work and negotiations with NORAD from 1996. The new HQ complex and staff housing is much smaller than initially envisaged; is being constructed in Mfuwe rather than at the district centre in Jumbe. Proposals for proper staff housing in four sector headquarters are being processed by NORAD.

Land and resource use planning *[To provide formal co-ordination of land and resource use planning for the area for unreserved land].*

In Phase 2, LIRDP completed a land capability classification of the project area, and introducing the subject of land use planning to local leaders, with the intention to develop plans with full local participation at Ward and Branch level in 1992. But these ideas were never carried through because of the change of government and then project leadership in 1991. LIRDP at this stage had opted for a cautious approach fearing that any planning process leading to exclusive or restricted use of resources (i.e. through zoning) could lead to conflict between interest groups. Direct responsibility for broader land use planning was relinquished in Phase 3 with project restructuring. NORAD funded IUCN to undertake a park and GMA plan in 1995 but the plan was so weak and unrealistic that it was never approved. During this exercise the Chiefs rejected any planning in the GMA. In 1998, the EDF-NPWS Project prepared a draft zoning plan for the park, but this plan was also not an implementable document, having neither budgets nor workplans. The Phase 4 proposal can also be considered to be a plan, and in many ways subsumes the functions of a park plan. Despite rising land-use conflicts and the need plan and organise socio-economic development in the GMA, and although data was collected in Phase 2, there has still been no effective planning.

Road development and maintenance *[To undertake a feasibility study to develop plans for road alignments, designs and construction. In the interim, it would maintain the roads in the area].*

Although a major component of Phase 2, there is still no comprehensive description of road requirements or a road plan for the park and GMA. This matter is now being addressed (Box 8.5). During Phases 2 and 3, some roads were developed in the GMA, but records of these are weak, and no provision was made for maintenance. The total length of passable gravel roads in the GMA at the end of Phase 3 was approximately 50km, with other roads being shaped but seasonal. Almost nothing was constructed in the park, though seasonal grading was done regularly.

Training and manpower development *[To provide local training seminars and overseas training for recognised qualifications].*

Some 15 staff achieved higher degrees, but only one remains with the project. In-service training has been limited and unresponsive to project needs. Middle management has only been developed in Phase 4, and only through performance management. There is little to show for expenditure on training during Phase 2.

Non-government programmes *[To provide support to cooperatives and other small-scale organisations].*

There are no lasting results from efforts to develop such partnerships. There were difficulties in developing such linkages due to the historical mistrust between the project and NPWS.

Agricultural programme *[To be carried out in collaboration with existing programs: surveys, agriculture research, support for extension].*

This produced useful research results and a reasonable extension programme. Because of this added value, it was with some hesitation that Scanteam recommended it be phased out of LIRDP in 1993. However, agricultural support in the district has collapsed. Line ministries are unable to provide communities with services, despite a demand for these. The buildings and agricultural centre at Masumba remain.

Electric fencing *[To test self-help electric fencing schemes].*

This was initiated in 1999, when a small-scale electric fence was constructed in Malama in 1999. A proposal was also developed for further fencing to reduce conflicts between people and animals and to retard the movement of settlement against the park boundary in 1999, but no funding was found.

Tsetse control *[To conduct a trial eradication using "impregnated" targets or screens].*

A research station was established and later taken over by the EC-funded Regional Tsetse and Trypanosomiasis Control Programme (RTTCP) until the end of this (sometimes controversial) project in 1999. Fortunately for the area's biodiversity, no measures were taken to control tsetse flies (spraying of DDT), and the Luangwa Valley did not suffer the unplanned and socially disruptive settlement and degradation that followed such spraying in Zimbabwe's Zambezi Valley.

Women's programme *[To develop a programme to provide extension services to women and improve their access to credit facilities, ease daily workloads and increase literacy rates].*

This was implemented and a few vegetable, chicken and sewing clubs started. But it was phased out in 1995 and almost nothing remains of it, suggesting problems of applicability or sustainability.

Co-operatives *[A study of existing cooperatives, identification/evaluation of ventures for possible support, training, and supervision and monitoring of established cooperatives].*

There is no obvious evidence of the existence of co-operative societies in the Luangwa Valley. However, people do refer to abandoned buildings as having once been constructed by co-operatives.

Forestry, fisheries and water development *[To develop a forestry management and development plan. The fisheries and water development programmes remained to be elaborated].*

Forest inventory surveys were conducted by Forest Department but never written up. Water development projects were started by LIRD. Since they were handed back to the line ministry, there have been few inputs. However, communities have proven effective at developing water projects, either on their own or in partnership with the District Water and Sanitation Project. Communities talk of long-forgotten promises of fish farms as part of a project component that was never started.

Wildlife management *[To establish a unified operational command for SLNP and Lupande GMA, increase scout densities, expand Village Scout programme, establish wildlife research unit].*

This has been LIRD's most important achievement, with elephant and other wildlife populations protected and now expanding. LIRD conducted over 200 patrols each year, and monitored these well. The rest of the wildlife programme was never fully implemented. The Village Scouts were never incorporated into communities after training, and became part of the regular scout force. Some monitoring was initiated, but never expanded much beyond the regular counting of animals. A comprehensive and applied ecological research programme never materialised. The first ecological assessment of range condition was conducted in 1999.

Works and supplies *[To establish LIRD coordinating unit for works and supplies]*

LIRD established this unit but it became very inefficient in Phase 3. In Phase 4, it was restructured into several smaller and more accountable sections - with some success.

Evaluation capacity *[To build a strong evaluation capability].*

No strong evaluation capacity was ever established. The recently adopted adaptive management approach has arisen largely from the use of LFA participatory planning techniques rather than any formal data management system.

In short, the comparison of status with plans suggests that while the project was innovative on a conceptual level, it was never well planned or executed operationally, and never even remotely achieved the plethora of objectives assigned to it.

LIRD should have made much more effort to work with these institutions, providing help and support (including funds) to enable them to undertake their responsibilities, and to develop skills and capacities where these were lacking. The review of Phase 3 noted that:

"LIRD sought to be all things to all people, and to encompass all resources (i.e. to be a mini government) as a means for conserving wildlife and national parks. Working from the general to the particulate is generally sensible and the concept of integrated resource management might have worked had it been possible for the project to be better structured and focused from the very beginning. It would probably also have needed more human and financial resources than were available." (Scanteam 1998, p103)

This criticism is well and good. However, the fundamental problem was that there was no likelihood that services provided by these institutions would survive beyond the project anyway (see section 8.4.1.f). The dominant point of view is that projects come and go, but government departments remain. Therefore, this argument continues, from the point of view of project sustainability, it is vital to work with the system and existing government structures, however imperfect they are, building on their strengths and plugging deficiencies. This is not a new conclusion, and is defended on the grounds that projects which have attempted to bypass inefficient government systems and set up mini bureaucracies in order to make progress have collapsed once the project has ended and the donor withdrawn (see Box 8.10). This is true, but the logic of the negative argument is not. The reason for these projects in the first place is the failure of government to provide the requisite services. Indeed, when LIRDIP handed over functions to line ministries these collapsed almost immediately. We must conclude that both strategies have serious weaknesses. An entirely new approach to governance and the provision of services may well be necessary.

(d) Why did the concept of co-ordination through a 'mini-government' fail?

Some observers have criticised the LIRDIP concept as far too ambitious and unwieldy. Others suggest that if all parties had seized the opportunity and worked together rather than against the project, then significant progress could have been achieved. Neither opinion is very useful because they fail to analyse the causes of the failures. While the politics of LIRDIP's formative years were undeniably difficult, the project did have considerable resources to address the neglect of Valley people and its wildlife. All programmes have personal differences and difficulties, and successful ones are able to overcome these. We therefore assess why such a wasteful and antagonistic situation was able to develop, with two main issues emerging – accountability and leadership.

The legal standing of LIRDIP was unclear, its reporting framework outside the regular structure of government, and lines of accountability poorly defined. Its goals showed remarkable congruence with those of ADMADE and the aims of NPWS – each purporting to promote a community-centred approach to wildlife management. But there was a long-running conflict between LIRDIP and ADMADE/NPWS and attitudes were defensive, territorial and often hostile towards each other. This suggests that personal agendas took precedence over the priorities of the rural people and wildlife in the LIRDIP area (which the project was intended to support).

The existence of a system to measure progress, either in financial or performance terms, and to hold managers accountable for meeting targets, might have prevented such a deplorable situation arising or persisting. However, it must be noted that such personal politicking is increasingly becoming the norm in wildlife conservation at the national and international level, particularly since the rights to and responsibilities for this 'nationalised' or 'globalised' resource are seldom, if ever, delineated. The search for a solution to wildlife conservation problems is increasingly being focused on tenure and who has rights to access wildlife resources.

Quality leadership and management are essential to overcome such difficulties. Unfortunately, neither government nor aid-donor systems give much credence to the personality of individuals and champions. The belief that systems or projects should never be personalised is misplaced. It is almost always the case – in both business ventures and development initiatives alike – that leadership excellence is a critical factor for success. Success in pioneering new approaches (which are usually resisted at first by bureaucracies and vested interests) is almost always down to the pivotal, catalytic and dedicated efforts of individuals.

The difficulties of measuring conservation or development¹³, coupled with the lack of accountability

¹³ These difficulties are, perhaps, more of an excuse than a reality, since methods are available. Indeed, LIRDIP has implemented some. Most successful aid-projects (e.g. the Marshall Plan; India's Green Revolution) owe

in government-donor projects, and an apparent reluctance and inability to actively seek quality leadership and management, lies behind the dismal performance of so many aid projects. LIRD, NPWS and ADMAD have been no exception.

(e) Reasons for the changing focus of LIRD after phase 2

Various factors and criticisms led to a change in the focus of LIRD at the end of Phase 2. Amongst these were:

- The project's overwhelming dependency on high levels of donor-funding (relative to earned revenues) and the fact it was nowhere near becoming self-sustaining by the end of Phase 2;
- Consistent difficulties in initiating multi-sectoral collaboration for integrated land use planning;
- The top-heavy and unaccountable committee structures;
- The unclear roles of interested parties;
- The project assuming an implementing role, rather than co-ordinating the activities of line ministries;
- Weakness in raising public awareness;
- The inadequacy of the Local Leadership Sub-Committee as a mechanism for genuine community participation in decision-making and for the equitable distribution of revenues;
- Lack of progress in developing CBNRM systems and democratic village institutions capable of managing CBNRM activities.

Thus, in Phase 3, the project was scaled down, the multi-sectoral approach was dropped, and the focus was put on managing SLNP as a conservation area, and on promoting CBNRM in Lupande GMA. The delivery of functions falling under the responsibility of line ministries was left to those ministries. The project moved away from its original goals of integrated resource development.

(f) Was the failure of integrated resource development a management or conceptual failure?

There has been much criticism of the way LIRD was structured in Phases 1 and 2 - aiming to integrate and coordinate a wide range of functions and objectives. But, with the implementation of the Zambia Wildlife Authority Act and with changes that are envisaged to follow (i.e. the provision of legal status for CBNRM), this original re-orientation of LIRD may well prove to have been the right approach. But it needs to be remembered that the main reason why LIRD adopted a multi-sectoral approach in the first place was because of the extremely poor and un-coordinated performance of line ministries in the area. Arguably, the project could have adopted a much more supportive role, rather than taking over responsibilities where ministries or local authorities were weak. The institutional problems arising from the launch of LIRD no doubt contributed to this malaise. But it is already apparent that without financial, technical and capacity-building support, the line ministries will remain unable to deliver what is expected of them. And whilst LIRD (and now SLAMU) may show success in delivering progress against reduced and more focused aims and objectives, the area will still suffer - as it did before - from neglect on other fronts (see section 7.5.11). Indeed, at the end of Phase 3, there was no evidence that line ministries had been willing or able (due to lack of funds, transport, etc) to re-assume their development and service responsibilities in Lupande GMA.

These are difficult dilemmas that should have been properly analysed in the initial design of LIRD,

much to using quantifiable measures of progress, and holding people accountable for their performance against these targets (Drucker, 1993). Indeed, later in this chapter, we suggest that it is in management systems (rather than technology) that progress in making park management, community programmes, indeed development aid, successful is likely to lie.

and certainly soon afterwards. The services provided by line ministries are sorely needed by the neglected communities in the Luangwa Valley, but they cost money. The means of providing this money, either through a long-term patron or a growing economy, was never established. Indeed, as argued in the following sections, addressing the causes of the failure to provide services (the absence of a local economy), rather than the symptoms (the lack of services), may have been a better objective for LIRD. We should also be highly critical of the way LIRD used its financial resources. The project had attained only 7.6% financial self-sufficiency by the end of phase 2¹⁴. Furthermore, the majority of the US \$20m grant funding received during this period was used for recurrent expenditure (see section 8.3.3). The greatest problem faced by SLAMU in achieving self-sufficiency as it entered Phase 4 was the lack of capital development: few roads had been built, and a headquarters was still required in the project area. This suggests that, during the early phases of the project, project managers, overseeing committees and even the donor, were culpable of misallocation of resources against the project's sustainability objectives.

(g) Sustaining the provision of social services

Many conventional donor-funded projects have assisted line ministries to provide services by supporting their capacity to perform functions (both financially and through technical assistance). Such support in the Lupande GMA through LIRD has proved to be unsustainable. Two similar IRDP projects based in Zambia's Eastern Province suffered a similar outcome. In one case, nothing but a few houses remain to justify an expenditure of about US \$20m (see Box 8.10).

Box 8.10 Integrated resource development projects

In the 1970 and 1980s integrated rural development projects/programmes (IRDPs) became fashionable. They set out to address rural development priorities and needs through a set of mutually supportive components. This often included a combination of agronomic packages supported by credit, the development of roads and water supplies, and sometimes even land tenure reform. Although initially intended to work with and through local institutions, many IRDPs were planned and implemented through an autonomous project body. They came to rely on this autonomy to achieve their objectives and were also, usually, entirely dependent on donor funding.

Some IRDPs were partly successful in building institutional capacity to undertake planning. For example, the Serenje, Mpika and Chinsali Districts IRDP in Zambia, funded by British aid, was regarded in the country as 'a model for institutionally sustainable development' (Mellors, 1988). 'Planning, co-ordination and implementation systems were evolved by the district institutions themselves, with the IRDP acting as a catalyst in a flexible learning-by-doing, evolutionary approach'.

However, most IRDPs have been integrated in name only, and few have been sustainable. Their component elements have often been a shopping list of essentially independent sub-projects, each of which could have been (and usually were) undertaken separately by responsible government agencies, and simply subsidised by the IRDP's external funds. In many cases, withdrawal of external funding led to cessation of activity with no perceptible impact remaining in terms of land use patterns or practices (Dalal-Clayton and Dent, in press). Two IRDPs in Zambia's Eastern Province, both with multi-million dollar budgets, are worth noting for their disappearance: the Eastern Province IRDP funded by Sida and the Eastern Province Agricultural Development Project (EPAD) funded by IFAD. Both were operating during the 1980s when LIRD was proposed and initiated, and neither survived the phasing out of donor funding.

¹⁴ In 1992, LIRD expenditure was US \$2,034,966, compared to an income of \$76,248 from tourism and \$79,784 from safari hunting.

Ultimately, most IRDPs that have sought to by-pass government line ministries have been unsuccessful. But integrating such projects within government departments is not necessarily any more successful. Indeed, it may be more costly. While departments still continue to exist after donor support for an IRDP project has come to an end or has been withdrawn, they are often unable to continue to provide services (due to lack of recurrent funds, skills or capacity). Yet they continue to incur direct costs and may exert indirect costs by using their influence to impede other initiatives – and this may be an even worse outcome than the total collapse of an IRDP. The problem manifests itself in ‘procedures’ that tend to retard economic growth rather than provide an enabling and co-ordinating environment

The position is simply that the provision of services by line ministries is impossible to sustain without a growing economy and a reliable tax base. This is the key problem in remote rural areas like the Luangwa Valley, and it was not actively or effectively addressed by the project in its main spending phase (Phase 2). Whether or not LIRDP provided these services, or developed the capacity of line ministries to perform them, the system was bound to collapse after the withdrawal of the donor. Indeed, we have provided examples where both approaches were tried, and both failed¹⁵. The immediate problem in the Luangwa Valley is the absence of a thriving local economy, and this is exacerbated by a tax regime that centralises revenues at the expense of localised government. However, the core problem is one of governance. With proper management, political will, and some investment in infrastructure, the Luangwa Valley could certainly support a tourism and wildlife industry capable of funding critical co-ordination and services.

The reason why LIRDP withdrew from the provision of services (with the exception of CBNRM) was its cardinal requirement to become a viable institution. Once it has a sound tourism sector and economic base, its new ‘selfish’ commercial focus may, paradoxically, provide sufficient resources to finance these services again. This could lead, progressively, to a situation in which certain national parks become socio-economic investments as well as a conservation tools. It is not too far fetched to imagine, in the future, governments setting aside parks as tools for socio-economic growth. This would be very positive for the future of parks (Box 8.11).

(h) Commercial ventures

During Phase 2, LIRDP established several companies: Malambo Milling to provide maize and other meal; Malambo Safaris to run hunting safaris, Malambo Trails to run tourism, and Malambo Transport. All appear to have recorded losses, were described as "commercially dubious, with doubtful justification" (Scanteam, 1993), and were closed down and sold during Phase 3. Analyses of these operations were never provided, largely because their finances could not be extracted from the larger project of which they were a part. However, reports do suggest that the milling operation contributed significantly to food security within the project area, and that the transport company did provide an important social service (e.g. LIRDP, 1994) - the loss of which was much regretted by local leaders¹⁶. This conclusion contrasts with the fact that the bus could not make money within the Valley, and was used primarily on the Chipata-Lusaka route where it was certainly not servicing the project’s constituents. As with the culling exercise, where meat was sold outside the Valley to defray costs in a loss-making enterprise, a subsidised service tried to reduce its losses by operating outside

¹⁵ This also suggests that in the face of steadily deteriorating government institutions, a more radical approach may be worthwhile. Options include increased autonomy and outsourcing of management (or components of management) to the commercial or not-for-profit sectors - though under clear mandates.

¹⁶ “All the chiefs were disappointed with the sale of Malambo Milling and phasing out of Malambo Transport, respectively. They felt that selling of Malambo Milling may result in the re-allocation of the mill to an area outside the project area or an increase in the mealie meal prices - thus depriving the people of the project area of the opportunity to purchase cheap mealie meal. They also felt this would reduce the anti-poaching effort, as this activity mainly depended on the mill for patrol ration The consequences of phasing out Malambo Transport are already being felt by the people living in the valley. There is no reliable public transport between Mfuwe and Chipata. Thus people face the same problems they faced in the 1980s before the project was in operation” (LIRDP 1996b, p6).

Box 8.11 A new role for national parks: 'local' parks as local engines for economic growth

From a financial perspective, a large park like South Luangwa Park, with its diverse habitats and good wildlife resources, could be managed with more imagination to provide long-lasting solutions to both rural poverty and conservation. SLAMU can fund its recurrent expenditure and capital replacement requirements, as well as service the CBNRM programme, within an annual budget of US \$1.5m. However, once it develops 600 tourism beds, it might generate US \$2.5m per year. The surplus could be divided four-ways to support: capital investment in the park, performance bonuses and incentives, cross-subsidisation of other protected areas and district development. With \$250,000 available on a regular and sustainable basis for district development, would be likely to have a significant impact on service provision and on further economic growth (provided it is managed sensibly). Given the investment of some \$27m by NORAD for the explicit purpose of general rural development, there is a strong moral argument for the use of such surpluses from SLNP for district development.

Were this suggestion to be implemented successfully, the outlook for parks and the conservation of protected areas in Africa might be radically improved. Until now, parks have been economic black holes, consuming rather than generating economic growth. They have been difficult to justify for many governments. As a consequence, many parks are under-funded and deteriorating. Governments would look far more seriously at parks that were self-funding and that generated a surplus to sustain rural development around them.

While a far-sighted ideal, there is a precedent: Madikwe in South Africa is the first case where a government deliberately invested money to develop a new park. It calculated that this was a good investment in terms of economic growth. Here, the primary purpose of the park was economic growth, and the secondary purpose was conservation.

This emerging paradigm should not alarm conservationists: the feedback loops of an economically prosperous park would require and support good conservation practices. This surely provides food for thought in debates about the political and economic objectives of Africa's parks. Surely, parks would be more sustainable (politically, economically and ecologically) if managed as economic engines for rural and disadvantaged constituencies, rather than as a subsidised global resource? Both people and conservation would be likely to benefit. While not explicitly stated, the South Luangwa National Park could easily become an important pioneer for such a new paradigm. Indeed, the initial proponents of LIRD had something of this in mind when they designed the original project.

the project area. Thus, it cost money and did not provide any local benefit except, perhaps, to the few individuals in control of the operation. Here it should be noted that community members complained that the money from the sale of Malambo Transport was given to the chiefs (about ZK4m each; at 1995 exchange rate this equates to US \$8,000) and they never saw any benefits from it.

A rigorous analysis of the contribution of the milling and transport ventures was not undertaken before they were cut from the LIRD program. However, the way they were managed apparently reflects the times. Management was patently unaccountable for financial costs, and the impulse to provide services appears to have over-ridden the needs to assess costs and benefits.

Latterly, the project has adopted a policy of outsourcing commercial enterprises. All tourism operations are contracted out, as is hippo culling. The result is an improvement in the project's financial position, and a reduction in the complexity of management.

(i) Faulty project design

The failure the project to provide services for which it was designed, begs a question: why did those who initiated LIRD apparently do so little to conceptualise and plan its sustainability, and why did

the project invested in social services before economic growth (Box 8.6). There is little to be gained from criticising these pioneers, unless we also understand their circumstances, for it is clearly evident that the project was initiated by concerned, good-hearted and experienced people with the best intentions.

The issue of sustainability was not addressed in initial plans in any detail. Perhaps the primary reasons for this were that the desire and need for conservation and development in the long neglected Luangwa Valley was overwhelming, and the threats inherent in not doing anything were indeed great. While the challenges and uncertainties were immense, doing nothing would almost definitely have led to long-term damage to the wildlife potential of the project area. We can speculate that the project was planned in the hope that it could maintain the resources until something would come along in the future to make it sustainable. It is useful to remember that, at this time, Zambia had no private sector to think of. The economy had been nationalised and remained almost entirely state controlled. While stated in the plans as the overall objective, financial sustainability was never really possible in such circumstances.

Similarly, the unfocussed nature of the project was a reflection of the times. The survival of the project depended on political support from many areas, rather than its technical merits. Its underlying performance in terms of finances or output was almost totally irrelevant in the nationalised, planned, politicised economy of the day. Survival did not depend on the project's ability to add-value, but to buy political support. The project therefore adopted a strategy of locking-in the support of a wide range of government agencies. By including many components in its make-up, it enabled a much larger number of agencies to benefit and, in so doing, it built itself a constituency. While this inevitably compromised sustainability, the project's funders and planners would have been persuaded by the approach as each component helped disadvantaged people. The failure to make trade-off decisions is a characteristic of many grant-funded institutions. Moreover, planning techniques to identify the core problems, and to build a project as a set of activities and outputs that can achieve a medium-term purpose and contribute to long-term goals, were not available at the time.

(j) Land use planning and the co-ordination of land use

The ideas envisaged in the original LIRD concept - to co-ordinate land use planning and integrated natural resource management in the Luangwa Valley in combination with community-based approaches - have still to be tested properly. In Phase 2, the project began to approach the issue of land use planning, completing a land capability classification of the project area and introducing the subject of land use planning to local leaders. It had intended to commence the development of plans with full local participation at Ward and Branch level in 1992, but these ideas were never carried through because of the change of government and then project leadership in 1991. LIRD at this stage had opted for a cautious approach fearing that any planning process leading to exclusive or restricted use of resources (i.e. through zoning) could lead to conflict between interest groups. Phase 2 faced many problems and rivalries. Possibly, LIRD never had a real opportunity to experiment effectively with the concepts and modalities of integration. On the other hand, several review missions argued that senior project staff needed to invest more in building personal relations and institutional bridges, and to create the opportunities for LIRD to work with and support other government departments and local authorities. These arguments again reflect structural and leadership problems.

When the project was re-orientated in Phase 3, it relinquished direct responsibility for broader land use planning. However, the most recent project review (Scanteam, 1998) noted the urgent need for land use planning in the Mfuwe area and Lupande GMA and recommended that the project should again become involved in such planning. The main reason for this recommendation was the highly visible growth of unplanned settlement just outside the park gate.

There is widespread evidence that technocratic land use planning seldom works. To be effective, there must be buy-in from local people, and mechanisms for implementation. Therefore, had LIRD developed plans, for which it did undertake some groundwork, the impact may still have been negligible, given the deficiencies in community structures and participation at this time. An added difficulty is that there is no clear institutional mechanism in the area for economic and land-use planning. Authority for land is vested in the Chief, but ameliorated by various ministries and the District Council. The 1995 Park Plan included an attempt to start planning in the GMA, but was flatly rejected by the Chiefs. In planning the new headquarters in 1998, LIRD found a highly appropriate location between Josefe and Mfuwe schools that had earlier been set aside by government planners for a town site. Nevertheless, the Chief Kakumbi rejected this¹⁷. Government departments are too unclear of their mandates, relationships and powers to resolve such issues favourably. Moreover, the unclear tenure regimes in rural Zambia make any land use planning difficult. The only real means of progress is to develop local consensus around plans, a strategy that requires widespread participation.

(k) New opportunities for integrating and coordinating development

The need to plan and zone socio-economic development in the Luangwa Valley has long been recognised and was a central part of the original concept of LIRD. In the previous section, we have discussed why progress was not made earlier during Phases 1 and 2. Recognising the inability of present government structures to undertake the necessary planning, the project discussions in 1999 with Mambwe District Council to address the issue again. A proposal was developed that identified the need for some research and information as a basis for planning, for broad participation in decision-making, and for money to initiate key infrastructure investments to launch any plan past the document stage. The proposal is that District Council will devolve the authority for most planning to sub-district VAGs and ADCs, and then acquire or develop the capacity to facilitate existing sub-district structures (i.e., those developed by SLAMU) to plan. It envisages considerable community participation, first in learning about the issues and then in deciding how to deal with them. Council support would be largely in the form of information provision, the facilitation of decision-making, and the final authorisation of plans. Much of the planning would be done in community forums.

These sub-district structures would thus be doubly empowered – for wildlife management and for district planning. It was then seen as sensible to further empower them, allowing them to provide services and collect fees for doing so, with a proportion of these fees being returned to Council. Thus a Village Action Group might acquire the right to set up, run and ‘tax’ a market, paying Council 25%, with Councils role being as over-seer.

LIRD started off with an important goal of co-ordinating rural development. So far, it has failed to achieve this. However, it has laid the groundwork for some very important progress in this direction. It has developed strong, functioning grassroots democratic structures. It is now in the process of passing to these the function of wildlife management, the primary cash resource in the area. It is also developing systems by which these institutions can manage and benefit from other resources like wood, timber, grass and the like. As described above, the project is working with Mambwe District Council to institute a planning system through community structures. This has developed an appreciation of the potential that exists to follow the lead of wildlife management and to devolve both service provision and ‘taxation’ to these structures. In short, the vision, acceptance and modus operandi of truly devolved rural governance is emerging.

However, SLAMU has neither the mandate nor the resources to implement these systems. But they would be a very exciting development in the so far elusive quest for progress in local government

¹⁷ This was a transparent case of leveraging, and worked to the disadvantage of local people, the economy and wildlife.

progress¹⁸. Mambwe District Council itself is in a very poor financial situation and, at the time of writing, its staff have received no salaries for four months.

This failure to take advantage of such opportunities seriously questions the larger development system. A lot of donor money is available, but far too many donor-funded projects fail to meet their main aims. Very few are successfully piloting new approaches. Whilst there is consensus on the importance of decentralised or devolved governance, the plethora of failures to successfully achieve this suggest that the wrong approaches are being followed. LIRD/SLAMU is becoming an increasingly successful project which provides an excellent opportunity to address many of these issues. Sadly, to date, it has proved difficult to interest anyone in government or donors in this opportunity.

If this opportunity were grasped, it would return the project back to its origins, where its rationale was to grow the wildlife sector as an engine for socio-economic advancement. Now, however, it would be the grassroots democratic process that would drive and co-ordinate development, rather than project technocrats. This is an advance on many similar programmes which have been criticised for imposing solutions, ignoring local knowledge, excessively simplifying complex, multi-dimensional resource management systems, etc. (Goldman, 1998).

The SLAMU community programme has imposed a democratic framework and has gone some way towards creating transparency and providing information. This has created the possibility for local people to evolve their own solutions. The human ecology movement criticises projects for imposing solutions insensitively, and believes that people will, in time, evolve their own solutions. Institutional ecologists (e.g. Goldman, 1998) and political scientists (e.g. Gibson, 1999) think this approach is naïve, and see no easy path by which disempowered communities can displace entrenched systems of patronage. In this paradoxical world, LIRD has invoked the strengths of these two disparate approaches – as a project, it has imposed a democratic framework and procedures, but it has done this to empower communities to begin to formulate their own futures.

8.4.2 *Lessons for managing service institutions and donor projects*

(a) An environment that enables improved management

The recent ‘improvement’ of the project in terms of its increased focus on core-business and sustainability, and the implementation of performance management systems, have been made possible by changing circumstances in the country. Without copper revenues, Zambia has gradually shifted towards privatisation and free market principles. Government agencies have lost resources and effectiveness, so the need to gain their support has declined. Similarly, the reduction of budget allocations from the Ministry of Finance has forced the project to become more orientated to its basic aims and business as well as its performance. It is to the credit of the project that it has made this transition proactively, and well in advance of other agencies including NPWS (the project’s parent agency).

Under these stricter circumstances, SLAMU is achieving more output, in a more co-ordinated manner, and on less than half of its previous budget. This can be taken as a validation of the trend towards market-led growth and performance management. As a corollary, it is an indictment on the command-and-control mentality that gripped many emerging nations and which still dominates conservation thinking. In short, it supports the claim that structural adjustment will generate long-term gains.

¹⁸ In a review of common property, Goldman (1998, p25-41) points out that there are three major approaches to resolving these human-resource dilemmas: human ecology; development experts; and global resource managers. The Mambwe-SLAMU planning initiative has the strengths of several of these approaches and provides a rare opportunity for progress in the political-economics and governance of rural resources.

However, the disadvantaged people of Mambwe District have suffered greatly with the decline and withdrawal of state services, and there has been a long gap as the private sector economy has evolved. LIRDPA has been unfairly criticised for this situation. However, in a case study of structural adjustment in Zambia, Reed (1992) shows that this phenomenon was country wide as the government increasingly was unable to provide such services.

(b) Managing service organisations and donor aid

LIRDPA, and its transition to SLAMU, provide useful insights into the management of service industries and donor aid. Prior to Phase 4, the project suffered acute deficiencies in both its effectiveness and efficiency. An analysis of the causes of these problems, and how some of them were solved, provide useful lessons.

(i) Effectiveness and efficiency

There are two central problems in service organisations. The first is the definition of what the organisation does. It is a common for goals to be ambiguous. Ineffectiveness, or the absence of clear direction, is also common in service institutions for structural reasons that we explore below. However, it can be overcome with sound leadership and management. Defining the “mission” of an organisation is usually the hardest challenge.

The second problem is that service organisations are usually grant- or state-funded and are not disciplined by the need to generate a profit. How, therefore, are such organisations held accountable for their performance? This is a question of efficiency. Effectiveness is concerned with the aims and objectives of the organisation, and efficiency measures how well it is achieving these. But effectiveness is more important. For instance, highly ineffective institutions can still be efficient if, for example, they have good cost controls or technical programmes. Yet they may well produce the wrong outputs. At the end of Phase 2, LIRDPA was both ineffective and inefficient. It lacked direction and was wasteful.

(ii) Why service institutions are ineffective

Service institutions like LIRDPA very often lack of effectiveness because of the way they are funded. Businesses are paid for satisfying customers, and are only paid when they produce what the customer wants. As a result, they are always under pressure to supply value and to perform. In contrast, service institutions, typically are funded from a budget allocation or a donor grant. Their revenue stream is thus related more to what they can prise from government than to the results and performance wanted by the taxpayer or customers. A business cannot survive if it does not add value. A service industry can.

Secondly, the success of an institution is often measured by the size of its budget and staff complement. Achieving the same results with less money and less staff might actually be thought to endanger the institution. Thus the LIRDPA of 1990 with some 600 staff, over 40 four-wheel drive vehicles and a US \$2.5m budget would, at the time, have been perceived as more successful than the present SLAMU with 290 employees, 22 vehicles and a \$1.3m budget. But the latter, despite its smaller size, produces more output.

Thirdly, a business is answerable to its customers, but a service institution is answerable to a wide range of stakeholders. A business with a 25% market share may be very profitable, but a government agency or project supported by only a quarter of its stakeholders would probably not survive. It has to satisfy a much wider constituency, so it must strike a balance between various objectives and cannot focus too precisely. For similar reasons, it needs to avoid controversy over function, mission and objectives. This is the challenge that faced LIRDPA, especially in its earlier years when over 90% of its

budget was grant-funded. The project could not concentrate on its core activities and senior staff were required to devote considerable energies placating a wide range of agencies and individuals (see section 8.4.1.b). The tendency of service institutions (provided with an operational budget) to become unfocussed is exacerbated because unproductive or obsolete functions are rarely put to a performance test. Without prioritised and clearly agreed core functions, there tends to be much theorising, much protection of the status quo, but no real test of what is productive and what is not.

Finally, until Phase 4, LIRD was financed mainly by donor funds provided on the basis of the project's good intentions and proposed programmes, and a perception (on the part of the main donor) of what the project deserved. Donor support was not directly related to what was (or could be) earned. In other words, there was no business or market orientation. Furthermore, donor assistance was given to harness the support of important constituents and not to satisfy any one group. As a result, in its earlier phases, the way the project was financed strongly influenced the design and direction of the project. It meant that performance and results were defined by what appeared to be good initiatives to be pursued and by what attracted more budget support - not by what actually led to a contribution to sustainable development in the area.

(c) What is SLAMU's business?

In this section, we paraphrase the work of Drucker (1974) and describe problems familiar to many aid- or budget-funded service institutions and projects. The recent experience of SLAMU shows that by clearly defining the issue of the project's business, many of these problems can be addressed. The financial pressure to focus on wildlife as the core business provided added impetus for streamlining the project's objectives. Nevertheless, to achieve change in this direction has required a strong-willed leadership, particularly given the large number of stakeholders that had to be placated. It has also required two paradigm shifts.

First, it has had to re-engineer and restructure an inefficient, unsustainable, service-providing project into a focused, financially-aware, conservation-based business - essentially making a partial transition from an organisation provided with a guaranteed budget to a business. It will be interesting to see if the latter also generates better biodiversity and ecosystem conservation - initial indicators suggest that it will.

Second, the survival of SLAMU has depended on its 'commoditising' wildlife and protected areas - resources and assets which have been long perceived and managed as global non-commodities, kept out of the market-place with highly restricted uses, subsidised access, etc. This paradigm has had considerable costs in terms of the livelihoods of disadvantaged people living around parks, and in deteriorating levels and standards of park management. While it may work in rich, urbanised communities wanting cheap access to outdoor recreation, its effectiveness in Africa is highly questionable. We have suggested that a more business-like SLAMU can both conserve the wildlife and environment of the park and adjacent Lupande GMA and develop the local socio-economy. If this model works, it will have important implications for the way conservation is pursued in Africa in the future.

(d) Circumstances forced SLAMU to become evolutionary and business-like

Two key factors influenced the changes in SLAMU and its re-orientation along business lines - an innovation that is at odds with normal conservation thinking. First, LIRD operates in a remote and isolated area with poor communications. As a result, its staff are not engaged on a regular basis in debates on the ideology of conservation, though the project has a clear mandate to conserve the ecosystem. Second, in rethinking its priorities and objectives, and deciding on its future direction, the project used the logical framework approach which avoided ambiguity. All goals had to be quantified, and decisions were further constrained by financial realities as well as ecological objectives. The

outcome seriously questioned the wisdom and applicability of conventional protected area management.

In retrospect, the process of transforming LIRDP into SLAMU was very much in tune with approaches used in business management, and provides new insights for protected area managers. Following an iterative process, again along similar lines to those espoused by Drucker (1974, pp 158-159) for defining and improving business performance, SLAMU has:

- i. Defined “what its business is and what it should be”, its function and mission.
- ii. Translated these into clear objectives and goals, ensuring consistency and complementarity (using the LFA tool).
- iii. Set priorities, defined targets, standards of accomplishment and performance, deadlines, responsibilities etc., - now visible in recent work plans and budgets.
- iv. Defined measurements of performance for roads, workshop, finances, income, etc., but also for the far more difficult area of bio-diversity and ecosystem conservation where the results have been informative (see section 6.4)
- v. Used these measurements to provide feedback and therefore self-control mechanisms, using quarterly workshops and externally-facilitated, participatory, mini-reviews of status with respect to targets (i.e., performance).
- vi. Organised an audit of its objectives and results, and is shedding activities that are unproductive or not affordable.

In business parlance, this is called “management-by-objectives”, while ecologists would call it “adaptive management”. By setting clear targets, the project has significantly increased its effectiveness and performance. In turn, by regularly assessing its performance, SLAMU has set in place an iterative process of improvement. This step-by-step progress has also been an important intellectual journey.

(e) Evolution, survival and adaptive mechanisms for conservation organisation

The life span of even the biggest firms is measured only in decades. New giants are constantly emerging, while those that fail to adapt (the majority) disappear. Hamel and Prahalad (1994) argue persuasively that proactive adaptation and change increasingly is becoming a necessity for survival, and that successful adaptation depends on understanding both present and future circumstances. This underscores the importance of the management systems adopted by SLAMU, although only the long-term survival of the project will signal the effectiveness of the changes made. However, the likelihood of random adaptations leading to survival is slim. To be more than a shot in the dark, it is essential to know why changes have been made and how to manage the process of change. Protected areas in general are managed conservatively and their managers do not adapt to global changes in ideas and approaches. The experience of SLAMU is therefore important.

Darwinism implies that adaptation requires the discipline of performance. While service-institutions like SLAMU can get away without this discipline for years and even decades, long-term survival is unlikely unless some discipline is instituted. SLAMU does not have the narrower and more simplistic discipline of seeking profit, but it has achieved discipline in several other ways. As a not-for-profit organisation, SLAMU has set out aggressively on a path towards financial sustainability, not because making profits are important but because money is needed to fulfil its mandate. This has introduced financial discipline, with the result that activities that do not add value to the central goals are selected out. SLAMU has also tried, with some success, to establish goals that are specific and a rigorous system of appraising performance. The improvement of the project is thus not accidental, but related to improving management systems. Consequently, this approach can be repeated by similar projects. For the sake of performance, it is highly desirable that such institutions have managerial autonomy and are not run by government, even if they are supervised and regulated by it. SLAMU is currently

negotiating in this direction using the window of opportunity presented by ZAWA, and with the understanding that accountability to ZAWA will be essential to reap the full benefits of managerial autonomy. This is synonymous with the flatter organisations and the self-managed teams that are evolving within businesses to cope with the increasing complexity and speed of the global, networked economy.

(f) Human resources

We having discussed the importance of management systems in creating the conditions within which institutional evolution can occur. Here we assess the question of human resources. There is a tendency to blame the failure of projects like LIRDP on the fact that managers are not businesslike, and to imagine that the easy solution is that better men are needed¹⁹. This situation can be exaggerated and confused by class or racial differences.

While vision and leadership is vital for positive change, it is unrealistic to place the burden of management on genius and exceptional leadership. The reality is that 'ordinary' people will always do the vast majority of the work. To make changes requires leadership and vision. Equally, it requires the removal of the small minority that cling to the status quo and hinder change.

SLAMU is clear that it has to be managed by Zambians, on Zambian salaries, accepting that some improvement of civil service conditions is essential. The project is equally clear that a new management system and culture is essential. The performance improvements of SLAMU were achieved with, essentially, the same people that previously worked for LIRDP when it inefficient and ineffective, though staff numbers have been cut significantly and Technical Assistance has been halved²⁰. A big difference was made by the recruitment of two or three Zambians from the private sector to fill key positions. Similarly, change was facilitated by the dismissal of a smaller number of people in key positions who could not make the cultural adaptation.

What, then, allowed the rapid improvements illustrated by the LIRDP-SLAMU transition?

The underlying driver was not the recruitment of new people but the development of systems that allowed and encouraged people to work, and measured their work. Empowerment and decentralisation of responsibility enabled the growth of effective middle managers – significant deficiency in previous phases of the project. However, a few new people in key positions made a huge difference to the introduction of performance management systems. The value of good (not necessarily exceptional) leaders, and the reality that most people can do a good job if managed well, is a good lesson for other projects. With the change from LIRDP to SLAMU, responsive management systems were introduced; and the members of staff who had stagnated in an inefficient organisation began to work, and to further improve the project.

Thus, LIRDP laid the basis for SLAMU to contribute meaningfully to people-based conservation in south-central Africa. The project's ability to make this contribution emanated from the introduction of objectives-orientated performance-based management systems. This has implications for project

¹⁹ LIRDP has been dogged by such suggestions

²⁰ It should be noted in this regard that the two expatriate Technical Assistant (TAs) working with the project during the transformation period both understood management, whereas previous TAs had been specialists in technical disciplines (accounting, ecology, agronomy). While the transformation of LIRDP into SLAMU was rather smooth, that from NPWS into ZAWA was not. It is perhaps not a co-incidence that the TA support to the NPWS-ZAWA transformation was, at least initially, comprised of ecologists, park planners and accountants, with a notable lack of experience in institutional transformation. It is important though to note two important points. First, it is undeniable that the NPWS-ZAWA transformation was politically much more sensitive and difficult, though much more could have been made of this opportunity. Second, the credit for the transformation of LIRDP to SLAMU must be shared between top-management, middle management and the TAs that were all an integral part of the coalition (team) guiding change.

planning, especially of conservation projects. It suggests the need for clear overall goals, and the over-riding importance of management being held accountable for achieving these goals. It confirms the importance of the management process.

Thus, a successful project will require that clear and achievable goals are set, and that an effective and adaptive management system is established that can't work towards these goals. A detailed pre-planning process is less useful. Many projects are constrained by a political environment that does not promote accountability, and by procedures that deter good managers and fail to insist on monitoring performance. As a consequence, they are predisposed to failure.

In completing his assessment of the management of service industries, Drucker (1974) notes:

“What now has to be learned is to manage service institutions for performance. This may well be the biggest and most important management task in this century”.

LIRD-PSLAMU has undoubtedly contributed to this learning. In phase 4 it has shown how, even in exceptionally difficult circumstances (i.e. the parent organisation, NPWS, was antagonistic and reluctantly being forced to make major changes; and the over-arching governance system was weak and unaccountable), good management systems encourage project staff to strive to overcome these difficulties. In doing so, the project has demonstrated some factors which enable a project to work even in very difficult circumstances: clear goals, a performance management system, and some financial autonomy.

8.4.3 Threats to the survival of progress

Despite the recent progress, there are still some problems that could derail the project. At a local level, the conflict over the role of the traditional chiefs is potentially disruptive for the CBNRM programme, although a much more positive attitude amongst five of the six Kunda Chiefs is allowing progress to resolve the issue.

Most of the threats are external. The outcome of the battle to control the new Zambia Wildlife Authority, and the direction taken by this organisation, are critical in many respects. Will ZAWA allow and encourage further devolution both in park and community management, or will it introduce a return to centralisation? How much revenue will ZAWA extract from SLAMU and the community programme to support itself, and will short-term attitudes undermine the financial bases of these programmes before they are self-sustaining? This will ultimately undermine the financial future of ZAWA itself.

Perhaps the greatest threat to the project is political. As Gibson (1999) has so ably demonstrated, Zambia's wildlife sector is controlled by the politics of patronage. This is the reason that the sector has been managed so ineffectively and inefficiently. LIRD/PSLAMU has developed a model that shows how to overcome these problems. The question is whether the political establishment will allow this model to grow and to be replicated. If it does, Zambia's wildlife industry has potential second to none, and the potential to rival mining as an employer. However, as is true of Zambia in general, potential is seldom fulfilled.

8.4.4 Some experiences relating to donors

(a) Norwegian tenacity and flexibility

The major donor, NORAD, has played a key role in the LIRD experiment. It was willing to support the initiation in 1986 of a new and difficult type of project when others said it was far too ambitious

and couldn't be done. It was prepared to allow room for experimentation. Many donors are too inflexible to allow programmes to evolve, and are too big to respond personally to opportunities. Norwegian flexibility has been an important factor in enabling the project to develop managed institutional evolution. This would not have happened had the project been linked too tightly to a blueprint. Managed evolution is more risky, and requires personal relationships, trust and good communication of the kind that have existed between LIRD and NORAD, especially in the last few years. Finally, and of considerable importance, NORAD has stuck with the project throughout its evolution. Projects that aim to develop institutions, and especially those involving community transformation, are setting out on unavoidable long-term processes. But donors are seldom prepared to invest in long-term projects. For example, in the case of CAMPFIRE (a similar CBNRM initiative in Zimbabwe), the main donor (USAID) has provided funding for 10 years, but its interest is now swinging towards the new fashion – transfrontier conservation – rather than entrenching and building on the progress already made. Donors are fashion conscious, but have a poor record in consolidating progress.

(b) Donor responsiveness and partnerships

The relationship between LIRD and NORAD illustrates a common human phenomenon – that people work better if someone takes an interest in them and their achievements. In the circumstances prevailing during the first two phases of the project, project staff were seldom supported by NORAD and often worked in a hostile environment (section 8.2). It is not surprising that vigour suffered. There is a clear correlation between improvements in the project and the level of interest shown by its supervisors, especially in NORAD. NPWS (the parent agency) was generally unsupportive. As the NORAD officials overseeing the project became more interested in understanding and deliberating its activities, so project management became more responsible in implementing targets and operating within budgets. This does not imply that NORAD drove these changes, merely that it was an important partner in the process. Indeed, many improvements were advocated from within the project. But it was important that someone noticed, and then responded to the desire for increased accountability and recognition. Fortunately NORAD did. The recent progress of the project has much to do with this virtuous cycle, mutually driven by donor and recipient.

NORAD has achieved much through LIRD, especially once it decided on a responsible strategy for financial withdrawal. This encouraged the project to focus on performance and financial survival. The Norwegian support is still essential to wean this process to sustainability. The door has been left open for a fifth phase, necessary mainly because the project's commercial growth is constrained by the environment in which it operates.

NORAD funding is obviously vital. However, we have already indicated the importance of responsiveness. Nowhere is this more obvious than in the project's annual and review meetings, where NORAD officials have strived to professionalise the proto-Board-like role of these obligatory meetings. NORAD has played an important role in continually raising the standards required of performance assessment. It has also been an indispensable ally and provided valuable support in the uncertain environment that characterises the wildlife sector in Zambia. NORAD has been right to challenge and stretch the project financially, but it should also be aware of the importance of the project's 'softer' and much less expensive roles.

(c) Donor capacity

LIRD has benefited enormously from good relationships with dedicated and professional individuals in NORAD, especially recently. The tragic murder of the most recent project officer, Gudbrand Stuve, is a serious loss to new thinking in CBNRM and park management. The more general experience is that donor desk officers are rarely qualified to support the projects they administer. Often they have too many projects to oversee and, with some notable exceptions, are not strongly committed to these

projects. This is a weak link in the development process. It could be strengthened through building some in-house capacity in project management.

LIRDIP itself requested and has benefited greatly from a regular annual input of 1-2 weeks of facilitated planning and review led by a consultant²¹. Given that desk-officers manage a large number of projects, donors too could usefully consider developing in-house capacity to assist projects to develop better annual workplans and budgets, to undertake annual performance reviews, and even to provide a source of easily accessible management advice. Simultaneously, such capacity could assist in inculcating such methods into the donor's own management systems.

(d) Opportunities for 'integrated rural development'

Participatory development, and the evolution of local management systems is a long-term investment - success does not come overnight. NORAD's faith is now being rewarded as the project stands on the brink of achieving major success. SLAMU, as a narrowly focused wildlife agency, is being weaned off donor funding. The project can certainly become a sustainable park-based organisation, and this is a major success in and of itself. However, the project has also laid the foundation for what is potentially a far more important breakthrough for Zambia, indeed for rural development in Africa – democratic and devolved rural governance. Paradoxically, after integrated development failed and LIRDIP re-defined its core business as wildlife management, NORAD now finds itself with an opportunity to pursue the initial and big goals of LIRDIP. Eager local governance structures are emerging in Mambwe District and the project is providing numerous lessons. These now provide a cheaper opportunity and a higher probability of success to pursue the broad developmental goals initially set by LIRDIP, in the pursuit of which NORAD has spend US \$25 million. The project, unfortunately, does not have the capacity to pursue this opportunity. It will be an important indicator of the commitment of donors to assisting potentially sustainable development to see if this opportunity is taken.

If NORAD does take up this challenge, it should heed the lessons of LIRDIP: support should be linked only to realistic plans with clear performance goals and should be withheld (or, if necessary, withdrawn) the moment money is diverted or targets are not met. It should also ensure that money is spent dealing with "external factors". This is the component of the Logical Framework Approach matrix that is usual ignored²², but so important where interventions are working to change systems of governance²³.

(e) Operationalising plans derived from the Logical Framework Approach

The use of LFA has been a major factor in the revitalisation of LIRDIP²⁴. It was essential for setting clear, measurable objectives for a potentially complicated project. The outputs and indicators developed through LFA also provide the framework for performance management. Indeed, LIRDIP

²¹ Hasan Moinuddin

²² The LFA planning process is described in the 1992 NORAD booklet: *The Logical Framework Approach (LFA). Handbook for objectives-orientated planning*. But even here, there are no indicators for external factors (i.e., the fourth column is missing from the Project Matrix). For projects like LIRDIP which are heavily influenced by externalities, this is an important omission. External factors need to be closely monitored.

²³ In the experience of LIRDIP, these external factors have been a critical determinant of success. They need to be monitored and managed, and resources must be set aside specifically to influence them. By not explicitly doing so, LIRDIP's senior management has been caught between spending time in Lusaka dealing with external factors (and in an ad-hoc way because the approach has not been planned) and time in the project area managing it. As a result, the management of both the internal and external environment has suffered. Careful analysis and planning should address this.

²⁴ But LIRDIP has had to learn much of this management practice itself. A sister booklet on how to convert plans (the project matrix) into performance-based management would be very useful.

has increased performance and reduced costs very considerably by operationalising LFA-based plans. The value of unambiguous goals is discussed in sections 8.3.5 and 8.3.6.

(f) “Recipient responsibility”

Like a number of other donors, NORAD manages projects using a policy or slogan of ‘recipient responsibility’. While the importance of devolving responsibility has been recognised throughout this report, ‘recipient responsibility’ can be used as an excuse by the donor to wash its hands of responsibility. The donor, in providing money, cannot avoid responsibility. Ideally this responsibility should mean ensuring that money is provided in response to the recipient’s request, that this request is rigorously appraised in terms of both equity and efficiency, and that the money is then always used as intended. Failure to demand accountability is a widespread cause of corruption, and of project failure (Drucker, 1974).

Linking funds to performance is the essence of recipient responsibility and, if applied in a planned and disciplined way, development aid can succeed. However, much donor aid fails because money is poured into developing countries without insisting on performance discipline. In the early days of LIRD, there were no clear goals nor was the project held more than loosely responsible. As a result, it could have easily unravelled, and nearly did. Money was certainly wasted, and the project entrenched dependency and other unproductive habits.

The enduring support of NORAD for LIRD has always been positive. But Child *et al.* (1999) argue that it was also irresponsible, at least in the initial phases of the project. They take the view that NORAD took far too long time to insist on clear targets or responsibility about money or performance. It should, therefore, share the blame for the early problems – on the basis that responsibility is a two-way relationship, especially where giving money is involved. However, they also admit that, to its great credit, NORAD stuck with the project for long enough to turn the corner and to learn from and correct the early mistakes. The important lesson is that the turnaround in LIRD came with responsibility; it came when objectives and targets were clarified, and reporting became more purposeful. Indeed, the turnaround came with less money, and when individuals in NORAD took a real and more positive interest in the project.

Two factors created this accountability for performance: better management systems, and more responsive staff in NORAD and the project. As Drucker (1993) observes “any government, whether that of a company or of a nation, degenerates into mediocrity and malperformance if it is not clearly accountable for results, and not clearly accountable to someone”. For the donor, the dilemma is the need to be responsible, and to create responsibility, while trying to help poor people and tattered economies in systems that are clearly neither accountable nor responsible, and are often downright corrupt and self-serving.

Based on the recent experience of LIRD, Child *et al.* (1999) also suggest that NORAD would be ‘responsible’ only by insisting on effective accountability for project delivery of outputs. Within LIRD, the demand for such accountability was largely driven by the project itself, in response to a period when staff within the Lusaka office of NORAD were particularly interested in, committed and responsive to LIRD. As a result, the project began to develop clearer goals and to encourage openness and constructive criticism, and was rewarded by interest, participation and acknowledgement²⁵. One consequence is that the project’s annual and review meetings became far more positive, performance-related and proactive. In the past these meetings had sometimes been critical, uncomfortable, negative affairs where – rather like small birds mobbing an owl – project management was blasted by criticism, which often lacked a factual base. These meetings provided

²⁵ Contrary to common belief, accountability can be very rewarding and beneficial to the person being held accountable – working in an environment where nobody cares whether work is done well, or badly, or done at all, is very dispiriting.

little opportunity for LIRD P to offer a factual defence, let alone to reach a positive, mutual and satisfactory solution. There are management training games to demonstrate the effects of this phenomenon. The berated person is not allowed to speak to explain his position, and the result is frustration, pent-up anger and, in the longer term, despondency and reduced performance, even among talented and competent people.

If NORAD decides to build on the opportunity that LIRD P has created – and it should – it must focus more on the word ‘responsibility’ than ‘recipient’. But NORAD, too, must be responsible. And the key to this is that, after working closely with the recipients to develop achievable and worthwhile targets and embedding these in performance goals, it must be responsible in insisting on responsibility. Otherwise the system drifts too easily towards ‘recipient’. This creates dependency and can lead to destitution, incompetence, corruption and self-loathing. It also results in the degradation and despair of the incompetent and dependent poor – who, in the case of Lupande GMA, have the resources to uplift themselves given the correct sort of help.

(g) Appraisals and reviews

LIRD P has been subjected to a series of formal annual reviews during Phase 2 in 1989, 1990, and 1991, a further review in 1993 to assess proposals for Phase 3, and a review in 1998 combined with an assessment of the proposal for Phase 4. The first two Review Missions (RMs) took place within a year of each other and at a time when LIRD P was still struggling to establish itself and gain the co-operation of other government departments and was beset with organisational problems. The first two reviews were critical of many aspects of the project and of the management style of senior management - which was seen as defensive and hostile to criticism. In contrast, the third review took place after LIRD P had been operational for some three years and was much more positive, noting considerable progress. However, it also pointed out that many improvements were still necessary. The most recent review (Scanteam 1998), while mainly positive, points to a range of continuing deficiencies in project management and the unlikelihood of project objectives being met by the end of Phase 3. It praises the considerable progress made, particularly in CBNRM, and noted that the project has had a major positive impact - not just locally but within Zambia and elsewhere (see Box 5.9).

Reviews are built into development projects to monitor progress and to highlight the need for re-orientation or adjustment where necessary. However, reviews have their own problems. They are usually short (20 to 30 days) and team members' are often unfamiliar with local conditions and project dynamics. This can be problematic with a complicated project like LIRD P. Teams can be biased, and each review team brings its own views on the way a project should proceed. Teams can also be incompetent, and not up-to-date with concepts. For instance, the members of the first two review missions had little experience of CBNRM and failed to correct the project's mistakes (although, in their defence, CBNRM was early in its evolution at the time). Frequent reviews, as at the beginning of LIRD P, can also disrupt a project. LIRD P project management felt the project had been over-reviewed during its first few years and expressed the view that much effort was taken up in repairing inaccurate findings (Richard Bell, pers.comm). Perhaps the major criticism of reviews is that they are non-participatory, and more of the nature of an audit. Despite these problems, reviews are essential to 'audit' progress, to draw attention to important problems and dilemmas, and to exerted pressure on projects to more actively address some key issues. However, thought needs to be given to improving the review process.

The two recent reviews have certainly had a very positive impact on the project, primarily because the project was willing and able to learn. In addition, the review team felt some responsibility for improving and participating with the project. Some lessons emerge for improving the review process.

First, reviews need to become a regular and expected part of the management system, whereas they tend to be rather ad-hoc (1989, 1991, 1992, 1993, 1998) and to have unclear objectives. Second, the

review needs to be done in terms of targets and objectives, and its role in assessing and then addressing performance should be defined. For these reasons, LIRD P has suggested the need for an annual “mini-review” to feed into the annual meeting. Third, project management needs to participate in and learn from the review. This was obviously lacking in the early reviews, but was much improved in the most recent review where, not by coincidence, the project has benefited most.

The two-component strategy adopted by LIRD P has corrected many of these problems. The first component was to institute annual performance reviews against specific targets. The project corrected weaknesses in the definition of these targets by using LFA to clearly define objectives at all levels. It now hires an experienced and skilled facilitator each year to assist the twenty senior and middle managers to review their own performance against these targets in the ‘mini review’. This information is used to prepare the documentation for the annual meeting. It has significantly increased the value of this meeting by giving it a performance focus. The second component is the ‘independent audit’, or what has been termed a project review. Putting performance management systems in place will make this audit much easier.

8.5 Conclusions

Many conclusions can be drawn from the 15 years of experience of the LIRD P project. Perhaps the major lessons are as follows:

8.5.1 Following CBNRM principles

We now have the knowledge to implement successful CBNRM programmes with some degree of certainty. In developing transparent, democratic, equitable and accountable community management, it is important to follow as closely as possible the principles outlined in Chapter 7. The closer we follow these principles, the more rapid we progress. The second major lesson is that a team of *locally-recruited people can be developed to manage a CBNRM programme competently*, with progress depending on sound leadership and the building of a learning organisation of para-professionals. In other words, when locally recruited para-professionals are fully involved in the planning, implementation and monitoring of the CBNRM programme, and operate through a performance management systems with clear expectations, steady progress is to be expected.

The implementation of the LIRD P community programme faced two major obstacles. The first was in switching from a top-down system which empowered the chiefs, to a *bottom-up system that empowered and involved local communities*. In the four years from 1996, considerable progress was made in introducing grass-roots democracy in what had been feudal society. There were often severe tensions between the chiefs who favoured the top-down system and the communities who preferred the bottom-up approach. Solving this tension by ensuring that all transactions, and especially financial transactions, were entirely transparent was critical. While the project continued to emphasise the integrity of its policies, this transparency allowed the community and chiefs to re-negotiate their relationships themselves. The primary role of the project was to maintain transparency and to reiterate policy rather than to actively intervene in this relationship.

The progress of the community programme emphasised the critical and *over-riding importance of fiscal devolution* in: (a) promoting grassroots empowerment and democracy; (b) establishing local organisations, capacity and project construction; (c) linking wildlife and benefit in the minds of people and transforming attitudes; and (d) promoting the active management of wildlife. Indeed, communities took up the responsibility of managing wildlife rather more rapidly than initially envisioned, with the limiting factor being the project’s ability to provide training.

Once the central importance of fiscal devolution to progress is accepted, perhaps the most important

lesson emanating from LIRDP regards *scale and governance*. At the participatory level of governance, money was well accounted for, projects were implemented several times more quickly and cheaply than the project had done, and social buy-in and checks-and-balances operated effectively. Indeed, at this level, the progress of the project was exciting. At higher levels of organisation, where full community participation was not possible (we can characterise this as the representative level of governance), the performance of most aspects of management and governance was markedly less satisfactory. The magnitude of this difference is exemplified by the loss of 40% of revenue at ADC-level compared to less than 1% at VAG level. While this difference was exacerbated by the actions of some of the chiefs, it is nonetheless an important lesson for donors.

We therefore introduce the concept of "*scale-laziness*". This project has demonstrated that even in such a marginalised and dependent community as that in the Lupande GMA, rapid and positive progress can be made provided the system operates at the level of fully participatory governance and is implemented with sound checks-and-balances. At this level, the community and the social pressure that it exerts provides the primary controlling mechanisms - these are often not present or fail to function at higher levels of governance. We conclude, therefore, that the probability of any intervention being successful is likely to be far lower if the implementer fails to focus the programme at the participatory level of governance. The failure to follow this tenet (i.e. scale-laziness) is, perhaps, a major reason why so many rural development projects are unsuccessful. There are certainly serious logistical challenges to working at the level of the community, but we suggest that effective progress is dependent upon meeting these challenges.

The one problem that has not been solved, and which proved so important in the CAMPFIRE programme, is the *setting of quotas by communities*, and their empowerment to market these for themselves. If and when higher authorities are prepared to devolve this authority and responsibility to communities, we can expect a further and marked improvement and acceleration of the programme.

8.5.2 *Management of the project*

The primary lesson is that the transformation of LIRDP from a command-and-control bureaucracy into a learning organisation in which a much larger number of people were involved in decision-making coincided with improved objective-setting and performance. Three things were of paramount importance:

- The establishment of clear objectives using the logical framework matrix;
- The introduction of performance management, with regular peer and external review of expected targets;
- The devolution of financial and operational responsibility to section heads within this framework.

Changing the management culture was a long and time-consuming process, again requiring at least three components:

- A team of people the majority of whom were willing to change and seek improvements;
- Continual management facilitation provided in the main by long-term technical assistance, but also supported by consultants (especially to provide logical framework analysis planning expertise and facilitation);
- The willingness of NORAD to be flexible, and especially the determination of NORAD personnel to understand the project and to hold the project to its targets. Thus the Project had considerable flexibility in setting its own objectives provide these were realistic, but was then held accountable for achieving them.

8.5.3 Law enforcement

The project reaffirmed the importance of law-enforcement in protecting wildlife populations, even in the presence of a sound CBNRM programme. There were also many lessons, such as the importance of monitoring, the need to combine ground coverage with investigations, the need to ration patrol time, etc. Moreover, the data acquired over a decade of law enforcement showed that it was the effectiveness of patrolling rather than other measures such as the international ivory ban that determined the level of poaching.

8.5.4 Benchmarks

LIRD P developed a number of benchmarks that might be useful to other projects. It costs US\$1.3m per year to manage a park and community programme of the magnitude of the South Luangwa National Park and Lupande GMA, equating to about US\$1 per hectare. 22,000 patrol days were necessary to protect 14,000km² from poaching. The community programme cost US\$2 per head per year. Each seasonal tourism bed could earn some US\$1,000 - 2,000 for the park annually.

8.5.6 Inefficiencies

LIRD P has certainly had many positive outcomes: providing many lessons, saving the elephants of the Luangwa Valley, providing a framework on which to build sustainable development; and setting in motion a successful community programme. While these outcomes indicate effectiveness, the project has undoubtedly been inefficient and there is a need to look at new ways of funding and managing such programmes. After an expenditure of US\$26m over 15 years, the project is almost 60% self-sufficient. Given that it costs US\$1.3m in recurrent expenditure, the park could be made self-sustaining with a trust fund of some US\$15m, assuming an interest rate approaching 10%. If this money were invested internationally, the principal could be safeguarded with the park operating off the interest indefinitely. These insights stimulate ideas. For instance, a donor could match private contributions, with the contributors forming a trust to hold the parks' management to clearly defined objectives and targets. This would build in both financial sustainability and management accountability.

8.5.7 Finally

The LIRD P programme has been an evolving and learning process. The staff, government and other supporters have shown great dedication. NORAD has been extremely patient and has made a significant investment in the Luangwa Valley. These efforts have been rewarded by a relative success amidst a great deal of failure. As we have seen, there are many lessons to be learned from this programme about the management of donor projects, protected areas and CBNRM initiatives. But it is a complicated story with many facets and we have only been able to draw out the key lessons. We hope this document provides readers and researchers with the raw information from which many more lessons can be drawn.

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APPENDIX 1

ZAMBIA WILDLIFE ACT

The Zambia Wildlife Act (Act No.12 of 1998) has been passed by parliament and signed by the President. For the Act to take effect, it required the Minister of Tourism to sign Commencement Order. Such an Order was issued on 3rd July 1998 announcing that the Act would become operational on 1st January 1999. But this Order was revoked on 4th December 1998 by a second Order announcing that the new Act would instead come into operation on 1st January 2000. Subsequently, the Act was put into effect on 1st November 1999.

Objectives of the Act

The new Act provides for the:

- Repeal the National Parks and Wildlife Act 1991;
- Establishment of the Zambia Wildlife Authority (ZAWA), replacing the National Parks and Wildlife Service;
- Establishment, control, management and continued existence of National Parks and Game Management Areas (GMAs) and for the conservation, protection and enhancement of wildlife ecosystems, biodiversity and a range of other interests in parks;
- Sustainable use of wildlife and the effective management of wildlife habitat in GMAs;
- Enhancement of the economic and social well-being of local communities within GMAs;
- Involvement of local communities in the management of GMAs;
- Development and implementation of management plans for National Parks and GMAs and bird and wildlife sanctuaries in consultation with local communities;
- Regulation of game management;
- Licensing of hunting and control of the processing, transfer, sale, import and export of wild animals and trophies;
- Granting, in partnership with local communities, of hunting concessions in GMAs to hunting outfitters and photographic tour operators;
- Implementation of several international conventions and agreements:
 - (i) The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)
 - (ii) The Convention on Wetlands of International Importance Especially as Water Fowl Habitat (RAMSAR)
 - (iii) The Convention on Biological Diversity
 - (iv) The Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora;

The Zambia Wildlife Authority

NPWS was intimately involved in the process of developing the new Act from the time the process was initiated in 1992. The European Union funded a five-person project to support NPWS in the transition process. Not only was this team unfamiliar with managing change and overly focused in park planning, but this change threatened powerful vested interests in the sector, and the relations and dialogue between NPWS and EDF project staff were poor. One outcome of this process, however, was a new Act. Having set in motion a change process, the EDF Project terminated in July 1999 with the Act still not implemented.

Clearly, the process lacked genuine high-level political commitment and vision. Neither the government nor the consultants appeared to have had a very clear idea at the outset of what they wanted in terms of reorganising NPWS. The EDF project team concentrated their efforts mostly on redesigning NPWS (in a rather old fashioned way, it might be said) and paid insufficient attention to securing broad-based commitment and support, although there are questions of whether a transparent and effective organization would ever have been genuinely encouraged. Understandably, senior NPWS staff felt that implementation plans developed by the project did not reflect their view on the way to proceed. The contrary view is that NPWS staff were overly defensive and resistant to new ideas about increasing effectiveness. Strong vested interests in the hunting sector in particular, were also playing themselves out beneath the surface, causing huge uncertainty and the many changes in top personnel.

These factors contributed to the delays in implementing the legislation. During 1999, the Permanent Secretary of the Ministry of Tourism was apparently pressurized by Cabinet Office to move ahead with the implementation of ZAWA, probably more to do with pressure from the World Bank to achieve downsizing of the civil service under the Public Service Reform Programme than with a genuine interest to reform the wildlife sector (the NPWS with its large staff complement was a prime candidate for staff retrenchment, at least in the government books). In response, in mid 1999, the Permanent Secretary established a committee to develop an action plan for ZAWA with a view to trying to meet the commencement date set for 1st January 2000. In practice, ZAWA took effect on 1st November 1999, albeit with no senior management.

A strong donor group consisting of the World Bank, USAID, the EU, NORAD and DANIDA were supporting the process because of the potential of the wildlife sector to promote economic development, especially in under-developed rural areas. Thus, NORAD and DANIDA used their flexibility to continue this process, employing a consultancy (Deloitte and Touche) for about a year to bring into being a new agency. A structure was agreed, and middle level staff were fired and recruited, but by the time this Consultancy was terminated (presumably by the Ministry, because it was well supported by the donors) top managers and financing had not been agreed. During this period there was constant change in Ministers, Board Chairs and acting Director Generals. Unfortunately, ZAWA was restructured from the bottom up. The recruitment of top-level managers was convoluted and heavily influenced by political interference. Several, sometimes expensive, recruitment processes contracted out to consultancy firms were abandoned, but the Ministry eventually appointed a substantive Director General in early 2001. After no less than three years on great uncertainty, and it was not until early 2002 that the situation began to stabilize, at least relatively speaking.

Initially, the ZAWA Board comprised of 18 people, with a heavy emphasis on senior government officials. This proved unworkable, and the Board was later reduced to nine, with four private sector representatives. ZAWA, however, was never freed of political influence, which constrained technical progress.

The transition period was highly politicized, and made more complicated by the fact that it coincided with the 2001 General Election when no one group of politicians or business interests held sway. NPWS was slashed from some 3,500 personnel, including a number of ghost workers, to under 1,100 personnel. The process was rushed, eliminated some of the better but most of the worst staff, and caused considerable antagonism. While this is a normal part of a change process, the potential benefits of change were squandered by poor handling of the transition, and particularly because the transition process was not supported by financing. Somehow, government expected ZAWA to become viable immediately, and grants were forthcoming only with huge difficulties. Staff did not get salaries for months on end, and operational budgets were

almost completely lacking. In some cases (e.g. Kafue National Park) the majority of staff were fired allegedly for corrupt practices, yet fully two years later these staff had not been replaced. A large number of personnel found themselves unproductively in towns. Few management systems were fully developed. Thus the new Director General found himself with an unfunded agency, with few systems and staff in place. Furthermore, despite their earlier support and confidence in the economic potential of the industry, donors were extremely reluctant to fund an organization associated with political interference and patronage. The lack of transparency in the much-delayed allocation of hunting tenders almost drove the donors away completely.

NORAD overcame these challenges by agreeing to fund performance in the form of patrol days in Kafue National Park. Thus for each patrol day, NORAD provided \$17: \$10 to cover the costs of staff and rations; \$5 for park overheads like fuel, prosecutions and administration; and \$2 for general ZAWA HQ overheads. This was so effective in motivating staff and reducing poaching in an area where poaching had been out of control, that in early 2003 NORAD was looking favourably on a \$3.5m roll out of this programme. NORAD also agreed to negotiate a further Phase of the SLAMU project, stating that it would fund only what it was convinced could be managed by ZAWA, and implicitly encouraging outsourcing. At this time, the major concern with ZAWA was no longer its integrity, but its capacity to perform with a perception that many staff, particularly in middle and top management had been under-recruited given the challenges they had to surmount.

The World Bank also came to the table with its usual blue-printing process, and is in the process of planning and supporting the tourism sector, including key parks, in and around Victoria Falls. Other key donors who had intended to pump significant funds into ZAWA are currently waiting out the process to see whether the moderately positive trends continue.

Community Resource Boards

A key innovation of the new Act is the explicit recognition and formalization of a CBNRM programme. Under the new Act, ZAWA may register (on application) “the establishment of a Community Resource Board (CRB) for a local community along geographic boundaries contiguous to a chiefdom in a GMA or open area or to a chiefdom with common interest in the wildlife and natural resources in that area”. It thus provides a mechanism for legally defining communities as body-corporates, a key constraint for instance to Zimbabwe’s CAMPFIRE programme. In consultation with that CRB, the Authority will develop management plans for the GMA or area concerned.

The structures of CRBs are overly circumscribed. Thus, a CRB “shall comprise between 7 (min) and 10 (max) representatives elected by the local community, one representative of the local authority in the area, and a representative of a chief in whose area the Board is established”. The Board may invite others to participate (but not vote) in meetings. The importance of distancing unaccountable traditional leaders from the programme and especially its finances, while not totally alienating these powerful individuals, was tackled by legislating that the chief of the area concerned “shall be a patron of the Board”. The Board may appoint a secretariat of suitably qualified officers and, after consultation, the Authority may second officers to the Board.

The functions of such CRBs will be to promote and develop an integrated approach to the management of human and natural resources in GMAs or open areas, with power to:

- Negotiate, in conjunction with the Authority, co-management agreements with hunting outfitters and photographic tour operators (note that ZAWA can still maintain an overpowering role here);

- Manage the wildlife under their jurisdiction, within quotas specified by the Authority (Again, ZAWA can maintain full control);
- Appoint village scouts to exercise and perform the duties of a wildlife police officer under the supervision of a wildlife police officer in the Boards' areas;
- In consultation with the Authority, develop and implement management plans which reconcile the various uses of land in their areas of jurisdiction;
- Perform other functions delegated to them by the Authority or its Director General;
- Establish a fund to enhance the economic and social well-being of the local community within the GMA or open area concerned. Such CRB funds will hold revenues arising from concession fees, hunting licenses, grants and donations from within or outside Zambia (with the Authority's approval) (Again, ZAWA has control over a key factor).

This legislation allows ZAWA to powerfully devolve the benefits, responsibility and management of wildlife to communities, and thus provides the foundations for a path breaking CBNRM programme. However, precipitated by ZAWA's perilous financial position, ZAWA has taken a narrower view more suited to the financial survival of ZAWA than the releasing of powerful devolutionary and economic forces inherent in well designed CBNRM programmes. Thus, unlike the situation in Zimbabwe, Namibia and Botswana where communities have proved so effective, ZAWA (or more precisely, the larger political system of which ZAWA is a part) still allocates hunting concession with little community involvement and certainly no control. ZAWA has also, much to the consternation of communities and support NGOs, stated that communities will retain only 45% of revenues, with an additional 5% to chiefs. In doing so, ZAWA has probably miscalculated the negative consequences this has in terms of donor commitment, since the donors are interested in the impact of wildlife at household level, and in ZAWA as a tool for facilitating this rather than in perpetuating a large organization for its own sake. With a two-year hunting ban meaning there are no wildlife revenues anyway, this negotiation has not yet come to a head. An opportunity for an exceptional CBNRM programme is also being lost. The essence of CBNRM, as defined in southern Africa, is the transference of power and benefit to rural communities. This is a highly political process. It is interesting that NGOs and donors in Zambia have shied well away from tackling such fundamental issues as proprietorship, rights and revenue sharing, and most CBNRM programmes are thus rather insipid affairs providing training and, in truth, focused largely on agriculture.

APPENDIX 2

ADMINISTRATIVE MANAGEMENT DESIGN (ADMADE) FOR GAME MANAGEMENT AREAS

ADMADE is the official national CBNRM programme of Zambia's National Parks and Wildlife Service (NPWS). Like LIRD, it had its origins in the Lupande Development Workshop held at Nyamaluma in 1983 (DalaClayton and Lewis 1984) (see sections 2.1 and 2.2), but the two initiatives have followed different directions. NPWS (strongly prompted by Dale Lewis) was of the view that community-based resource protection and benefit sharing should be enabled within existing administrative structures and should remain firmly within and under the control of NPWS. This school initiated the ADMADE programme. The other school (planners and other government officers working with the Eastern Province authorities) followed through on the approach endorsed by the majority of workshop participants and developed a proposal which led to LIRD - in its early phases, this was developed as an integrated project with a wide remit for resource management in the Luangwa catchment, and sought to establish itself as a semi-autonomous body to overcome the inertia and poor performance in the Luangwa Valley of line departments. Since 1995, LIRD has had a tighter focus on CBNRM and managing the South Luangwa National Park. Since 1992, LIRD has been officially under NPWS, but it has not been integrated with ADMADE and has been more-or-less ignored by NPWS and allowed to operate as a stand-alone project.

The main donor support for ADMADE has come from USAID which has provided US \$4.8m since 1989, but this funding is scheduled to come to end at the end of 1999.

The programme has operated through two phases: a development phase (1989-1994) and a strengthening phase (1995-1997/8).

The development phase was based on the following objectives (Mwenya *et al.* 1990) - to:

- Provide an effective network of buffer zones for national parks and self-supporting wildlife management units;
- Provide a self-sustained management programme for long-term protection of wildlife resources in GMAs;
- Develop an improved and sustainable basis for supporting local community projects;
- Foster a closer and more cooperative relationship between the NPWS and local communities on wildlife affairs;
- Earn foreign exchange from the wildlife estate for the government central treasury;
- Stimulate the development of entrepreneurship and skills among residents needed to support the management of renewable wildlife resources.

Thus, the main emphasis of ADMADE has been on wildlife management and conservation through law enforcement (anti-poaching).

The strengthening phase aimed to overcome a number of weaknesses identified in ADMADE by various evaluations (DeGeorges 1992, Hachileka 1992, USAID 1993, Billings 1994, Rosenthal *et al.* 1995) (see Table A2.1)

On paper, ADMADE covers over 30 GMAs in Zambia extending over more than 100,000 km² (about 20% of the country's entire land mass) but, in practice, to date it has operated effectively only in the more

Table A2.1: Evolution of the ADMADE programme and claimed achievements

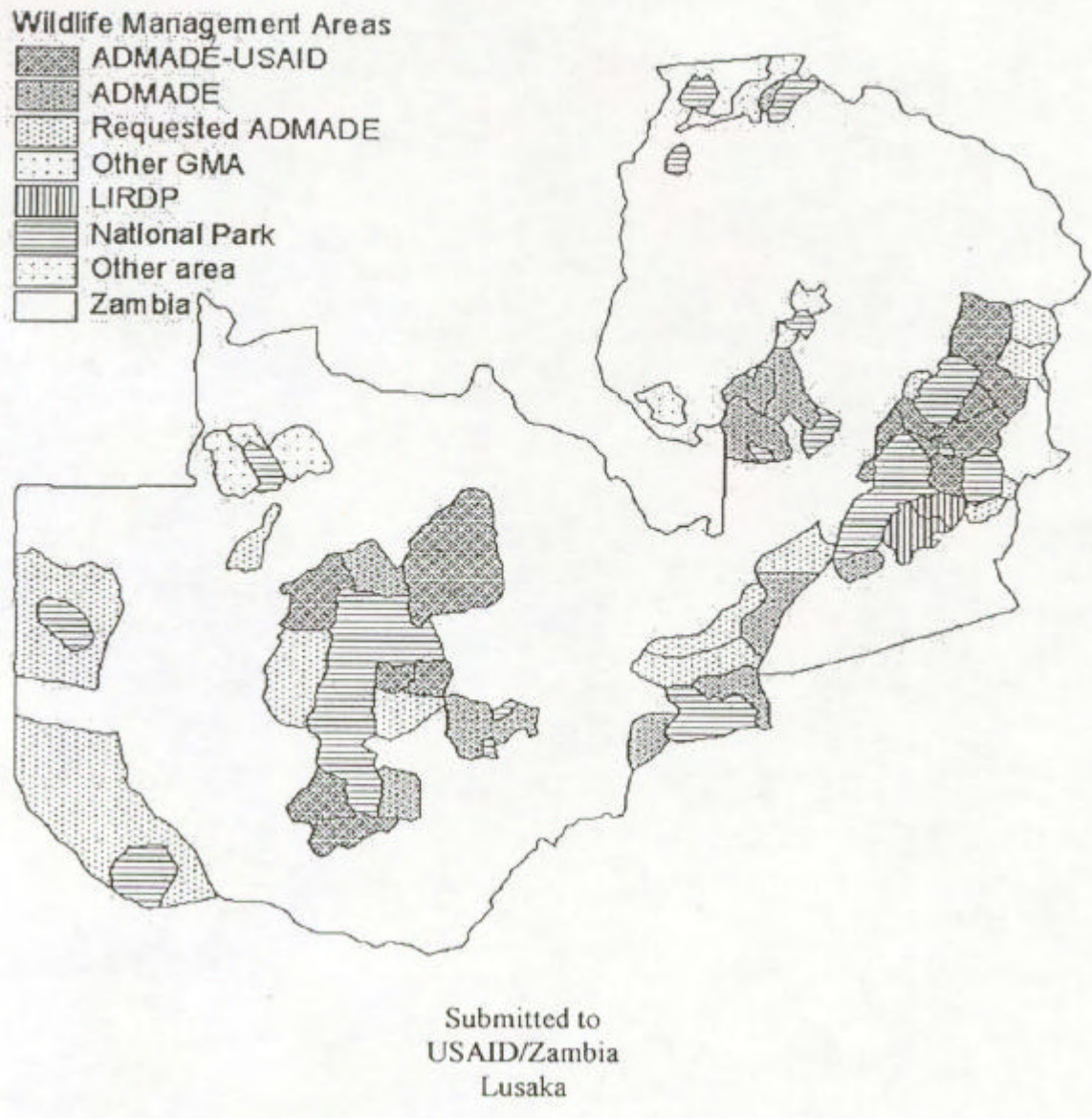
Source: Nyamaluma Training Institute, published in Mano (1998)

Pre-ADMADE Stage (1980-1988)	ADMADE Development (1989-1994)	ADMADE Strengthening (1995-1997)
<ol style="list-style-type: none"> 1. Poaching high 2. Community not a wildlife stakeholder in the wildlife industry 3. Community against conservation 4. No data collection for monitoring 5. No local NPWS administration 6. Too few camps and scouts 7. No arrangement for income to support areas 8. Resource ownership govt. controlled 9. No training institute for community skills 	<ol style="list-style-type: none"> 1. Sub-Authorities formed 2. Residents trained as village scouts 3. Extension officer (Unit Leader) deployed 4. USAID provided equipment support (incl. Vehicles) 5. WRCF (originally set up in 1984 to supplement govt. funding to national parks) used to return income benefits to communities 6. Information gathering system developed 7. Community skills introduced and Nyamaluma Institute created 8. Camp construction and improvements 9. Councils involved 	<ol style="list-style-type: none"> 1. Sub-Committees formed to balance powers of Chiefs 2. Sub-Authority members elected 3. Village Area Groups formed 4. Local book-keepers trained 5. Capacity-building courses taught 6. Licensing computerised 7. Participatory skills extended to Unit Leaders 8. Quota-setting supported with indicators and local participation 9. Database made user-friendly & accessible to local management 10. Lease agreement tied to CBNRM commitment with capacity to monitor compliance 11. Nyamaluma Institute expands curriculum for local leaders & develops GIS applications for ADMADE
	<p>Problems and weaknesses</p> <ol style="list-style-type: none"> 1. Abuse and interference of safari operators 2. Autocratic leadership of Sub-Authority Chairmen 3. Misappropriation of WRCF funds 4. Dysfunctional Sub-Authorities 	

‘viable’ GMAs (i.e. those with reasonable remaining game populations) funded by USAID. These are in the Luangwa Valley (with the exception of Lupande GMA which is under LIRD/SLAMU), and more recently around Kafue National Park and in the lower Zambezi Valley (Figure A2.1). ADMADE is not yet operating in more than a third of Zambia’s GMAs.

The ADMADE programme is administered directly by NPWS headquarters, with strong facilitation provided by the Nyamaluma Training Institute with one expatriate technical adviser (Dale Lewis). At the district level, Wildlife Management Authorities have been established, chaired by the District Governor with the area Wildlife Warden as the Secretary. Other members of the WMAs include local politicians (MPs and elected Councilors) and Directors of Commercial Companies with interests in wildlife in the area. But since the inception of ADMADE, however, WMAs have hardly functioned and have, therefore, been irrelevant.

Figure A2.1: Present and Future ADMADE Areas in Zambia



Source: NPWS (1998)

The current administrative structure is shown in Table A2.2. GMAs are divided into administrative wildlife management Units. In most cases, a Unit covers a GMA which is also usually corresponds to a traditional chiefdom. In some cases, a Unit shares two chiefdoms. The Unit consists of Unit leader and other staff. For every chiefdom, a Wildlife Management Sub-Authority has been established (chaired by the Chief). From 1997, WMA Sub-Committees were established to balance the powers of the Chiefs. In the period 1995-1997, Village Area Groups were introduced.

Table A2.2: ADMADE administrative levels

Administrative level	Responsibility
Headquarters	Centred at NPWS, Chilanga, and extending to regional (approximately provincial) level of the 12 Commands (Luangwa, Kafue, etc.). WCRF held at NPWS HQ.
Wildlife Management Unit	At GMA level or for chiefdoms within GMAs. Consists of a Unit Leader (an NPWS civil servant specially trained to implement community-based wildlife management), some NPWS scouts, 20-30 odd Village Scouts, and ancillary staff. Responsible for anti-poaching activities, data collection, community conservation education (through drama), health education. Unit offices keep files of field information and data summaries which is used for natural resource management plans. The division of the Unit from the Sub-Authority is something of an accounting convenience as the two are inextricably linked in terms of decision-making, administration and implementation
Sub-Authority	An elected body (currently chaired by the Chief – they will become ‘patrons’ when ZAWA becomes operational). Members include village headmen, elected councilors, head teachers, a District Council representative and the Unit Leader acts as Secretary. It makes decisions on the allocation of funds to community projects. The Sub-Authorities were conceived as offering local residents a forum consistent with traditional customs to participate in the formulation of ideas on how to better manage and develop their wildlife resources and how to allocate wildlife revenues for community improvements. Recently, to increase democracy, Sub-Committees have been formed for finance, resource management and community development matters. Sub-Authorities are likely to become elected Community Resource Boards when the new Zambia Wildlife Authority become operational
Village Area Group	Established to represent and express localised opinion. Each with a committee of representatives of “peer groups” (e.g. elders, fishermen, women’s clubs) or other people who may be elected. Led by Senior Village Group Headmen. Members then among themselves elect representatives to sit on Sub-Authority Sub-Committees.
Nyamaluma Institute	<p>Located within Lupande GMA, Eastern Province. Provides training courses for Village Scouts, Unit Leaders, Chiefs and other community leaders, bookkeepers and health workers (covering financial management, community development, resource management).</p> <p>Maintains comprehensive GIS database on ADMADE operations, e.g. hunting effort, success of safari operations. Used to: evaluate status of wildlife in GMAs; produce maps/illustrations for land use planning, resource management planning, zoning uses, siting fishing camps, lodges, safaris and planning hunting operations.</p>

Revenues earned from wildlife in GMAs are channeled into the Wildlife Conservation Revolving Fund (WCRF) managed by NPWS HQ in Chilanga. Inflows include 100% of safari hunting concession fees and 50% of hunting license fees (the other 50% is taken into central government revenues). WCRF revenues are then expected to be used as follows:

- 35% for community projects in the GMA;
- 40% for wildlife management unit operations (i.e. village scouts);
- 25% for administration and other uses.

As this distribution shows, about 35% of the WCRF funds are channeled to local communities for projects, but this process is cumbersome and slow. Given that half of hunting licence fees go to central revenues, this represents considerably less than 35% of total GMA wildlife revenues. By comparison, under LIRD/SLAMU, 100% of **all** GMA wildlife revenues are returned to local communities to be used as they determine.

There have been several formal reviews of ADMADE and, as with LIRD/SLAMU, there is considerable controversy surrounding the programme. For example, the issue of the role of Chiefs, has been closely scrutinised. The most recent review (Mano 1998) notes that:

“ADMADE’s key achievement over 10 years has been to persuade a number of Chiefs (together with their advisers) to exert their *de facto* authority for the preservation of wildlife – in exchange for their retention of a large portion of hunting (and some other minor) revenues in their area for “community development” in the form of schools, clinics, wells and other public goods. Much criticism has also been leveled at ADMADE for strengthening the authority of the “undemocratic” chiefs, particularly where the first tangible community asset has been a new house or palace for the chief himself, and where subsequent, more public, goods have tended to be located in his own village. But a short-lived attempt in 1995 to take the chiefs “out of the circuit” and to democratise in some fashion resulted in an explicit threat by all chiefs consulted to revert to the scorched earth policy.”

This review is generally positive and suggests that ADMADE has been a great success and argues that this is why it has spurned much controversy. But, in contrast, a report by Hachileka *et al.* (1998) concludes that ADMADE has not yet achieved success in most important areas of the programme’s ideals. Such diametrically opposed conclusions (also evident in reviews of LIRD) have probably been influenced by the use of different criteria to judge success, the absence of performance indicators in project documents, and the personal biases or ideological orientation of the evaluators.

Given the growing interest in CBNRM, an increasing number of academic and other studies are investigating progress with the ADMADE programme (e.g. Gibson 1995; Matenga 1999; Chundama and Hachileka 1999). Some are quite critical. For example, Matenga (1999) observes:

“Contrary to its theoretical bases. ADMADE has operated as a top-down programme initiated, planned and implemented externally by the NPWS and facilitated locally by the all-powerful chiefs presiding over the Sub-Authorities. The ADMADE programme has since its inception been controlled by the NPWS, a state institution, in line with state priorities. As argued in one report, ‘ADMADE is first and foremost a conservation initiative, for the simple reason that the remit of NPWS is to manage Zambia’s wildlife estate.’ Although the promotion of social and economic welfare is one of the expected outcomes from community-based conservation of wildlife, in ADMADE, this ideal has remained a far-fetched dream. The bulk of the wildlife-derived revenues in the GMAs are appropriated by the central government, NPWS and WCRF leaving an insignificant revenue base for the enhancement of the economic and social well-being of local communities in the GMAs”

“Most of the GMAs have experienced very small economic returns from the programme. Very few community members have benefited in terms of employment as village scouts. Even for these few village

scouts, most often they go without pay and other requirements the job demands for several months”

“The Sub-Authority is composed of community representatives who are largely hand-picked by the all-powerful chiefs..... There is nothing in the structure that is representative of the broader community interests. The larger community is, therefore, simply *told* what has been decided by the Sub-Authority or the NPWS. This lack of voice in decision-making by the local community members has effectively disempowered them politically in voicing their concern on issues that affect their welfare.”

ADMADE has also conducted internal reviews but the extent to which these have influenced ADMADE policy and implementation is unclear.

ADMADE and LIRD/SLAMU are briefly compared in Table A2.3.

Table A2.3: ADMADE and LIRD/SLAMU compared

	ADMADE	LIRD/SLAMU
Main donor support	USAID: US \$4.8 (since 1989)	NORAD [insert figure] (since 1987)
GMA wildlife revenues returned to communities for their use	Revenue channeled to WCRF held at NPWS (100% of concession fees but only 50% of licence fees). Only 35% of WCRF returned to communities.	100% of all revenues returned to communities: 80% direct to Village Action Groups, 4% to ADCs, 6% to Chiefs, 10% to accumulation fund. Used as they determine
Use of community revenue	Use for projects (only) determined by Sub-Authorities. No household dividends	VAGs and ADCs determine use. Mix of projects and household dividends
Emphasis	Wildlife conservation and law enforcement in GMAs	1987-1995: multi-sectoral 1996-present: CBRNM in Lupande GMA and SLNP management
Status	National programme of NPWS	Stand-alone project, quasi-autonomous (officially under NPWS from 1992)
Geographical location	Officially in all GMAs, but effectively operational in fewer than half (mainly in Luangwa Valley, around Kafue NP and in Lower Zambezi Valley)	Confined to Lupande GMA and South Luangwa National Park
Changes	Two phases but little change of approach or emphasis. Failed to learn from lessons of LIRD	Innovative and evolved through 4 phases. Responded to criticism by changing objectives and focus

Current administrative structure	<ol style="list-style-type: none"> 1. Headquarters at NPWS 2. District Wildlife Management Authority (chaired by District Governor – hardly functional) 3. Wildlife Management Unit at GMA/chiefdom level (led by NPWS officer) 4. Elected Sub-Authorities for each chiefdom (chaired by chief), with sub-committees 5. Village Area Groups 6. Nyamaluma Institute (provides, training, facilitation and advise) 7. National coordinating office (at NPWS) 	<ol style="list-style-type: none"> 1. Luangwa Integrated Resource Development Authority (not functioning, Council of Chiefs to be introduced) 2. 6 elected Area Development Committees (one for each of six chiefdoms in Lupande GMA) – some chaired by chief, others with independent chair 3. 40 elected Village Action Groups 4. 6 indigenous indigenous Liaison Assistants (one per chiefdom) 5. LIRD/SLAMU administers and manages the project and provides logistical/technical support
Support for law enforcement	<p>< \$ 500,000/yr (from hunting revenues).</p> <p>< \$ 10-15/km²</p>	\$ 65/km ²
Training	<p>Nyamaluma Training Institute runs regular courses for Village Scouts, Unit Leaders, Chiefs and community leaders, etc.</p> <p>Est. cost: c. US \$150,000/yr (c.12% of WCRF)</p>	Runs no courses
Data management and monitoring	<p>Nyamaluma Training Institute maintains comprehensive GIS-based database on operations. Unit offices maintain data files for planning wildlife management</p>	<p>No database.</p> <p>Project oriented monitoring system (with indicators) introduced in 19**</p>
Major equipment and infrastructural development	<ol style="list-style-type: none"> 1. Capital expenditure on vehicles once in 1990 	<ol style="list-style-type: none"> 1. Periodic replacement of vehicle fleet 2. Road graders, tractors, lorries, etc 3. Maintenance of roads in SLNP and some in Lupande GMA 4. Feasibility study for rehabilitating and developing road network in SLNP for tourism development (separately funded) 5. New offices and housing at Mfuwe in 1999/2000 (separately-funded)
Presumed effect of ZAWA	<p>Sub-Authorities will convert to elected Community Resource Boards. Chiefs will become patrons (not chairs)</p>	<p>ADCs will convert to elected CRBs with Chiefs as patrons</p>

APPENDIX 3

STAKEHOLDER COMMENTS ON KEY ISSUES

In August 1999, the senior author conducted a series of interviews with a range of primary stakeholders in the project area and with individuals in government departments and donor agencies in Lusaka. Those interviewed were invited to comment on the project in terms of the benefits or disbenefits they perceived it to have brought and to raise problems or criticisms.

A number of key themes and issues emerged as of concern to most people. The comments expressed in relation to these issues reflect a wide variety of opinions, some critical, some positive, and they often conflict with each other.

It is clear that a number of the criticisms are not based on reality or fact, but they do illustrate perceptions which are actually held and these are just as important as truths and facts in trying to develop and implement a sensitive approach such as CBNRM. Whether justified or not, these critical comments indicate clearly that SLAMU needs to invest seriously in improving public relations and in providing open and accurate information about the project (objectives, plans, activities, progress, etc.) to all stakeholders and interest groups.

The issues listed below are not in any order of priority.

Community account

“We don’t want the project to look after the Community Account because we don’t feel we know just what income is received and when. For example, SLAMU is selling hippo carcasses but how do we know how much is raised? So we want the account to come to the community and be controlled by the ADCs.”
(Chief)

“We are only told how much is in their account. Why should someone be keeping our money? We want to handle things ourselves (referring to the Wildlife Management Account which holds GMA revenues from concession fees, hunting licenses, hippo culling, etc.).”
(Chief)

“We need to know how wildlife revenues are spent. We have no say and no knowledge. People and SLAMU should cooperate and consult. This is our land. SLAMU should not ignore us.”
(Member of Kakumbi ADC)

“We want the Community Account to be with the ADCs. We are the owners.”
(Member of Mnkhanya ADC)

“We need full information about the Community Account. We don’t know how much is there. They [SLAMU] just tell us what has come in and gone out. We need transparency. We in the community should handle the account.”
(Chief)

Problem animals

(Note: This is a long-standing issue which pre-dates LIRDP)

“The response to our complaints about problem animals is too slow – the procedures need clarifying, they are too prolonged and sometimes they don’t come.”

(Chief)

“It takes too much time to respond to complaints about problem animals. We need clear rules on how much damage should be caused before an animal is shot. We need a transparent process. In most cases, they [NPWS officers] kill the wrong animal anyway. We don’t get any benefit from elephants which cause the most damage – they give nothing to the community. All we get from problem animals is meat.”

(Community Liaison Assistant)

“When these problem animals graze and damage our fields, it is we owners of the fields that really suffer. A lot of fields get destroyed and *tyolela* is too little to compensate us. We need a problem animal control system.”

(Member Luangwa VAG, Kakumbi chiefdom)

Allocation of revenues to chiefs

“The project should not be telling the people how much money we chiefs receive from the Community Account – this is disrespectful.”

(Chief)

“The percentage given to local leaders should be private information. It has brought insults from the communities and made Chiefs quarrel with staff.”

(Member of Mnkhanya ADC)

Chiefs feel sidelined

In the past [referring to Phase 2], things were OK. Then we were sidelined from our chairs put on the floor. Now we are powerless. Those who are trusted with donor funds have become strong.”

(Chief)

“On paper it is for the communities to say what they want. But, in practice, the project says no. They are the ones pulling the strings. The communities are the owners of resources but project people have taken over. We have not been included in Phase 4. We are not happy that NORAD is prepared only to finance the national park. We are being excluded even by NORAD itself. Communities have seen they are being sidelined. People have started killing elephants, assisted by our communities.”

(Chief)

“Using the chiefs in the past was a good instrument.”

(WWF Zambia official)

Conflicts

“I am from that area and am a stakeholder myself and I know what people are thinking there. There are many conflicts and things are getting serious.”

(Senior NPWS Officer, Chilanga)

“Conflicts and politics in the Luangwa Valley has always been a huge problem.”

(Ministry of Finance official)

“The key thing is that it is very difficult for people to get involved actively in law enforcement [referring to village scouts]. People don’t want to be policed by their own people. It just leads to conflict. There have been threats of bewitching and burning houses.”

(NPWS officer, Mfuwe)

Communications

“We have had communication problems with SLAMU. A presentation by SLAMU to the LSA earlier this year was a bit too silly. It was too self-congratulatory and didn’t give the warts. They want credit for being good but don’t admit their problems. But it happened when tensions between SLAMU and LSA were high.”

(Representative of Luangwa Safaris Association)

“A few tour operators have expressed criticism of the project, but this is the voice of just a few. It is not everyone’s view.”

(Lodge owner)

“The operators generally support SLAMU. But we sometimes lose sight of the broader picture and just get caught up with the issue of the day such as the recent concern about hippo culling.”

(Lodge manager)

“Shooting people is not the way to educate people” [referring to the confrontation between villagers and wildlife police officers in 1998]

(Chief)

“Malco News is helping to inform the people and other chiefdoms. It is good. It is our own newspaper. And it is right that we should pay a small amount for it. We can’t always have free things.”

(Chief)

“Coordination between the project and local leaders has improved. They now consult us a lot.”

(Chief)

“Communication was poor. Now it has improved a lot.”

(Kawaza Village Tourism Project official)

“SLAMU needs to improve its PR. But we operators also need to approach SLAMU and offer to get involved and help – not just be one-sided and criticise each other.”

(Lodge Owner)

“The community in Kakumbi chiefdom is generally positive about SLAMU. It is just some individuals who are negative.”

(Community Liaison Assistant)

Benefits

“Giving something with nothing in return is folly [referring to the *tyolela* system]. The amount is so small as to be senseless and undermines the value of wildlife.”

(Representative of Luangwa Safaris Association)

“The project is doing well. We are building clinics and schools, employing community scouts and constructing dams and there is good cooperation between project management and the chiefs.”

(Chief)

“SLAMU gives us very little benefit. Yes there is employment but very little. The project hasn’t spread its wings. We are totally behind.”

(Member of Kakumbi ADC)

“My people are very happy with SLAMU – their conditions have improved and they have work as drivers, Community Liaison Assistants, bricklayers and casual workers.”

(Chief)

“LIRDPA started well with plans covering roads, schools, clinics and other things but it did very little to improve standards of living. Roads are not yet completed, schools are few and in bad condition and we still only have one clinic. There is no safe water. After 10 years, there is not much change.”

(Member of Kakumbi ADC)

“The people didn’t know why the project was here until CBNRM was started a few years ago. It has taken us some time to understand our responsibilities for the animals. But now the revenue is now in our hands and we have done some very good projects with the assistance of the project. We are very happy to have it”

(Member of Mnkhanya ADC)

“We are happy to have SLAMU. We are getting something and have seen development in a short period.”

(Member of Jumbe ADC)

“We don’t seem to be beneficiaries. Very few Kundas are employed in senior positions in SLAMU. People re imported from other areas”

(Member of Kakumbi ADC)

“We have many benefits which we are proud of such as electricity at the clinic and painting of school blocks. These are due to the help of SLAMU”

(Member of Chitempha VAG, Mnkhanya chiefdom)

“*Tyolela* may have contributed to the influx of people into the area. This means there is less for genuine residents”

(Safari camp operator)

“In general, SLAMU is very good. Without it, we wouldn’t be able sustain a national park.”

(Lodge owner)

Revenues, chiefs, community projects and household dividends

“The chiefs have the upper hand on funds allocated to ADCs and they impose projects on us, so we have asked for extra funds from the VAGs.”

(Member of Jumbe ADC)

“The chief and the ADC imposed a project to electrify a clinic and to put an MS [the Danish volunteer service] worker in to look after projects. So the money was just deducted from all VAGs in Mnkhanya- about ZK 7 million in 1999. At first people were not happy about this, We were not informed because it was very urgent. Then after it was explained to us we accepted that it is a good idea and now we are happy.”

(Member of Chitempha VAG, Mnkhanya chiefdom)

“Everyone knows the problems in Kakumbi chiefdom. Whatever the chief says is final. The people have no say.”

(Member of Chitempha VAG, Mnkhanya chiefdom)

“The ADC said all of our ZK 8m of VAG money should be allocated for *tyolela* and said this was what the Chief wanted. So how could we object?”

(Member of Luangwa VAG, Kakumbi chiefdom)

“The communities have been demoralised by the chiefs demanding money from project funds. This is why they have allocated most of it to *tyolela*. People want projects but they have been discouraged.”

(Community Liaison Assistant)

“They [SLAMU] told the people that this money is yours to do with as you want. If you don’t want projects you can share it. So people just refuse projects.”

(Chief)

“These people [referring to SLAMU] have tried hard. They have educated people very well about the value of contributing to projects.”

(Member of Nsefu ADC)

“ZAWA should discontinue this *tyolela* system. It is killing projects. It is causing the people to challenge the chiefs and to refuse projects we propose.”

(Chief)

“The initial approach was to tell the communities that it was their money to use as they want. This was a mistake because it is now in their minds that it is for them and they don’t need to fund projects.”

(NPWS official, Mfuwe)

“At first, we didn’t know what a project was and how we could manage wildlife. More recently, they [SLAMU] have organised workshops which have explained a lot.”

Kawaza Village Tourism Project officer)

Poaching and awareness of value of wildlife

“Poaching is now low and people are aware that animals should be protected.”

(Chief)

“LIRD P had a tremendous effect on poaching and greatly increased the morale of scouts.”
(Safari camp operator)

“We have reached the stage where wildlife is seen as a benefit if we are allowed to manage it ourselves.”
(Chief)

“Without LIRD P and then SLAMU, there would have been no elephants left in the area and we would just be bumping around on bad roads. We wouldn’t have scouts with weapons that work. But there is always room for improvement.”
(Lodge manager)

“People are being educated to conserve wildlife but they complain now that they never eat meat. The quota for District licenses is not enough”
(Chief)

“All-in-all the project is working well. They are teaching communities to look after their own resources.”
(Chief)

“We are very happy with SLAMU. It is doing its level best. They have done a lot of community development. We have seen how wildlife has benefited us in the community. If poaching goes up again, the tourists won’t come because there will be no animals.”
(Kawaza Village Tourism Project Officer)

“Poaching has gone down a lot. Now it is just outside people doing it.”
(Member of Jumbe ADC)

“The project has brought good control of poaching. We now have a lot of animals and there is awareness of its value.”
(Member of Kakumbi ADC)

“Poaching has been greatly reduced due to *tyolela*. People see the value of wildlife and law enforcement. Law enforcement is an external approach. *Tyolela* is a way of discouraging poaching internally.”
(Member of Nsefu ADC)

Hippo culling

“Hippo culling has been done disgracefully, with carcasses in the tourist viewing areas and lorries of smelly meat driven through the park.”
(Representative of Luangwa Safaris Association)

“We didn’t agree to this system of SLAMU selling hippo meat themselves. How do we know how much has been earned? They should discuss such decisions with the Chiefs and ADCs.”
(Member of Mnkanya ADC)

“We want this hippo meat available locally for sale at a low price. They didn’t consult us before changing the system. They are making up 10 kg sacks. There is no transparency.”
(Chief)

“Local people want to get some of the hippo meat at a modest price.”
(Member of Luangwa VAG, Kakumbi chiefdom)

LIRD in Phases 2 and 3

“Things have gone down since 1996. Before that it was OK.”

(Member of Kakumbi ADC)

NORAD channeled too much money to LIRD in the past, and there was too little emphasis on setting priorities.”

(NORAD official)

“LIRD took on too much with the money they had available.”

(Safari camp operator)

“LIRD has been innovative and has been able to change its objectives. But it has only been able to register success because it has been heavily subsidised by NORAD.”

(WWF Zambia Official)

“LIRD’s biggest problem in the past was its lack of clear goals. Not it is strongly financially oriented and this could drive decisions and be a good thing.”

(Ministry of Finance official)

“In phase 2 a lot of promises were not fulfilled.”

(Chief)

“More could have been done with the funds available.”

(Lodge owner)

“In phase 2, the project looked like indirect rule and the people had very little power over the project. It seems like it was for individual people like the President. Also the project had too much to do and the people were left with nothing.”

(Member of Mnkhanya ADC)

Mambwe District Council

”We have good relations with SLAMU and are discussing how to change the ADCs and VAGs to suit the needs of the District Council. So we will have to sit with SLAMU to see how to convert ADCs from a chiefdom level to operate at a Ward level. The new Council has a lot of painstaking work to do to make people understand what its role is and what it is saying. We must maintain respect for the chiefs and protect traditions and use the chiefs correctly for development. But all money from wildlife cannot be controlled directly by the chiefs. We need a system that directs all funds for development through the Council.”

(Senior official, Mambwe District Council)

“In the future, what will be the role of District Councilors and the new Mambwe District Council?”

(WWF Zambia officer)

“Mambwe District Council has changed the situation in the LIRD area slightly.”

(Ministry of Finance official)

New SLAMU headquarters

“We don’t want SLAMU’s new HQ here at Mfuwe. The community rejected it and we told them they should put it at Mambwe. But they are dictating and going ahead here anyway.”

(Member of Kakumbi ADC)

“SLAMU is building its new HQ in the conflict zone [referring to the over-congested Mfuwe area] where it will encourage even more settlement near the animals. The logical place is near the airport or at Mambwe boma. They don’t realise they are fuelling the problem of town growth.”

(Representative of Luangwa Safaris Association)

Professional safari hunters

“We are not seeing meat from hunters. This could promote poaching to start up again.”

(Member of Kakumbi ADC)

“We suspect that hunters may be killing more than their quotas. It appears that SLAMU has not control over this.”

(Member of Chitempha VAG, Mnkanya chiefdom)

“The meat from sport hunting should be given to the community but this is not done in Upper Lupande. So the communities are not happy.”

(Member of Luangwa VAG, Kakumbi chiefdom)

“The communities are not involved in selecting hunters. They are just imposed. They appointed six of our people to act as community monitoring scouts and they were sent to Nyamaluma for some training. But the hunters refused them and just chased the away. We suspect the hunters could be killing more than their quota. MPWS scouts accompany them [the hunters] but they could be being so the hunters can kill more than they are supposed to.”

(Member of Luangwa VAG, Kakumbi chiefdom)

Use and sale of equipment

“When equipment is sold such as vehicles, we are not told. They are advertised in Chipata and Lusaka but no-one here knows there is an auction.”

(Member of Mnkanya ADC)

“It seems to use that there has been mismanagement and misuse of equipment, particularly vehicles. They only seem to be able to run their vehicles for three or four years and then sell or scrap them when there is not much really wrong with them. But we operators manage to look after ours and keep them running for 20 years. Maybe that is because they are not in business and have less strict controls. Their staff are not stakeholders”

(Lodge owner)

VAGs

“The VAGs are functioning well but we need good education to handle our administration. We need training on using the money wisely.”

“VAG constitutions are not legal. So when wrong-doers on the committee are found out, they just refute the charge. VAGs need legalising and making official.”

(Office holder, Luangwa VAG, Kakumbi chiefdom)

“They [SLAMU] should take serious measures when they audit VAGs and find problems. Some projects have been financed but progress has been slow. Nobody knows where the money goes.”

(Kawaza Village Tourism Project officer)

Tourism growth

“The one million dollar target is probably over ambitious. There are just too many externalities involved.”

(Lodge manager)

“On balance, the operators think it will never be feasible for photo-tourism to earn one million dollars a year in the national park. No-one thinks it can be done in the time-scale they are talking about.”

(Representative of Luangwa Safaris Association)

Project awareness

“It took 10 years for the communities to understand what this project is all about. Now they are catching up fast.”

(Community Liaison Assistant)

“Everyone has learned a lot through the project. Educational awareness has really improved. Overall the project has been very beneficial.”

(Safari camp operator)

APPENDIX 4

REPORTS OF THE LUANGWA VALLEY CONSERVATION AND DEVELOPMENT PROJECT

The major objective of the Luangwa Valley Conservation and Development Project (1968-1973), funded by UNDP/FAO, was to advise the Government of Zambia on management and development requirements for the full utilisation of natural resources in the Luangwa Valley, through improved conservation and utilisation and promotion of tourism. To achieve this, the project had more specific sub-objectives or targets:

- Halting erosion and vegetative degradation, stabilisation of the Luangwa River and reversal of decline in the groundwater table;
- Improvement of husbandry in the settled parts of the Valley;
- The reduction of game stocks to the carrying capacity of the habitat; and
- The development of tourism.

In achieving these targets, the project was also to upgrade the qualifications of Zambian staff by in-service training and fellowships. A fifth target - development of a programme for conservation education - was later added.

Various reports were produced, some as official FAO publications, others as project working papers. These are now difficult to find in Zambia and particularly in the Luangwa Valley itself. Some of these (which the senior author is aware of) are cited below, by author in alphabetic order. Abstracts are provided for those reports in his possession.

Albrecht R.W. (1973): *Land Use Development Proposals for the Mid and Upper Luangwa Watershed, Zambia.* Project. No. FO:DP/ZAM/68/510. Working Doc.No.3 UNDP/FAO

This report provides basic information about the area (e.g. topography, climate, soils, water resources), present land use, production and land use problems, potential land use categories, land management requirements and development and management recommendations. There are 9 appendices.

Abstract

“Agricultural surveys and land use planning activities covering the entire mid and upper watershed were incorporated to obtain a complete assessment of all resources and management problems. This involved collecting available land use data, analysing the technical and human problems, and formulating proposals for an overall land use development policy but with particular emphasis on the agricultural sector, soil conservation measures and the implementation of improved farming practices as part of a programme to prevent further soil erosion. These aims were achieved by a comprehensive ground and aerial reconnaissance, numerous interviews in the field, evaluation of previous reports and recommendations and the establishment of field demonstrations and study plots.

The main conclusions were that: there are no major gaps in technical knowledge to conserve and develop resources; mobilization of the human resources, improving skills, raising levels of management, increasing efficiencies and administration procedures, and changing attitudes and customs are of greater importance for the implementation of a development programme than sheer physical inputs and improvements.

The Luangwa Valley proper offers a multipurpose land use potential for wildlife, tourism and agriculture. There is no conflict between these uses provided agricultural areas are clearly demarcated and re-organised. Supported by dedicated and high quality extension services, agricultural production throughout the watershed could be considerably improved; beef cattle on improved pastures offers the biggest single expansion potential. Provided known conservation practices, backed by necessary legislation and land tenure laws, are implemented, the erosion problems can be solved. However, it will be a long-term task.”

Albrecht R.W. (1973): *Pasture Improvement in the Luangwa Watershed. Luangwa Valley Conservation and Development Project, Zambia: Project. No. FO:DP/ZAM/68/510. FAO, Rome (Feb 1973)*

This report discusses livestock production, land use problems in connection with animal production, improved pastures, the need for pasture extension work, a pasture development programme, and sets out major findings and recommendations.

Albrecht R.W. (1973): *Land Use Planning in the Luangwa Valley: Development Proposals for the Kakumbi/Jumbe Area. Luangwa Valley Conservation and Development Project, Zambia: Project. No. FO:DP/ZAM/68/510. FAO, Rome (Feb 1973)*

This report discusses areas of special land use interest, resources in relation to present and future land use, basic land use considerations and problems, economic matters, development proposals, and presents a summary of major findings and recommendations:

1. The Kakumbi/Jumbe area offers a multiple land use potential but agricultural production, based on soils of high natural fertility, has the greatest single future value.
2. The population density is relatively high. Consequently, human interests in agricultural production can clash in certain areas with wildlife preservation and game management. A realistic development policy would overcome these difficulties.
3. The riverine strip along the east bank of the Luangwa river should have priority use for wildlife/tourism. The remaining areas should be given priority use for agriculture, but can be maintained, outside the farming areas, as a Game Management Area to facilitate various types of hunting.
4. It is impossible and impracticable to shift or resettle population by force. In order to achieve human resettlement, short-term development projects should aim to make existing population centres at Masumba, Nsefu, Katuzi and Jumbe/Chikowa more attractive by improving existing infrastructure facilities. Such a policy would encourage voluntary movement of people from the riverine areas
5. Existing agricultural areas should be amalgamated into larger blocks and be given added protection from wildlife depredation.
6. Agricultural extension and community education services must be greatly improved in their efficiency and impact in order to transform people into skilled agriculturalists and to make an interest in self-help schemes and an emerging cash economy.
7. Funds for the establishment of an IDZ [intensive development zone] in the Eastern Province should be spent for investigating the possibility of damming Mpata Gorge at the Msandile river. If feasible, this project would have wide economic and land settlement repercussions beyond the Kakumbi/Jumbe area.
8. Long-term development projects and efforts together with further consolidation and improvement of infrastructure facilities would lead to large scale commercial farming and intensive horticultural production under irrigation. In turn, this would open up possibilities for the establishment of processing industries.

Boulton M.N. (1973): Conservation Education in Zambia. In: In: *Luangwa Valley Conservation and Development Project*: FAO, DP/ZAM/68/510, Rome

Dasmann W.P. (1973): Report on Wildlife Habitat Investigations. In: *Luangwa Valley Conservation and Development Project*: FAO, DP/ZAM/68/510, Rome

The main emphasis of this report is a review of the work of various ecologists in the Luangwa Valley and a literature review of work in other countries.

Dillmann J.S.S.S (1977). *Final Report, Veterinary Wildlife Research, 1966-1976*. German Agency for Technical Cooperation (GTZ), Eschborn, Germany.

Dodds D.G. and D.R. Patton (1968): *Wildlife and Land-Use Survey of the Luangwa Valley. Report to the Government of Zambia*. TA Report 2592, FAO, Rome

This report followed orientation and reconnaissance surveys. It assessed the range deterioration and animal population problems in the Luangwa Valley as critical. It discusses the environment of the Luangwa Valley, water resources, game populations and game range, game research, game management, diseases of wildlife, tourism, the Nyika Plateau, the Munyamadzi corridor, agriculture, planning and policy, the Game Branch of the Department of Game and Fisheries, education and information, and other resources. There are five appendices on perennial streams, game control policy in the Luangwa Command, recent history of the Luangwa Valley, wildlife policy, and a suggested approach to training.

Dunlap R.C. (1973): A Tourism Plan for the Luangwa Valley. In: *Luangwa Valley Conservation and Development Project*: FAO, DP/ZAM/68/510, Rome

Abstract

“One of the major objectives of the Luangwa Valley Conservation and Development Project was to advise the Government of Zambia on how it could realise the potential of the Luangwa Valley through the development of tourism. This was to be accomplished by making a survey and preparing a development plan within the framework of the tourist potential of Zambia and that of nearby African countries.

As a result, an inventory was taken of the cultural and natural resources including wildlife and an assessment was made of how these resources could best be utilised to assist government in achieving its objectives for tourism in Zambia.

In order to give government a choice as to how it wanted to develop tourism in the Valley, two separate plans were prepared, one within the present framework of government policy on national park development and another giving an alternate approach with the emphasis on fuller utilization of park tourist attractions. Cost estimates were prepared for development proposals in each plan in order that government would be fully aware of the financial implications of capital investment and its continuing recurrent costs.

One of the major conclusions of the study was that if Zambia’s tourist industry is to make the contribution to the nation’s economy that is expected of it, one of the contributing factors will be a change in policy to permit much greater development of the wildlife resources in its national parks.”

FAO (1972): *Luangwa Valley Conservation and Development Project: Report on Project Results: Conclusions and Recommendations*, Project FO:DP/ZAM/68/510. Terminal Report. FAO, Rome (September 1993)

This report presents the results of the project, covering: vegetation studies, animal populations, fire control, land-use survey, development of tourism, conservation education, hydrology and the training programme. It sets out proposals for future management covering: game management and habitat manipulation, fire control, land use development, tourism development, hydrology, conservation education, use of aircraft and further training. There are six appendices.

Naylor J.N., G.J. Caughley, N.O.J. Abel and O.Liberg (1973): *Game Management and Habitat Manipulation*. Project. No. FO:DP/ZAM/68/510. Working Doc.No.1 UNDP/FAO

This report provides a background with information on previous surveys and inventories. There are chapters describing the vegetation studies undertaken and methods used, the results, management implications, and distribution of large mammals,

Conclusions and Recommendations

“The four contributions to this report outline investigations of different aspects of one problem – changing habitats in the Luangwa Valley. The team is in agreement that these changes are caused primarily by elephants and by fire.

The first contribution concentrates on the present production, utilization and trend of plant communities. The second deals with animal populations, concentrating on long-term trends which may differ from an extrapolation of the present trend. The last two contributions outline the habitat preferences and the patterns of forage utilization of the animals that live within different vegetation types. This information allows prediction of the changes in the fauna that will result if particular vegetational trends continue.

The investigation covers the current situation, the process by which it came about, and the direction in which it is trending. The team’s attitude to change is neutral: dynamic processes are good or bad only if they complement or conflict with the human requirements for a particular area.

The major change detected was a progressive reduction of forest cover in the national parks. If the aim were to feature some types of grassland and the kind of animals that favour them at the expense of forest, forest animals, and other types of grassland, this change would be welcomed. If the aim were to preserve the present interspersion of forests and grassland or even to roll back the trend to a point in the past, the current process of change would be considered undesirable. The choice need not be the same for all areas in the valley. In some, a policy of stabilization may be dictated by a desire to preserve particular biological communities; in others, it may be desirable to preserve the system as such, thereby allowing the changes that are an integral part of the system to be viewed with equanimity.

In line with this flexibility of concept, it is suggested that the South Luangwa National Park be treated as an area in which specific plant and animal communities are preserved. This option requires that present trends in habitat be halted. For the North Luangwa National Park, it is suggested, in contrast, that the aim should be to preserve the integrity of the ecological system. Since dynamic change is an integral part of this system, the trends should not be modified by management treatments. The North Luangwa National Park would thereby serve as the custodian of the ecological system itself, as opposed to the system’s manifestations frozen at an arbitrary point in time. Equally important, the North Luangwa National Park would serve thereby as an experimental control on the management treatment applied to the South Luangwa National Park.

The Game Management Areas within the valley present more of an administrative than an ecological problem. Changes are recommended in the intensity of hunting in these areas but it must be emphasised that modifications such as this will be of little benefit in the absence of a national policy on Game Management Areas that allows some control over land use.

Specifically, the team recommends:

1. The South Luangwa National Park should be a priority area for fire protection. Other national parks can be integrated later into an overall plan for fire control when finance becomes available. The team endorses the FAO fire officer's recommendations for an early burning for fire protection where necessary to exclude fires late in the dry season and also supports the fire officer's plan for periodic control burning.
2. Elephant numbers should be reduced in the South Luangwa National Park to about 20,000. The reduction should be made in three steps of 5,000. The time for the completion of each step will be 3 months, 2-3 years, or 5 years, depending on the option chosen. Continuous monitoring of changes in plant communities will be necessary.
3. Trends should be monitored in both the South Luangwa National Park and North Luangwa National Park. Special attention should be paid to trends in forage utilization using methods outlined in Part 1, Appendix 3 [of the report], and to trends in canopy cover which can be monitored by methods such as aerial photographic surveys currently used by the Department of Wildlife, Fisheries and National Parks.
4. Continue the hippo reduction experiment and the vegetational studies associated with it and, in addition, initiate a study of density, food and feeding habits of the other grazing animals within the treatment area as compared with the control area. The results of this experiment, when they come available, will indicate whether a programme of reduction and stabilization of grazing animal densities is needed.
5. Overutilization of forage by species other than elephants is probably a consequence of instabilities introduced into the trend of these populations by habitat changes wrought by elephants. A long-term increase in hippo may also be implicated. Reduction and stabilization of elephant numbers in the South Luangwa National Park, along with whatever treatment proves appropriate to hippo, should allow much of the vegetation to grow beyond the optimum for use by other animals so that populations of these other species will stabilize at a density where forage ceases to be over-utilized. However, should there be continued over-utilization of forage and no sign of downward adjustments in density of the other animal species after monitoring the results of the second elephant reduction, a programme should be initiated to bring the animal units down to the appropriate stocking level.
6. The Department of Wildlife, Fisheries and National Parks should liberalize the regulations governing subsistence hunting in the Game Management Areas, allow a larger allocation of hunting permits, and simplify administrative procedures such that the allocated permits are issued.
7. Safari hunting operations should be expanded in the Game Management Areas.
8. The Department of Wildlife, Fisheries and National Parks should convene a conference of the departments and local bodies responsible for different aspects of Game Management Area management in an attempt to reconcile the disparate policies under which Game Management Areas are currently administered.

APPENDIX 5

COMMUNITY VIEWS ON SAFARI HUNTING TOURISM¹

A5.1 Safari Hunting Tourism in SLAMU

Safari hunting tourism in Zambia is amongst the best in Africa. The Game Management Areas (GMAs) act as buffer zones to the national parks, allowing wildlife to move freely between the parks and the GMAs. This ensures a reliable supply of superior trophies for safari hunting.

The South Luangwa area attracts many tourists. These fall into two main categories: safari hunting and photographic tourism. In 1998, revenue from safari hunting was estimated to be \$US300, 000 whilst, in 1997, revenue from park entry fees was \$US 218,000 (see Table A5.1). The numbers of sport hunters and photographic tourists in 1994 – 1998 are shown in Tables A5.2 and A5.3, respectively.

Table A5.1: Estimated revenues from safari hunting and photographic tourism, 1993-1998 (US \$)

Source: SLAMU

Year	1992	1994	1995	1996	1997	1998
Safari hunting	124,000	200,000	185,000	214,000	243,913	300,000
Park entry fees	60,000	167,000	200,000	265,000	218,000	

Table A5.2: Numbers of sport hunters visiting the South Luangwa area, 1994-1998

Source: SLAMU

Hunting Block	1994	1995	1996	1997	1998
Upper Lupande	12	16	23	20	18
Lower Lupande	15	13	28	48	25
Total	27	29	51	68	43

Table A5.3: Numbers of Photographic Tourists visiting South Luangwa National Park, 1993-1997

Source: SLAMU

Year	No. Local Tourists	No. International Tourists	Total
1993	3763	2897	6660
1994	5010	5145	10155
1995	2811	5167	7978
1996	2976	7350	10326
1997	3404	7373	10777

¹ This appendix is based on research undertaken for a dissertation, *A Case Study of Consumptive Tourism's Contribution to Conservation and Rural Development in LGMA, Zambia* (Elias Phiri, in prep) as fulfillment for an MSc in Tourism, Conservation and Sustainable Development at the University of Greenwich, UK.

Of these two forms of tourism, safari hunting tourism (SHT) is the most important for the majority of the people in Lupande GMA and provides the backbone of the CBNRM programme of SLAMU. At present, 100% of SHT income is channelled directly to local communities in Lupande GMA to support community projects and for cash dividends (*tyolela*). Income from photographic tourism is used to support the management of the South Luangwa National Park.

Lupande GMA is divided into two hunting blocks: Lower Lupande and Upper Lupande. These blocks are currently managed, respectively, by Safari Expeditions and Baobab Safaris. As elsewhere in Zambia, safari hunting is usually undertaken between May and October. The many international clients pay Game License fees and Block fees to SLAMU through the Professional Safari Hunter² (see Table A5.4). These revenues are deposited by SLAMU in community accounts³. ZAWA (formerly

Table A5.4: Hunting Fees for 1997

Source : SLAMU

	District License Fee (ZK)*	Safari License Fee (US\$)**
Baboon	1,000	40
Buffalo M	50,000	900
Buffalo F	50,000	800
Bushbuck	3,000	250
Bushpig	1,000	200
Crocodile		600
Duiker	3,000	150
Eland		900
Grysbok	2,000	150
Hartebeest	12,000	500
Hippo		900
Hyaena		150
Impala m	5,000	150
Impala f		100
Jackal		150
Leopard		1,600
Lion		1,700
Lioness		1,100
Puku M	5,000	300
Puku F		150
Reedbuck	6,000	250
Warthog	8,000	250

* Block fees are not included

** 1US\$ = Zambian Kwacha (ZK) 2,500 (1999)

NB: Some animals are not sold on district licence

² Each Safari-Outfitter employs a Professional Hunter for a particular hunting area who welcomes the client from the airport, assists the client to buy hunting licences from SLAMU and assists/guides the client in hunting.

³ In order to maintain transparency over the control of the community account, there are four signatories: two from panel 1 (SLAMU management) and two from Panel 2 (two local Chiefs). For a cheque to be valid, it requires the signature of one member from each panel. This ensures that all the money withdrawn from this account has the approval of the Chiefs.

NPWS, see Appendix 1) monitors hunting by ensuring that required official forms are completed⁴ and submitted to its offices after the hunt is completed. At the end of each financial year, a share of the total revenue accrued is given to the residents of all the six chiefdoms of Lupande GMA as community benefit. As discussed in Chapter 5, there is debate amongst the six Chiefs in the GMA over whether producer communities⁵ should be paid more than non-producer communities. However, recent research by Phiri (in prep., 1999) indicates that local communities in Lupande GMA are not yet ready to accept the producer community concept.

A5.2 A profile of the safari hunter in Lupande GMA

A questionnaire completed in 1999 by 21 safari hunters in Lupande GMA showed that over 60% of them were from USA and all of them were members of Safari Club International (SCI)⁶. The majority (81%) of respondents were above 46 years of age and were in high paying profession, e.g. medical doctors, pilots, businessmen. Clearly, safari hunting tourism is a sport for rich and older men. By comparison, the majority of photographic tourists visiting the South Luangwa National Park are younger - in 1996, most were under 35 years (Butler, 1996).

Not surprisingly, all the hunters indicated that trophy size was an important factor when choosing a destination to hunt, a link also found by Jackson (1996). Animal abundance and safety of the country closely followed. 81% of the hunters rated hunting in Lupande GMA as very good compared to other places in Africa, and 42.9% of these said it was excellent. 95.2% of respondents hunted all of the animals bought on their licences. The success rate of hunting in Lupande GMA is clearly very high.

Most of the respondents (61.9%) spend between US\$10,000 and 25,000 to hunt in the area. A photographic tourist on a 10-day visit staying in an up-market lodge in the park spends about US\$ 3,239 for one returned trip (Butler, 1998). Local communities receive about 26% of the revenues from a single hunt, but only 3.3% from one photographic tourist visiting the national park (for 10 days) (Butler, 1998). This comparison could be misleading since SLAMU's CBNRM policy is that all income from safari hunting tourism accrued by ZAWA goes to local community and income from photographic tourism (park entry fees, etc.) are retained by ZAWA for park management.

A5.3 Socio-economy of Lupande GMA

Subsistence farming is the main occupation for most people in Lupande GMA which suffers from a general scarcity of development inputs, extension services, credit and opportunities for local people to produce enough food. These constraints, combined with harsh ecological conditions (frequent drought, crop damage by wild animals and floods in some years), limit agricultural development in the area (Kalyocha, *et al.* 1998). As a consequence, food insecurity⁷ is a problem for the majority of

⁴ A Wildlife Officer is always present at the safari camp to ensure that all the forms are filed, i.e. pre-hunt licences; Scout's records and Professional Hunter's records .

⁵ The success of CBNRM programs depends on meeting all or most of the twelve pillars of CBNRM (Child, 1995). One of these pillars states that "producers, managers and beneficiaries should be the same people" meaning that communities with wildlife (producers) should receive the benefit of wildlife because they are the ones experiencing more problems with wildlife through crop damage, etc. 'producer communities' in Lupande GMA are Kakumbi, Nsefu and Malama chiefdoms. Most safari hunting in Lupande GMA takes place in these chiefdoms.

⁶ SCI is the largest organisation for trophy hunters in the world. In 1994, it had 30,000 core members in over 160 chapters from Namibia to Moscow. It serves as the principle market place for trophy hunts. The headquarters is in Las Vegas, USA (Jackson, 1996).

⁷ Food consumption in Zambia has decreased. Per capita consumption of maize, the single most important component in a Zambian meal, has declined drastically from 153.2kg in 1990-91 to 123.3kg in 1996-97 (UNCEF Report, *Overcoming Barriers to Zambia*, 1999).

households in Lupande GMA and malnutrition and related diseases are reported to be increasing (pers.comm., Mr. Banda, Male Nurse at Kamoto Hospital, 1999). The use of bush-meat in areas with abundant game is a common coping strategy (ibid.). If subsistence continues not to provide sufficient food for the people in the area, poaching will be a major problem in the future.

Education standards in the area are poor. There are few schools (see Table A5.5) and no college.

Table A5.5: Number of schools in Lupande GMA

Source: SLAMU

Chiefdom	Basic*	Primary	Secondary
Jumbe	1	4	1
Mnkhanya	2	6	0
Kakumbi	1	2	0
Nsefu	0	2	0
Msoro	0	7	1
Malama	0	1	0
Total	4	22	2

*Basic schools are school with classes from grade 1 to 9

A5.4 Views on the functions of VAGs

The strengthening of Village Action Groups (VAGs) and Area Development Committees (ADCs) under the new SLAMU CBNRM Policy is a positive movement towards community involvement in wildlife conservation. Such grassroots institutions allow a greater degree of local community participation in decision-making about wildlife management than was the case in the past (Gibson, 1995). A questionnaire survey conducted by the author showed a high degree of involvement in VAGs and awareness of (part of) their function: 96% of respondents stated that they were members of VAGs and 89% signalled that they knew that VAGs are forums for communities to discuss community projects. Since the new CBNRM policy was introduced in Phase 3 of LIRD, there has been much more community involvement in the planning and implementation of community projects.

This situation (a lot of people are able to participate in making VAG decisions) is a very positive indicator for the better conservation of wildlife in Lupande GMA. But, much awareness-building remains to be done. The survey revealed that only 15.7% of the respondents knew that the core function of VAGs is to discuss wildlife management, and only 16.3% of respondents knew the price of a safari licence to hunt a lion. Wildlife management is still rarely discussed in VAG meetings.

As *wildlife farmers*, local people are expected to know the price of their *produce*. Gibson (1995) opines that the most important function of community grassroots institution in GMAs should be to manage wildlife resources. Members of VAGs/ADCs should be discussing more frequently how to “farm” wildlife so that they can generate more income. SLAMU needs to refocus the functions and terms of reference of VAGs so that there is more discussion in meetings of wildlife management issues. The recruitment of Community Based Scouts (CBS) by some ADCs in Lupande GMA is a positive development in community involvement in conservation.

A5.5 Views on the negative aspects of safari hunting tourism (SHT)

52% of the respondents were of the view that SHT prevents traditional hunting which is cultural important to local people in LGMA. Such hunting requires a District License⁸ but it would be difficult to allocate such licences to most of the people in the GMA. Gibson (1995) is of the view that local communities should know by now that wildlife conservation and wildlife use are inseparable and the cost of conservation in developing countries like Zambia is very high. Thus, communities in Lupande GMA should now be thinking about how to maximise the income from SHT while getting enough meat to eat. Tables A5.6 and A5.7, illustrate how communities could increase their income by allocating more District Licences to safari operators. SLAMU could easily increase the income of local

Table A5.6: Benefit of one buffalo to the local community: Safari and District Licence compared
(Source: SLAMU)

Type of Use	Benefits	Value of Benefit (ZK)*
Safari Licence	Employment	ZK 10,000
	Money	ZK 1,820,000
	Meat (3/4)	ZK 500,000
	Profit to community	ZK 2,330,000
District Licences	Money	ZK 50,000
	Meat	Individual benefits
	Profit to community	ZK 50,000

Table A5.7. District and Safari Licence Fees for selected species compared

Species	District Licence Fee (ZK)*	Safari Licence Fee** (ZK)	Difference (No of District Licences sold to equal one safari Licence)
Baboon	1,000	52,000	52
Buffalo M	50,000	1,820,000	36
Bushbuck	3,000	325,000	108
Bushpig	1,000	260,000	260
Duiker	3,000	195,000	65
Grysbok	2,000	195,000	98
Hartebeest	12,000	650,000	54
Impala (male)	5,000	195,000	39
Puku (male)	5,000	390,000	78
Reedbuck	6,000	325,000	54
Warthog	8,000	325,000	41

After Child *et. al*, 1997

** 1US\$ = Zambian Kwacha (ZK) 2,500 (1999)

community through proper utilisation of wildlife resources, e.g. by more efficient management of the performance of safari operators so they fully utilise their hunting quotas, and by being permitted to derive revenues from the culling of problem animals (see Table 7.3). Human-elephant conflicts will

⁸ In theory, district license are sold cheaply to local residents for hunting which benefits the community. However, in practice, only relatively rich and influential people - often from the outside area – are able to get licenses with few benefits to local people (Child, 1999).

always be a problem in Lupande GMA and, therefore, every year elephants will always need to be killed. Allowing the hunting of elephants in Lupande GMA could help in the proper utilisation of wildlife resources in the Luangwa area and reduce the numbers killed to control crop damage (Table 8.3).

This view was supported by results from a participatory community workshop. Communities in Lupande GMA are expected to support elephant hunting because SLAMU has informed them that such hunting would generate more income for distribution and would reduce human-elephants conflicts. A single elephant allocated on a Safari Hunting Licence could generate between US\$ 5,000 and 7,000 through safari hunting fees. There are some 800 elephants in the Lupande GMA (Table A5.8) and the harvesting of two elephants each year on safari quota would be sustainable.

Table A5.8: Elephants: Summary Statistics

Source: Jachmann(1998) and Kalyocha., *et al.*(1998)

	1994	1996
Conservation Area	Population Estimates	Population Estimates
South Luangwa NP	7,197	7,942
North Luangwa NP	2,200	3,033
Lupande GMA	829	892
Munyamadzi GMA	459	102*

* 95%CL (0- 337)

The SLAMU area contains 50% of the total elephant population in Zambia (Jachmann, 1998). This population is expanding at the same time that the human population (mostly subsistence farmers) is rapidly growing and there is ever increasing pressure to convert new areas to cropland. This is leading to more human-elephant conflict in the area (Child, 1999).

At present there is no suitable solution to control elephant crop damage. Controlling elephant populations in most African countries has proven to be difficult and expensive (Child 1995; IEA 1997). There are essentially three mechanisms. The first is through a managed culling operation; the second is to translocate live animals to new areas; and the third is to use some form of elephant contraception (IEA 1997; Dublin *et al.* 1995; Sas-Rolfer 1995) All three methods are very expensive.

Reintroducing elephant hunting in SLAMU offers an alternative approach and could be trialed through a pilot project. This would reduce the numbers that would need to be killed to control crop damage control (Table A5.8) and significantly raise their standing in the community because they would generate more income for the community and ZAWA for community projects and law enforcement, respectively (Child, 1998). This approach has worked in Zimbabwe where, by formalising elephant hunting, the CAMPFIRE programme was able to reduced the numbers killed on crop damage control and the elephant population increased (Bond 1996, Child 1995).

However, others argue that the elephant population has increased because of the CITES ivory ban and that, if elephants were again allowed to be legally hunted, the population would decrease (Ginette, 1994; Jorgan ,1994). But this claim has been refuted by Jachmann (1998) and Jackson (1996). Jachmann (1998) argues that from 1992 to 1996 (post-ban period) the elephant population in the Kafue ecosystem in Zambia (comprising the Kafue National Park, Kasonso Busanga GMA and Lungu Luswishi GMA) fell from 10,263 to 4,980 - a reduction of 51.5% in four years. During the same period, the elephant population in the SLAMU area increased. The difference between the two areas

was the investment in law enforcement: approximately US\$4 sq. per km⁹ in the Kafue area compared to approximately US\$40 sq. per km in SLAMU area (Jachmann, 1998). The acceptance level of law-enforcement investment, were some elephants will be killed, is US\$65 per sq. km (pers. comm. Prof. Leader-Williams). Thus, to achieve better results in SLAMU areas, the aim should be to invest above US\$65 sq. per Km. To achieve this target, SLAMU needs income from elephant hunting.

Evidence from the SLAMU area shows clearly that it was not the CITES ivory ban that resulted in elephant conservation; rather it was investment in effective law-enforcement. The latter was introduced by LIRD in 1988, 2 years before the ivory ban came into effect, and illegal hunting of elephant dropped dramatically (Jachmann and Billiow, 1997).

Jackson (1996) further claims that many populations of species in the USA that were once on the brink of extinction have had been restored by wise use of revenue generated through hunting. This restoration occurred well before the enactment of the US Endangered Species Act, or before CITES came into force. CITES emphasises limitations on trade rather than finding ways to facilitate trade that may ultimately enhance the status of wild species (IEA, 1997; Parker and Amin 1993; SCI, 1992; Sas-Rolfer, 1995).

Law-enforcement is an important "tool" in controlling and reducing poaching. But effective law enforcement is expensive and, at the moment, ZAWA can not cover the cost. Piloting elephant hunting in SLAMU area could contribute significantly to funding law enforcement and increase the elephant population in Lupande GMA.

A5.6 Views on negative aspects of community activities on Safari hunting tourism (SHT)

Poaching is the "greatest enemy" of the SHT industry in Africa. 78% of respondents agreed that poaching in Lupande GMA remains a problem and has a very negative impact on SHT. Table A5.9 shows the total arrests, offences and convictions made during the years 1988 to 1997 in the SLAMU area. These figures indicate high encounter rates (arrests and confiscation of firearms) and this has

Table A5.9: Illegal Activity and Law-enforcement, SLAMU (LIRD), 1988 - 1997

Source: After Kalyocha., *et al*, 1998

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Parameter										
Total Arrest	230	398	341	411	781	334	71	164	366	234
Game meat	13	7	7	11	?	?	25	35	16	6
Firearms	110	283	243	212	641	76	36	235	419	225
Skin	36	20	10	48	?	?	18	16	13	4
Ivory	6	7	13	6	?	?	5	5	5	2
Park entry	28	20	28	21	?	?	26	14	20	6
Snares	-	-	-	-	-	-	-	-	-	-
Convictions	91	102	85	120	?	?	69	152	73	58

NB: *The monitoring of illegal activities and law-enforcement effort as a feedback mechanism to wildlife management, using a system developed by Bell, et al. (1984) in Kasungu National Park (Malawi), has been undertaken in the Luangwa Valley, particularly, in the SLAMU area. This method is probably the most elaborate and useful on the whole of the African Continent. It is based on analysis of patrol reports, like the table above which indicates high encounter rates (arrests and confiscation of firearms).*

⁹ Investments in law-enforcement equals the total budget spent over the whole area, divided by the size in sq. km of the area. This is usually calculated in US\$.

been acclaimed as good performance and a success story for SLAMU in combating poaching (SLAMU News Letter, Issue No11, 1997). These rates confirm that illegal hunting pressure from the local community and others is still high (Kalyocha. *et al.* 1998). In 1999, due the problem in Kakumbi area, 15 elephants were poached in the area (pers.comm, Kayeyi, Wildlife Warden/SLAMU).

Fishing is another activity, which needs to be better controlled in Lupande GMA, especially in Upper Lupande, where there are more fish camps. 81% of respondents agreed that such camps have a negative impact on SHT. Fishermen are usually involved in poaching and stealing of baits set in the bush by safari hunters, a conclusion also reached by Jackson (1998).

A5.7 Views on attitude towards Community-based Scouts

Due budget constraints, the government cannot afford additional wildlife scouts on the payroll of ZAWA. But the recruitment of Community-based Scouts (CBS) by ADCs is an inexpensive way of enlarging the scout force in Lupande GMA. Such scouts have detailed local knowledge about the wildlife in their areas and those who pursue it (legally and illegally). Furthermore, local youths recruited as CBSs gain income and assume the status of being an employed person and this has the effect of terminating some of the resident hunting activities (youths are usually involved in poaching as a source of income). This trend with ADCs now employing CBSs shows that the community is becoming more “mature” in the management of wildlife resources, i.e. changing from passive management to participatory management (pers.comm. Flywell Munyenembe 1998).

A5.8 View and attitude on safari hunting tourism

Previous research in Upper Lupande GMA on community attitudes towards SHT also involved questionnaire surveys and showed that, in the early 1990s, 88.2% of the respondents (from a sample of 135) were not in favour of SHT (Balakrishnan and Ndlovu, 1992). Research conducted by the author of this appendix) in 1999 shows that attitudes have changed greatly with 86.3% of respondents now agreeing that SHT is good for the local community, having brought significant benefits to local people. This change in the view could be attributed to the new CBNRM policy of SLAMU which gives 100% of income from SHT to local people.