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Rural Planning in the Developing World with a Special Focus on Natural Resources: Lessons Learned and Potential Contributions to Sustainable Livelihoods

An Overview

By

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AUTHORS' NOTE

This manuscript was completed in November 1999. References are made to materials from a wide range of countries. In particular, the report draws from three country case studies undertaken in Ghana, South Africa and Zimbabwe which were completed in mid 1999 and which reflect the position in those countries at that time. We are aware that there have been significant changes in these countries during the last eighteen months in terms of legislation, institutional arrangements and certain key issues (e.g. land). In preparing this manuscript for publication, wherever possible and to the extent that we have been able to access more recent information, we have updated the text.

ACRONYMS

4Rs	Rights, responsibilities, returns/revenues, and relationships
AGRITEX	Agriculture, Technical and Extension Services (Zimbabwe)
ASAL	Arid and semi-arid lands
BATNA	Best alternative to a negotiated agreement
CAMPFIRE	Communal areas management plan for indigenous resources (Zimbabwe)
CBNRM	Community-based natural resource management
CBO	Community-based organisation
CCC	Catchment conservation committee (Kenya)
CDF	Comprehensive development framework (promoted by the World Bank)
CGIAR	Consultative Group of International Agricultural Research Organisations
CIRAD	Centre for International Cooperation in Development, in Paris
CSD	UN Commission for Sustainable Development
CSIR	Council for Scientific and Industrial Research (Ghana)
DA	District Assembly
DAC	Development Assistance Committee (of OECD)
DANIDA	Danish International Development Agency
DCC	District Conciliation Court (Burkina Faso)
DCE	District Chief Executive (Ghana)
DD	Democratic decentralisation /devolution
DDC	District Development Committee
DDS	District Development Strategy
DEAP	District environmental action plan
DFID	UK Department for International Development
DPT	District planning team (Kenya)
EIA	Environmental impact assessment
ESAP	Economic structural adjustment program
FAO	UN Food and Agricultural Organisation
FAP	Flood action plan (Bangladesh)
FRA	Forest resource accounting
FSC	Forest Stewardship Council
GIS	Geographical information system
GT	Gestion de terroir
GTZ	German Agency for Technical Cooperation
HIMA	Hifadhi Mazingira (Swahili phrase meaning ‘ conserve the environment) program (Tanzania)
IDZ	Intensive Development Zone
IFAD	International Fund for Agricultural Development
IIED	International Institute for Environment and Development
ILO	International Labour Organisation
IUCN	World Conservation Union
IRDP	Integrated rural development program
ITTO	International Tropical Timber Organisation
KIWASAP	Kifili water and sanitation project (Kenya)
KMA	Kumasi Metropolitan Authority (Ghana)
LTC	Land tenure Commission (Niger)
NDPC	National Development Planning Commission (Ghana)
NFCAP	National forestry and conservation action plan (Papua New Guinea)
LDF	Local development fund
LDO	Land development objective (South Africa)
LGU	Local government unit
LMS	Local management structure

LRDC	Land Resources Development Centre
LTP	Land treatment plan (Kenya)
MARP	Methode Acceleré de Recherche Participative
MET	Ministry of Environment and Tourism (Namibia)
NGO	Non-governmental organisation
NRM	Natural resource management
NTFP	Non Timber Forest Product
OECD	Organisation for Economic Cooperation and Development
PIDA	Participatory and integrated development approach
PLA	Participatory learning and action
PRA	Participatory rural appraisal
PROAFT	Mexican program for the protection of tropical forests
RDA	Rapid district appraisal (Indonesia)
RDP	Rural development project
RIDEP	Regional integrated development plan (Tanzania)
RM	Rural market
RRA	Rapid rural appraisal
RRD	Regional rural development (GTZ approach)
SARDEP	Sustainable animal and range development program (Namibia)
SA	Stakeholder analysis
SDI	Spatial Development Initiative
SL	Sustainable livelihoods
SFM	Sustainable forest management
SWC	Soil and water conservation
SWCB	Soil and Water Conservation Branch (of Kenya Ministry of Agriculture, Livestock Development and Marketing)
TA	Transect area
TAA	Transect area approach
TFAP	Tropical forestry action plan
TLC	Transitional Local Council (South Africa)
TRC	Transitional Rural Council (South Africa)
UNCED	United Nations Conference on Environment and Development (1992)
UNCDF	United Nations Capital Development Fund
UNCHS	United Nations Centre for Human Settlements
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNSO	United Nations Sahelian Office
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
UST	University of Science and Technology (Ghana)
VDC	Village Development Committee (Nepal)
VIDCO	Village Development Committee (Zimbabwe)
WADCO	Ward Development Committee (Zimbabwe)
WCMC	World Conservation Monitoring Centre
WRRI	Water Resources Research Institute (Ghana)

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SYNOPSIS

Background and scope of the report

In September 1998, the Department for International Development (DFID) commissioned IIED to coordinate a study of local strategic planning as a contribution to the work of its Sustainable Livelihoods Theme Group. The study encompasses several conventional fields of development planning, explores innovative local planning approaches and draws together lessons from recent and current experience of rural planning in the developing world.

This overview provides an international perspective on rural planning. Such planning is expected to achieve an eclectic mixture of goals. The more pragmatic include effective delivery of public services such as schooling and health care, and the efficient provision of infrastructure for water supply and sanitation, access, communications and electricity. More complex goals include the sustainable use nad management of the natural resources that underpin rural livelihoods, and encouragement and support for local enterprises that can broaden the base of the economy, e.g. by provision of facilities and credit. Intangible goals include alleviation of poverty, equity and empowerment of local people through participation in the planning process itself. It is a tall order!

To deal with all of these aspects of rural planning in detail within a single volume would be an enormous task and is beyond the scope of this study and the expertise of the authors. Thus, the emphasis of this overview is on land resource planning and management of natural resources. We bring together lessons from past and current experience in rural planning from across the developing world. Examples of conventional and more innovative planning practices are taken from Africa, Asia and Latin America.

The report also draws from three case studies of rural planning experience in Ghana, South Africa and Zimbabwe - undertaken as part of this study at the request of DFID - as stand-alone studies. These reports have been free to take broader perspective of rural planning. Taken together the various reports provide a more balanced set of perspectives on the challenges of rural planning.

It is important to note that this overview does not describe or suggest much that is actually new in terms of rural planning. But it does provide numerous examples of approaches that appear to be working and, collectively, these do represent what can currently be judged as best practice. It also describes approaches that have not been effective in the past. Thus, the report covers the main themes and challenges facing rural planning and local development.

The purpose of the synopsis

This is a long document – deliberately so as the subject is complex and planning practice and experience varies considerably in different geographic regions – and it requires extensive illustration (through boxes and tables) to support and amplify the text. The reports contains much that has never been brought together before, drawing extensively from grey literature and building on the work of the authors and many others.

This synopsis is provided as a detailed summary to guide the reader to issues explored in depth in the main text. It only introduces key themes and issues and should not be seen as a substitute for the main chapters.

The report is a technical document. It is hoped that, together with the case study reports, it can provide a basis for a shorter policy-oriented document to carry forward (to policy-makers,

decision-makers and senior planners) the main messages, lessons of past experience and challenges for rural planning in the future.

Contents of the overview

Current practice in rural planning is examined; opportunities for improving strategic and participatory approaches are explored and the principles of these approaches are underlined. The report draws attention to the relationships between strategic planning and local economic development. The five chapters deal with:

- Lessons from experience (in regional planning)
- Conventional technical planning approaches
- Approaches to participation in planning
- A basis for collaboration
- The way forward: recommendations and conclusions

Country case studies by collaborating teams in Ghana, South Africa and Zimbabwe are presented as separate volumes.

Chapter One: Background and purpose

Different responsibilities are assumed at different levels of government. In recent years, there has been a trend towards shunting increasing responsibility for planning and management from central government agencies to local government but a measure of strategic planning, as well as operational activity, is needed at every level. In outline:

- At *community level*: management of their localities by groups responsible for particular services, e.g. water point or irrigation committee, school governors. Communities plan and implement activities from their own resources and may contribute to District plans.
- At *District level*: representation of the people; delivery of public services and infrastructure projects; management of a substantial District budget;, maybe raising local revenue; strategic planning for the District including infrastructure, land use and allocation/regulation of water and other natural resources.
  At *Provincial level*: coordination of District plans, financial audit and provision of specialist services not available within Districts, e.g. scientific, engineering and veterinary services.
  At *National level*: raising and distribution of revenue for public services; policy-making and strategic planning. In most countries, line ministries remain the main service providers, commonly through staff in provincial outstations.

Concepts

Concepts of the terms ‘rural’ and ‘rural planning’ vary in different countries and this leads to confusion between planners, policy-makers and implementers. This problem is illustrated by reference to a range of different perceptions of these terms in South Africa.

Rural planning is in a state of flux. From a development point of view, the objectives of planning have evolved over the years from a focus on increased production, through greater efficiency and effectiveness, to explicit concerns in recent years about equity issues and the reduction of poverty and vulnerability. The focus of rural planning has also broadened away from a narrow agricultural one, e.g. with planning concentrating on water resource allocation and comprehensive watershed management rather than irrigation and drainage. The management of natural resources in sustainable production systems is beginning to replace the

independent focus on arable cropping, livestock production or forestry, etc. Human capital development, infrastructure and social development are being woven into integrated rural development strategies.

In many situations it might prove difficult to gain local "buy-in" on issues of equity since these tend to represent a shift against those who are currently more powerful. In Ghana, the government has addressed this problem through the Local Government Act No.462, 1993, which gives legal authority to District Assemblies to promote development to ensure equity and the reduction of poverty and vulnerability (see Box 2.10). We examine the issue of power relations in Chapters 3 and 4

The move to decentralised rural and regional planning

Today's planners might learn much from the failures of *top-down*, central planning. Both within the Eastern bloc and elsewhere, e.g. the World Bank's *redistribution and growth* model of the 1970s, this relied on physical planning - that is spatial zoning of activities backed-up by regulation. Piecemeal support for disconnected infrastructure, commodity and conservation projects has been no more successful than central planning.

In the 1980s, various Integrated Rural Development Programmes (IRDPs) were initiated at district level: some narrowly focused on agricultural production, others with broad objectives, some associated with decentralised administration. Few of these programmes successfully embodied local participation; many created their own project management units, by-passing and thereby weakening local institutions. Hardly any IRDPs survived. Most collapsed when donor funding and expatriate staff were withdrawn.

Decentralisation is now seen as a key to rural development but the underlying principles are weakly understood and effective institutions still to be built. The three country case studies highlight a spectrum of quite different situations in terms of the trend to decentralisation. Ghana has developed an enviable national vision for development that is mirrored in policies at all levels and has introduced a strongly-focused model that provides genuine power and responsibilities for rural planning to District Assemblies (see Botchie 2000). In Zimbabwe, there is a mix of devolution to Rural District Councils and deconcentration within central government, but no coordinated strategy for rural development (PlanAfric 2000). South Africa has a much more centralised approach and is still grappling with the dilemma of the centre versus the provinces and with the lack of viable rural local government institutions that characterised the apartheid years (Khanya-mrc 2000).

Poverty and livelihoods

Tackling poverty, unequal distribution of resources and degradation of the environment in specific and unique places demands more than sensible supporting policies. It requires the support of the local people, broad access to natural and financial resources, and administrations that are actually able to do (and are doing) what they are supposed to be doing.

The sustainable livelihoods (SL) approach adopted by DFID provides a conceptual framework that links the natural, human and capital assets of a place with, on the one hand, the vulnerability and opportunity of various livelihoods and, on the other hand, institutions (governmental and non-governmental) and processes (like planning, legal, *etc*.) that have the potential to transform the situation, e.g. through investment. The framework is holistic, not sectoral. It begins with (poor) people but also keeps the supporting environment centre stage.

Now the framework has to be translated into working procedures both at the policy level and at the institutional level to enable local people to participate meaningfully in strategic

planning. A number of other approaches have also adopted a livelihoods approach. One example is the *regional rural development* concept developed in the 1980s by the German Agency GTZ and discussed in Chapter 3.

Equity is another key issue: how to maintain and, even, increase particular capital assets without detriment to any of the various groups of people who depend on them. As a first step, the various stakeholders have to be identified. They will include different interest groups within local communities, urban interests, private operators, government at central and decentralised level, and NGOs - some with direct and primary interests, others playing intermediary roles. Equity requires clarification of the interests and roles of the stakeholders and appropriate institutions in which the various stakeholders can meet on equal terms to negotiate common goals and agree on common action. These issues are addressed in Chapter Four.

Stakeholders

Another key issue is equity: how to maintain and, even, increase particular capital assets without detriment to any of the various groups of people who depend on them. As a first step, the various stakeholders have to be identified. They will include different interest groups within local communities, urban interests, private operators, government at central and decentralised level, and NGOs - some with direct and primary interests, others playing intermediary roles. Equity requires clarification of the interests and roles of the stakeholders and appropriate institutions in which the various stakeholders can meet on equal terms to negotiate common goals and agree on common action. These issues are addressed in Chapter Four.

Land tenure

Land tenure and rights of access to resources are very important factors in rural planning. In Zimbabwe, for example, the historic legacy of unequal land distribution, rights and planning continues to undermine efforts to plan and develop rural areas. Confidence to produce and to invest can only be based on reliable rights to use the land. These rights must be clear, well established, and protected by law. Good husbandry is promoted by security of use of the same patch of land over the long term: enforceable rights to invest in the resource and garner the eventual returns on the investment. At the same time, a market in land, leasing, or some other customary allocation of use must be flexible enough to accommodate population growth, and grant access to land to those willing and able to use it.

Those who do have access to resources require adequate security of tenure – this applies to the smallholder and mutlinational companies, to individuals and communities. Security means robust rights, adequate duration and legal certainty.

Assumptions of ownership by the state and its subsequent disbursement of leaseholds and freehold titles has disadvantaged poor and marginalised groups that may have had broader access to resources and more security under customary arrangements.

Rural-urban linkages

Town (concentration of demand) and country (the natural resource base) are inter dependant. Policy-makers and planners need to understand the nature and scale of rural-urban linkages: both *spatial links* (flows of people, goods, wastes, money and information) and *sectoral links* (rural activities in urban areas, e.g. urban agriculture) and the revival of manufacturing and services in rural areas.

Income diversification and migration are two kinds of rural-urban interaction that are, increasingly, contributing to livelihood strategies in low-income countries. Migrants returning from urban to rural areas may have acquired new skills. However, their ability to put them into practice and contribute to the development of the rural non-agricultural sector is linked to access to essential assets such as land, capital and labour, and also to social networks which, in many cases, are crucial in determining access to, and information about, markets.

The implications for planning for the urban-rural interface are explored. Access to both rural and urban opportunities increases the security of households and communities against the shocks common in many developing countries. However, economic planners mistakenly tend to treat society as an undifferentiated whole, diverting attention from the most vulnerable groups in both rural and urban areas. Access to land, capital and labour may be far more important than proximity to urban markets in determining the extent to which farmers are able to benefit from those markets

Accommodation of rural-urban linkages is difficult within planning structures that deal quite separately with town and country – this is brought out strongly in the case studies of South Africa (Khanya-mrc 2000) and Zimbabwe (PlanAfric 2000). Furthermore, urban planning and rural planning are completely different schools and there has been little communication between the two. Clearly the time has come to bridge the gap.

Chapter Two: Conventional, technical planning approaches

This chapter reviews the mainstream approaches to resource surveys, land evaluation, impact assessment and land use planning - their advantages and limitations. Potentially, they comprise an array of complementary techniques but, more often than not, have been undertaken in isolation.

Rural planners in developing countries - usually based in small rural towns - have tended to focus on the provision of social infrastructure (roads, schools, clinics, etc.). To date, planning for the rural areas (*sensu stricto*) lying beyond the towns has been mainly a top-down process, usually the domain of government departments concerned with rural development, agriculture and natural resources (e.g. fisheries, forestry, wildlife, water). The current trend towards decentralisation is being accompanied by efforts to deconcentrate and devolve planning functions and concerns are turning to the effectiveness of such efforts and the historical legacies that remain.

Up to now, plans have usually been made in offices, remote from the areas being planned and the people who would be affected. Commonly, procedures set out in planning manuals have been rigidly applied and their focus has been largely on the use of land and land resources. The planning process has relied, first, on the gathering of information about the natural resources and socio-economic conditions of the area under consideration, followed by analysis and interpretation, all as a professional exercise.

The sustainable livelihoods framework (Figure 1.1) offers a good way of ensuring a comprehensive and balanced approach to information needs. Its use in planning would help to demonstrate the need for good data linked to all the main capital assets areas (natural, human, financial, physical and social) and would, therefore include such matters as demographic information, local skills availability, rural-urban linkages, etc. Natural resources information is but one vital element amongst the five assets and it is necessary to make connections and interlinkages.

Natural resources surveys

Formal information about natural resources is gathered by topographic survey; surveys of geology, soil and land use; inventories of forests and biodiversity; and systematic recording of climatic and hydrological data. It is characteristic of poor countries that data about natural resources and their use are incomplete and unreliable, and much that was gathered (mainly by expatriates during the colonial period and subsequently through donor-funded projects) has now been lost because there has been little institutional ownership of such data within developing countries. The basic data, presented in technical reports and maps, are rarely in a form that can be used directly by decision-makers but interpretations in terms of development options and management practices have rarely been provided. So decisions have been taken, and are still being taken, in ignorance - even when useful data have been gathered.

A persistent, institutionalised shortcoming of development planning is that natural resources information has never really been part of the political process of decision-making. Often, large surveys have been carried out at the behest of donors, without establishing who would use the information, how it would be used, or the capacity of institutions to make use of it. Often they were carried out as a background to development that never happened. So the potential value of the information was usually understood only by the professionals. Senior decision-makers and politicians had no real appreciation of the information, and paid no attention to the survival of the data or the maintenance of the professional capacity to make use of it.

A key need in rural planning is for technical people who really understand natural resources data to be involved in the decision-making process (at whatever level it takes place - national to local) so they can explain the information, options regarding resource use and management and any risks. Another is for potential uses of natural resources information to be identified at the outset and for them to specify what they require (Box S.1)

A hierarchy of data is required for planning at different levels: generalised at national level, increasingly detailed for application at district, catchment (watershed) and field level. Strides have been made in computer-based information storage and management, though bedevilled by lack of practical approaches to realistic ownership, archiving and access.

The apparently insuperable problem of providing all the necessary detail at the catchment and field scale (there are not enough natural resource specialists to go around) may be solved by do-it-yourself survey kits developed by professionals for use in the local community, backed up by expert systems that enable local people to interpret their data for themselves.

Land evaluation

Basic land resources data such as soil depth, slope angle and mean annual rainfall do not answer the complex questions faced by policy-makers, planners and managers, such as 'What is the land good for?', 'What will the production be?', 'What management practices must be applied?'. To answer these questions, a range of basic data has to be interpreted and combined with other kinds of information, such as market information. Early impetus in land evaluation came from soil conservation issues and from land settlement and irrigation schemes which produced the two most widely used systems of land evaluation, both originating in the USA: Land Capability Classification and the United States Bureau of Reclamation system of Irrigability Assessment.

Natural resources data provided by specialists have proved daunting to land users and policy-makers. However, expert knowledge of land response to management can be used to interpret these data, providing information that is, at once, more accessible and more focused on the problem in hand. Physical land evaluation tries to explain and predict the potential of land for

one or more uses by systematic comparison of the requirements of land use with the qualities of the land. The end product is an index of potential performance in terms of *capability* to support broadly defined categories of use, *suitability* for some specified land use, or *productivity* (*e.g.* crop yield) of a specified land use. In this way, the range of feasible land use options may be identified. Where economic appraisal has

Box S.1: Checklist – specifications for natural resources surveys

1 What is the information going to be used for?
- Are the goals of the development programme and the specific uses of the natural resources data clearly defined?

2 Who will use the data?
- There may be several categories of users, each with different requirements. Have these users been involved in defining the goals and specifying the data needed, the scale and precision of survey and format of the data?
- Are these people able to interpret the data requested and check their quality?

3 When will the data be used?
- How soon are they needed?

4 Do relevant data already exist?
- Where are they held, are they accessible? Do they cover the whole area of interest? Are they up-to-date, reliable and at an appropriate scale - and who has checked this?

5 What useful information is held within the local community?
- What information is already used in land use decision-making?
- Are local methods of data collection, classification and analysis appropriate?
- Are the proposed professional staff experienced in techniques of participatory inquiry that can elicit locally-held information?
- On completion of the survey, the results should be explained to all interested parties, not least to local people, both for their information and for immediate correction of errors that are obvious with the benefit of local experience.

6 Who is best placed and best qualified to provide the data needed?
- Are there local institutions, NGOs, local consultants or national specialist organisations that can undertake or contribute to the work?
- If expatriate consultants are selected, can they provide training for in-country staff?
- Can they supply data of the quality needed in time and within budget?

7 Are the proposed methods of survey the most appropriate?
- What alternatives have been considered? Will the data be compatible with existing key data?

8 Are there adequate resources to complete the work to the standard needed and to implement any recommendations?

9 What support is there for the project at every relevant level of government and across the local community?

Source: Dalal-Clayton and Dent 1993

been demanded, this has been tacked on without much change in procedure, either from natural resources specialists or economists.

The established methods were geared to a frontier situation that nowadays scarcely exists. They have been slow to adapt to providing information either for policy options or sustainable management in situations where decisions already taken severely limit the room for manoeuvre, but there are promising new developments both for policy-support and planning for sustainable management at farm level.

Land use planning

Land use planning weighs land use opportunities against the problems involved, generates a range of land use options, and makes choices between these options. Not only does land use planning demand a broader range of professional expertise than is needed for land evaluation but the decisions made are much closer to the lives of land users and, in the final analysis, are political as much as technical. In this section, some of the techniques of land use planning are reviewed and examples of their application in wildlife, forestry, and agriculture are described. Techniques of land allocation were originally adopted from farm planning and small-scale engineering for settler farms. Now there is a range of computer software enabling planners to view the outcomes of applying different criteria and interactively changing the weightings given to these criteria to arrive at an acceptable outcome.

A fundamental question that has been overlooked in most plans is 'To whom must the plan be acceptable?' Planning is not a straightforward technical issue when there are many independent decision-makers and management units, and conflicts of interest within local communities and between government and local people. Not least of the difficulties has been the failure of professional planners and administrators to comprehend and respect the various goals of different stakeholders.

Plans handed down from above have a consistent record of failure:

- *Failure to address all the issues*: There are many instances of concentration on production at all costs. On the other hand, efforts at conservation typically deal in isolation with technical measures such as destocking of grazing lands, or construction of earthworks to retain soil and water. The social and economic imperatives that drive unsustainable use are not dealt with.

- *Failure of information*: Sometimes a lack of data, sometimes failure to make use of either detailed local knowledge or relevant technical knowledge.

- *Failure to integrate* efforts and goals: Typically we see competing projects and competing institutions with disparate goals.

- *Failure of institutions*: Failure to cope when situations are complex or when times are hard. Reluctance of governments and development agencies to address the problems of institutional weakness.

- *Failure to address the legitimate goals of all the stakeholders*, to involve all the stakeholders in planning the use of land, or to empower them to manage resources in common. Fiats imposed from above are resented, resisted, ignored and, ultimately, overturned.

Therefore, there has been a general failure of implementation of plans, at least in anything like the shape envisaged by the planners. Attempts to learn from these failures have not yet advanced beyond statements of principle.

The FAO *Guidelines for land use planning* (1993) outline a ten-step procedure that may be applied at any scale of planning, from global to the individual farm, but leaves the fine detail to the people on the ground. In principle, these steps can be taken either with a top-down or bottom-up approach but, in practice, few established institutions have been able to break away from their paternalistic tradition. The most recent expert response to the felt need to integrate physical, socio-economic and institutional aspects of land use, as well as the need for active participation of stakeholders in decision making, involves few changes in the guidelines (FAO/UNEP 1997) but it does emphasise two principles that may serve as a basis for more effective land use plans:

- First, successful implementation of a plan depends upon common ownership of the problems and the proposed solutions by the people who will be affected. This common ownership may come from consensus about the goals and the actions needed, or from a negotiated compromise between groups with different goals and different insights.

- If there is to be negotiation, there must be some institution or forum that commands general respect where the parties can negotiate - to agree goals, prioritise problems, contribute their knowledge, and allocate responsibilities for action.

Of course, the necessary readiness to negotiate a compromise may not be present, but no better alternative has been proposed.

Impact assessment

Over the past 30 years, several techniques have been developed for the environmental assessment of projects, programs and policies. They include environmental impact assessment (EIA), risk assessment, and social impact assessment. Increasingly, EIA is being seen as an important tool for involving different stakeholders in the development process and as a means of ensuring public accountability of development proposals.

EIA has been applied mainly to individual development projects. There is a growing recognition of the need to introduce environmental considerations at a much earlier stage in the decision-making process, at policy-level, through Strategic Environmental Assessment.

Decentralised district planning

Planning at some level between central government and local or village communities (which we are calling district level) has long been a feature of development planning but district authorities in poor countries have lacked the capacity to prepare and implement integrated rural development and monitor plans. Whilst donors have supported some projects in district plans, implementation of plans has been hampered by less-than-enthusiastic support from central government agencies and by shortages of finance and resources available to district authorities. In fighting for the meagre resources that are available results in farcical situations, e.g. rural planning carried out exclusively by town planners – highlighted in the South African case study (Khanya-mrc 2000) but has also been the case in Tanzania for a long time.

In many countries, district plans are sectorally-based, lack integration and still represent little more than a catalogue of major projects, initiatives and events that will take place (providing funding is available from central government or other sources) in the future. This is exemplified by the case of Nepal (see Appendix 9).

More recent decentralisation programs provide direct funding to district authorities to implement their plans, *e.g.* the new decentralised planning system in Ghana. Formidable problems of institutional capacity remain and a huge investment in training will be needed to equip district staff for their new roles in planning and management.

In sub-Saharan Africa, and particularly in the wildlife sector, Namibia has experimented with innovative approaches to decentralisation through processes of empowerment and participation, but there are constraints at all levels of the planning process related to 'discontinuities' between national frameworks and local realities (discussed in Appendix 3).

Planning responses to the challenge of sustainable development

Sustainable development – as a concept - is increasingly being placed at the centre of national development plans and sector policy-making, at least in rhetoric. *Agenda 21* (UNCED 1992) urged all nations to develop a national strategy for sustainable development (nssd) to implement its priorities and recommendations. The UN General Assembly Special Session review meeting in 1997 set a target date of 2002 for introducing such strategies. A variety of approaches is being pursued, some government-sponsored and often built on existing environmental strategies, some led by NGOs, others are multi-stakeholder initiatives. Importantly, there is a trend to devolve these approaches to district strategies and Local Agenda 21s - usually at the city level.

Despite these international targets, there is a lack of clarity on what an nssds actually is (there is no internally agreed definition, nor any official guidance on how to prepare an nssd). But there is a growing view that the focus of an nssd should be on improving the integration of social and environmental objectives into key economic development processes and should, therefore, be seen as a "strategic and participatory process of analysis, debate, capacity strengthening, planning and action towards sustainable development" (OECD-DAC 1999). This view also holds that an nssd should not be a completely new planning process to be conducted from the beginning. Rather, it is recognised that in an individual country there will be a range of recent and current strategic planning initiatives, e.g. various domestic approaches such as national development plans, sectoral policies and programmes; frameworks developed in response to commitments entered into at the Rio Earth Summit (UNCED) or as part of commitments to international treaties and conventions (such as national biodiversity action plans). These may be regarded in that country, individually or collectively, as the nssd. But the challenge is to develop principles for developing and implementing a strategy for sustainable development[1] and then to use these to identify what improvements need to be made to these existing initiatives – or developed between them such as umbrella frameworks, systems for participation and national sustainable development fora – so that they meet the (above) definition of an nssd and meet the principles.

Ideally, there needs to be a hierarchy of interlocking and mutually supportive strategic planning processes in support of sustainable development at national to local levels. As experience of working with such strategies at national level has been gained, increasing attention is now being given to developing sub-national and more local strategies. For example, in Pakistan the National Conservation Strategy has led to the development of more effective provincial strategies (e.g. in North West Frontier Province), Zimbabwe is focusing now on District Environmental Action Plans and many cities have developed local Agenda

[1] The OECD Development Assistance Committee is undertaking a two-year project (1999-2001), funded by a range of donors, to support stakeholder dialogues in a number of developing countries on experience of strategic planning processes. This is identifying lessons and best practice for strategies sustainable development. The project is developing principles and policy guidance on developing and implementing strategies for sustainable development which will be submitted to aid ministers for endorsement in April 2001 (see project website: www.nssd.net).

21s. More countries are developing broader visions or perspectives for development over longer time frames, e.g. a generation into the future. Ghana's National Development Policy Framework (GhanaVision 2020) represents a leading example of such an approach at the national level. At the more local level, in South Africa, under the Development Facilitation Act (DFA), Land Development Objectives (LDOs) are now being set which provide for negotiated five-year development plans for all local authorities and District Councils using visioning and priority setting processes. We discuss examples these in Chapter Two.

The aim of such strategic processes should be to provide an enabling environment, not a strait-jacket – particularly for district and local planning. In diverse and complex rural areas, creative and flexible participatory learning approaches will need to be tried and tested, with institutions adapting to local realities – not the reverse. In Chapter Five, we consider some options and, in Appendix 2, describe some approaches that have been developed in Kenya.

A number of initiatives have been launched to establish indicators of sustainable development but the availability and reliability of basic data by which to measure them in developing countries is likely to be a problem. This is one reason why there has been a tendency to continue to rely on easily-derived indicators such as GDP - which are rather meaningless in terms of sustainable development. In practice, broad, national-level indicators are usually irrelevant to most applications of rural planning.
Efforts are needed to seek cost-effective ways in which communities themselves might identify and agree locally-meaningful indicators and gather the data needed to monitor them. Such idicators for rural planning purposes are best developed on a case-by-case basis as part of the planning process itself.

Pros and cons of conventional approaches

Natural resources surveys and monitoring systems provide essential data for development planning but natural resource professionals, rather than users, drive the supply. The information provided rarely matches the experience of potential users and much is irrelevant to decisions actually being taken. It is characteristic of poor countries that the data base is incomplete, sometimes unreliable and is not being maintained.

Development planning has equal need of social and economic information – as the failure of so many development plans that have emphasised just one component (be it physical, economic or social) demonstrates. Integration of these three strands and the various techniques of physical, land use, accessibility and economic planning, is a big task. It cannot be achieved without better planning procedures and a revolution in the attitude and training of planners and decision-makers.

Command-and-control planning has failed for two reasons. The loads governments impose upon themselves in attempting to plan, implement and administer land use, infrastructure and the provision of public services soon exceed their administrative and logistical capabilities, outstripping their capacity to gather the necessary information and their ability to absorb and make use of it. At the same time, the supposed beneficiaries have little opportunity to articulate their needs, nor to contribute their own local knowledge. Failure of development planning has been even more a failure in working with people than a failure of natural resources or economic data. This realisation has brought about the current interest in participatory planning which is dealt with in Chapter Three.

Chapter Three: Approaches to participation in planning

Perceptions of participation

Participation is nothing less than the fabric of social life and a variety of means, formal or informal, has evolved to define and address collective needs, to resolve conflicts, to make plans and take the steps necessary to implement them. As a reaction to the failures of top-down planning, participation has been rediscovered by development agencies and the term 'participatory', like 'sustainability' is now part of their everyday language.

All the evidence points to the need to draw upon people's own ideas and knowledge, and enable them to make decisions. The dilemma for authorities is that they both need and fear people's participation in planning: they need it for effective implementation but they fear loss of control. So participation has usually been sought without any meaningful reforms of the power relations between government and local communities. As Table S1 illustrates, participation may be interpreted in a variety of ways from people acting out pre-determined role, to the stage where communities take initiatives of their own - which may or may not challenge existing distributions of wealth and power.

The dilemma is the more acute in the field of policy-making where participation can be seen as *horizontal*, to ensure that issues are dealt with across sectoral interest groups, ministries and communities in different parts of the country; or *vertical* where participation is required to deal with issues throughout the hierarchy of decision-making from national to local levels, or from leaders to marginalised groups.

Where governments are serious about winning a broad consensus on policy, a multi-stakeholder forum - the *future search conference* - is one of a number of methods that has been used to promote participation.

Table S.1: Types of participation in local-level development
Source: Adapted from Pretty (1997)

Type		Characteristics
1.	Manipulative participation	Participation is simply a pretence
2.	Passive participation	People participate by being told what has been decided or has already happened. Information shared belongs only to external professionals
3.	Participation by consultation	People participate by being consulted or by answering questions. No share in decision-making is conceded and professionals are under no obligation to take on board people's views
4.	Participation for material incentives	People participate in return for food, cash or other material incentives. Local people have no stake in prolonging practices when the incentives end
5.	Functional participation	Participation is seen by external agencies as a means to achieve project goals, especially reduced costs. People may participate by forming groups to meet predetermined project objectives
6.	Interactive participation	People participate in joint analysis, which leads to action plans and the formation or strengthening of local groups or institutions that determine how available resources are used. Learning methods are used to seek multiple viewpoints
7.	Self-mobilisation	People participate by taking initiatives independently of external institutions. They develop contacts with external institutions for resources and technical advice but retain control over how resources are used.

Participatory learning and action

A range of techniques of participatory learning and action (PLA) emerged during the 1980s and 1990s as an alternative to extractive techniques usually used by social scientists. They fall into four groups: group and team interaction, sampling, dialogue and visualisation. Some focus on problem diagnosis, *e.g.* RRA (rapid rural appraisal) which evolved into PRA (participatory rural appraisal); others are oriented toward community empowerment, *e.g.* PAR (participatory action research); some facilitate on-farm or user-led research, *e.g.* FPR (farmer participatory research); others are designed simply to get professionals in the field listening to resource users, *e.g.* SB (*Samuhik Brahman* - joint trek). Their common principles are: cumulative learning by all participants; seeking diversity; encouraging group learning; flexibility to be context-specific; experts facilitating not dominating; and that the learning process leads to debate about change and agreed action.

It can be difficult to quantify context-specific information derived from participatory analysis. Issues are discussed in groups and there is an emphasis on relative, rather than absolute, values. So despite the widespread uptake of participatory techniques, their findings are still greeted by the question 'but how do they compare with real data? Criteria of trustworthiness, authenticity, and rigour can be applied to demonstrate the soundness of participatory approaches (Guba and Lincoln 1989, Marshall 1990).

Participatory planning

Participatory planning is now promoted as an alternative to the top-down approach but it faces significant problems of undefined lines of authority and responsibility, reactionary institutional cultures, and a limited information base and technical capacity.

Participation appears to be most successful where:

- *There is an enabling environment* within which local institutions can make rules and exercise authority over resource use;
- *There is a platform for decision-making*, a legitimate institution where stakeholders can meet on equal terms to negotiate policies, plans and agree about action to be taken;
- *The value of the resources is high*, justifying local investments in their management. Where no significantly high-value resources are involved, the need for effective management and decision-making may still be high but the motivations are less strong. However, highly valued resources also tend to attract more - often divergent - interests, and tend to increase power disparities among stakeholders.

The accountability of local government to all potential beneficiaries is crucial and limited capacity is likely to be a key constraint. We deal with these issues in Chapter Four.

In this chapter and in the appendices, a range of examples of local-level resource planning is given. In the government field, the successful Communal Areas Management Program for Indigenous Resources (CAMPFIRE) in Zimbabwe is devolving power over wildlife and other resources to local people. Its success has been attributed to the tangible benefits from wildlife that now accrue to the local communities. Despite wide acclaim, CAMPFIRE has not been without problems - *e.g.* it has to operate within a confusing institutional framework which has undermined traditional structures. These difficulties underline the need to build on existing participatory structures, whenever possible.

As an example of an NGO initiative, the Aga Khan Rural Support Programme in India and Pakistan has used community-level analysis of problems to determine priorities and investment of both local and external resources.

Amongst donor agencies, the German GTZ developed the concept of Regional Rural Development (RRD) in the early 1980s. RRD is a specific project approach which attaches priority to the needs of *target groups* and aims to ensure the participation of disadvantaged groups in planning and decision-making. RRD does not prescribe procedures for participation, but promotes those which are practicable under local conditions. There is an emphasis on *participatory dialogue* so that decisions are mutually coordinated between development program sponsors and the beneficiaries.

To date, participatory approaches have been used with reasonable success at community level and to promote local-level development. There may be opportunities for enlarging or extending existing participatory planning initiatives or possibilities to replicate such initiatives in adjacent areas coupled with the establishment of means to provide coordination and strategic guidance. Such expansion would require the training of more facilitators as well as addressing institutional capacity. This issue is discussed in Chapter Four (sections 4.4.1.vi and 4.5.v). But practitioners are still generally grappling with the question of scaling-up participatory approaches for application at broader and higher levels of decision-making, and there is little significant and documented experience of the transfer of participatory approaches to hierarchical organisations and large-scale projects. Examples are given of approaches at the district level including rapid district planning in Indonesia and the DEAP process in Zimbabwe. Approaches to participatory planning at the catchment in both Kenya and Zimbabwe are included, and a similar approach in Tanzania is described in Appendix 4.

NGOs have been important catalysts in the development and application of participatory planning at both local and national level. For example, in 1992, the Mexican government delegated its Tropical Forest Action Plan to its strongest critics led by a consortium of NGOs; and other cases where NGOs have assisted local communities to identify their own priorities and State representatives participating in these discussions have suggested ways and means to carry out the plans. Pooling of community priorities at regional or national level enabled them to link with the development of policy. Other examples in Latin America (in Appendix 5) and Asia are described.

Of course, such linkage depends on willingness to empower local institutions, the building of a planning framework in which it can occur, and long-term commitment. The two largest examples, *Gestion de terroir* (GT), widely adopted in Sahelian West Africa and the Landcare movement in Australia run in parallel with established government institutions.

Gestion de terroir (Box S.2) involves the transfer of control over the management and use of natural resources in socially- defined areas (*terroirs*) from government to local communities. Programmes include support for crop, livestock, and forestry production. Over the course of the 1990s, the GT approach to local land use planning has been adopted by a myriad of government projects, donors and NGOs operating in the region.

Probably the largest community-based movement is Landcare in Australia, initiated in 1989 by the farmers' and conservation groups but which attracted government support and, most importantly, significant finance diverted from sectoral channels. Landcare groups are voluntary associations of rural people who work together, and in collaboration with long-established state agencies, to look after their own neighbourhoods. Their varied activities include:

- Development of a catchment or district plan, identifying major problems areas, and proposals for dealing with them;
- Active involvement in natural resource monitoring, often in conjunction with schools, state agencies and other professionals;

- Documenting local knowledge about land and its management;
- Study tours of their own and other regions;
- Joint research with universities, research bodies, and state agencies;
- Production of educational materials.

Landcare has had a significant social effect, and thousands of local groups are taking management of the local environment into their own hands. However, they haven't the capacity to tackle regional degradation issues and substantial work on the ground depends on external finance.

Limitations of participatory methods

The evidence is clear that development works best when all the stakeholders participate fully in the process. There are plenty of diverse local examples: demand-driven sanitation projects, micro-financing, user-managed irrigation systems. The challenge now is in scaling-up.

All of these examples of approaches to local, participatory planning in rural areas are still in their infancy. It remains to be seen how successful they will turn out to be, in the long-term, in addressing the weaknesses of the former top-down approaches.

Box S.2: *Gestion de terroir* in Sahelian West Africa

The driving principle of the GT approach is the devolution of decision-making powers over land resources from government services and projects to the local people. This principle stems from the recognition that governments are not well-equipped to manage land at local level, whereas local people often have both sound technical knowledge and a range of institutional structures capable of managing resources. In practice, there are many variants of the GT approach which can be differentiated by the relative attention paid to either the degree of genuine local participation, or the extent to which they address natural resource management or socio-economic issues:

- **Natural resource management approach**: focuses on the physical improvement of the natural resource base with emphasis on soil and water conservation and agroforestry, working through existing structures (modern and traditional) as well as with individuals.

- **Institution-building approach**: focuses on establishing and training a community-based structure to design and implement a land use plan.

- **Local development approach**: is a more recent adaptation and tries to address the weaknesses of the former approaches.

GT has not fully lived up to expectations. Problems include:

- Governments have not provided a policy framework;
- Projects have focused on natural resources and have ignored the complex social, economic, political and cultural factors that affect how households can effectively use resources;
- Many projects have adopted a top-down approach;
- The integrated approach of GT clashes with the usually sectoral way in which government is organised;
- Implementation of GT projects has been hampered by lack of channels for rural finance;
- Locally important institutional issues have not been addressed, *e.g.* land tenure, local access rules;
- GT is biased toward settled communities and does not allow for integrating the interests of nomadic groups in community-level planning and management of resources.

As the value of participation has gained increasing recognition, it has become common for planners to assume that the maximum participation of all of the people all of the time is necessary and a good thing. It is not. Complete participation may lead to complete inertia, due to the costs involved in conflict resolution, for meetings, time and energy for managing resources, and practical difficulties like transport and reaching a quorum. The costs of participation fall into four main areas: providing access to information, raising expectations, facilitation, and being actively involved (money and time taken out of already busy lives). Stakeholder analysis can identify the form of participation (whether at a local, district or higher level) that is desirable and feasible, and when particular stakeholders need to be involved.

Local participation in planning usually raises expectations, so there is a need to ensure a commitment to follow through with actions. Active participation also means that more time is needed to reach a decision. However, and perhaps more importantly, it forces shared decision-making, and thus leads to a redistribution of power. Often, issues of power matter more than active involvement in decision-making in reaching durable agreements.

There will always be development issues that are national in scope, where decisions have to be taken in the broader national interest, for example, development of a major catchment for hydro-electric power or the establishment of a national park. In such cases, trade-offs must be made between national and local interests. There are other instances where the initiative should rest with local communities. Centralised, top-down methods of planning and the participatory approaches described in this chapter are not alternatives, nor are they mutually exclusive. The approach to be adopted depends on purpose and context. Clearly, links need to be forged between the two approaches so that they are mutually supporting.

Chapter Four: A basis for collaboration

Rural planning has been very much a technocratic exercise. Participatory planning attempts to enlarge its scope by bringing in the perspectives of rural people but, in practice, participation has often been confined to community groups and project staff. This ignores the claims of other groups or antagonises them.

A working definition of the roles of different stakeholders may be drawn from the balance of the Rights, Responsibilities, Returns/Revenues and Relationships (the 4Rs). Power relations are always critical, and assessing stakeholders' roles using this definition provides an indirect way to assess them.

Different interest groups have different, often conflicting priorities. To reach a consensus with the minimum antagonism between, and maximum accommodation of, different interest groups is a daunting task which raises the issue of the capacity of institutions to manage new roles. The same issue is raised by the need to share responsibility for decision-making between different decision-making levels - central government, district and local. Institutional mechanisms are needed to ensure that local priorities are included in negotiations. This can upset established patterns of power and control within a society or group.

Methods are needed that allow people to collaborate and negotiate agreement over competing claims and priorities; and methods are needed to value the resources and differing ways of using them (to facilitate trade-off negotiations). These two issues are dealt with in detail and techniques of negotiation are discussed.

Constraints and opportunities for collaboration in rural planning

Competition and collaboration represent the extremes of active conflict management or negotiation strategies. Collaboration has several advantages:

- Collaborative strategies are likely to *improve the overall quality of decisions* by exploring new options with the potential for win-win settlements;
- Even if they do not achieve a settlement, collaborative strategies may still *improve the quality of the failure*, because they foster discussion between stakeholders, hence improving knowledge of each other's interests and perceptions;
- It allows a freer flow of information between stakeholders. Information flows are vital. Conflict frequently emerges because adequate information was not available to key stakeholders early in the planning process (or at all).

While nobody likes to be manipulated, it should not be assumed that all stakeholders wish to be fully in control. Some may be happy to be kept informed, or consulted as necessary. If partnership is seen to be desirable, this has to be consciously constructed in an informed manner.

Key issues that arise again and again are summarised in Table S.2. Some may be stumbling blocks but they can be addressed. The necessary support for stakeholders, especially marginalised groups, is one of the costs of participatory planning but it contributes to the sustainability of activities that arise from plans.

Table S.2: Partnerships with primary stakeholders - some key issues and ways to deal with them
Based on ODA 1995a

Issue for stakeholder	Support for stakeholder
Lack of political or institutional power	Support representative, decision-making institutions
Lack of appropriate information for decision-making	Ensure access to appropriate media. Training programs. Mutual learning, and sharing of available information. Targeted research
Less powerful than other primary stakeholders	Ensure access to planning of powerless groups such as women or ethnic minorities. Incorporate activities that directly benefit minorities (economically or socially) while not threatening more powerful stakeholders
Time and/or money costs of collaborating are high	Planning activities specifically designed to accommodate all stakeholders' resources
Legitimacy of one stakeholder group challenged by others	Case-by-case assessment of importance of full participation, regardless of any adverse impact this may have on participation of others
Non-participatory, hierarchical structure of the agency implementing/co-ordinating planning process discourages involvement	Agency needs to change its way of working. Training and consultancy report to adapt working practices and structures
A Secondary stakeholder, seeking to representing interest of Primary stakeholder, has management structure or value system incompatible with developing a working partnership with the primary stakeholder	Training support to NGO

Despite the obvious advantages of collaboration in the management of natural resources, the more powerful parties are usually unwilling. Three factors seem to be essential to achieving progress: space for dialogue; sufficient time for establishing good rapport and building confidence between stakeholders; and a focus on concrete matters that all parties are comfortable with. To provide a tangible basis for constructive dialogue, it has been found effective to start by discussing micro-projects and stakeholders' roles.

At the outset, there may be a need for a mechanism to build each others' trust and confidence. Various forums have been used to achieve this goal, but do not necessarily lead to good decision-making. The rules that govern them, particularly the status of any decisions reached, need to be thought about carefully in advance and described in a way that all parties understand. If these initiatives founder, disillusion sets in amongst the local community.

It is important to be able to identify ways in which participation is both desirable and feasible. For example, the initial gathering of information may require speed. Wide participation may not be useful at this stage. However, once potential problems are identified and planning moves to the stage of analysing, prioritising and generating alternative solutions, then wider participation may be invaluable.

Valuing resources: the characteristics of rural goods and services and how they influence planning and management strategies

Any decisions on the use of natural resources needs to be informed by valuation of their worth. But this is not easy. It can be difficult to distinguish high- and low-value goods. For example, woodfuel is of very high local value but of little value outside the local context (see section 4.2.4 and Box 4.10 for discussion of role of private operators in the woodfuel business in the Sahel). Pricing everything in money terms would make it easy to compare values but there is no agreement about how to put money-values on non-marketed produce; how to value social and cultural preferences and beliefs; how to equate use values with money values; and how to regulate market forces to adequately reflect the perspectives of the poor, marginalised and politically weak. Rural planning has to deal with several issues in which market values are at odds with social values, e.g. the very high value of drinking water supplies to all members of the community, including the poorest; and the long-term value of ensuring sustainable use of natural resources.

As a basis for valuing goods and services, Bass and Hearne (1997) suggest the concepts of subtractability and excludability:

> *Excludability* refers to the ability of an individual to deny the use of the resource to another individual. Thus, if a resource is excludable, then those who have not paid for it are excluded from consuming it;
>
> *Subtractability* refers to the amount that the consumption of a resource subtracts from its repeated consumption. So if a resource is subtractable, its consumption by one person reduces its availability to others.

Then four categories of resources may be defined as a basis for determining planning approaches and establishing the roles of various stakeholders:

- Highly excludable and subtractable goods, like timber, are often considered to be best controlled by market mechanisms and, can be thought of as *private goods*;
- Goods and services that are characterised by low excludability and low subtractability, such as watershed protection, do not provide much incentive for

individuals or groups to replenish them, and they are therefore commonly referred to as a pure *public goods* (and can be used by anybody);

- *Club goods,* whose benefits are excludable but partially non-rival (*e.g.* hunting). If these goods or services have significant externalities, this might justify tight control and also assistance by public bodies. However, not all members of a community benefit from club goods and services, and may resent public funds being used to support them. As a result of such sensitive situations, it is frequently necessary to make trade-offs between equity and efficiency in rural planning and management;
- *Common-pool goods, e.g.* groundwater in shallow aquifers and, also, freeboard above a water table (ownership of and access to such goods is usually restricted to a particular, discrete, local community).

However, in practice, the differences between these categories of resources are not so clear cut, and the attributes of goods and services may change according to different circumstances. It seems, therefore, more useful to see them as part of a continuum.

Several examples of valuation methods that link approaches from pertinent fields are presented.

When a natural resource has a high market value, this generates market opportunities and is an important factor in the success of resource management initiatives that involve local users. However, commercialisation of a resource also brings the risk that the most powerful - local elites or outsiders - will reap most of the benefits. High stakes also tend to attract outside speculators. This inevitably increases the external pressures on local stakeholders, and even governments, while reducing their ability to control the use of the resource. Where a resource has a high value (*e.g.* timber), reaching agreement to manage it collaboratively is also likely to be difficult. Highly-priced resources also influence national natural resource management strategies.

Collaborative management can also be very difficult to achieve when the commercial value of a resource is low, that is when it is so degraded that the returns-to-labour make it unappealing to embark on joint resource management activities. Nevertheless, there is also an important role for local enterprises in exploiting lower-value resources as well as in the recurrent operations of facility maintenance and service delivery.

There are many layers of stakeholders' values, interests and entitlements generated by the fact that they share a range of natural resources and use them in various ways to support their livelihoods. These different layers must be recognised and then integrated in rural planning. This is yet another challenge to the planner and development of effective methods is still in its infancy.

Institutional realities

In most poor countries, weak institutions and poor coordination between them compound the difficulties of building collaboration between stakeholders. Institutional shortcomings include poor public accountability; weak managerial and technical capacities; inappropriate performance incentives; competition between line agencies for funds from government and donors; and unsatisfactory donor strategies (*e.g.* funding sectoral projects to circumvent poor local coordination; and channelling funds to poorly-equipped institutions to meet expenditure schedules).

Promises and realities of decentralisation

Decentralisation is a pre-requisite if local planning is to be really effective. The problem is that decentralisation means different things to different people. Governments often see

decentralisation as *deconcentration* of the activities of line ministries to regional offices, whilst NGOs believe that it implies *devolution* of power. Nowadays, devolution in some form is being promoted as a cure-for-all-ills of rural development as a reaction to the failures of both centralised and deconcentration strategies. For example, in China, Russia and Vietnam, deconcentration provided no authority for decision-making to local bodies and inhibited mechanisms for competition so that production needed to be 100% subsidised.

Devolution promises:

- Participation, representation and empowerment of marginal groups;
- More equitable distribution of benefits and reduced poverty;
- More financial autonomy at the local level;
- Improved local accountability;
- Increased effectiveness of local government units in delivering goods and services.

In the past, decentralisation has rarely lived up to expectations, maybe because it involved deconcentration, rather than devolution, but also because it has not addressed the *invisible institutions* problem (individuals seeking financial gain from assets they control (but do not own), patronage, personal power struggles, negative attitudes to participation, *etc*.). More recent attempts to introduce devolution have shown promise, especially in socially-homogenous areas with few or poor natural resources. However, these initiatives have given priority to social matters and providing small-scale infrastructure for education and health rather than to the more complex tasks of management of natural resources.

While decentralisation is a prerequisite of effective local planning, it does not guarantee good local management. To be effective, decentralised systems must have:

- Enough power to exercise substantial influence over political affairs and over development activities;
- Financial resources sufficient to accomplish important tasks;
- Adequate technical and institutional capacity to accomplish those tasks;
- Reliable accountability mechanisms.

Better institutions to make rural planning and development work

Three important levels of management, and ways of linking them, are discussed: the resource/community level, the local government level and the central government.

Resource/Community level

Community involvement in management will be difficult to achieve without:

- Real power and rights (if not ownership rights, at least management rights) allowing local people to commercialise resources without needing to follow cumbersome and sometimes restrictive procedures;
- The necessary competence - both knowledge of the land and administrative capacity;
- Economic interest and adequate finance.

People's participation is not enough to induce sustainable management of natural resources. It needs to be accompanied by *adequate representation* in decision-making bodies and *empowerment* to ensure that local communities have bargaining power in the negotiations over local resources. Mechanisms to enhance these objectives are discussed, *e.g*. mandatory inclusion of members of NGOs and marginal groups on local councils, development of alliances.

Regulations and institutions to control the use of resources by small-scale entrepreneurs are often weak but there are examples where their activities are controlled and/or legalised.

Box S.3 sets out some criteria to assess the probable effectiveness of local institutions and organisations involved in local natural resource management.

Local government level

Local government units need autonomy to undertake development activities and modify local rules and institutions if they are to secure support from local people. They also need financial independence. In a transitional phase, resources can be provided from higher levels, so long as mechanisms are introduced to progressively enable self-financing. The United Nations Capital

Box S.3: Success criteria for community institutions managing local natural resources

The chances of success are greater when:

1. **The costs of any exclusion technology (*e.g.* fencing) are high**, but only if local stakeholders are paying themselves;

2. **The rules for access to the resources make sense** in terms of the local economy;

3. **Relationships between resources and user groups**

(i) (Location) - there is overlap between where users live and the location of common-pool resources,
(ii) (Demand) - the resource is vital to users,
(iii) (Knowledge) - users have knowledge of sustainable management practices;

4. **User groups**

(i) Groups are small - not more than 30-40 members,
(ii) Boundaries are clearly defined,
(iii) Local resource users are able to maintain their rights to the use and management of common resources in the face of competition from both outside and within the group,
(iv) There are good arrangements for discussing common problems,
(v) The mutual obligations of users affect their social reputation,
(vi) There are rules, and graduated sanctions to punish offenders,
(vii) There is consensus about who are the users and this is negotiated when the group is established;

5. **Most individuals affected by the rules can participate in modifying these rules;**

6. **Monitors**, who check and report on compliance to rules are themselves resource users or are accountable to the users;

7. **All parties have rapid access to low-cost conflict resolution mechanisms**;

8. **The rights of users** to devise their own institutions are not challenged by external governmental authorities.

9. **Governance and provision of services are organised in a nested hierarchy**, matched to the geographic scale of the resources to be managed - very local for management of village wells and pastures, large scale for catchment water management, larger still for integrated coastal area management.

Source: Hobley (1995)

Development Fund (UNCDF) has developed a pilot program on Local Development Funds (LDFs) to provide financial autonomy to local authorities.

The checks and balances needed to underpin consensus on the distribution of profits from local use of resources are often overlooked in development programmes. Mechanisms are required to ensure the public accountability of local institutions, *e.g.* improved citizen's access to information, formal redress procedures.

At present technical and administrative capacity at local and district level is universally weak - both technical capacity to do planning and the human and financial resources to initiate, implement and monitor plans. Training in technical processes is certainly needed but a greater task is to equip people to assume responsibility for their own future.

Capacity development might proceed step-by-step. For example:

1. *Agreement of objectives* of development initiatives between the stakeholders;
2. *Clarification/(re)negotiation of roles* between the main stakeholders;
3. *Definition of capacity needs by the stakeholders*, as opposed to capacity-building objectives being decided mainly by donors and/or national governments;
4. Assess what can be achieved using the existing capacities;
5. Based on the above, assess *where weaknesses lie* and what types of local partnerships might overcome them. Encompass *both technical and institutional capacities* and address the key 'hidden institutional' problems.

Central government

Government policies for natural resources have a poor record, but much may be learnt from existing local initiatives. The state should learn to let go of powers and responsibilities to viable local management groups, even if they do not comply with formal requirements, but complete handing-over to local communities is also no panacea, especially when the resources are under pressure from outside the local community.

In addition to facilitating local initiatives, central government has other important roles. Box S.4 lists some of these roles in the case of forestry. If government ministers and agencies can be persuaded of the importance of these roles and the credit attached to them, they may be more willing to cede some of their direct executive role.

Box S.4: Possible roles of central government in local forestry management

Assistance and guidance because it can more effectively monitor the external effects of forest use. Main areas concerned include:

- Perceiving environmental change
- Convincing local groups that there are remedies to environmental stress
- Disseminating information on environmentally sound techniques, and sharing information both between the state and local groups and between groups

Provision of economic incentives for conservation-oriented practices, especially where communities struggle to meet their basic needs and/or are at the mercy of powerful outside interests

Clarification of group territorial rights and provision of a legal framework which enables user groups and their rights and benefits to be officially recognised

Protection against broad-scale external pressures (*e.g.* pollution) and/or other economic sectors which central government is better able to respond to

Provision of formal rules for conflict-resolution whenever locally-derived rules are insufficient, especially in the case of conflicts between different communities and/or with broader-based stakeholders

Financial assistance to complement the mobilisation of local resources

Provision of incentives and a framework to **link different decision-making levels**

Source: Baland and Platteau (1996)

Chapter Five: The Way forward: conclusions and recommendations

In this concluding chapter, we summarise the lessons from half a century of professional natural resources surveys and development planning that are relevant today. These conclusions and recommendations are backed-up in the main report by examples of good practice which can be built upon. We are quite specific and confident in the case of natural resources information and the principles of land use planning; inevitably, there is less experience on which to draw with innovative planning approaches that have emerged only in the last decade.

Key Points

- The overview report and the three country case studies all highlight the paramount need for rural planning to operate under a truly domestically-driven development vision at national and also sub-national (where appropriate) levels - not tied to party, ethnic or religious groups - and coordinated strategies for working toward the vision. Amongst the country case studies, Ghana has the benefit of having such a vision in place (Ghana Vision 2020) but this is not yet the case in Zimbabwe where participation operates in a vacuum in the absence of a coordinated rural development strategy. In South Africa, political accommodation is so recent that effective institutions of bcal government have yet to be built.

- The sustainable livelihoods (SL) concept offers a powerful focus for development planning. It links the natural, human and capital assets of a particular place with, on the

one hand, the vulnerability and opportunities of different livelihoods and, on the other hand, potentially transforming institutions (governmental and non-governmental) and processes (legal, planning, etc.). This contrasts with previous piecemeal support for services, infrastructure and commodity projects. It remains to translate SL into practical guidelines for effective decision-making and action on the ground. The real value of the SL as a planning concept is that it brings together a small number of key factors. Its value will be lost if it is made over-complicated.

- Two underlying causes of the general *failure of top-down planning* in poor and emerging countries have been the absence of any local stake or input to the planning process; and the preference of donors to by-pass ineffective local administrations by setting up financially and administratively autonomous project organisations, which have further weakened local capacity to plan and to deliver development. In reaction to these failures, *decentralisation* and *participation* are now the watchwords.

- *Planning is not a politically neutral, technical activity*. It is now increasingly recognised that successful implementation of development plans depends upon common ownership of the problems and the proposed solutions by the people who will be affected. This common ownership may arise from consensus about the goals and the necessary actions, or from a negotiated compromise between groups with different goals and insights.

- If there is to be negotiation of a sustainable future, there must be some forum that commands general respect and legitimacy where all stakeholders can negotiate and contribute to plans. Appropriate *platforms for decision-making* are needed at each level of planning (local, district and national) and the stakeholders must be equipped to participate.

Natural resources surveys

- The information provided doesn't fit into the decision-makers' economic concepts and can't be used directly to assess risk. It is asking a lot of policy-makers, planners and land users to bridge the gap between a soil map, biodiversity inventory or table of climatic data to an assessment of the various development options available and forecasts of their effects. Where interpretations of basic data have been provided, they have been taken off-the-peg, not tailored to the decision-makers' requirements.

  Recommendations

  Natural resources agencies must establish who their customers are. Then there must be dialogue with them to establish the precise information needed.

  Blunderbuss surveys should not be continued. If the immediate use of data is not known, don't collect them.

  Simulation models can provide production and input data for economic models, and forecasts in terms of probability. Existing survey data are rarely adequate for simulation models but expert knowledge can be used to devise 'transfer functions' that relate existing data to the parameters required.

- There is a gap between the scale at which information is needed and the scale at which it can be provided quickly. Survey coverage and recording networks are incomplete at any level of detail and there is no strategy for completion, no continuity of survey effort and

no continuity of staff. As a result, methods are not compatible, expertise is not built up, and institutional memory is short.

Recommendation

Greater investment in land resource information would be beneficial but, at the same time, we need procedures for survey and for maintenance of the data base that can be implemented by imperfect and modestly-funded institutions.

- Data are of variable quality and detail. This limits the use that can be made of the better data. For example, soil profile data gathered by land systems surveys are often cursory (*e.g.* 'reddish brown earth') so little interpretation is possible. Other data are generated by remote sensing without adequate (or any) field checks.

  Recommendation

  Surveyors must develop and stick to rigorous quality control. Users should be able to ascertain the date and accuracy of data from the files. GIS managers must ascertain the compatibility of different data sets.

- It is difficult to disentangle primary, factual data from interpretations.

  Recommendation

  Make explicit the distinction between 'What the land?' and 'What is it good for?'. Data banks should store these different kinds of data in separate files, e.g. 'physical' files for climatic data, soil data etc.; 'use' files for the results of experimentation and practice, e.g. crop yields, water yields; and 'interpretation' files for judgements, e.g. land suitability.

- There is a critical shortage of competent land resources specialists able to provide a service to policy-makers, planners and land users, both in specialist institutions and in-house. The lack of a career structure in land use planning is a major constraint. The secondment of staff from established institutions is universally unsatisfactory. While information gaps can be plugged by overseas-funded and managed survey programmes, these do not maintain the data base for iterative use or provide new interpretations at a later date.

  Recommendation

  An attractive career structure is necessary to attract and retain able people. Technical training in natural resources survey and land use planning is urgently needed for professional staff in developing countries but it will be more realistic in the physical, social and economic environment of the home country or a regional centre: training in rich countries invariably emphasises hi-tech and laboratory techniques that are inappropriate where state-of-the-art technology cannot be afforded.

- Indigenous, local knowledge of the land has been ignored by technical specialists and policy-makers alike. Following Robert Chambers' *Farmer First* ideas, a tidal wave of people-oriented approaches has swept the field to the extent that hard-won, significant

physical data are ignored, even dismissed, in favour of 'participation' and 'bottom-up' planning. But no amount of participation or political will can make it rain.

Recommendation

Links should be forged between top-down and bottom-up planning. Professional training should encompass BOTH the techniques of participatory enquiry and those of the natural sciences, so that information gleaned from both approaches can be combined.

- Natural resources information is incomprehensible: confounded by jargon and fogged by the sheer mass of data.

  Recommendation

  The comprehension barrier is raised as soon as we snap the links with the logic based on common sense and everyday experience. Apart from using plain words and few, it is necessary to communicate knowledge of the land by analogy with common experience, even if this takes some time and trouble.

  A lot of jargon and complexity arose from the needs of manual systems of storage and retrieval of information through maps and abstract hierarchical classifications. This need has been swept away by computer-based information technology, although the new Nirvana has gatekeepers of its own.

- 'We have been pouring information into the sand!'

  Recommendation

  Specialists must carry their information to the point of decision. Synthesis and generalisation from factual detail cannot be accomplished by generalist planners and policy-makers, only by a master of the information, otherwise much is lost or corrupted along the way.

Principles of land use planning

Strategic rural planning has now moved on beyond farm planning writ large. It has to integrate elements that have been the domain of quite separate professions – not just soil and water resource conservation, irrigation and drainage, but water resource allocation and total catchment management; development of sustainable production systems and their supporting infrastructure; and the development of the human capital of rural areas.

Our recommendations are set out in seven principles:

1. Planning should not be undertaken exclusively by professionals remote from the area concerned. To be successful, a plan needs to be developed in partnership by all of those with a legitimate interest, particularly residents of the area and those whose livelihoods depend on its resources. Identify these people first, and established a mechanism for them to participate in the planning process.

2. Acknowledge the existence of conflicting interests in developing, implementing and benefiting from land use plans and develop processes to deal with this. The needs and goals of all the interest groups should be clarified in the light of the aims of the plan.

3. Address social issues, especially land tenure and access to resources, as well as physical or environmental issues.

4. To the extent possible, try to reach consensus, taking particular care to include marginalised groups, *e.g.* women and minorities.

5. Consensus-building and meaningful negotiation require equal access to information about the issues, problems and development options. Build on:

   - Indigenous systems of local knowledge, land use and planning, taking care to retain their
     diversity and flexibility;
   - The experience and expertise of other sectors and NGOs.

6. Build and support local institutions that can manage common property resources and devolve authority to them.

7. Common property (or unpriced) resources such as land, water, pastures, forest and wildlife have important economic values and are not infinitely substitutable. There needs to be an accounting system to assess depreciation of these natural resources and a mechanism to ensure their sustainable management, otherwise they are likely to be exploited to the point where the system is destroyed.

Strategic rural planning seeks to achieve deliberate voluntary change of land use and management. This can only occur where there is knowledge, the capacity to change and the motivation to change:

Knowledge

Information about natural resources is essential at all levels of decision-making so that emerging problems can be recognised. Good information is also needed about the social and economic consequences of change in land use and management, and of not changing. There is no single way to inform all stakeholders, and a range of approaches will need to be tried, modified and repeated.

Capacity to change

Lack of time, people, management skills, appropriate institutional structures (tenure, laws or decision-making systems), equipment and money are all constraints. Financial and managerial resources are needed for activities that do not give a quick return and, often, benefit urban people more than those in rural areas, *e.g.* safeguarding water resources.

Money and managerial skills are scarce in poor rural areas. It is hard for the poor to invest in costly interventions, but not all improvements are expensive and cheaper interventions may be more cost-effective in the long-term.

Motivation to change

Education, information and persuasion will be effective only if the change interests and benefits the people for whom change is deemed desirable, and where such change is socially acceptable.

Practical, profitable affordable solutions to land use problems are needed that can be incorporated easily into existing management systems. Such attractive technical solutions

may be readily accepted although some may be environmentally damaging (*e.g.* pesticides); unattractive ones are not likely to be accepted (*e.g.* many mechanical soil conservation practices). In many instances, attractive solutions are not available.

Institutional support

The State does not make a good manager of natural resources. All the evidence points to the need for active involvement of local people in managing the resources they depend upon, and in planning their own development. But they need institutional support from various levels of government:

- Platforms for decision-making at local and district level where stakeholders can meet on equal terms to negotiate development goals and the allocation of resources;
- Responsive, effective services provided at district level;
- In big countries, coordination across districts and provision of specialist services at provincial level;
- Strategic direction and redistribution of resources at national level.

At the local level, there are rarely any institutions with a mandate for development planning and, consequently, little or no capacity or experience. However, there are many examples of good management of resources such as irrigation water, drainage, pastures, forest and wildlife by local communities and it should be possible to build on these existing management structures. Where institutions have to be built from scratch, critical elements will be:

- Management of the local area by the local community, focusing on what people can do for themselves - not just bidding for handouts;
- Committees formed to deal with particular services, *e.g.* water point committee, school governing body;
- Local structures developing local plans that contribute, in turn, to a more comprehensive district plan.

At the district level, the key functions are:

- Delivery of local services (schools, clinics, technical advice, etc..);
- Strategic planning of infastructure and services. Allocation of rights to water, common grazing, timber, wildlife and other resources, according to national legislation – and monitoring and policing of this use; and coordination of local development plans.

Nearly all experience worldwide shows that devolution of service delivery to the district level improves effectiveness and responsiveness to local needs. However, this requires devolution of commensurate powers and resources to the districts, accountable financial autonomy and a big investment in professional capacity at the district level. This last point applies equally to professional capacity for development planning. At the moment, districts do not have this capacity and cannot build it unless their staff are accountable at the district level, not to a higher level.

At provincial level. In some countries, the switch of responsibilities to districts has much reduced the role of the province. Sometimes this has created a support gap. Certainly in big or very diverse countries, there are several continuing functions for the province;

- Capacity building for districts, because there are able staff at the province level;
- Technical support where there is not enough demand or supply for a full professional complement at district level, *e.g.* for an irrigation engineer;

- Audit of local government with sanctions against poor performance;
- Coordination of development plans across districts, and development of strategic opportunities at province level, *e.g.* for tourism, water/power resources.

At national level, the push toward decentralisation is often seen as a threat to the power of central government and the budgets of line ministries. In an important sense, this is true but it is still in the long-term interest of government staff and politicians to improve service delivery - they will get the credit for this. Decentralisation is not a loss of role for the centre but a change of role, for example:

- An increased demand for higher-level, specialist services which will be provided by line ministries, possibly at the province level;
- Increased information flow, replacing control by signature (or many signatures) by control through monitoring and by ensuring financial and legal discipline;
- Strengthened policy-making, taking a more strategic approach to development, seeking points where state initiative and support can make the most impact.

Conclusions

Local strategic planning requires information about the condition and trends of natural resources, social and economic conditions. Methods to gather, synthesise and interpret this information are well established. Methods and mechanisms to enable the participation of stakeholders also exist. It should be obvious that there is a also a requirement for skilled and dedicated people to use these methods; for a planning framework within which they can be brought together; and for financial resources sufficient to do the job at the local level. At district level, the key level for both service delivery and local strategic planning, professional and financial resources are not sufficient for the task, partly because we are dealing with poor countries and, partly, because – in most cases - the district level has not been entrusted with responsibility for strategic planning or the raising of money (e.g. through taxation). Nevertheless, we conclude that it is at the district level that the most immediate needs and priorities of both rural and urban communities can best be met.

Implications for donors

The implication for donors is clear. Assistance in rural planning in a particular country will require a structured response which should first involve an assessment of current rural planning arrangements (planning framework, institutional roles and responsibilities, skills-base, etc.) and an assessment of needs. The lead in such an assessment should be taken by nationals as part of the raising of awareness of the issues and possible responses. The issues raised by this study indicate clearly that donor assistance is likely to require considerable investment in training, building capacity and skills, and providing incentives which will encourage bureaucracies to change - this will need a long-term commitment. Without this, continued investment in or support for projects which arise from flawed planning processes will not, except by luck, lead to improvements in livelihoods.

A key issue for donors is to identify the possible ***entry points*** to assist planning processes and for capacity-building. Possible initial activities should be developed at a local level from the consultative *needs assessment* or *scoping* activity which provides all primary stakeholders with the opportunity to express their aspirations and concerns. These activities should be the first stage of any planning process. A common sense approach to this suggests that initial activities should be those which have a reasonable chance of success. Success breeds self-confidence, and increased self-confidence in turn assists people to tackle more difficult issues.

In this way a *process* which supports building local capacity is also initiated. The planning process does more than merely produce a plan, it also builds people's skills and ability to produce a plan.

The assessment of existing capacity should be used as a foundation to build increased planning capacity. Initial activities should be selected that stretch, but not by so much that it breaks down, existing planning capacity.

It is also useful to remember that the classic development assistance or NGO 'project' may not be the only possible *entry point*. Local, community-based initiatives may also be identified during a needs assessment or scoping study. These may provide an *entry point* to a wider planning process.

There is always a pressure to provide firm guidelines and procedures around which to structure planning approaches. We do not believe that blueprint approaches are useful – they tend to lead to routine or mechanical adherence to procedures, leaving little room to respond to the realities of situations on-the-ground or to think creatively and innovate.

Nevertheless, current thinking on ways of engaging in the development and implementation of national strategies for sustainable development (as discussed in section 2.6) offers a framework for planning which is equally valid at more local levels – one which is centred on participatory processes of analysis, debate, capacity-strengthening, planning and action. Following this type of thinking, Tanzib Chowdhury of the World Bank (pers.comm.) suggests that it might be possible to build upon the new partnership approach adopted by the World Bank's initiative on City Development Strategies and promote District Development Strategies (see Box S.5).

In practice, this is not an entirely new idea – indeed, the case studies for Ghana, South Africa and Zimbabwe all illustrate clear aspirations to move towards a such a dynamic rural planning system: the new decentralised planning system in Ghana, the Integrated Development Plans of South Africa and the Rural Master Plans in Zimbabwe all aspire to be effective tools for coordination, management and gathering community inputs. District Development Strategies could act as a vehicle to strengthen such emerging planning systems which currently are faltering because of institutional problems and lack of technical capacity and guidance within planning departments. Whilst there is considerable rhetoric in promoting participatory, integrated and decentralised planning systems, practice has not lived up to expectations. Sectoral planning systems continue to work against efforts to promote an integrated approach. Donors continue to respond to rural development needs with individual projects or sector loans which fail to address the multi-sectoral and multi-dimensional problems faced by rural areas (including rural-urban interactions). The lack of an enabling framework (political, administrative and fiscal decentralisation) and the lack of an empowering framework for community participation are major constraints to decentralised planning. Development plans are largely descriptive and factual rather than analytical and do not explore the inter-relationships between different sectors, issues and actors. These issues should be collectively analysed, prioritised and addressed to stimulate or sustain economic growth and to improve the quality of rural life. The concept of a District Development Strategy aims to address these particular weaknesses in current planning systems.

Box S.5: From City to District Development Strategies

The World Bank has launched a new "partnership approach" to city assistance - the City Development Strategy (CDS). Recent trends in urban affairs (decentralisation, democratisation, emphasis on participation in governance), the limited impact of individual urban projects and sectoral loans, and the growing recognition that cities are increasingly contributing to national economies are all critical factors which have led to emergence of the CDS concept. The CDS aims to analyse the key urban growth issues (economic, environmental, poverty, governance, etc.) seen from the perspective of the city stakeholders, to consult and advise on priorities, and to suggest priority assistance and a future work programme. The CDS would not necessarily be equally comprehensive for every city as the impetus for the strategy exercise can arise from various priorities perceived by the stakeholders. The key elements of the CDS include: extensive participatory activities with large numbers of actors; in-depth examination of the composition of the city economy; development of a coordinated framework for donor assistance. There has been widespread interest expressed by cities and countries to undertake CDSs. They are being piloted in Vietnam, Philippines, Thailand, China, Indonesia, Bangladesh, Sri Lanka, Colombia, Uganda, and South Africa.

A similar pattern can be traced in rural areas which are subject to the same forces of decentralisation and democratisation, yet district authorities don't have the capacity to plan effectively and engage communities in the process. Projects and departments work on a sectoral basis. Usually, there is a very limited understanding of how the local rural economy works and its relationship with the urban economy.

A similar model to CDS could be developed in rural areas. Put simply , a District Development Strategy (DDS) would be a framework for doing business at the local level in a more integrated, coordinated, participatory way which pays particular attention to promoting the local economy or sustainable livelihoods.

The emerging planning systems in Ghana, South Africa and Zimbabwe are all trying to move in this direction. Some donor assistance is also being targeted to promote and support this process (e.g. in South Africa, GTZ is supporting an Integrated Planning Support package). But there are considerable gaps and obstacles, as this overview of international experience clearly demonstrates. A DDS would be concerned with defining this approach more sharply, concentrating efforts in a few localities to develop good practice, and targeting assistance in a significantly more coordinated way".

The DDS would seek broad coalitions of local stakeholders and development partners, both local and international, to work together to develop a strategy for a particular rural district that reflects a common understanding of the district's socio-economic structure, constraints and prospects (an analytical assessment) and a shared 'vision' of goals, priorities and requirements (a strategic plan of action). The DDS would be both a process and a product which together identify ways of moving towards sustainable development. The process would be defined by the district but might be expected to involve the following stages:

- ***Preparatory phase***: A quick assessment of the readiness of the district to engage in the process, and the key concerns of district officials and other key local stakeholders;
- ***Analytical phase***: An in-depth analysis of the structure and trends in the local economy, the various obstacles – institutional, financial, environmental and social – which may impede progress. The information base should be compiled from existing knowledge and data with a particular emphasis on inter-relationships among issues and actors. A number of options would be developed according to the analysis;
- ***Consensus-building phase:*** Setting priorities, building consensus, making decisions and identifying sources of assistance. This would include determining how local and international partners can help the district achieve its goals.

The process of developing and implementing the strategy should be directed and owned by the district. Donors should support fascilitation of the process and perhaps provide some technical inputs if requested. A DDS would be expected to define development priorities for the district but could go further and identify potential sources of assistance to realise strategic components. This process could help to coordinate donor assistance in a more effective and targeted manner.

Uncertainties

The key uncertainties are:

- Are bureaucrats willing to do things differently ? - to think and behave in new, open, participatory ways that provide for dialogue and consensus-building to agree what is needed and how to get there. There is a need to be identify those motivations that will encourage bureaucrats to work differently;

- Are institutions willing to work in support of each other to achieve cross-sectoral integration and synchronisation?. There is a need to identify and support, in each situation, the constructive institutional relationships that exist; and ways must be identified to face up to the initial severe capacity constraints and to build such capacity through action in order to overcome the constraints; and perhaps most critically;

- Is there political will to give effect to the necessary changes and introduce planning frameworks that support rather than inhibit such approaches ? Such political will needs to be harnessed to achieve realistic objectives and a practical process of change; and finally;

- What is the appropriate role for government ? This needs to be clarified, particularly in relation to private enterprise – the latter represents an important resource (often virtually the only resource in many countries, albeit it at a low level) to drive effective development.

Appendices

The following appendices provide details of experience in rural planning in particular countries and regions:

1. Kilifi Water and Sanitation Project (KIWASAP), Kenya
2. Recent land use planning approaches in Kenya: some examples
3. Rural planning in Namibia: national constraints, local experimentation: State-led initiatives and some rural realities
4. The HIMA programne in Tanzania
5. Rural planning in Latin America
6. Rural planning in Mali

GHANA CASE STUDY: KEY POINTS

Upon independence, Ghana embarked upon an ambitious programme of highly centralised development planning. All development activities in the rural areas were undertaken by sectoral agencies of central government; they were uncoordinated (the Department of Town and Country Planning has been placed under 15 different ministries!); and no capacity for planning and implementation was built up at local level or district level. This programme was unsuccessful.

A new strategic vision (Ghana Vision 2020) was developed over four years beginning in 1990 through unprecedented collaboration between many institutions in both public and private sectors, coordinated by the National Development Planning Committee. This aims to shift the economy over a 25 year period from dominance by agriculture and the public sector to a middle-income country driven by the private sector in which industry and services will produce the bulk of wealth and employment. The key elements of the strategy are: participation; decentralisation; integration of sectoral activities; and a long-term vision with a strong environmental focus

Within this vision, District Assemblies are supposed to produce their own development plans and subject them to public scrutiny. District plans are then to be harmonised at regional level with national priorities and the sectoral plans in line ministries. Planning at the district level should be participatory but the few plans to emerge so far show no evidence of this, or of forward vision, or the national vision. Nor has a range of alternatives been put forward. Planning at the district level still labours under formidable difficulties:

- Politicking within District Assemblies, especially the stand-off between the elected members and the presidentially-appointed Chief Executives;
- Lack of professional capacity. The staff of line ministry district offices have been nominally transferred to the District Assemblies but their allegiance remains with their ministries;
- Sectoral agencies continue with their own programs, by-passing the District Assemblies contrary to statutory provisions.

District Assemblies have been granted substantial funds by central government to implement their programmes but they have been unable or unwilling to match this finance by local levies.

At the local level within the districts, Unit Committees have no institutional capacity to contribute to the development progress and only weak linkages with their own constituencies.

Recommendations

1. The institutional and technical capacities of District Assemblies, District Planning Committees and Unit Committees should be strengthened so that they can play their part in the planning process. Training is needed for members of the District Assemblies and Unit Committees.

2. District Chief Executives should be appointed in some way that makes them responsible and responsive to the local communities and concerns.

3. Market-oriented skills training and micro-credit should be provided for local people.

SOUTH AFRICA CASE STUDY: KEY POINTS

Beginning in 1994, local government is being created anew. It is expected to:

- Deliver essential services.
- Develop negotiated integrated development plans with a 25 year vision and setting 5-year land development objectives (LDOs).

But local government is hamstrung by:

- Lack of acceptance by its constituency.
- Lack of money to pay for services and activities. There is no tax base in rural areas and authorities in urban areas are unwilling or unable to collect dues.
- Lack of experience in managing their own affairs and lack of planning expertise.

LDOs are driven by town planners who have no concept of sustainable livelihoods and land use planning.

As of now:

- Effective planning is sectoral and top down (e.g. transport plans, water services plans, environmental management plans). Powerful sectoral planning at national and provincial level jeopardises any local integrated planning initiatives.
- Spatial planning has no departmental home.
- Participatory planning in enshrined in the Development Facilitation Act of 1993 and the LDO process, but scarcely happens. Partnership approaches are weak.
- The community is a myth. It is composed of diverse groups and planning does not take enough account of this.
- Links between local/provincial/national levels of government are weak.

Recommendations

- Planning around people needs locally-accountable forms, clarification of the role of local government and community-based planning, and investment in capacity at the local level. Local authorities do not have the capacity to do their job at present.

- Institutional processes at national and provincial level should be changed to concentrate on a strategic and supporting role while devolving and deconcentrating functions to local government where possible.

- The environment and natural resources should be put at the heart of planning. Planners need to understand the role that natural resources play in people's lives.

- Trade-offs are needed between short-term and long-term goals. There is huge pressure for the provision of infrastructure but care is needed to ensure that it is sustainable and supportable, e.g. in terms of availability of resources such as water, and ability to pay.

ZIMBABWE CASE STUDY: KEY POINTS

Until the 1970s, all development efforts were focused on the white settler areas which occupy the best land. Most of the people live in the peripheral Communal Areas (formerly African Reserves) which are marginal farmland, overcrowded and degraded.

Top-down rural planning initiatives in African Reserves in the 1970s, achieved very little. Independence in 1980 brought in a bottom-up planning policy to redress the colonial bias; but the 1990s have seen a dramatic cut-back in public spending under the economic structural adjustment program (ESAP). Lacking public resources, the rural planning initiative has become discredited.

A. Strategic issues:

- ESAP has swung policy from development to macro-economic stability and from equity to economic growth. Development policy is heavily influenced by donors, reflecting international development fashion, rather than Zimbabwe's particular needs.

- There is no coordinated rural development strategy.

- There are some 30 government-led rural development projects (RDPs) attempting to improve infrastructure and services, and a plethora of RDPs run by NGOs operating at the sub-district level with donor support, each with its own agenda and procedures.

- Key problems of rural areas include: access to land, vulnerability to drought, unemployment and inflation have not been addressed satisfactorily.

Recommendations:

1. Rural development strategy

1.1 Develop a truly national vision for sustained improvement of livelihoods and an integrated set of strategies to realise this vision.

1.2 District strategies within the vision are needed to accommodate differences in natural resources and society within the country.

1.3 These strategies should be multi-sectoral, enabling all agencies within rural development to pull together.

2. Rural policy institute

2.1. A platform for policy development, maybe a rural policy institute, commanding the support of all stakeholders needs to address, urgently:

- Access to land;
- Rural-urban linkages;
- Sustainable livelihoods, especially reconciliation of survival in the short term with environmental sustainability in the long term;
- Basic data on who is doing what, where, with what costs and benefits and impacts.

3. *Common approach to structural issues*

3.1 All agencies working in rural development should recognise the importance of addressing the structural issues governing rural livelihoods, such as land reform, poverty and inequality, support national efforts to resolve these, and integrate proposed reforms into their own strategies.

B. Institutional issues

- Government is highly centralised and hierarchical.

- Planning is sectoral with many jealous and uncoordinated agencies (each dependent upon different consortia of donors) responsible for physical planning, land use planning, water catchment planning, national parks, forestry, etc.

- There is halting movement toward decentralization with some responsibilities for development being allotted to the 57 Rural District Councils, but these have neither the financial resources nor professional capacity to deliver.

- The rhetoric of participatory planning may exist in all development programs but it remains only rhetoric.

Recommendations:

4.1 The government must give a clear lead: demonstrating that decentralisation means devolution of functions, not just deconcentration of responsibilities within ministries, establishing a timetable, and allocating resources commensurate with responsibilities to RDCs.

4.2 Decentralisation must be accompanied by capacity-building at all levels, both for RDCs and at community level to plan and manage development projects. This means professional capacity, democratic capacity and legitimacy of institutions.

4.3 Donor agencies should come together and agree a common set of requirements for support of district-level activities (with minimal additional special records).

4.4 The existing Capacity Building Coordinating Committee includes all relevant government departments and ministries except AGRITEX (which is responsible for land use planning under the Ministry of Agriculture) and is the national committee best linked to rural local authorities. AGRITEX should be included and the committee should take on the task of national-level integration of rural planning.

4.5 The government must build its own capacity for development planning rather than rely on donor technical support.

4.6 Explore the feasibility of Rural Planning Forums to bring together all stakeholders to identify issues and problems, and seek ways forward.

CHAPTER ONE

LESSONS FROM EXPERIENCE

1.1 Background and scope of the overview

In September 1998, the Department for International Development (DFID) commissioned IIED to coordinate a study of local strategic planning as a contribution to the work of its Sustainable Livelihoods Theme Group. The study aims to increase knowledge of issues that encompass several conventional fields of development planning and, specifically to explore innovative local planning approaches.

This overview provides an international perspective on rural planning. Such planning is expected to achieve an eclectic mixture of goals. The more pragmatic include effective delivery of public services such as schooling and health care, and the efficient provision of infrastructure for water supply and sanitation, access, communications and electricity. More complex goals include the sustainable use and management of the natural resources that underpin rural livelihoods, and encouragement and support for local enterprises that can broaden the base of the economy, e.g. by provision of facilities and credit. Intangible goals include alleviation of poverty, equity and empowerment of local people through participation in the planning process itself. It is a tall order!

To deal with all of these aspects of rural planning in detail within a single volume would be an enormous task and is beyond the scope of this study and the expertise of the authors. Thus, the emphasis of this overview is on land resource planning and management of natural resources. We bring together lessons from past and current experience of rural planning in the developing world.

Local planning in rural areas has tended to focus on the provision of social infrastructure - for many reasons, e.g. it brings more immediate tangible results to people and is less complex, and it tends to secure political support. However, the more complex problems of managing natural resources have usually not been properly addressed in the context of livelihood strategies. By focusing on natural resource issues, this report seeks to address this context.

The overview is the result of a desk study which reviews literature on rural planning from around the world, some from books, journals and other academic materials, but much from grey sources. The authors and other contributors have drawn extensively from their own experiences.

The report also draws from three case studies of rural planning experience in Ghana, South Africa and Zimbabwe - undertaken by collaborating teams as part of this study at the request of DFID - as stand-alone studies (Botchie 2000, Khanya-mrc 2000, PlanAfric 2000). These case studies have been free to take broader perspective of rural planning. Taken together, the various reports provide a balanced set of perspectives on the challenges of rural planning.

It is important to note that this overview does not describe or suggest much that is actually new in terms of rural planning. But it does provide numerous examples of approaches that appear to be working and, collectively, these do represent what can currently be judged as best practice. It also describes approaches that have not been effective in the past. Thus, the report covers key themes and challenges facing rural planning and local development.

Current practice in rural planning is examined; opportunities for improving strategic and participatory approaches are explored; and principles of these approaches underlined. The

report draws attention to the relationships between strategic planning and local economic development. The five chapters deal with:

- Background and lessons from experience
- Conventional technical planning
- Approaches to participation in planning
- A basis for collaboration
- The way forward

The three country case study reports are presented as separate volumes.

1.2 Rural planning – perspectives, concepts, terminology and the objectives and roles of government

Different responsibilities are assumed at different levels of government. In recent years, there has been a trend towards shunting increasing responsibility for planning and management from central government agencies to local government; but a measure of strategic planning, as well as operational activity, is needed at every level. In outline:

- At *community level*: management of their localities by groups responsible for particular services, e.g. water point or irrigation committee, school governors. Communities plan and implement activities from their own resources and may contribute to district plans.

- At *district level*: representation of the people; delivery of public services and infrastructure projects; management of a substantial district budget;, maybe raising local revenue; strategic planning for the district including infrastructure, land use and allocation/regulation of water and other natural resources.

- At *provincial level*: coordination of district plans, financial audit and provision of specialist services not available within districts, e.g. scientific, engineering and veterinary services.

- At *national level*: raising and distribution of revenue for public services; policy-making and strategic planning. In most countries, line ministries remain the main service providers, commonly through staff in provincial outstations.

Rural planning may be usefully seen as comprising three crucial elements (PlanAfric 2000):

- The *content* – the strategies and policies that underlie what rural planning seeks to achieve;
- The *institutional framework* within which rural planning operates, especially the agencies and actors involved and how they interact;
- The *approach* – often seen in terms of the polarities of a top-down, blueprint approach or a bottom-up approach.

In most developing countries, there has been no review of these aspects of the subject in an integrated way. The case study reports go some way to meeting this need.

Concepts of rural planning vary in different countries and this leads to confusion between planners, policy-makers and implementers. This is well illustrated in South Africa where, until 1995, 'rural' was defined as all households not living in formally-declared towns and thus, under apartheid, many areas defined as rural were, in reality, urban areas without services. In the era after apartheid, 'rural' is now defined as "the sparsely populated areas in

which people farm or depend on natural resources, including villages and small towns that are dispersed through these areas". However, many households fall into both urban and rural categories as they derive their incomes from a range of sources, including migrant labour to towns (Khanya-mrc 1999). Service providers in South Africa's Free State provide a range of different definitions of 'rural' (Box 1.1) which contribute to the confusion and the lack of a single approach to rural planning in this State.

Box 1.1: Definitions of 'rural' given by service providers in South Africa

- The commercial farming area outside urban municipalities, independent of the size of the latter;
- Areas where people still live in villages in traditional systems, e.g. Thaba 'Nchu and QwaQwa;
- All areas outside of municipal boundaries (therefore mostly including farmland);
- Small towns and their hinterlands where the economic base is mostly agriculture-related;
- Places where people grow what they eat, e.g. commonages and back yards;
- Areas not having an agricultural context but close enough to services or isolated from large cities;
- The whole Free State.

Source (Khanya-mrc 2000)

Planning is about preparing for the future. It has to do with setting goals and designing the way to achieve those goals. Everyone needs to plan: individual householders, villages, government authorities (at all levels), entrepreneurs and investors in the private sector, etc. Rural planning is concerned with planning for development, land use, the allocation and management of resources, including in the rural-urban interface. In some instances, rural planning equates with regional planning (see next section); in others it does not.

In Ghana, planning seeks to coordinate across different sectors, identify important inter-relationships and develop collaborative frameworks. Most developing countries have sought to use rural planning as a development tool and, more recently, as a poverty alleviation mechanism. The emphasis now being given to sustainable livelihoods is directly linked to this new current within planning. Indeed, in South Africa, planning is required to include a 'social equity' component, given the inequities of the past.

It is frequently now argued that the emphasis of planning should be on the process of planning rather than the production of a document (the plan) (e.g. Klein and Mabin 1998). Such a process approach can include goals such as the acquisition of knowledge and perspectives as well as skills (capacity-building) on the part of those involved – and this may influence the course of development as much as any plan-product (Khanya-mrc 1999).

Planning if often seen as an activity of the state apparatus to coordinate, rationalise and/or (re)organise human activity and the distribution of resources (Simon 1990). But this definition *per se* tells us nothing of the motives for such activities – they could be genuinely concerned with promoting development, or at least in part self-serving in terms of legitimising existing power relations and state structures.

Rural planning is in a state of flux. From a development point of view, the objectives of planning have evolved over the years from a focus on increased production, through greater efficiency and effectiveness, to explicit concerns in recent years about equity issues and the reduction of poverty and vulnerability. The focus of rural planning has also broadened away from a narrow agricultural one, e.g. with planning concentrating on water resource allocation and comprehensive watershed management rather than irrigation and drainage. The management of natural resources in sustainable production systems is beginning to replace the

independent focus on arable cropping, livestock production or forestry, etc. Human capital development, infrastructure and social development are being woven into integrated rural development strategies.

It has been suggested (Peter Roberts, pers.comm.) that it might prove most difficult to gain local "buy-in" on issues of equity since these tend to represent a shift against those who are currently more powerful. In Ghana, the government has addressed this problem through the Local Government Act No.462, 1993. It doesn't directly threaten the powerful but gives legal authority to District Assemblies to promote development of their districts to ensure equity and the reduction of poverty and vulnerability (see Box 2.10). We examine the issue of power relations in sections 3.5.4 and 4.2.4.

1.2 Experience of regional planning

Since the 1970s, there have been many initiatives in decentralised rural and regional planning in developing countries. The reasons behind them have been various but, in most cases, include: concern at the flight of people from rural areas to cities; desire to reduce regional inequality by some redistribution of resources and by responding to local needs; to secure rural livelihoods by more effective delivery of services like education, health care and agricultural extension; and concern about the degradation of natural resources. These reasons for decentralisation still hold today.

In seeking a way forward for strategic planning at the local level, there are useful lessons to be learnt from the experience of early experiments in regional planning - regional being taken to mean a sub-national division of land accommodating physical or social differences (Simon and Rakodi 1990). Such regions are usually defined by governments as a basis for local administration and planning, e.g. provinces and districts.

In the immediate post-independence period, the norm for development planning was the 5-year plan, and a regional dimension was incorporated through designating growth centres in each demarcated region, coupled with packages of incentives to attract investment. Most of the focus was on industrial expansion. Part of the impetus came from the *redistribution with growth* model promoted in particular by the World Bank and ILO during the early and mid-1970s. The objective of reducing social inequality was to be met by investment in appropriate sectors as the economy grew; but economies didn't grow and the master-plan mentality of developing country bureaucracies emphasised physical planning - zoning of development backed up by regulation (Chenery *et al.* 1974, Dewar *et al.* 1986).

Other planning approaches have taken urban centres as their starting point. In the *urban functions in rural development* approach, the strategy for promoting rural development is to develop a network of small, medium-sized and larger centres each providing centrally-located and hierarchically-organised services, facilities and infrastructure (Rondinelli and Ruddle 1978). Rural development would be stimulated by filling in the supposedly missing functions through selective investment in rural towns. Translating this model into practice has been problematic for three main reasons:

- All 'urban functions' are assumed to benefit the whole surrounding region and all rural households (issues of access, control and economic status are not considered);
- The methods for selecting key towns have not been clear (they have focused only on the attributes of the towns themselves with no regard for the rural potential);
- The model is based on generalisations which do not take account of the various roles of urban centres, which are determined by the rural and regional context.

Strategic approaches that have taken rural areas as their starting point include the Intensive Development Zones. These were promoted, for example, in Zambia in the 1970s with the aim of concentrating resources in a limited number of areas with potential, in the hope that self-sustaining growth would be achieved and the surrounding areas would benefit through multiplier effects. The equivalent in Latin America during this period was Development Foci (*polos de desarrollo*) which attempted to overcome the problems of simple colonization (delimiting large tracts of usually marginal land and creating subdividisions to be bought or claimed by interested people). Several plans were made and implemented under the scheme, but through top-down approaches and with short-term views which frustrated the achievement of the higher development goals while the tracts were occupied and environmental degradation problems ensued (see Appendix 5). The Spatial Development Initiative programme in South Africa (Box 1.2) represents a recent return to such an area-based focus.

Box 1.2: Spatial Development Initiatives, South Africa

"The Spatial Development Initiatives (SDI) programme is a short-term investment strategy that aims to unlock inherent economic potential in specific spatial locations in South Africa. It uses public resources to leverage private sector investment. SDIs are a strategy for boosting investment and kick-starting development in regions of Southern Africa with a high potential for economic growth. The SDI programme consists of ten local SDIs and four IDZs at varying stages of delivery. To date, the current portfolio of SDIs has identified 518 investment opportunities valued at R115,4 billion with the capacity to generate more than 118 000 new jobs. Simply put, the initiatives aim to create jobs and opportunities for real Black economic empowerment by encouraging economic growth. They are the practical implementation of the government's economic strategy as set out in its Growth, Employment and Redistribution (GEAR) policy."

Source: Khanya-mrc (2000)

Such approaches gave way in the 1980s to *Integrated Rural Development Programs* (IRDPs) at district levels - an approach which gained widespread currency (Warren 1988). Throughout the developing countries, IRDPs grew to be highly dependent on donor assistance and, in particular, came to rely on organisational and procedural autonomy to achieve their objectives. The attraction of by-passing ineffective local administrations is obvious, but this very action hindered the development of local institutional capacity to prepare and implement development programmes. Another example comes from Tanzania where administrative decentralisation in the 1970s was accompanied by the preparation of Regional Integrated Development Plans (Box 1.3). Similarly, in Zimbabwe, plans were prepared in the late 1970s by central government teams for five *Intensive Rural Development Areas*.

Box 1.3: Regional planning in Tanzania

In the 1960s, local administration in Tanzania was provided by poorly-funded and ineffective District Councils. In 1972, a new hierarchical administrative system was instituted with districts amalgamated into 20 regions, each with a political administrator and a Regional Development Committee comprising representatives and officials and responsible for regional policy formulation. 40% of the national development budget was allocated to the regions. Districts were subordinate, but District Development Councils and their Planning Committees were supposed to formulate and implement plans. Regional Integrated Development Plans (RIDEPs) were prepared for each region. Half of these received donor support for implementation but, by 1988, donors had withdrawn their support from all but three (Iringa, Arusha and Kigoma) due to lack of progress. Kleemeier (1988) notes that none was implemented successfully through the decentralised government structure because of the lack of autonomy at the regional level and scarcity of managerial resources. Nor were the projects able to engender local participation. Local willingness to contribute declined as the government demonstrated its inability to support such projects with staff and money.

The RIDEPs were intended to be strategy documents but they tended to be one-off planning exercises. Many were merely shopping lists of projects and they neglected spatial issues. As a result, zonal physical plans, to be prepared by the Unit of Regional Planning in the Ministry of Lands, Housing and Urban Development, were introduced in 1974. They were to cover five zones, each comprising 2-3 regions, and were intended to provide long-term guidance for integrated economic and physical development. However, they had no legal status, did not involve local bodies and, therefore, conflicted with existing proposals; and lacked any administrative framework or resources for implementation.

The establishment of the Rufiji Basin Development Authority in 1975 introduced *river basin planning* in an attempt integrate the development of water and land resources in individual catchment areas. Four basins have received some attention but these have been ineffective initiatives, unable to provide real coordination, and have followed the now discredited top-down model of planning.

All of these initiatives have been technocratic, 'top-down' exercises and, initially, centrally-directed. There was a gradual shift away from the national 'blueprint' plan toward provincial or district planning and administration, but this was hamstrung by a chronic lack of capacity at district level and building this capacity is a long process. None of the early attempts at decentralisation successfully incorporated meaningful participation of the supposed beneficiaries in the planning process. In nearly every case, turf wars have developed between centrally-focused sectoral agencies (e.g. Department of Agriculture and Department of Transport) and decentralised district authorities, and coordination between the rival agencies has always proved to be difficult (see, e.g. Sazanami and Newels 1990 for Pacific countries, and Rakodi 1990 for central Africa).

A further underlying conceptual problem with much regional development planning is the assumption that it is the absence of *central places* (or markets) that constrains development. There is increasing recognition that other factors are also important in shaping development such as ecological capacity, land tenure, crop types and control over crops and access to markets (all of which are shaped by rural-urban interactions within the specific regional context).

Based on an analysis of past experience with regional planning, Simon and Rakodi (1990) identify some of the components needed in strong local planning strategies:

- Clearly-focused aims, objectives and target areas;
- Substantial grassroots participation and control over decision-making, as distinct from mere consultation by planners;
- Availability of appropriate resources, training and powers;

- Orientation towards planning as a process rather than towards the plan as a product;
- On-going monitoring and evaluation of qualitative as well as quantitative dimensions, and in terms of appropriate criteria;
- Integration between sectors and ministries to enhance the effectiveness of state activities;
- Focus on sustainability as well as increased prosperity;
- Replicability without loss of local appropriateness and accountability.

Many of these criteria have been reiterated by subsequent analysts (e.g. Dalal-Clayton and Dent 1993, Bass *et al.* 1995) and we return to them in subsequent chapters.

1.3 A move to decentralised rural and regional planning

There is now renewed interest in decentralisation. Donors have seen this as a way of widening the shortcomings of the old Integrated Rural Development programmes/projects (IRDPs) - in particular their by-passing and, thus, weakening of local institutions (Box 1.4).

Box 1.4: Integrated rural development programs

'The 1970s also saw moves to provide more focus for rural development efforts through *integrated rural development projects/programs* (IRDPs). The concept of the IRDP was to address rural development priorities and needs through a set of mutually-supportive components, e.g. a combination of agronomic packages with credit, development of infrastructure like roads and water supply, commonly with baseline natural resources survey, sometimes even clarification of land tenure. Many of the ideas now captured within the philosophy of *sustainable development* were embodied within the concept of the IRDP.

Approaches to IRDPs varied as a result of different local conditions and donor philosophies. Many were planned and implemented through an autonomous project body, although initially they may have intended to work with and through local institutions, and many encountered problems of donor dependency.

Without doubt, some IRDPs have had some success in building institutional capacity to undertake planning. For example, under the Serenje, Mpika and Chinsali Districts IRDP in Zambia, '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 little more than 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. Whilst IRDP staff responsible for each component may have executed their responsibilities professionally and effectively, management of these diverse activities has proved difficult. IRDP staff have rarely functioned as an integrated team, working on each component collectively so as to bring together their combined skills and engage in an interdisciplinary approach to solve problems and achieve objectives.

In several cases known to us, withdrawal of external funding has led to cessation of activity. No perceptible impact remains in terms of land use patterns or practices. The projects have sunk without a leaving a ripple.'

Source: Dalal-Clayton and Dent 1993

As Goldman (1998) points out:

> 'Decentralisation appeared to offer a locus for integrated rural development, an institution to deal with it (local government), and the potential for downsizing central government and promoting "good governance." '

Ribot (1999) suggests the concept of Integral Local Development to improve the outcome and sustainability of integrated rural development initiatives. This concept is discussed in section 4.5.2.

The three country case studies highlight a spectrum of quite different situations in terms of the trend to decentralisation. Ghana has developed an enviable national vision for development (the National Development Policy Framework – Ghana Vision 2020) that is mirrored in policies at all levels and has introduced a strongly-focused model that provides genuine power and responsibilities for rural planning to District Assemblies (see Box 2.10 and Botchie 2000). In Zimbabwe, there is a mix of devolution to Rural District Councils and deconcentration within central government, but no coordinated strategy for rural development (PlanAfric 2000). South Africa has a much more centralised approach and is still grappling with the dilemma of the centre versus the provinces and with the lack of viable rural local government institutions that characterised the apartheid years (Khanya-mrc 2000).

1.4 Focus on poverty and rural livelihoods

Despite the shifts to decentralised planning, policy still focuses on treating symptoms of poverty rather than addressing the underlying causes. The keys to effective regional development policy lie in greater understanding of the underlying causes, addressing inequalities and environmental degradation, and meeting basic needs. This means empowering local people to manage the resources on which they depend and plan their own development, appropriate decision-making structures and sensible supporting policies. Policy frameworks under which this might be achieved include the *regional rural development* concept developed in the 1980s by the German Agency GTZ, which is discussed in detail in Chapter 3, and the more recent *livelihoods* focus adopted by UK DFID in its 1997 White Paper on International Development.

1.4.1 Sustainable livelihoods

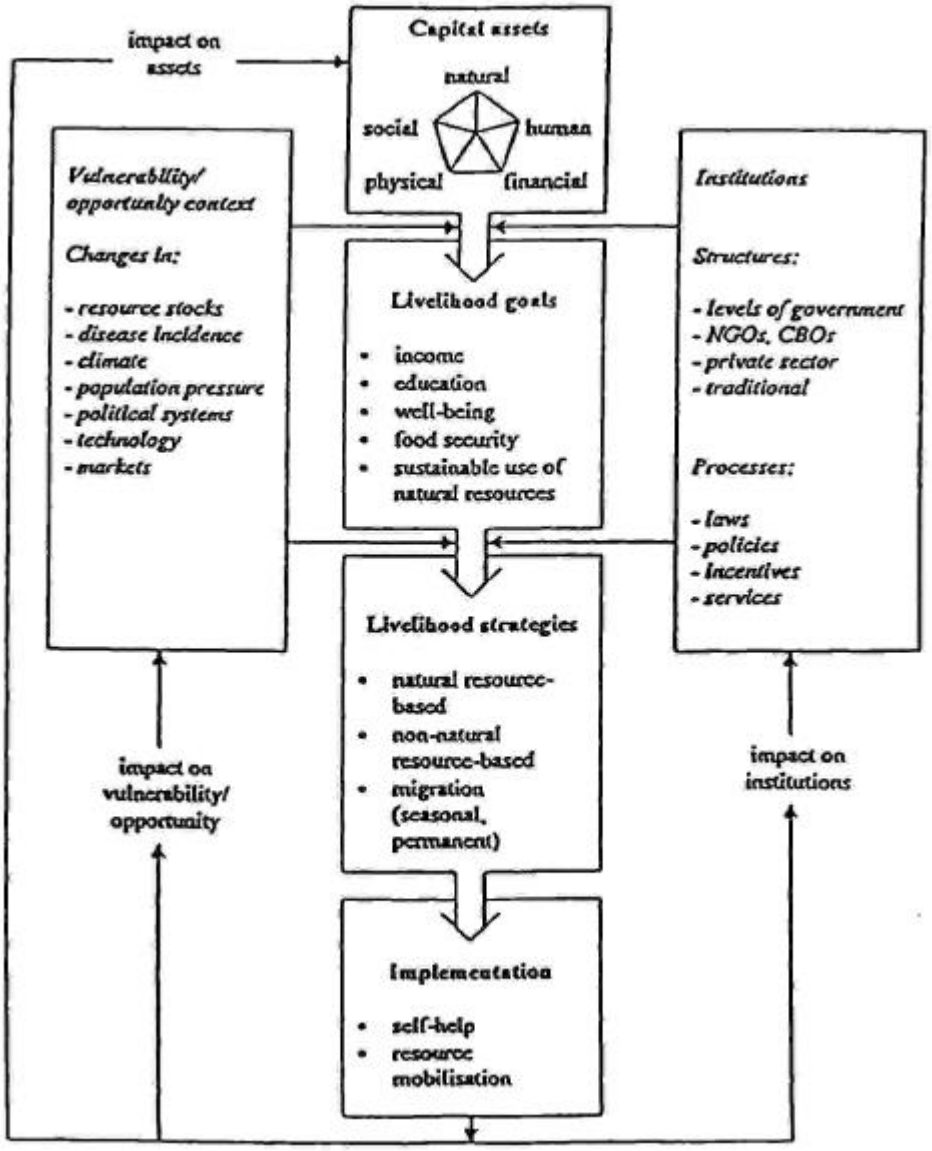
DFID's Sustainable Livelihoods (SL) group has adopted the following definition:

> *'A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.'*
> (Carney 1998)

The Sustainable Livelihoods Framework (Figure 1.1) groups particular components of rural livelihood: their capital assets (Box 1.5), their vulnerability/opportunity context, and the institutional structures and processes that may transform livelihoods.

Figure 1.1: Sustainable livelihoods: framework

As adapted from Carney 1998 by Dalal-Clayton and Dent (1999)



Box 1.5: Capital assets and the sustainable livelihoods framework

At the heart of the framework are the capital assets of rural communities:

Natural capital - the natural resource stocks from which useful resource flows useful for livelihoods are derived (e.g. land, water, wildlife, biodiversity, environmental resources);

Social capital - the social resources (networks, membership of groups, relationships of trust, access to wider institutions of society) upon which people draw;

Human capital - the skills, knowledge and health important to the ability to pursue different livelihood strategies;

Physical capital - the infrastructure (transport, shelter, water, energy and communications) and the production equipment which enable people to pursue their livelihoods;

Financial capital - moneys (whether savings, supplies of credit or regular remittances or pensions which provide them with different livelihood options.

These assets are presented schematically as a pentagon (see Figure 1.1), equivalent to a five-axis graph (uncalibrated) on which access by different social groups (or even households) to different types of assets can be subjectively plotted. Access has wide interpretation - anything from individual ownership of private goods to customary use rights for groups. The aim is to promote holistic (rather than sectoral) thinking about the ways in which assets, individually or more often in combination, support sustainable livelihoods. Analysis should reveal much information about the asset status of particular groups and how this is changing over time, e.g. what changes have occurred over time in the shape and size of the pentagon plot, reflecting changes (improvement or deterioration) in the situation of people?; is there consistency across all axes?; what changes might occur in the next decade or so (as population density and the state of resources change)?; and what are the causes of changes and do they vary between different wealth or social groups?

Source: Carney 1998

This clustering shows the complexity of the various rural livelihoods and how this complexity may be managed. It also helps to identify opportunities for both external interventions and internal redirection of resources, and assessment of the complimentarity of contributions and trade-offs between outcomes. This particular viewpoint appears to call for an area-based rather than sectoral approach to development, and supports the devolution of resources and authority to the district level. Table 1.1 compares the Sustainable Livelihoods approach with really existing Integrated Rural Development.

1.4.2 Stakeholders

A key issue regarding planning and management of natural resources is how to maintain and, even increase, particular capital assets without detrimentally affecting others[2]. This provides a focus to identify the different stakeholders in such processes. They are likely to include interest groups within rural communities, private operators and the government - both at central and decentralised level - as primary stakeholders (directly affected by the project) with other stakeholders such as NGOs, research bodies and, sometimes, the state playing more

[2] Serageldin and Steer (1994) distinguish between *weak sustainability* - maintaining total capital stocks intact without regard to their composition; *sensible sustainability* - maintaining total stocks intact and avoiding depletion of any capital beyond critical levels; *strong sustainability* - maintaining each component of capital intact (i.e. any destruction of capital should be replaced); and *absurdly strong sustainability* - no depletion at all of capital stock.

intermediary roles. Sound planning and management of natural resources requires that these stakeholders be identified at the outset of the planning process, and their various roles and goals be established (see Chapter Four).

Table 1.1: Integrated rural development and sustainable livelihoods compared
Source: Adapted from Carney (1998)

	Integrated Rural Development	**Sustainable Livelihoods**
Starting point	Structures, areas	People and their existing strengths and constraints
Conceptions of poverty	Holistic, multi-dimensional	Multi-dimensional, complex, local. Embraces concepts of risk, power and variability
Problem analysis	Undertaken by planning unit in short period of time, viewed as conclusive	Inclusive, iterative process based on holistic livelihood assessment
Sectoral scope	Multi-sectoral, single plan, sector involvement established at outset	Small number of entry points, multi-sectoral, many plans, sectoral involvement evolves with project
Level of operation	Local, area-based	Both policy and field level with clear links between the two
Time taken to prepare projects for donor support	Initial identification rapid; detailed planning time-consuming	Understanding of livelihood options time-consuming. However, projects start as discrete interventions and build on these. Preparation time therefore 'spread' over longer overall project time
Time frame	5-10 years	Longer commitment
Co-ordination	Often donor-driven, dependent on donor funds to implement	Driven by shared objectives and needs identified by those involved
Spatial focus	Rural, area-based	Rural areas as part of larger systems
Indicators	Production changes, uptake	Production/conservation oriented, people and outcome-oriented, negotiated
Sustainability	Not explicitly considered	Key aspect of livelihoods. Also at political/fiscal levels
Environment	Treated as add-on (if at all)	Opportunity to put environment at the heart of livelihood development
Capacity-building	Minor concern. Relied on idealised conception of capacity	Major concern
Supporting research	Adaptive technical, socio-economic	Livelihood strategy-based Action research

1.5 Land tenure

Land tenure and rights of access to resources are very important factors in rural planning. In Zimbabwe, for example, the historic legacy of unequal land distribution, rights and planning continues to undermine efforts to plan and develop rural areas. Phase 2 of the Land Reform and Resettlement Programme (LRRP) was agreed in late 1999. This process of land re-distribution was to involve acquiring 1 million ha of commercial farming land (out of a national total of 11.2 million ha) over two years. It was intended that it would be set within the National Land Policy Framework (NLPF) which was approved by all key stakeholders in late 1999. However, the onset of the closely fought general election in March 2000 disrupted the process and major land occupations took place on about a third of the country's 4,660 commercial farms. The government adopted a new "fast track" programme of land re-distribution aimed at speeding up the process of land acquisition and taking over 3,000 large-scale commercial farms, covering 5 million ha (Derek Gunby, pers.comm.).

Confidence to produce and to invest can only be based on reliable rights to use the land. These rights must be clear, well established, and protected by law. Conservation of resources is promoted by security of use of the same patch of land over the long term. At the same time, a market in land, leasing, or some other customary allocation of use must be flexible enough to accommodate population growth, and give access to land to those willing and able to make use of it (Box 1.6).

Compulsory redistribution of land by the state is one approach to this issue but, in recent decades, policy-makers have sought other means for which a broad political consensus is more likely to be generated. There is an increased emphasis on government-facilitated reallocation of resources through market mechanisms.

More significant than private-private shifts in access to resources, is the current trend toward release to individuals and communities of vast resources which the state itself earlier appropriated. The hope is that these resources will be better managed by those who have a direct interest in them. Where these resources are considered by the local community to have been theirs already, recognition of that ownership may be a better policy than devolution of some title derived from the state.

Box 1.6: General effects of the nature of land tenure on the use and conservation of resources

- If there is open access or if people are using land to which they have no legal or customary rights (either for cultivation as squatters, for grazing or for collection of products), there is no incentive to conserve. Users will take as much as they can get away with.

- In communal tenure systems, individual members of the community have land use rights but these rights are determined by the community as a whole and the land remains the property of the community. Such systems have, in the past, provided sustainable management of diverse resources and spread risk over a wide area of land - particularly useful for grazing of marginal land. However, communal management is difficult to maintain where there is intense competition for resources and the social sanctions that underpin communal management have been eroded; and there is no incentive for individuals to invest in long-term improvements or perennial crops, especially if the right to use a particular plot is periodically redistributed.

- State land may be managed directly by state agencies or rented/leased under various conditions. Where management is by a bureaucracy, neither this agency nor individuals within it are exposed to the market, nor do they have any incentive to produce or conserve. Concessions to extract products (e.g. to logging companies) are an incentive to extract as much as possible at least cost and with little or no regard for the consequences. Regulation of this activity by state agencies is rarely effective.

  In many cases, state forests and other reserves were created from land that was previously a communal resource and which is often required as a component of the traditional use of surrounding areas - for example for grazing, hunting, fuel. This creates conflict between the needs of local people and the objectives of the state as interpreted by, e.g. the Forest Department.

  Agricultural tenancies may include provisions to protect the land and incentives to produce, e.g. by provision of infrastructure (irrigation and drainage works) and inputs (water, agrochemicals). Often the terms of tenancy are a disincentive, especially to invest in long-term management. In general, the shorter-term and less-secure the tenancy, the more the tendency to exploit the land.

- Private ownership, whether allocated under traditional rights or legal deed, gives the user the strongest motive to develop and conserve its resources, at least in principle, and there is a well-established positive correlation between secure land rights and agricultural productivity. However, where farming is not seen as a socially or economically-desirable occupation, the incentive to improve and conserve is weak and the short-term profit motive overrides it.

Source: Dent (1997)

1.5.1 Security of tenure

Those who do have access to resources require adequate security of tenure: the assurance provided to the resource manager by enforceable rights to invest in the resource and garner the eventual returns on that investment. This manager/investor includes both the small farmer and the multinational company, individuals and communities, as well as the state and its agencies.

Security of tenure means:

1. *Robust rights:* The manager must have rights over the resource that permit genuine control of the resource. Among the most fundamental are the rights to possess the

resource; to exclude others where they would interfere with management; and to improve, harvest and fallow the resource. If those who would invest their labour and capital in the resource do not have such rights, as when women in many societies are denied rights to land, their incentives will be undermined.

For some managers, those whose economic strategies and opportunities require greater liquidity of assets, and those who are attractive lending prospects for formal sector lenders, the rights to sell and mortgage land will also be important.

2. *Adequate duration:* The manager must be assured of control over the resource until the anticipated benefits of investments have accrued. The length of time required will obviously vary with the type and magnitude of the investment. Many investments take many years to bring returns, with investments in permanent improvements and conservation often paying off only over several generations, and the right of inheritance is often crucial.

3. *Legal certainty:* However adequate the rights themselves, they provide little incentive unless there is confidence in enforcement mechanisms and dispute-settlement processes. This applies to both informal mechanisms in local communities and to more formal judicial structures.

To enhance security of tenure, the most important tools are, first, restraint of the state itself and, secondly, tenure reform. National elites have used the asserted ownership of natural resources by the state as a way to grab land from rural people. This is seen in concession regimes that oust customary users from land which is traditionally theirs but, technically, belongs to the state. Certainly the state must retain the right to take land for public purposes but it must be constrained from doing so for private interests and, even in the case of takings for public purposes, without payment of compensation that recognises the true value of the land. It is increasingly urgent that rural communities of resource-users demarcate the resources on which they depend, which will often be on land formally belonging to the state, and that the state recognise their rights, individual and communal, in this area.

Where rights are so framed that they fail to provide the necessary assurance, then they may need to be changed. Tenure reform can proceed in two ways:

- Replacement of the existing tenure by a different model, often a model drawn from more economically developed contexts;
- Adaptation of the existing tenure in specific ways to address perceived inadequacies.

These two approaches are not mutually exclusive in terms of national policy, and different approaches may be applied in different localities.

The replacement approach is direct and, seemingly, final. It is, however, expensive because it generally involves a formalization of land rights, cadastre and establishment of land registries. Usually individual ownership or leasehold are proposed to replace tenures that are customary and community-based. In practice, few countries have been able to mobilize the resources to effect this, and so replacement has been a localized strategy in urban and peri-urban areas and special project areas. Where it has taken place, rights of registered individuals have been increased at the expense of their communities, and other individuals' rights in the land have been cut off as well.

It has also proven difficult to erase previous notions of tenurial rights. Often, the result of attempted replacement is the coexistence of inconsistent statutory rights (the replacing regime) and popular tenure regimes (those which were to be replaced). The resultant confusion can undermine security of tenure more dramatically than the failing which the

reform attempted to address. On the other hand, there are situations in which existing tenure systems have broken down under intense competition for resources by increasingly diverse claimants, as in peri-urban areas. Then replacement may be the only option, but it should be recognised that there is an almost universal tendency for the powerful to increase their control of resources in the course of this purportedly neutral process.

The adaptation approach is incremental and, generally, relies upon the ability of customary systems to evolve in response to new needs. These largely unwritten systems evolve both through conscious amendment of rules and institutional arrangements by traditional authorities, and through the recognition of changing needs in the settlement of disputes between different users. Both rules and institutions must evolve and, in a market economy, the direction of evolution will be toward fuller property rights for individuals and communities.

Implementation of this approach requires recognition by the state of indigenous custom as the law governing land allocation and use, and empowerment of local institutions to implement that policy and to resolve disputes. Adaptation is less costly than replacement but it, too, involves uncertainties: the direction of evolution may be doubtful, and may be vigorously contested within the community. Statutory intervention by the state may still be necessary to address points of confusion; to deal with matters on which national policy is so fundamental as not to tolerate local contradictions, including equality among peoples and genders; and to reform failing institutions.

1.5.2 Co-ordinating tenure incentives and disincentives

Twenty years ago, it was not uncommon for tenure to be provided subject to "development conditions" and for the land to be subject to reallocation if those conditions were not met. In retrospect, we see that these conditions were commonly flawed and, especially, did not allow the flexibility to adjust to market conditions. Monitoring and enforcement were very limited and erratic, and often took place for the wrong reason - someone else wanted the land. The conditions did not create incentives, but undermined them by undermining security of tenure.

1.6 Rural-urban linkages

There is a growing trend towards the dispersal of manufacturing to green field or small town sites away from the big cities. The spread effects of this offer the prospect of rapid growth in rural incomes and there is a need to understand and take account of such growth patterns and plan accordingly. It is important to ensure that the right services and facilities are in place to promote such growth (e.g. infrastructure, credit provision). From the perspective of the livelihoods of vulnerable individuals or households, access to both rural and urban contexts is likely to greatly increase the diversity of opportunity, thus increasing security against the extreme shocks which are common in many developing countries.

In order to appreciate rural livelihoods and the local economy within the wider regional context, it is essential to understand the nature and scale of rural-urban linkages. Commentary on such linkages in South Africa is provided in Box 1.7.

For analytical purposes, rural-urban interactions can be divided into two broad categories:

- ***'Spatial' interactions***, between 'urban' and 'rural' areas, including flows of people, goods, money, information and wastes;

Box 1.7.: Rural-urban links in South Africa

"Planning health services: Rural/urban linkages are significant to health planning because out-of-town patients receive most of their services in the small or bigger towns. As more people leave the farms for the towns, service delivery via mobile clinics becomes very expensive in the farming areas, while the town services become more congested. New solutions for services will have to be found, e.g. farmers will have to take farm workers to central mobile service points, or farmers' wives who are trained nurses will need to give assistance to the farm workers.

Planning employment: Many farm workers leave the farms to live in towns because they hope to get better paid jobs and better health and education services for the family. The planning of local economic development strategies should therefore be closely linked to the farming community to prepare them proactively for the continuous influx of unemployed people, as well as to create opportunities for potential and emerging farmers outside towns. This is not the case at the moment.

Planning shelter: 50 years ago, many farmers owned a house in town, to use when they occasionally came to town for church events or to buy and sell goods. This trend has changed with the improvement of vehicles and roads and visits to town have become a normal weekly event. Now many farm workers own a site (erven) with a shack or house in town. A senior member of the household, often a granny, sometimes lives there with the school-going children or sometimes the children live alone. Many farmers also encourage their workers to own houses in town because of new legislation that forces farmers to provide permanent accommodation to labour tenants. This has also led to some farm workers commuting on a daily or weekly basis between farms and towns. Housing schemes for farm workers in towns or agricultural villages in the farming areas need to be co-operatively planned by the farming community and the town residents.

Planning marketing of rural produce: Large farmer co-operatives played a major role before 1994 in marketing the produce of commercial farmers. After the abolition of control boards and entering of the free market system for agriculture, the role of the co-operatives has changed. Co-operatives must now compete with private enterprise to market their produce. Most co-operatives have changed and become input suppliers. Most of the time, the produce of local farmers does not even reach the town. It will go directly via rail or road transport to bigger centres for value-adding or packaging. This has removed a major economic activity from the small rural towns, leaving many people unemployed. However, some innovative commercial farmers have started agro-processing businesses on their farms like dairy processing, mills, sunflower oil processing or abattoirs. These products also by-pass the small towns and go directly to the bigger centres where the markets are, with a detrimental impact on the economy of the town. Incentives by the Transitional Local Council (TLC) can lure agro-businesses back to town to stimulate the economy of the town.

Planning educational facilities: Before 1994, it was the practice for white farm children to go to a well-provisioned school in town where they were accommodated in a government-supported hostel. African children, who lived on farms, went to small farm schools with few facilities, equipment and poorly-trained teachers. After 1994, all schools were opened to all races and the immediate reaction of the rural whites was to send their children to schools in the bigger centres where there were many whites, or to start local private schools. This again had a major impact on the economy of the small towns. Instead of going to the nearest town on a Monday or Friday, the trip was now to the big centres where business was also done at the same time. However, there was a major movement of African children to the town schools, in the hope of a securing a better education. Awareness of this migration of scholars is essential to plan effective school services.

Planning transport: The increase in the numbers of private cars over many years has had a far-reaching impact on the rural society. Those who do not own cars find it very difficult to move from the farms to the towns. Taxis do not venture onto the gravel roads between the farms, and buses are rare. There are no trains either. Farm workers are therefore dependent on the farmers for transport to towns.

Planning linkages: These linkages highlight the need for the integration of rural and urban services and integrated planning. However, there is hardly any contact between the Transitional Rural Councils and Transitional Local Councils which co-exist with each other. They seem to operate in different worlds (Atkinson and Inge (1997)".

Source: Khanya-mrc (2000)

- ***'Sectoral' interactions***, including 'rural' activities taking place in urban areas (such as urban agriculture) and activities often classified as 'urban' (such as manufacturing and services) taking place in rural areas.

Two types of interactions, income diversification and migration, are becoming increasingly important in contributing to the livelihood strategies of many groups in low income countries.

1.6.1 Income diversification

Farming alone rarely provides a sufficient means of survival in rural areas of low income countries. Income diversification is increasingly recognised as an enduring and pervasive strategy in developing countries (Ellis 1998). Non-agricultural rural activities include those carried out on the farm but not related to crop production (such as furniture- and brick-making or brewing, with the products sold in both rural and urban markets) and off-farm activities all of which have bigger markets around urban centres. Bryceson (1997) defines 'de-agrarianisation' as a long-term process involving four main elements: occupational adjustment, income-earning re-orientation, social identity transformation and spatial relocation of rural dwellers away from strictly peasant modes of livelihood. These changes do not necessarily take place simultaneously, or follow similar trajectories. In Brazil, between 1981 and 1990, the average annual growth of non-agricultural rural employment was 6 per cent (compared to 0.7 per cent for agricultural employment) and equivalent to an increase in the number of workers from 3.1 to 5.2 million (Graziano da Silva 1995). In China, government promotion of 'rural industries' is aimed explicitly at creating employment opportunities in the countryside, reducing migratory pressure on cities. In 1994, industrial production in rural areas was double the output of agriculture, and the number of workers employed in the sector increased from 30 million in 1980 to 123.5 million in 1993 (Yang Zheng 1995).

Linkages between non-agricultural and agricultural activities, such as processing of agricultural raw materials and manufacturing of agricultural equipment, tools and inputs are the basis of the most profitable types of non-farm rural employment. This suggests that a rich natural resource base may be as necessary for rural non-agricultural activities as it is for agriculture (Livingstone 1997). However, non-farm rural activities are not completely dependent on rural sources and, therefore, are not insulated from pressures at wider levels. For example, the impact of devaluation on the cost of imported inputs and urban supply networks has adversely affected all manner of rural-based activities in Nigeria, e.g. rural transport, grain grinders, mechanics and photographers. In addition, structural adjustment programmes are forcing small-scale producers to compete with exporters, urban consumers and local industry for access to local raw materials (Meagher and Mustapha 1997).

Opportunities for non-farm production in rural areas are usually mediated by culturally-specific formal and informal networks. These may be based on income as well as political and/or religious affiliation, ethnicity, household type, gender and generation. In Tanzania, for example, rural women heading their households and widows living alone are often socially marginalised, and may be forced to find employment in unprofitable occupations. Patronage is, in many cases, a crucial element of access to activities such as intra-regional trade (Seppala 1996). Rural poverty in Senegal has been linked to lack of access to non-farm income (Fall and Ba 1997).

1.6.2 Migration

Internal migration is often seen as essentially rural-to-urban and contributing to uncontrolled growth and related urban management problems in many cities. This has resulted in many policies to control or discourage migration which, generally, have little impact aside from lowering welfare. However, most of the growth in urban population is due to natural increase,

and rural-to-urban migration is fastest where economic growth is highest, as migrants tend to move to places where they are likely to find employment. For example, secondary urban centres have increased their role as destinations where they have attracted new investment and industries. In other cases, secondary cities within or close to agricultural regions have benefited from the renewed emphasis on export production (UNCHS 1996).

Migration from the urban to the rural areas is also, increasingly, frequent and, often, associated with economic decline and increasing poverty. In sub-Saharan Africa, many retrenched urban workers are thought to return to rural 'home' areas, where the cost of living is lower (Potts 1995) although it is difficult to estimate numbers in the absence of recent census data from the region. Seasonal waged agricultural work in rural areas can also provide employment for low-income urban groups (Kamete 1998). Temporary and seasonal movement is not reflected in census figures, and this can make static enumerations of rural and urban populations unreliable. Moreover, the complexity in migration direction and duration is matched by that in the composition of the flows, which reflect wider socio-economic dynamics. The age and gender of who moves and who stays can have a significant impact on source areas in terms of labour availability, remittances, household organisation and agricultural production systems.

The increase of population movement has important implications for understanding the livelihood strategies of the poor, and the changes in the organisation and structure of their households. Household membership is usually defined as 'sharing the same pot' under the same roof. However, the strong commitments and obligations between rural-based and urban-based individuals and units show that in many instances these are 'multi-spatial households' giving reciprocal support. For example, remittances from urban-based members can be an important income source for the rural-based members who, in turn, may look after their migrant relatives' children and property. These linkages can be crucial in the livelihood strategies of the poor, but are not usually taken into consideration in policy-making and planning. 'Absentee' land and/or livestock owners tend to be excluded from benefits such as relief or aid measures in case of loss, even in the case of low-income groups for whom such assets are a crucial safety net. Alternatively, rural development plans may ignore the fact that migrants can be the key decision-makers while residents may be better described as caretakers with no real power to make decisions over the use and management of local natural resources.

1.6.3 Implications for planning

Rural-urban linkages are the focus of renewed interest among policy-makers (see Evans 1990, Gaile 1992, UNDP/UNCHS 1995). First, because market-based development strategies with their emphasis on export-oriented agricultural production rely on efficient economic linkages connecting producers with external markets. Access to markets is assumed to transform potential demand into effective demand which, in turn, will spur local production. Growing incomes in the agricultural sector will then result in increased demand for services and manufactured goods. From this viewpoint, small towns play a key role in linking their rural hinterlands with both domestic and international markets, as well as in providing the rural population with non-farm employment opportunities and, thus, broadening the base of the local economy.

A second important reason is the increasing priority given to the decentralization of resources and responsibilities, and to the strengthening of local public institutions. Thus, in addition to their traditional role as infrastructure and service providers, local authorities are also responsible for supporting economic development and poverty alleviation. However, infrastructure provision has been re-focused to that directly related to productive activity, usually at the expense of 'social infrastructure' such as health and education.

The emphasis on market-led development leads economic planners to treat society as an undifferentiated whole. This is mistaken and diverts attention from the most vulnerable groups in both rural and urban areas. For example, spatial proximity to markets does not necessarily improve farmers' access to the inputs and services required to increase agricultural productivity. Access to land, capital and labour may be far more important in determining the extent to which farmers are able to benefit from urban markets. In Paraguay, despite their proximity to the capital city, smallholders' production is hardly stimulated by urban markets because their low incomes do not allow investment in cash crops or in production intensification (Zoomers and Kleinpenning 1996). Patterns of attendance at periodic markets also show that distance is a much less important issue than rural consumers' purchasing power in determining demand for manufactured goods, inputs and services. Markets are social institutions in which some participants are able to enforce mechanisms of control which favour access for specific groups and exclude others. For example, grain markets in South Asia tend to be dominated by large local merchants who control access to the means of distribution (transport, sites, capital, credit and information) and, even in the petty retailing subsector, caste and gender are major entry barriers (Harriss-White 1995).

Migrants returning from urban to rural areas may have acquired new skills. However, their ability to put them into practice and contribute to the development of the rural non-agricultural sector is linked to access to essential assets such as land, capital and labour, and also to social networks which, in many cases, are crucial in determining access to, and information about, markets.

1.6.4 The dilemma of planning for the urban-rural interface

The areas surrounding large metropolitan centres, large towns and smaller urban communities are characteristically part urban and part rural. To varying degrees, they 'enjoy' the infrastructure, facilities and activities of urban areas such as housing areas, heavy and light industrial sites, manufacturing plants, support services (e.g. bus services and shops), etc. At the same time, they also have many rural characteristics with small holdings and farms growing crops and keeping livestock, areas of woodland or forest, rivers and lakes, and even wildlands.

To date, planning for rural areas has been undertaken in two main ways. First, official planning by Rural District Councils (or their equivalents) has usually been undertaken by planners trained in 'town planning' and this has focused almost entirely on the provision of services such as roads, schools, clinics and hospitals, etc. Secondly, planning for the management of rural land and natural resource has been the responsibility of departments of line ministries (agriculture, water affairs, forestry, wildlife, etc.). They have used techniques of resource assessment and land use planning, but there has been little coordination between the departments or with District Council planners. Most major rural development projects and programmes (some covering extensive areas - even whole districts or provinces) have been funded by donors and project staff have undertaken their own planning independent of urban or rural authorities.

Peri-urban areas which constitute the urban-rural interface usually come under the control of the urban authorities concerned. But, given, their hybrid character, planning for their development also requires a hybrid approach which should draw from both urban and rural planning experience. In practice, urban and rural planning are completely different schools and there has been little overlap or communication between the two. Clearly the time has come to bridge the gap.

CHAPTER TWO

CONVENTIONAL TECHNICAL PLANNING APPROACHES

As mentioned in Chapter One, rural planners in developing countries - usually based in small rural towns - have tended to focus on the provision of social infrastructure (roads, schools, clinics, etc.). To date, planning for the rural areas (*sensu stricto*) lying beyond the towns has been mainly a top-down process, usually the domain of government departments concerned with rural development, agriculture and natural resources (e.g. fisheries, forestry, wildlife, water). The current trend towards decentralisation is being accompanied by efforts to deconcentrate and devolve planning functions and concerns are turning to the effectiveness of such efforts and the historical legacies that remain.

Plans in the past have usually been made in the offices of government departments, remote from the areas being planned or the people who would be affected and, usually, without their involvement. Frequently planning has followed rigid procedures, set out in planning manuals, and the focus has largely been on the use of land and natural resources.

The planning process has been technical, relying first on the gathering of basic information about natural resources and socio-economic conditions in the areas concerned - followed by analysis and interpretation (e.g. land evaluation - see later). Much of this information has been provided by natural resources professionals and institutions.

The methods of survey and interpretation are well-tried and reliable if carried out to a good professional standard, but there is often remarkably little evidence of their actual use in the subsequent planning. In this chapter, we review the main methods of survey and interpretation of natural resources data; consider the main planning approaches and, finally, discuss the pros and cons of the conventional approaches. We recognise that good quality information is also needed on a wide range of other subjects in rural planning, but the approaches for this are beyond the scope of this chapter.

The sustainable livelihoods framework (Figure 1.1) offers a good way of ensuring a comprehensive and balanced approach to information needs. Its use in planning would help to demonstrate the need for good data linked to all the main capital assets areas (natural, human, financial, physical and social) and would, therefore include such matters as demographic information, local skills availability, rural-urban linkages, etc. Natural resources information is but one vital element amongst the five assets and it is necessary to make connections and interlinkages.

2.1 Resource surveys for planning

Formal information on natural resources is gathered by surveys: topographic survey, surveys of geology, soils and land use, forest inventories, biological diversity stocktakings and systematic recording of climatic and hydrological data. These data are presented in detailed technical reports and as maps. It is a characteristic of developing countries that data about natural resources and their use are incomplete and unreliable, and much that was gathered has now been lost (Box 2.1).

The basic data are rarely in a form that can be used directly by decision-makers, but interpretation of these data in terms of development options and their consequences has rarely been provided. As a result, decisions have been taken, and are still being taken, in ignorance.

Box 2.1: Loss of natural resource survey information

A large proportion of formal information about land resources in developing countries was gathered in the past by expatriates: during the golden age of natural resources surveys (1956-69) as members of large interdisciplinary teams mounted by agencies of the colonial or former colonial power (e.g. the UK-based Land Resources Development Centre); later seconded to local survey departments of independent countries under aid agency support programs; or operating for consultancy companies.

Much of the data acquired was archived at the time within the offices of the survey organisations concerned (in-country in the case of local survey organisations and overseas in the case of consulting companies and international survey organisations). The expatriate staff concerned had laboured hard to acquire the data, had a vested interest in it and understood its value and utility for planning. The data were summarised in the final reports presented to the clients (usually the government) in the host country, but there was usually no in-country institutional ownership of this data. Even where in-country data-bases were set up (quite common), the host country seldom made any provision for their maintenance - so they have rarely survived. The former colonial survey institutions have been mainly disbanded and few people maintained any interest in the archived data. As a result, the data they once held are now largely scattered. What remains is mostly in the hands of individuals and a few archives but not as an organised body of data. In the case of data gathered by LRDC, some of these recently have been placed in DFID public records.

During the last 20 years, most natural resource survey operations funded by donors required that host country professionals were appointed as counterparts to expatriate members of the survey teams, usually in a junior capacity - seldom in a leading role. The counterparts usually received on-the-job training and commonly were sponsored for post-graduate training overseas. The goal was that such training would provide a skills and capacity base in the countries concerned. But few of these professionals are still practising their skills. They are either coming to the end of the careers, are retired, have passed away, or have moved into other areas of employment. And, in any case, few have a strong interest in maintaining the data gathered in the past (whether during the colonial period or since independence) by expatriates. Furthermore, most natural resource survey institutes in developing countries are now unable to function effectively (skilled staff and financial resources are mainly lacking and equipment is defunct – and, in any case, donors no-longer tend to support such survey operations) and archive maintenance has a low priority.

There has also been a persistent institutional problem regarding natural resource data. Such scientific information has never been part of the decision-making process. Where the data were gathered for a job-in-hand, they might have been used immediately, then shelved. Often they were gathered as background to future development that never happened. So its real potential was usually understood only by those who gathered it and they were rarely part of the decision-making team. Others, particularly senior decision-makers and politicians, had no real appreciation of its value and gave no attention to ensuring the maintenance and survival of data collections.

Privatisation and disbanding of organisations like Huntings Surveys mean that it will be difficult to resurrect the data. We have, at most, five years to do it.

The dilemma has been recognised for some time. Nearly 30 years ago, Roberston and Stoner (1970) commented:

> 'It is alarming to observe how little of the land resource data investigated and mapped is actually used in development plans - though one must recognise that its lack of use is by no means always related to irrelevance to the objectives in mind or to the form in which it is presented...
>
> ... frequently, public organisations gather routine data without any clear idea whether it can be used, until the point is reached where it cannot possibly be handled. And yet

the collecting process continues. Experience teaches us to beware of massive data gathering programmes. Such programmes can be expansionist and obsessive in their demands on the investigators' time until merely collecting data becomes an end in itself.'

In seeking to establish how this situation has arisen and how it may be rectified, Dalal-Clayton and Dent (2001, in press) address both sides of the question: first, the methods of survey, presentation and targeting of natural resources information and, secondly, the needs and capabilities of decision-makers within the institutional framework of land use planning.

Often, large surveys have been carried out without clearly establishing who will be using the information, how it will be used, and what is the capacity of institutions and individuals to make use of it. Under these circumstances, it is hardly surprising that little or no use is made of the findings. Clearly, at the outset of a survey programme, there is a need to establish what data are needed, by whom and for what purposes. A workshop held recently for district development planners in Ghana revealed that they had clear ideas on the kind of information they require for more effective planning, from where some of it might be available, and what additional information is required (Table 2.1). Box 2.2 provides a checklist of specifications for natural resources surveys to avoid the pitfalls.

Table 2.1: Natural resource information needs identified by district planners in Ghana
Source: NRI/UST 1997

Resource	Information needed	Possible information sources
Land	Land ownership, housing stock; land use, land suitability, land potential, soil quality, NR inventory; population	Land Evaluation Board, Land Title, District Revenue Records, Surveys Department, Town & Country Planning, Soils Research Institute, Universities, Ministry of Agriculture, Lands Commission
Water	Sources of pollution, watershed information, dispersal of waste, extent of pollution, water-borne diseases	Environmental Protection Agency, KMA Waste Department, UST Civil Engineering, Clinics, Chiefs, District Authorities, CSIR-WRRI
Timber	Species, coverage, timber concessions, rate of exploitation	Forestry Research Institute, FIBP, Forestry Department, Ghana Timber Board
Non-timber forest goods	Suitable species, inventory, rate of exploitation	Herbalists Association, Department of Game and Wildlife, Forestry Department, Institute of Science and Technology
Fish	Species, resources, practices	Fisheries Department, Universities
Sand and stone	Winning sites, contractors, demand, impact	Mineral Commission, Mines Department, Environmental Protection Agency, Town & Country Planning, Sand & Stone Association
Refuse and waste disposal	Housing, access roads, type & volume, disposal sites, collection sites	KMA, District Environmental Health Officers

Box 2.2: Checklist – specifications for natural resources surveys

1 What is the information going to be used for?
- Are the goals of the development programme and the specific uses of the natural resources data clearly defined?

2 Who will use the data?
- There may be several categories of users, each with different requirements. Have these users been involved in defining the goals and specifying the data needed, the scale and precision of survey and format of the data?
- Are these people able to interpret the data requested and check their quality?

3 When will the data be used?
- How soon are they needed?

4 Do relevant data already exist?
- Where are they held, are they accessible? Do they cover the whole area of interest? Are they up-to-date, reliable and at an appropriate scale - and who has checked this?

5 What useful information is held within the local community?
- What information is already used in land use decision-making?
- Are local methods of data collection, classification and analysis appropriate?
- Are the proposed professional staff experienced in techniques of participatory inquiry that can elicit locally-held information?
- On completion of the survey, the results should be explained to all interested parties, not least to local people, both for their information and for immediate correction of errors that are obvious with the benefit of local experience.

6 Who is best placed and best qualified to provide the data needed?
- Are there local institutions, NGOs, local consultants or national specialist organizations that can undertake or contribute to the work?
- If expatriate consultants are selected, can they provide training for in-country staff?
- Can they supply data of the quality needed in time and within budget?

7 Are the proposed methods of survey the most appropriate?
- What alternatives have been considered? Will the data be compatible with existing key data?

8 Are there adequate resources to complete the work to the standard needed and to implement any recommendations?

9 What support is there for the project at every relevant level of government and across the local community?

Source: Dalal-Clayton and Dent 1993

In rural situations, there are many different decision-makers and they have different needs. Different kinds of information in different degrees of detail are also needed at different stages in rural planning and in development projects. Ideally, decision-makers need to use the fund of information iteratively, so there is a need for interactive ways of presenting and manipulating the data to match them with the questions of the moment.

When it comes to information about natural resources, three situations are common:

i) There are no data;
ii) Relevant data exist but the people making the decisions don't know about them or don't have access to them;
iii) Data exist, are accessible, but are not comprehensible to the people who make policy and land use decisions. Moreover, data are of variable quality but the decision-makers and, even, professionals in allied fields, have no way of knowing even which are reliable and which are not.

With the expansion of aid agency programmes in the 1970s, organisations like the Land Resources Division of the British Directorate of Overseas Surveys mounted substantial professional teams to undertake aerial photography, topographic and natural resources survey, mainly but not exclusively in Commonwealth countries. Published works include land systems atlases of Lesotho (Bawden and Carrol 1968), Swaziland (Murdoch *et al.* 1971), part of Kenya (Scott *et al.* 1971), Uganda (Ollier *et al.* 1969), and Indonesia (Land Resources Department - Bina Program 1990). Other land resources studies included Ethiopia (Makin *et al.* 1975), N.E. Nigeria (Bawden *et al.* 1972), western states of Nigeria (Murdoch *et al.* 1976), central Nigeria (Hill *et al.* 1978/9), and Zambia (Mansfield *et al.* 1975/76). Land resource inventories carried out by consultant companies include those by Huntings in Sri Lanka (Hunting Survey Corporation 1954) and Sudan (Hunting Technical Services 1974, 1976, 1977) funded by multilateral aid and in Nepal (Kenting Earth Sciences 1986) under a bilateral agreement. Specialist agencies of the United Nations, especially FAO, also supported substantial programs of survey.

Little development seemed to result from these resource inventories but an exception is the Mahaweli power and irrigation project in Sri Lanka that can be traced back to the surveys carried out by the Hunting Survey Corporation under the Colombo Plan[3]. Development projects were more often directly associated with surveys for irrigation - which universally adopted a conventional hydrological and engineering appraisal, soil survey, and financial appraisal according to the procedure of the United States Bureau of Reclamation (1953).

As well as the regular programmes of survey organisations in developing countries, there was an exponential growth in the 1970s in development projects such as integrated rural development programmes funded by aid agencies. Donors usually required that these projects be preceded by resource assessments as a basis for planning and implementation. These surveys were undertaken mostly by consultancy companies or external organisations, the survey methods used and the reporting procedures usually prescribed by the aid agency or, sometimes, the methods were recommended by the consultants. As far as soil surveys are concerned, they have been based on established international systems of classification and land evaluation put forward by the same small group of professionals. There is little evidence of consultation with the host governments about the methods and products (some would argue that such consultation would not have helped much!), or prior consultation in-country with potential users of the information. As far as planning aspects are concerned, there is almost no indication of involvement of project beneficiaries.

Developments since the early 1970s include the general use of remote sensing for a range of surveys, and procedures for interpretation of the basic data beyond the mechanical application of land capability classification or the USBR payment capacity criterion. The FAO Framework for Land Evaluation (FAO 1976) recognised that land cannot be graded from best to worst regardless of the purpose, and procedures were developed for characterisation of land

[3] The Colombo Plan: an arrangement to provide technical assistance and finance for development projects in South and South East Asia, established in Ceylon in 1951

use types and land evaluation for these specified land use types (FAO 1984a, 1985, 1991). The FAO procedure, in its turn, has often been applied ritually to survey data with no perceptible increase in the utility of the information to farmers or policy-makers. Two notable innovations from the UK-based Land Resources Development Centre were the presentation of information from the huge land systems survey of central Nigeria (Hill 1978/79) in terms of crop options and agricultural development possibilities; and the focusing of data from the land resources study of Tabora Region, Tanzania, through algorithms calculating human- and stock-carrying capacities, to identify specific areas which were over-populated or which had quantified opportunities for resettlement (Corker 1982).

Development has turned out to be not so simple as once was thought. Some of the goals of development now seem illusory; the constraints more and more intractable; and the contribution of natural resources information disappointing in the absence of ways and means of using it. This is not better illustrated than in the former Soviet Union where a superb data base of surveys at a scale of 1:50 000 for individual collective farms and 1:100 000 for whole administrative units was tied to a powerful system of central planning. Yet this failed to prevent the desertification of the Aral Sea and other environmental disasters against which the failure of the Tanganyika Groundnut Scheme in the 1940s pales to insignificance.

Development failures have been much more often due to misuse and misinterpretation of survey data than failures of the data themselves. Commonly, detailed development work has been undertaken on the basis of information gathered at a very small scale. In other cases, basic data have lain unused because they did not match the needs of the decision-makers. Hills (1981) drew attention to the weakness of natural resources data that cannot be applied in the economic models that planners and policy-makers use. Since then, quantitative land evaluation and crop modelling have come of age (FAO 1978, Beek *et al.* 1987, Kassam *et al.* 1991, Driessen and Konijn 1992). The obvious advantage of being able to make quantitative predictions about crop production is that these data can be fed into cost:benefit models, e.g. Querner and Feddes (1989). However, current simulation models demand a lot of quantification data that are available only from instrumented sites, which are rare, and the methods are still the province of a few specialists and their computers.

A hierarchy of data is required for planning at different levels: generalised at national level, increasingly detailed for application at district, catchment and field level. Strides have been made in computer-based information storage and management, though bedevilled by lack of practical approaches to realistic ownership, archiving and access.

The apparently insuperable problem of providing all the necessary detail at the catchment (watershed) and field scale (there are not enough natural resource specialists to go around) may be solved by do-it-yourself survey kits developed by professionals for use in the local community, backed up by expert systems that enable local people to interpret their data for themselves.

2.2 Land evaluation

Over the last 30 years, there has been a shift of emphasis in the work of natural resources professionals and institutions. Initially they concentrated on the collection of basic, specialist data: topographic surveys produced topographic maps, geological surveys produced geological maps, soil surveys produced soil maps, and their responsibilities seemed to end there. In other words, they saw ‘the land, what it is’. But these basic data do not answer the next, more complex and difficult question faced by policy-makers, land use planners and managers. ‘What is it good for?’ Indeed there are sequences of questions. Planners and policy-makers at national level might ask:

- Where are the useful areas and what their extent?
- For which uses are they suitable and what is their potential?
- Is there land enough to meet present and future needs for food, industrial raw materials, timber, water supply and urban and industrial development?
- How much of the suitable land will be needed to meet each specified demand and how much can be diverted to other uses?

At farm level, the land user needs to know:

- What are the opportunities to increase production and what are the limitations?
- Where can the best returns from increased input be obtained?
- What investment is needed to obtain these returns in terms of capital, equipment, labour and management?
- What risks are associated with each option (e.g. from weather, land degradation, pests and diseases) and what measures are needed to manage the risks?

To answer these questions, a range of basic land resources data has to be interpreted and combined with other kinds of information, such as market information. Expert knowledge of land response to management can be used to interpret basic data, providing information that is, at once, more accessible and more focused on the problem in hand. Four approaches have been widely adopted: Land Capability Classification, the FAO Framework for Land Evaluation, the USBR (United States Bureau of Reclamation) land classification system for irrigation schemes, and various parametric indices. More recently, *decision trees* have been advocated as a more transparent way of using expert knowledge so that it can be built upon by the manager or decision-maker in the field.

Physical land evaluation tries to explain and predict the potential of land for one or more uses by systematic comparison of the requirements of land use with the qualities of the land. The end product is an index of potential performance in terms of *capability* to support broadly defined categories of use, *suitability* for some specified land use, or *productivity* (e.g. crop yield) of a specified land use. In this way, the range of feasible land use options may be identified. Where economic appraisal has been demanded, this has been tacked on without much change in procedure, either from natural resources specialists or economists.

2.2.1 Land capability classification

The best known and most widely used method of land evaluation is Land Capability Classification, originally developed by the United States Soil Conservation Service in the 1930s to interpret soil maps for farm planning (Hockensmith and Steele 1949). It has been adopted and, sometimes, modified by survey organisations in many developing countries. The definitive account is given by Klingebiel and Montgomery (1961).

There are three levels of classification. At the highest level, land is classified according to the *degree* of its limitations for sustained use and the soil conservation measures necessary to maintain it in productive use (Table 2.2). The limitations to use that are considered are those which it is not feasible for the farmer to correct (e.g. climate, slope, soil depth, liability to flooding) and these are recognised individually at the next, subclass, level. A third level of classification, within the subclass, is the capability unit which groups *soils that require similar management* and are suitable for similar crops.

Land allocated to a particular class has capability for the land use defined for that class (e.g. Class I: arable, no restrictions) and all uses allowed for lower classes, so Class I is also suitable for grazing, forestry and wildlife. The defining land use for the class does not necessarily indicate which use is most productive or profitable; for example, the world's most

sought-after coffee is grown *only* on Blue Mountain in Jamaica, on land that would be classified as Class VII !

Table 2.2 Land capability classes defined by the USDA Soil Conservation Service (Klingebiel and Montgomery 1961)

CLASS	DESCRIPTION
I	Soils with few limitations
II	Soils with limitations that reduce the choice of crops or require simple soil conservation practices
III	Soils with severe limitations that reduce the choice of crops and/or require special conservation practices
IV	Soils with very severe limitations that restrict the choice of crops and/or require very careful management
V	Soils with little or no erosion hazard but with other limitations that limit their use largely to pasture, range, woodland or wildlife
VI	Soils with very severe limitations that restrict their use to pasture, range, woodland or wildlife
VII	Soils with very severe limitations that restrict their use to range, woodland or wildlife
VIII	Soils and landforms with limitations that preclude commercial crops and restrict their use to recreation, wildlife and water supply

There is an in-built assumption that the most desirable land use is arable cropping requiring no special soil conservation practices. This determines the choice of limiting factors and the values of limiting land characteristics assigned as class boundaries:

Class		
I	Arable (all crops, no conservation practices)	Most desirable
II, III, IV	Arable (increasingly costly conservation practices and/or restricted choice of crops)	
VI	Improved pastures	
VII	Grazing of natural range, or forestry	
VIII	Recreation, wildlife, water catchment	Least desirable

Class V is an oddball for limitations other than erosion. In practice, it is used for wetland.

Decision-makers of all kinds are much more comfortable with land capability maps than with the foundation land resource data. In an article called 'We don't want soil maps. Just give us Land Capability', Woode (1981) wrote:

> 'It is probably true to say that in Zambia hardly anybody reads soil survey reports except the Senior Soil Surveyor and a few visiting consultants. Soil maps are rarely unfolded and the various soil names are known only to the surveyors who described them. But the land capability maps are used constantly…'

After all, class I is obviously the best; class III is less good; and class VI is rubbish, isn't it? Alas, no, but the assumptions of the system are hidden and the shortcomings are not immediately obvious. Perhaps its most obvious shortcoming is that land cannot be graded from best to worst, irrespective of the kind of management. Some kinds of use have special requirements and tolerances that others do not have, for example:

- Rice enjoys prolonged flooding; other cereals will not tolerate waterlogging during their period of active growth;
- Tea, sugar cane and oil palm need efficient transport to processing plants and so have a minimum area requirement; grain grown for subsistence does not;
- For mechanised operations, stones and rock outcrops are limiting; but with oxen or hand-hoeing the farmer can work round them.

The arable bias of Land Capability Classification and the very generalised information presented do not help choice between alternative uses, except to eliminate the grossly unsuitable. Land use, productivity and profitability are often poorly correlated with land capability class. Indeed, no one-shot land evaluation can provide the information needed to choose between several land use options and, thus, match land use closely with land suitability. These objections were addressed in the FAO Framework for land evaluation (see section 2.2.3).

2.2.2 The USBR system

The land classification system of the Bureau of Reclamation of the US Department of the Interior (USBR 1953) was developed for planning irrigation projects. It classifies land in terms of its *payment capacity* - the money remaining for the farmer after all costs except water charges are met and after making an allowance for family living costs. This was an early attempt to integrate physical and financial criteria of land suitability and remained the standard method of evaluation for irrigation projects for more than 30 years.

Classes 1 to 3 have progressively lower positive payment capacities; class 4 designates restricted land use or special engineering needs; class 5 is a holding class pending further investigation; and class 6 is not suitable for irrigation, as it doesn't pay. Classification proceeds directly by survey of the relevant land characteristics and USBR prescribes the scale, accuracy and survey intensity for different purposes. The USBR system works only for a single use within a specific scheme. The parameters vary from scheme to scheme and payment capacity also depends on the costs and farm gate prices at the time of assessment.

2.2.3 FAO framework for land evaluation

The first principle of the framework (FAO 1976) is that evaluation is for a specified *land use type* - a system of management relevant to local conditions in terms of the physical environment and social acceptability - so the first step is to identify and define promising land use types and establish their land requirements. For land use planning, there is also a need to know requirements for labour, capital and infrastructure - so the definition of land use types becomes a substantial, inter-disciplinary task.

Knowing the land requirements, relevant information about the land is assembled and the various land suitability classes are arrived at by matching the requirements of the land use type with the qualities of each land mapping unit. The situation becomes more complicated where a land use type depends on several contrasting kinds of land, e.g. extensive grazing

systems may require separate land areas to provide forage in the wet season and in the dry season. The structure of the framework is outlined in Box 2.3.

Early applications of the framework were qualitative and matched land use requirements with land qualities in the same way as in land capability classification. Typically, one or more diagnostic land characteristics (e.g. soil drainage class, slope angle) have been used as surrogates for land qualities, and limiting values for each land quality are fixed by expert judgement combined with field

Box 2.3: Structure of the FAO Framework for Land Evaluation

The target set by the FAO framework is a four category evaluation:

Land suitability orders. The first ordering is into SUITABLE or NOT SUITABLE for a specified land use type.

Suitable means that sustained use of the kind under consideration will yield benefits which justify the inputs without risk of unacceptable damage to land resources.

Not suitable means that the kind of land use is impracticable, or would cause unacceptable degradation of land resources, or that the value of expected benefits does not justify the expected costs of needed inputs.

Land suitability classes. These reflect degrees of suitability. Experience of testing land suitability evaluations against crop performance does not support detailed sub-division. Within the suitable order, FAO recommends not more than three classes:

Class S1 Land having no significant limitations to sustained use, or with only minor limitations that will not significantly reduce productivity or benefits and will not raise inputs above an acceptable level;

Class S2 Land having limitations that, in aggregate, will reduce productivity or benefits and will increase required inputs so that the advantage to be gained from the land use, though still attractive, will be less than that expected on Class S1 land;

Class S3 Land having limitations that, in aggregate, are so severe that expenditure on the land use will be only marginally justified.

Within the Not Suitable order, there are two classes:

Class N1 Currently not suitable. This land could be used for the purpose under consideration but the social or economic cost is, at present, unjustified;

Class N2 Permanently not suitable. Land having limitations that appear so severe that sustained use is not possible.

Land suitability subclasses. These reflect the kinds of limitations such as water deficiency, erosion hazard, e.g. S2w, S3e. There are no subclasses within S1.

Land suitability units. These are subdivisions of a subclass which differ in their response to management and so are significant at the farm level. They are distinguished by Arabic numbers, e.g. S2e - 1, S2e - 2.

Source: FAO 1976

calibration. The principal judgement is to determine the cut-off point between suitability and unsuitability for each attribute. The next step is to determine the point at which the attribute

changes from having no effect, to having a significant effect on production. A refinement is to begin with a cropping calendar for the land use type and, from this, establish critical periods of the year for different qualities, e.g. trafficability at sowing and harvest, a dry spell for ripening, and so forth.

The Law of the Minimum works remarkably well but many practitioners prefer a matching procedure that allows some compensation between different land qualities. Various procedures for rating limitations have been developed (e.g. Sys *et al.* 1991).

Detailed procedures for establishing land suitability are given in the series of FAO Guidelines for Land Evaluation (for rainfed agriculture 1984a, forestry 1984b, irrigated agriculture 1985, and extensive grazing 1991) and by Sys *et al.* (1991, 1993). The end-product is reassuringly familiar: a map of land suitability looks like a simplified soil map but, in the absence of short cuts that can be taken only by 'old hands', the procedures are time-consuming and, sometimes, opaque. The choice of factors may be arbitrary, the factors poorly defined and, where weightings are applied, the precision of any resulting numbers is spurious: the methods are essentially qualitative. And after all this, knowledge that a parcel of land is, say, suitability class S2 for sorghum but class S3 for cotton, is not a lot more useful to a farmer or a policy maker than news that its land capability class is III. Various workers have attempted to develop more rigorous ways of weighting and judging land qualities and determining land suitability, e.g. through the use of *fuzzy sets* (Chang and Burrough 1987, Triantafilis and McBratney 1993).

The clarity of thought behind the FAO Framework has had a profound influence on land evaluation, paving the way for simulation models (section 2.2.5). However, modelling of all the land qualities relevant for land evaluation requires detailed spatial and temporal data for many individual land characteristics, and these are not often available.

To command confidence, land evaluations are usually calibrated against some measure of land performance. In the case of agricultural land, crop yields provide the obvious yardstick. Land use, productivity and profitability are often poorly correlated with land capability or land suitability class (Aitken 1983, Burnham *et al.* 1987). Rather than proceed through the intermediate stage of capability/suitability classification, *land potential ratings* arrive at local comparative ratings of land mapping units by direct calculation of an index of performance or yield against a locally-established standard (the best lands in the area under good management) modified by the costs of measures to overcome or minimise the effects of land limitations and the costs resulting from continuing limitation (Soil Survey Staff 1951, McCormack and Stocking 1985, Stocking and McCormack 1986).

2.2.4 Parametric indices

Parametric methods of land suitability assessment assume that land suitability or performance is determined by only a few *significant* factors. The effect of each individual factor is expressed as a response function. A host of parametric systems has been developed. In the best-known, the Storie Index Rating, a single numerical rating is arrived at by multiplying factors representing the *character of the soil profile, topsoil texture, slope* and a fourth factor for any other significant impediments such as salinity or erosion:

$$SIR = A \times B \times C \times X$$

Each factor is scored as a percentage but multiplied as a decimal. The time factor is expressed as a percentage. The key factors, their rating and weighting are defined by the expert to produce an outcome in accord with experience and acceptable to users (Storie 1933, 1978).

Subjective decisions are taken by the expert at several stages: in the selection of properties to be used, the valuation of each factor, the formulation of the equation and, not least, the translation of the final numerical value into operational terms. The Storie Index illustrates common shortcomings of parametric indices. It uses a compound factor, *character of soil profile* which includes factors that are not independent variables and are used more than once in the calculation. Above all, the functions are developed and tested for one application, in one area and at one time. They do not travel well.

From the point of view of the land use planner, the system is easy to apply by a non-specialist. But the final numbers appear as if by magic; the assumptions are hidden; and the logic is difficult to retrace. If performance really is dependent on just a few characteristics, it is better to say so explicitly.

Parametric indices represent an evolutionary dead end in land evaluation, although they represent the beginnings of calculation. The way forward lies, on the one hand, in more transparent knowledge-based systems and, on the other hand, in quantitative modelling of physiological processes.

2.2.5 Process models

Process models (or simulation models) have been developed to predict, for example, crop production, risk, or inputs needed for a particular land use type. Process models with a sound physical basis have a wider potential application than analogue models or expert knowledge. In particular, they are not restricted to the locality where they are developed. Also, by running the model for many years of climatic data and including the effects of other modelled processes like soil erosion, they can provide probability estimates of future yields or risks of low yields. This is a great advance over static methods of land evaluation that deal only with the situation at the time of the evaluation.

At present, many of these simulation models are complex, yet their physiological base in weak. Their development and maintenance consume many man/years of research time in well-found institutions, and their thirst for quantitative data on specific land qualities cannot yet be quenched by the data usually available from natural resources surveys. As a consequence, they are overly dependent on available climatic data.

There is a need for innovative research into simpler yet realistic models. There is also need for surveys to provide quantitative data on relevant individual soil characteristics (like texture and soil depth) rather than taxonomic units; topographic characteristics (like slope angle, roughness and length of slope) rather than land systems or landform units; specific agrometeorological and hydrological characteristics, and so on.

The present state of the art in simulation modelling is comparable to that in geographic information systems. They are both active and exciting research fields needing scarce and costly staff and equipment. Linking them should greatly increase their applications in land use planning: data can be re-analysed and presented anew almost instantly when conditions change, or to meet specific needs, and to incorporate estimates of risk into assessments (e.g. for cropping in areas with marked climatic variability).

2.2.6 Financial and economic evaluation

If decisions are to be taken on rational grounds, decision-makers must weigh the natural resources information against economic and social imperatives. Usually, the balance is struck intuitively according to the information available to, and understood by, the decision-maker at

the time. The technical difficulties of understanding, handling and combining large amounts of diverse data have severely limited the use made of natural resources information.

The power of economics in decision-making lies in its reduction of many variables to a single measure – money – and the general acceptance of a limited range of measures of project worth (Box 2.4).

The rule is to undertake a project if the present value of benefits outweighs the present value of costs. But natural resources are not easily condensed into simple financial terms, and this is one of the

Box 2.4: Financial and economic evaluation of projects

These evaluations are based on the assumption that prices reflect values, or can be adjusted to do so. Financial analysis (from the point of view of the individual land user or investor) and economic analysis (from the point of view of the wider society) are most appropriate where there is general agreement on values and policy goals, and where there are no unintended or off-site impacts such as soil erosion, salinity or loss of biodiversity.

From the point of view of the land user, the profitability of any activity on any particular patch of land is measured by *gross margin analysis* as the income from the activity less the production costs and overheads. This is a straightforward way of evaluating land under various kinds of management.

Where capital costs are substantial or where an economic evaluation from the point of view of society is required, more sophisticated *cost-benefit analysis* may be applied. The initial cost of development is set against the stream of future benefits (and costs) which are reduced to their present value by *discounting* (approximately the reverse of interest) to give three measures of worth:

- *Net present value*: the present worth of benefits minus the present value of costs;
- *Benefit-cost ratio*: the present value of benefits divided by the present value of costs;
- *Internal rate of return*: the rate of discounting at which the present value of benefits becomes equal to the present value of costs.

Procedures for land evaluation are explained with examples by Dent and Young (1981). Discounting and calculation of these financial measures are explained in a manual by Price Gittinger (1982).

reasons why natural resources information has been neglected by decision-makers. Air, water and soil, for example, are often treated as free resources in economic planning. Environmental services like climatic and flood control are unpriced. This problem is now being addressed by the maturing discipline of environmental economics which seeks to develop economic measures of environmental resources and services and incorporate these measures into decision-making (Turner 1985, Pearce 1991, Turner *et al.* 1994).

A principle of the FAO framework for land evaluation is that comparison between land use and land should be in terms of *benefits* yielded with *inputs* needed. If this comparison is to be made in economic terms, then suitability classes have to be calibrated in terms of both measurable outputs, and the inputs needed to achieve these, and monetary values have to be assigned to these inputs and outputs. This has not been done often although one of the earliest applications of the FAO framework by Young and Goldsmith (1977) in Malawi included an economic evaluation. Ideally, the economic context should determine the cut-off values used for each land quality that determines a suitability class.

There are unavoidable uncertainties in economic evaluations. Costs and prices are themselves ephemeral, and performance depends on management as well as land qualities. The

effectiveness of management is difficult to forecast and its ability to cope with problems - physical, social and economic - is not assessed in land evaluation. These problems can be overcome to an extent if the data about the relatively stable land qualities are held separately from performance and cost/price data. Performance and economic appraisal may then be recalculated from updated information about costs, prices and inputs. For example, the ALES computer programme (Rossiter and van Wambeke 1993) provides a framework for land suitability evaluation according to decision rules entered by the user, and computes the conventional measures of financial suitability. By this means, any new or revised parameter can be taken into account and the re-evaluation undertaken quickly.

2.2.7 Strategic land evaluation

A somewhat different question is whether or not the land has the capacity to meet the demands for products and services, now and in the future. This relates to land use policies to cope with population growth, other changes in demand, climatic change and technological change. The question has been approached by comparing needs or production targets for commodities and services with the capacity of the land to satisfy them; measuring the degree to which needs may be met and the flexibility of land use options in meeting the needs. Several recent attempts at strategic evaluation of land resources have used multiple goal programming, e.g. to assess scenarios for development in Canada (Smit and Brklacich 1984) and the European Community.

Land use planning has proved to be much more difficult than gathering the supporting data. Land evaluation provides a link between the basic data and their application in land use planning; but the step from land evaluation to land use planning is a big one. Planning involves weighing land use opportunities against the problems involved, generation of a range of land use options, and making choices between these options. Not only does planning demand a broader range of professional expertise than for land evaluation, but the decisions made are much closer to the lives of land users and, in the final analysis, are political as much as technical.

2.3 Land use planning

It is only at the stage of land use planning or, more specifically, the implementation of the plan that something actually gets done with land resources information. Land users have always made plans to meet their needs from the resources at their disposal. These plans have usually been informal, and limited in scale and scope, but they *have* been implemented. Until recently, formal land use planning everywhere has remained very much a technocracy. Plans have been drawn up in the offices of the responsible agencies, remote from the areas being planned and often without any involvement by the supposed beneficiaries. Where the responsibility to plan and the power to implement have not been in the same hands, it has always proved difficult to impose these plans. Maybe this is just as well.

The last decade has seen two substantial responses to shortcomings of such 'top-down' plans, namely decentralisation and participation, both trying to bring planning closer to the people who have to implement and live with its results. Decentralisation remains hamstrung by the lack of local capacity to undertake the kind of planning previously attempted centrally. The challenge of integrating broadly-based participation in the planning process is greater and not merely logistic. It involves accommodating often divergent interests and dealing with power issues. Consequently, it requires both new methods and a leap of imagination from both planners and governments which we discuss in the following chapters.

Here, we briefly review some of the standard techniques of land use planning and give examples of their application.

2.3.1 Sectoral plans

The sheer variety of intentions and scales of planning, and the complexity of the situation on-the-ground, mean that no one clearly-defined method of planning is discernible. However, conventional approaches have developed within individual sectors e.g. water resources development, forestry, infrastructure development, etc. For instance, objectives for both wildlife conservation and development planning have been pursued through land use zoning - that is allocating or confining particular activities or uses to particular areas. In the case of wildlife conservation, most countries follow the categories of land defined by IUCN (1982) although the local criteria have to be drawn up to arrive at those categories and, hence, zones on the ground:

I	Scientific reserve/strict nature reserve
II	National park
III	Natural monument/natural landmark
IV	Managed nature reserve/wildlife sanctuary
V	Protected landscape or seascape
VI	Resource reserve
VII	Natural biotic area/anthropological reserve
VIII	Multiple use management area/managed resource area
IX	Biosphere reserve
X	Natural world heritage site.

Once protected areas have been designated, management plans can be prepared for them: the plan document providing baseline information on, e.g. landscapes, fauna and flora, and including prescriptions for use covering zoning, visitor management, resource management (e.g. fire control, game cropping, hunting quotas), research, infrastructure, education, etc. The master plans for national parks and wildlife management in Malawi are an excellent example (Clarke 1983).

In the forestry sector, many countries have designated areas in various categories (e.g. protected forest areas, forest reserves, plantations) and have prepared management plans for such areas. Legal categories have been defined for forests and forest lands by functions and by conditions (ITTO 1993):

1	Protection forests
	1.1 Protection forests on fragile land
	1.2 Forests set aside for plant and animal species and ecosystem preservation
	1.3 Totally protected areas
2	Production forests
3	Conservation forests

Frequently, protected forests are also designated as protected areas under the IUCN protected area categories. There are no universally agreed criteria either for zoning or for preparing management plans. Usually, documents describe the forest types and percentage cover, the standing stock, management objectives, logging quotas, controls and plans for regeneration/replanting.

In the agricultural sector, several national or departmental manuals have been drawn up and these show strong family relationships. For example, the manuals of the Land Use Services Division - later the Land Use Branch (Zambia Dept. Agric. 1977) in Zambia, and by Shaxson

et al. (1977) in Malawi, evolved out of earlier manuals prepared by the Department of Conservation and Extension (CONEX) of the Federation of Rhodesia and Nyasaland. In Zambia, for example, land use plans follow a standard format covering description of area, history, physical conditions, resources, population, communications, present land use, assessment of agricultural potential, proposals for land use, plot demarcation, bush clearing, extension program, roads, water supplies, soil conservation, staff and housing and financial appraisal. Good examples are the North Nyamphande Settlement Scheme (Wilson and Bourne 1971) and the Msandile Catchment Plan (Wilson and Priestley 1974). Such planning is often effective within its own narrow terms of reference, so long as the planning agency is also the executive agency and has some freedom of action; and so long as there are few conflicts of interest.

It is striking, looking at many sectoral plans, that they are often strong on description, even strong on prescription, but with no obvious link between these aspects. Presumably, the link is made intuitively. Only in a few cases is the procedure of land allocation explicit.

2.3.2 Land allocation procedures

Land use planning has been most effective and, sometimes, successful in settlement of 'empty' land and in new plantation and irrigation developments. In these cases, administrative or engineering concerns have been paramount. Limited natural resources information has been used to guide the physical layout of farms, roads and the water distribution system and in the choice of crops. A good example is the work by Hunting Technical Services (1979/80) for the Mahaweli irrigation development in Sri Lanka. Land suitability evaluation was designed for precisely this purpose - allocating land use to land, or land to land use, according to its physical compatibility: irrigation on irrigable land, forestry on steepland and so forth. Given (i) the goal (maximum production, settlement of the greatest number of people on viable farms, maximum conservation or some compromise between these); (ii) the area of land to be allocated; and (iii) basic information on land suitability; allocation can be done intuitively. The planner must also have an appreciation of the constraints of labour, capital and other inputs.

The techniques of land allocation have been adopted from farm planning and small-scale engineering development for settler farms, often based on land capability classification. Usually, arable land is at a premium and the simplest land allocation procedure is to establish how much arable is needed and in what sized management units. All the best land is then allocated to arable in units of appropriate size and if more land is still needed or to make up convenient management units, land of the next best category is tacked on till the demand for arable land is satisfied. Then the next priority is addressed in the same way.

Intuitive allocation becomes increasingly difficult where more (and more-complex) decisions have to be taken, for example for many management units over a large, complex area and, also, when even small mistakes are costly. Perversely, it also becomes more difficult the more information is to hand. The problem of dealing with a welter of detailed information has been addressed by mathematical programming techniques for optimal land allocation (e.g. Dykstra 1984, Hazell 1986). An example of a mature land allocation procedure is the LUPIS package, developed in Australia (Ive *et al.* 1985, Ive and Cocks 1988, Kessel 1990) which links mathematical programming and a geographic information system. The first step is to define all the objectives of the plan and what allocation of land would satisfy each of these objectives. If all objectives cannot be satisfied, trade-offs between them are made until an acceptable compromise is reached, according to the weighting given to each objective (see section 2.3.3, multiple criteria analysis).

Here is a crunch. To whom must the results of land use planning be acceptable?

The planner may start with a clean sheet of paper but the land is not a clean sheet. It has been over-written many times. There are few ‘empty’ areas to be settled and management is not so straightforward when there are many independent decision-makers and management units; and conflicts of interest within local communities and between government and local people. Not least of the difficulties is the failure of professional planners and administrators to comprehend and respect these various and often conflicting goals. This is exemplified by the case of the Barabaig in Tanzania (Box 2.5). There are also difficulties in getting several agencies to work together and, often, a stark absence of technical solutions to land use problems that are practicable, profitable and easily incorporated into existing farming systems.

Box 2.5: The case of the Barabaig

In 1970, in response to an expected increase in demand for wheat, and with financial and technical support from Canada, the government of Tanzania (through the National Agricultural and Food Corporation) initiated a wheat production project which occupies 100 000 acres of the Basotu plains, Hanang District (Fig. 2.1). The scheme is highly mechanised and based on the mono-cropping of hybrid wheat varieties along the lines of prairie wheat farming in Canada.

The land now used for wheat is also used for dry season communal grazing by the Barabaig, a tribe of semi-nomadic pastoralists who number more than 30 000 in Hanang District. Each household manages its herd to maximise production of milk, meat and occasionally blood. Maize is obtained through exchange or sale of livestock, and from shifting cultivation by households with the help of relatives and neighbours.

The Basotu plains are droughty and without permanent water supplies. Therefore, the use of these plains by the Barabaig involves trade-offs between the productivity and stability of grassland production in different areas, within the constraints of water availability and the incidence of tsetse fly. The sustainability of the pastoral system is critically dependent on a flexible response to changing patterns of resource availability; opportunistic land use that allows the exploitation of key areas (e.g. wet depressions, river and lake margins) at particular periods. The Barabaig have developed their own natural resource management strategy which includes seasonal grazing rotation, grazing management, tsetse-control measures (e.g. burning bushland), controlling resource access, and customary regulations to control degradation (e.g. banning settlements in certain areas).

Appropriation of land for the wheat project has denied access to *muhajega* grazing (depressions on the plains which provide important dry-season fodder). Despite the fact that some Barabaig were resident in the area appropriated and that the *muhajega* were a vital forage resource, this land was described as "idle" during the project assessment (Young 1983). Also, traditional burial sites have been ploughed up, causing much resentment.

The loss of *muhajega* has forced the Barabaig to adopt a new grazing pattern and to rely more heavily on the remaining forage areas, particularly in times when they would otherwise be rested from grazing. As a result, they are more intensively used during the critical regeneration period. There is increasing pressure to make greater use of those areas which have low potential, e.g. the rift escarpment which has shallow soils on steep slopes, and the tsetse-infested bushland. This will inevitably result in further soil erosion and reduced production. According to the Barabaig, cattle populations in areas adjacent to the wheat farms have declined by about 30% over the past seven years, whilst productivity of the remaining herds has declined because of the loss of land.

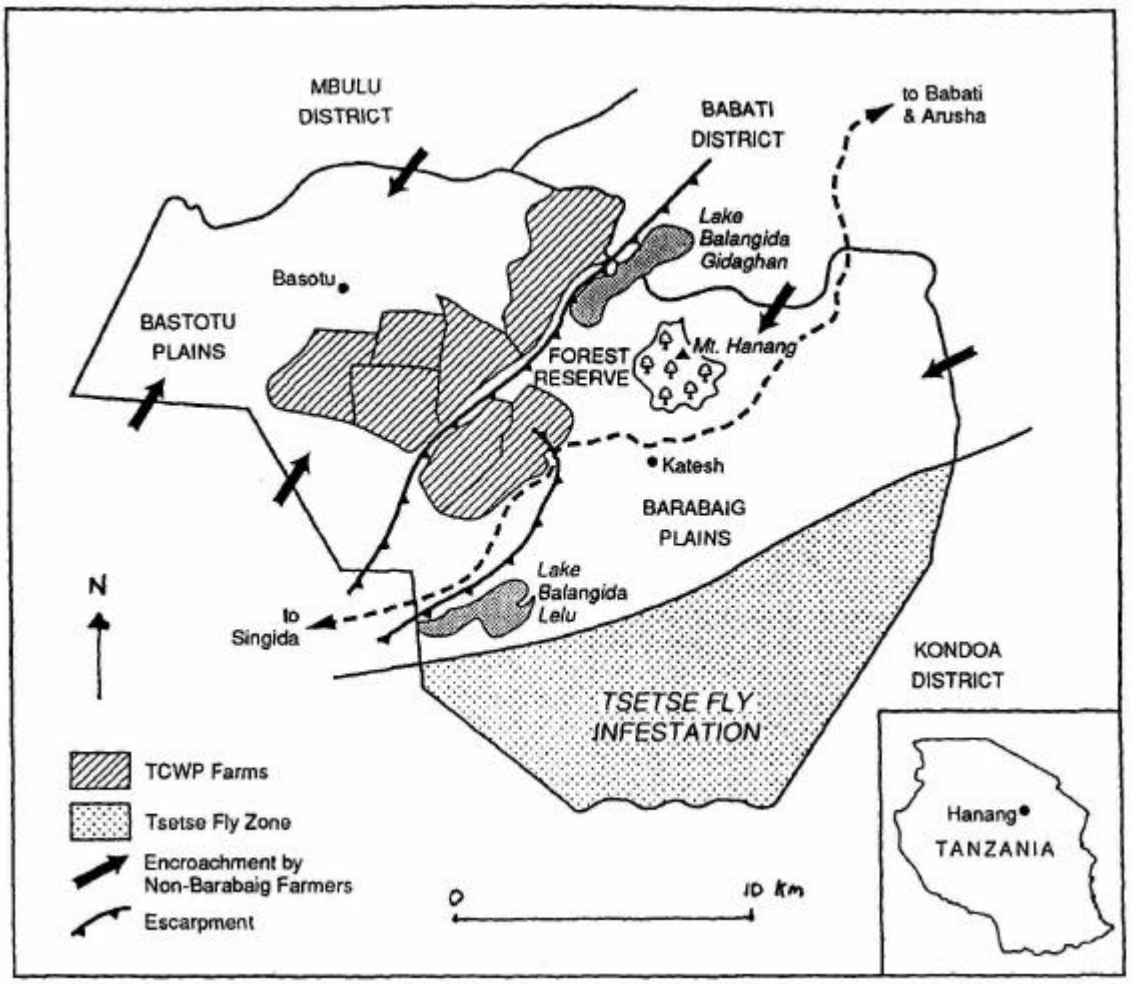
The mechanised wheat farming, with no provision made for soil conservation measures, has also caused considerable soil erosion and siltation of water courses.

Even on narrow economic terms, the wheat project assessment was inadequate on two important counts: it overestimated the potential economic returns of wheat production and it ignored the opportunity costs of reductions in land available to the pastoral system.

The enforced changes in pastoral land use have resulted in a range of environmental impacts: a decrease in perennial species on the plains, accelerated soil loss on the hills, and clearance of bushland. In the bottomland areas still accessible to the pastoralists, there has been puddling and erosion of river and lake margins through excessive grazing.

Source: Lane & Scoones (1991)

Figure 2.1: Map of Hanang District, Tanzania, showing major land use features
Source: Lane & Scoones 1991



2.3.3 Multiple criteria analysis

Where there are several goals and some of these are conflicting, the technique of multiple criteria analysis may be used to assess the degree to which these different goals may be attained. Van Mourik (1987) reports an early application in a livestock project in Tunisia but the greatest potential value of the technique may be in policy development. Policy makers need specific information to develop policies and to identify what actions have to be taken to meet their various goals - e.g. to reduce competition between rival demands, to meet present and future opportunities.

Interesting examples of an optimisation procedure come from work undertaken by Dutch researchers using the multiple goal programming method of de Wit *et al.* (1988) in dry parts of West Africa.

They have been applied to decision-making at the household level, e.g. Maatman *et al.* (1998) to optimise and to assess the value of soil conservation practices; and at regional level by Veenklaas *et al.* (1991) and van Duivenbooden *et al.* (1991) seeking ways to reduce competition between arable farming and livestock husbandry in the Fifth Region of Mali, to

explore the technical possibilities of a more sustainable land use than at present, and to judge the economic viability of various land use options (Box 2.6).

There are two obvious reasons why little or no use has been made of such policy-support work in poor countries:

- The huge data requirements and the substantial work needed to assemble the necessary data;
- The complexity of the modelling and grade of facilities needed to operate it.

The optimisation model for Mali has never actually been operated in Mali, so local planners have had no opportunity to use it!

Box 2.6: Optimising land use in the Fifth Region of Mali

The working steps in the Mali exercise were:

- Identify and characterise the land units (in this case, agro-ecological units defined by soil mapping units and climate);
- Identify and characterise promising land use types in terms of their land requirements, and their outputs given the constraints of each land unit;
- Scenario analysis. Several goals were defined that, in principle, could be optimised or assigned maximum or minimum values - production targets, monetary targets, risks, employment and emigration targets. Two technically feasible land use scenarios were built: one maximising monetary value, the other maximising self-sufficiency and both very different from the present pattern of land use.

The multiple goal programming technique was used to calculate the optimal pattern of land use and input require to achieve each selected goal.

Sources: Veenklas *et al*. (1994) and van Duivenbooden *et al*. (1991)

There remain the tasks of translating model predictions into their social and economic repercussions, and then into the policies and action on the ground that are necessary to realise the predictions (or to prevent them). Modellers are supremely ill-equipped for this task, as is illustrated again in the example of Mali where the computed fertilizer needed to compensate for nutrient uptake by the modelled grain crop, for the Fifth Region alone, greatly exceeded the total imports for the whole country.

2.3.4 Resource management domains

The planning techniques described so far come mostly from the land resources stable. Land resources specialists have analysed the potential for development and devised optimal solutions to problems of land resources in terms of biophysical variables (climate, soils, terrain, etc.) and biophysical potential (e.g. crop yields). Their planning units have been biophysical land units. These are real areas of land but they are not areas of responsibility: they are not often decision-making units.

Administrators can work only with areas for which they have responsibility, which rarely coincide with those defined by nature. The same applies to land occupied and managed by individual land users or by whole communities.

The most effective decision-making unit depends on the problem in hand and, also, on whom is making and implementing the decision. CIRAD in West Africa developed a distinctive geographic approach based on land use. Their basic decision-making unit, the *terroir*, is the village or social group territory in which farmers' practices are similar. Within the *terroir*, social, cultural and economic factors interact very powerfully with the biophysical environment to produce relatively homogeneous land use patterns – only providing that the pressures on the land are stable, which may have been the case in many rural societies up to a couple of generations ago. The socially-defined *terroir* is the basis of the participatory planning approach known as *gestion de terroir* (we discuss the Gestion de Terroir approach in detail in Chapter Three and Appendix 6).

The concept of *resource management domains* is an attempt to combine both the socio-economic and biophysical appreciation of land resources. It arose from the concept of *recommendation domains* (Harrington and Trip 1984) - groups of farmers whose circumstances are similar enough that they will be eligible for the same recommendation; and it was initially taken up by CGIAR[4] institutions looking for a more promising vehicle for transfer of their high-flying technologies to wider areas and to people with different value systems.

The resource management domain is now transferred to a landscape unit as:

> 'A spatial unit that offers opportunities for identification and application of resource management options to address specific issues. It is derived from georeferenced biophysical and socio-economic information, and it is dynamic and multiscale in that it reflects human interventions in the landscape.' (Craswell *et al.* 1996)

In plain English, this means a unit in which the biophysical landscape is homogenous AND so is the management.

To date, resource management domains have been constructed from traditional biophysical land units overlaid by socio-economic data. The various land units are linked with spatially-referenced socio-economic attributes in a GIS, so that resource management domains can be identified by relating the spatial units to the issue being addressed. An alternative approach, based entirely on GIS, might be a raster system in which each grid square is characterised by both biophysical and socio-economic attributes, so that a resource management domain might be identified by a digital elevation model and a decision-rule or algorithm for the problem in hand.

Resource management domains lend themselves to computer-based information but the concept can be applied in a variety of situations without involving sophisticated technology. For land use planning, particularly for planning based on interactive participation of different stakeholders, the resource management domain can be a place where particular land resources are appreciated in a particular way, or seen through particular eyes. Like a landscape painted by a Cezanne and by a Constable, the eyes don't change the landscapes but their appreciation is different. So different ways may be found to achieve the same planning goals, depending on who is doing the planning.

2.3.5 Land use planning experience in developing countries

Land use planning procedures range from the sophisticated to the summary. Examples of both have been tried in Tanzania where land use problems arose both from growing pressure on the

[4] CGIAR: Consultative Group of International Agricultural Research organisations.

land and from resettlement of people in new villages located by administrative fiat. The problems were addressed, first, by externally-funded resource inventories, for example Mitchell (1984) in Tabora Region. Building on the Tabora surveys, a rigorous village land use planning procedure was developed based on algorithms of carrying capacity, economic viability, livestock carrying capacity and fuelwood availability (Corker 1982).

The procedure proved too ambitious in terms of the time and expertise demanded (at least 45 days by an interdisciplinary team per village plan) and also in terms of the resources available to implement desired developments. With the benefit of this experience, a simplified two-stage procedure was evolved that demanded much less professional input. The simplified procedure comprised first, village-by-village appraisal of the land use situation by three-man teams with agronomic, livestock and forestry expertise; selection of priority villages; and then production of a framework plan in collaboration with the Village Council (Box 2.7).

Box 2.7: Procedure for framework village plans in Tanzania

I Quick appraisal

i Using air photos or 1:50 000 enlargements of SPOT imagery, delineate village boundaries and measure areas suitable for cultivation and areas actually cultivated.

ii Collect basic data on population and farming systems.

iii Discuss local land use problems with village leaders to arrive at a crude appraisal of the match between village land resources and village needs.

This takes a three-man team about four days working in the village. On the basis of such appraisals, priority villages for the next stage of planning can be identified at a district level.

II Framework plan

i Sketch landforms, land use, soils, eroded areas, water sources and tracks on 1:50 000 imagery.

ii Field check, especially of soils and water sources.

iii Survey village and sample households to determine population distribution and growth, land holdings, livestock ownership, levels of production and other economic activities.

iv Assess land suitability and draw up an indicative land use plan. Discuss its implications with the people concerned.

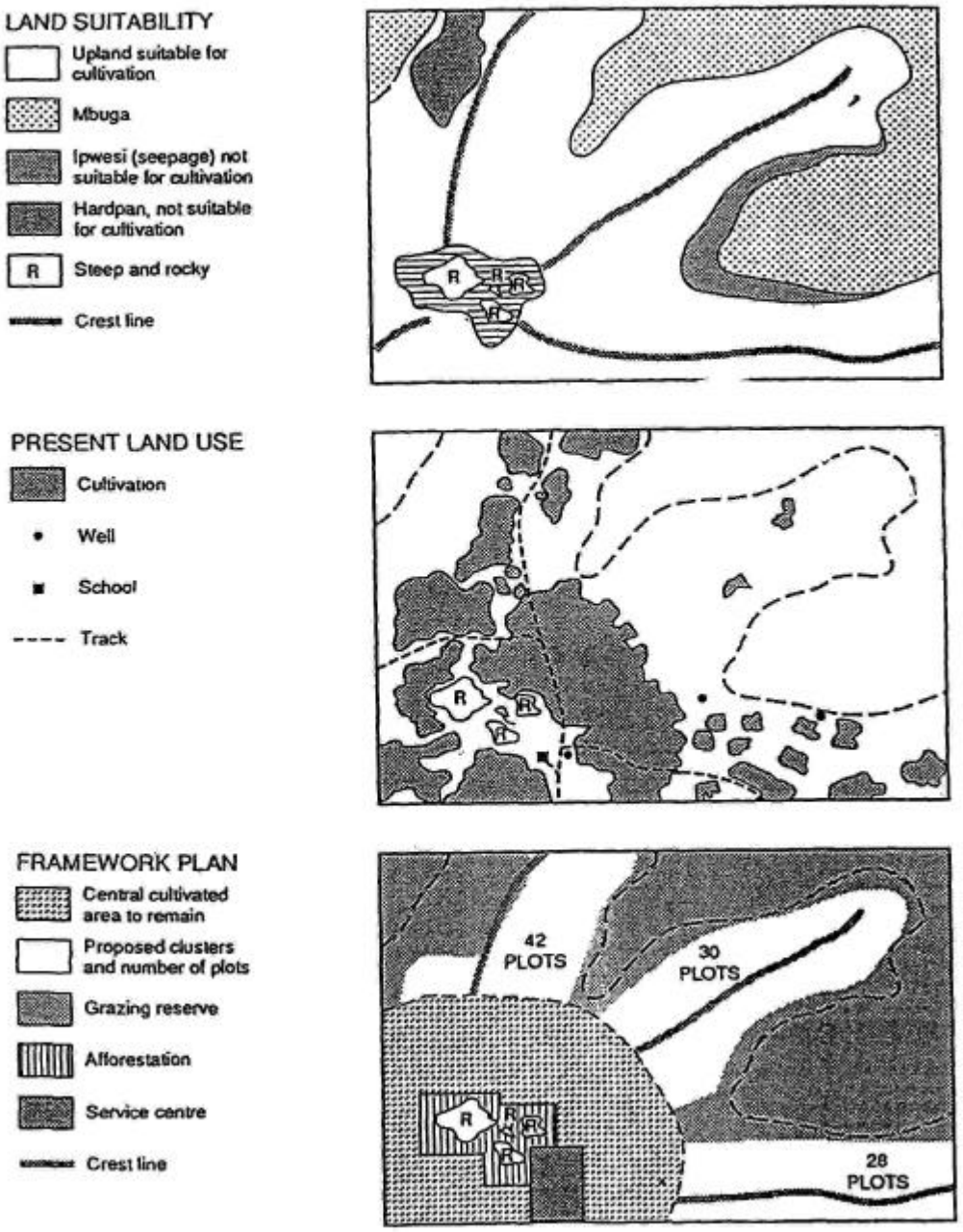
The whole procedure, including the production of a framework plan, requires about two weeks of work by a three-man planning team living in the village.

Implementation relies on devolution of authority to the Village Council which resolves conflicts and determines the priorities for development. The resulting framework plan (Figure 2.2) is its responsibility. It can allocate land according to customary law, lay out individual farm plots, and manage communal land uses such as woodlots and grazing reserves. Locally-developed plans can be implemented because they do not rely on major external inputs.

Source: Wheeler *et al*. (1989)

Figure 2.2: Land suitability, present land use and framework plan for a village in Tanzania

Source: Wheeler et al. 1989



Theoretically, this framework plan could then be fleshed out and implemented by the local community. But it wasn't. The local community was not involved from the outset (the initiative was external) nor in the active gathering and appraisal of data. Furthermore, Village Councils in Tanzania are essentially organs of government and Village Chairmen are political appointees. As a consequence, Council decisions do not necessarily reflect the needs, wishes or aspirations of the village community as a whole.

In Tabora, the planning teams were able to draw upon considerable expertise in land resources and planning built up by the externally-funded land use project. In the absence of external funding, the cost of SPOT imagery to provide basemaps and land resources information proved to be prohibitive, and elsewhere in Tanzania the natural resources expertise is not available.

Here we see two continuing problems of land use planning in the field:

- A growing awareness of the need for people's participation in planning without grasping the far-reaching implications of this for political development and professional procedures;

- An acute shortage of both professional expertise and of resources for both planning and implementation.

These problems may be tackled from opposite poles. One approach is to prescribe the detailed procedures to be followed, tailoring them to specific local circumstances. The alternative is to set out a pathway and the steps to be followed, leaving people on the ground to adapt the steps and fill in the details to suit their own circumstances.

An example of the first approach was developed in the 1980s in Bangladesh by Hugh Brammer in support of an attempt to revive the Thana[5] Development Programme. In the 1960s, this programme had made considerable progress in land drainage, irrigation and rural roads based on a participatory planning model developed by Akhter Hamid Khan at the Comilla (now Bangladesh) Rural Development Academy. Recognising that officials - mainly urban - often knew less about local environments than the farmers they were supposed to be talking with, a training manual was produced. It aimed to bring officials onto an equal footing, to make dialogue possible, by enabling them to make use of soils and land use information that had been gathered by surveys between 1963 and 1975.

The manual gives detailed instructions for every step and calculation: for example, to assess the area of land available, local food sufficiency, allocation of water for irrigation, even dealing with contingencies, and the procedure was dovetailed with the many layers of local administration and to the responsibilities of officials at each level.

Although this approach avoids the problem of lack of local technical expertise by working out all the answers beforehand, its strengths are also its weaknesses. It would be difficult to change the procedure from below to deal with new questions and whilst the intention is to engage local people in dialogue, it involves consultation rather than active participation by local communities (see Table 3.1). More empowering approaches to participatory planning are discussed in Chapter Three.

This planning initiative failed, for a number of reasons. Possibly the main one was the fall of the government that promoted it, just as the original Thana development planning programme foundered during and after the separation of Bangladesh from Pakistan. Without strong

[5] Thana: a local self-government/administrative unit in Bangladesh, usually including 150-175 villages and with a population of about 200 000 people.

political support, it fell prey to inter-agency rivalries. A subsequent government stripped Thana Councils of development powers and funds, and established government departments continue to operate their independent area development/technology transfer programmes, and refuse to be coordinated.

All-too-human factors also came into play: the threat perceived by senior officials in the Extension and other departments from their junior officials learning techniques they did not themselves understand, and the fact that dialogue remains an alien concept in the culture of officials throughout the subcontinent. A revised 'Manual of Upazilla Planning', prepared for use by extension officers, never got past the discussion stage and no further attempt has been made to revitalise the integrated planning initiative.

2.3.6 FAO guidelines for land use planning

An alternative model of planning evolved in the course of a series of 'expert consultations' convened by FAO. The *Guidelines for Land Use Planning* (FAO 1993, Fig 2.3) outline a ten-step procedure that may be applied at any scale of planning, from global to the individual farm, but leave the fine detail to the people on the ground.

The thrust of the spear point in Figure 2.3 implies steady progress from one step to another but, in practice we often have to retrace our steps to take account of new information, changing conditions or new goals.

The crucial question is 'Who shall be responsible for each step?'. Here the FAO guidelines betray their expert lineage by allocating most responsibilities to the professional planning team. Consultation is implicit in Step 1 (establish goals and ground rules) and, through rapid rural appraisal, in Step 3 (structure the problems and opportunities). Public and executive discussion is explicit in Step 7 (choose the best option - from amongst those already identified and appraised by the professionals !). Then, at Step 9, the plan is supposed to be made flesh by the beneficiaries.

The guidelines provide a checklist of the activities required at each step and, in principle, these steps can be taken either by top-down or bottom-up planning. In practice, however, few established institutions or individual professionals have been able to break away from their paternalistic tradition.

2.3.7 Faith in negotiation

Plans handed down from above have a consistent record of failure:

- *Failure to address all the issues*. There are many instances of concentration on production at all costs. On the other hand, efforts at conservation typically deal in isolation with technical measures such as destocking of grazing lands, or construction of earthworks to retain soil and water. The social and economic imperatives that drive unsustainable use are not dealt with.

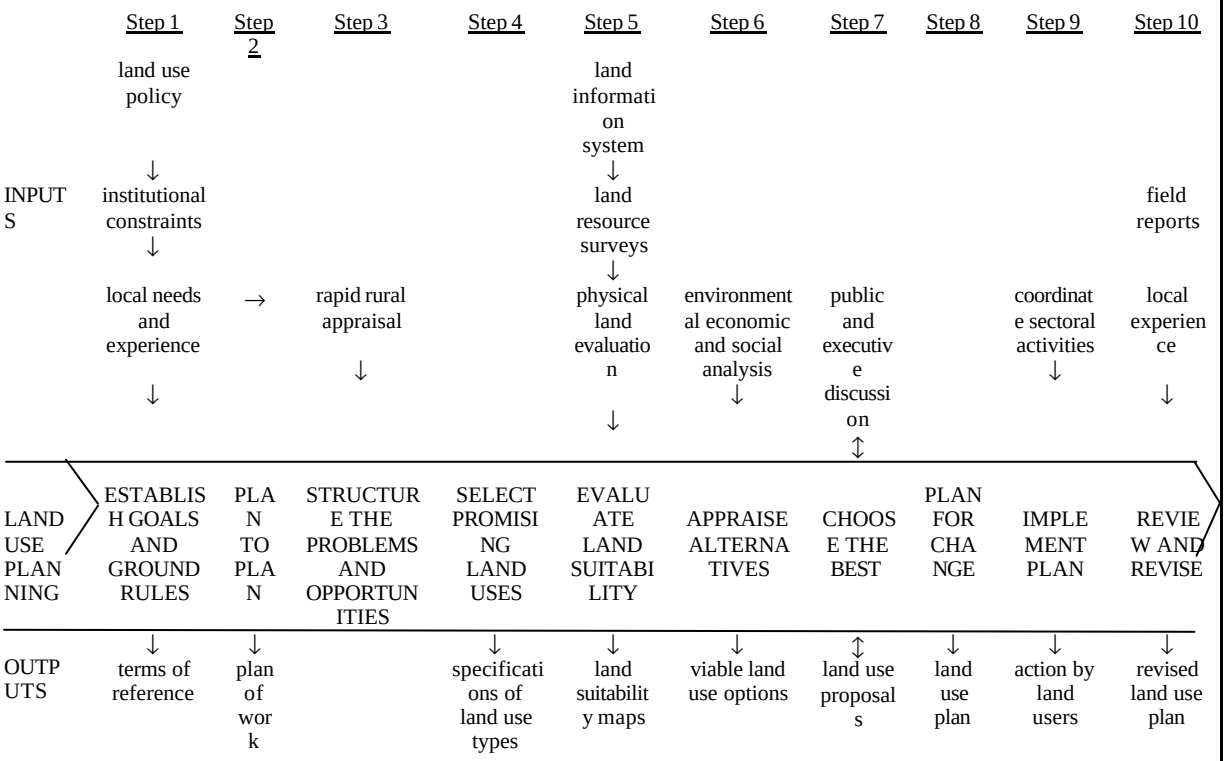
- *Failure of information*. Lack of data, failure to make use of either detailed local knowledge or relevant technical knowledge.

- *Failure to integrate* efforts and goals. Typically we see competing projects and competing institutions with disparate goals.

- *Failure of institutions.* Failure to cope when situations are complex or when times are hard, and a reluctance of governments and development agencies to address the problems of institutional weakness.

Figure 2.3: Steps in land use planning

(Source: Dent 1988)



DEFINE PROBLEMS

Step 1: Establish the present land use situation and the needs of all the stakeholders; agree and specify what you want to achieve.

Step 2: Plan to plan. Organise the work needed.

Step 3: Structure the problems and opportunities. Socio-economic and bio-physical considerations should be given equal weight.

MODEL SOLUTIONS

Step 4: Devise a range of responses. Identify or design alternative land use types or patterns of land use that might achieve the goals.

Step 5: Evaluate land suitability. For each promising land use type, establish its land requirements and match these with the qualities of the land.

Step 6: Appraise alternatives. For each well-matched combination of land use and land, assess its environmental, economic and social impact.

DECISION

Step 7: Choose the best achievable land use.

Step 8: Draw up a land use plan, allocating land to land use and making provision for appropriate management.

TEST SOLUTIONS

Step 9: Implement the plan. Action by implementing agencies and land users.

Step 10: Learn from the plan. Monitor progress. Revise the plan in the light of experience and to accommodate new goals.

- *Failure to address the legitimate goals of all the stakeholders*, to involve all the stakeholders in planning the use of land, or to empower them to manage resources in common. Fiats imposed from above are resented, resisted, ignored and, ultimately, overturned.

Therefore, there has been a general failure of implementation of plans, at least in anything like the shape envisaged by the planners.

Attempts to learn from these failures have not yet advanced beyond statements of principle. FAO has tried to develop a new approach to land management and land use planning which, it claims, emphasises the integration of physical, socio-economic and institutional aspects of land use, as well as the need for the active participation of stakeholders in decision-making (FAO/UNEP 1997). This latest expert response involves few changes to the existing land use planning guidelines and has yet to be field tested (a pilot exercise initiated in Sierra Leone had to be aborted due to civil war) but it does emphasise two principles that may serve as a basis for more effective land use plans:

- First, successful implementation of a plan depends upon common ownership of the problems and the proposed solutions by the people who will be affected. This common ownership may come from consensus about the goals and the actions needed, or from a negotiated compromise between groups with different goals and different insights.

- If there is to be negotiation, there must be some institution or forum that commands general respect where the parties can negotiate - to agree goals, prioritise problems, contribute their knowledge, and allocate responsibilities for action (see Chapter 4, institutions). Of course, the necessary readiness to negotiate a compromise may not be present, but no better alternative has been proposed.

Holding to these principles, Dalal-Clayton and Dent (1999) have redefined some of the steps in land use planning (Figure 2.3) with a further step at the very outset, a Step 0, to set off on the right foot (Box 2.8).

Box 2.8: Redefined steps in land use planning

Step O: Foster partnership

Legitimacy and, therefore, broadly-based commitment to a plan requires, first, identification of the stakeholders. A stakeholder is anyone, or any group, with an interest in or affected by the issue or activity. Where natural resources are concerned, everyone is a stakeholder but their commitment, or opposition, depends on the benefit they stand to gain, or forfeit.

Different stakeholders have different interests and, often these conflict. Unresolved conflicts are the root of much land degradation because they lead to short-term exploitation of resources; so a pre-requisite of sustainable management is a forum where all the stakeholders, or their representatives, meet on equal terms to resolve conflicts of interest or negotiate an acceptable comprise. Very often, there are existing institutions - maybe a local water management group, cooperative, or assembly - that can be empowered to take on a wider responsibility. If there is no forum, one must be created and experience shows that such institutions work best when the rights of resource users to manage the resources on which they depend are respected by outsiders and governments (Ostrom 1990).

Step 1: Setting the goals and ground rules

This is the first item for negotiation. The goals may emerge from local concerns or national issues. They must be specified and, since it is likely that there will be several, they must be ranked. The criteria by which decisions will be made must also be agreed and, since they too will be several, they must be weighted.

Decisions have to be made about the location, size and boundaries of the planning area; the scope and time frame of the plan; the responsibilities of the various partners, e.g. in providing funding, labour and facilities. All of these require basic information about the land and its resources; the people and their needs, rights and responsibilities; and the organisation of administration and services. And if negotiations are to be meaningful, all the stakeholders must hold this information and be equipped to make use of it.

Step 2: Organise the work

A list needs to be made of the tasks to be accomplished; the people and other resources required; and a schedule of activities drawn up. Depending on the size and complexity of the planning operation, the assembly of data and preparation of proposals may be delegated to professional staff but the decisions should be made jointly by all stakeholders - not by government agencies acting alone.

Step 3: Structure the problems and opportunities

A problem is a gap between the present situation and some preferred state of affairs. The essential activities of this step are to find out about the present situation; judge ways in which it is bad; and identify ways in which it might be made better (Siffin 1980). All participants will have their own ideas about the nature of the problems and the opportunities for change, and these must be canvassed. Specialist research may also be required to establish the facts. Table 2.3 lists examples of the kinds of problems that land use planning is expected to solve and the broad-brush solutions that might are proposed at Step 3.

Step 4: Specify alternatives

Usually, there are several ways of tackling a problem that are worthy of rigorous appraisal before the best option can be chosen. These may include non-land use options; projects to accomplish specific tasks such as construction of bunds and well boring; education programmes; and adoption of new or improved land use systems. In terms of conventional land evaluation, this step includes identification and definition of promising land use types.

Step 5: Evaluate land suitability

This step involves the comparison of the requirements of the promising land use types with what the land has to offer. In a large project, this biophysical evaluation is usually undertaken by land resources specialists.

Step 6: Appraise the alternatives

The alternatives are appraised in terms of their economic, environmental and social consequences. In the past, appraisal has been confined to one question - will it pay? Amongst the ground rules for planning that have to be negotiated at Step 1, and revisited at this step, are the criteria by which the alternatives will be judged; so that supporting information may be assembled.

Step 7: Choose the best option

Now the process moves firmly back into the hands of the decision-makers. Although there may be shuttling between them and any decision-support team to answer sequences of 'What if?' questions or to test modified proposals, the decisions are likely to be the outcome of intuitive judgement and hard bargaining.

Step 8: Prepare a land use plan

This will state what has been decided and why, how it should be accomplished and, if funding is required, how much it will cost. Where a formal written plan is required, this will draw upon the preparation work of earlier steps, especially the natural resources studies of Steps 3 to 6 but, beyond this, substantial logistic and financial planning will be involved.

Step 9: Implement the plan

Most failures of planning have failed in the doing, most often through lack of support which should already have been evident through Steps 0, 1, 3 and 7. For a large project, implementation may require an institution of its own with time and a budget orders of magnitude greater than the preparation stages, whereas an independent farmer or a local community may implement their own plan in their stride, with their own resources.

Where a project involves government departments, new project management institutions should *not* be created merely in order to circumvent the legitimate official structures, even if they are ineffective. This approach has

often been followed in the past, particularly for large donor-funded projects. The project might operate effectively whilst donors are involved, but experience shows that the new institution and the project usually collapses once donor support ends. The better option is to work within the existing government or other structures and try to overcome any institutional problems.

Step 10: Monitor and revise

Major projects establish regulatory procedures to ensure that money is being spent as intended and work is completed to the required standard. Of course, this is important but it is also necessary to know if the goals of the plan itself are being attained, e.g. arrest of land degradation, improvement of water supplies and water quality, maintenance of biodiversity. The original plan will not be perfect and changing circumstances may also demand a change of direction, so information on relevant natural resources indicators must also be gathered and fed back into the planning system.

Table 2.3: Examples of land use problems and responses

Symptoms	Underlying causes	Response options
Migration to towns Low rural incomes Lack of employment opportunities Shortage of land, fuel, timber Encroachment on forest and wildlife resources Land degradation	*Social:* - population pressure - inequitable access to land, capital - lack of infrastructure *Natural hazards:* - inadequate water - droughty soils - rough terrain - flooding *Mismatch between land and land use:* - clearance of forest on steeplands - inadequate bush fallow - inadequate soil & water management	Reform or clarification of land tenure Provision of credit guarantees Marketing and infrastructure initiatives Improved irrigation Fertiliser supply Integrated pest management Agroforestry Soil & water conservation

Many of these steps are less complicated where the area and scope of the plan is restricted, and the decision-makers themselves have close links with each other and with the land. But whatever body takes on the job of land use planning, it still needs the input of natural resources information, homespun or professional. Mountains cannot be moved, even by negotiation, unless the existence and whereabouts of the mountains are known about in the first place.

2.4 Impact assessment

Over the past 30 years, a battery of techniques has emerged for the environmental assessment of projects, programmes and policies. They include environmental impact assessment (EIA), risk assessment, social impact assessment, and the routine desk-screening of proposals for development. A useful, up-to-date summary of these techniques is provided in Donnelly *et al.* (1998).

Since its introduction in 1969 in the USA under the National Environmental Protection Act, more and more countries have introduced legislation that requires EIAs for certain categories of development. EIA predicts the likely environmental impacts of development projects, identifies ways to reduce or mitigate unacceptable impacts, and presents these predictions and options to decision-makers. However, EIA has been essentially reactive - often conducted after the design phase of projects and, sometimes, even after implementation (e.g. the Victoria dam in Sri Lanka). Whilst current practice deals mainly with environmental impacts in biophysical terms, there is now a widening recognition of the need to integrate within the EIA process the consideration of social, economic and biophysical aspects. Increasingly, EIA is being seen as an important tool for involving different groups of stakeholders in the development process, and as a means of ensuring the accountability of development proposals.

There is also growing recognition of the need for environmental management (through, for example, environmental management plans) and introducing environmental considerations at

earlier stages of the decision-making process. EIA has rarely been attempted at policy or plan level, although this approach is now being promoted through strategic environmental assessment. Dalal-Clayton and Sadler (1998) provide a review of its application and potential in developing countries.

There tends to be a divorce between EIA and other statutory and non-statutory rural planning, such that the one rarely informs the other and EIA studies can are ignored. There is also a tendency in many countries (e.g. Zimbabwe) for developers to hire consultants to undertake EIA studies, which are then prejudiced in favour of the priorities of the developer but given a patina of professionalism. The State, which should act as an arbiter in these matters, often has limited resources and so the EIA studies are not seriously examined or questioned. A recent review of the performance of EIA in Tanzania (Mwalyosi and Hughes, 1998) demonstrates how little impact EIA has on decision-making or rarely has led to design modifications.

2.5 Decentralised district planning

District planning has been a feature of regional planning for several decades. As for land use planning, many countries have prepared manuals for district-level planning, and these usually concentrate on the issues to be covered rather than how to do it. The top-down nature and project/programme orientation of district plans throughout the 1970s and 1980s and even in the 1990s is typified by that of the Akuapem North District Development Plan, Ghana (Box 2.9). In many countries, district plans are sectorally-based, lack integration and still represent little more than a catalogue of major projects, initiatives and events that will take place (providing funding is available from central government or other sources) in the future. This is exemplified by the case of Nepal (see Appendix 9).

As already noted above, district authorities in most developing countries have long suffered from a lack of institutional capacity to prepare, implement and monitor plans. Whilst donors have supported some projects in district plans, implementation of plans has been hampered by less-than-enthusiastic support from central government agencies and by shortages of finance and resources available to district authorities. The latter bottleneck is increasingly being recognised. For example, in Zimbabwe, the decentralisation model is seeking to enhance the role of Rural District Councils (RDCs) in planning and managing districts. The vision is that the RDC should act as the pivotal point for all rural planning initiatives. A Rural District Development Committee, led by the RDC but embracing all relevant district stakeholders is required to produce strategic and three-year rolling plans to guide development and set priorities. The Rural District Council Capacity-Building Programme aims to build the capacity of the RDC to lead this process and become a strategic planning authority (see Figure 2.4).

Box 2.9: Akuapem North District Development Plan, Ghana (1996 – 2000)

This plan was prepared by the Akuapem North District authorities within the framework of planning guidelines issued by the National Development Planning Commission. The latter specify a prescribed format and content (see below). Such district plans in Ghana are expected to be based on the goals and objectives of the 25-year Perspective Plan: Ghana Vision 2020, The First Step: 1996-200.

Contents

1. ***Executive summary***
   - General stagnation of population growth, inadequate social infrastructure, low incomes, weak settlement hierarchy, and weak administrative and management capacity;
   - The focus of the development plan – stated as the promotion of social and economic growth and development of the district consistent with the objectives of Ghana Vision 2020;
   - Strategies for achieving the development objective;
   - Specific development programmes following from the strategies;
   - Implementation of the 5-year district development plan.

2. ***The existing context (profile)***
   - Covers: social services, economic base, infrastructure, environment, land and land management, housing, urban management, and NGOs.

3. ***Medium-term development proposals***
   - Covers: development constraints and opportunities, development objectives and focus of the district development plan, development programmes and projects.

4. Implementation of the 5-year development plan

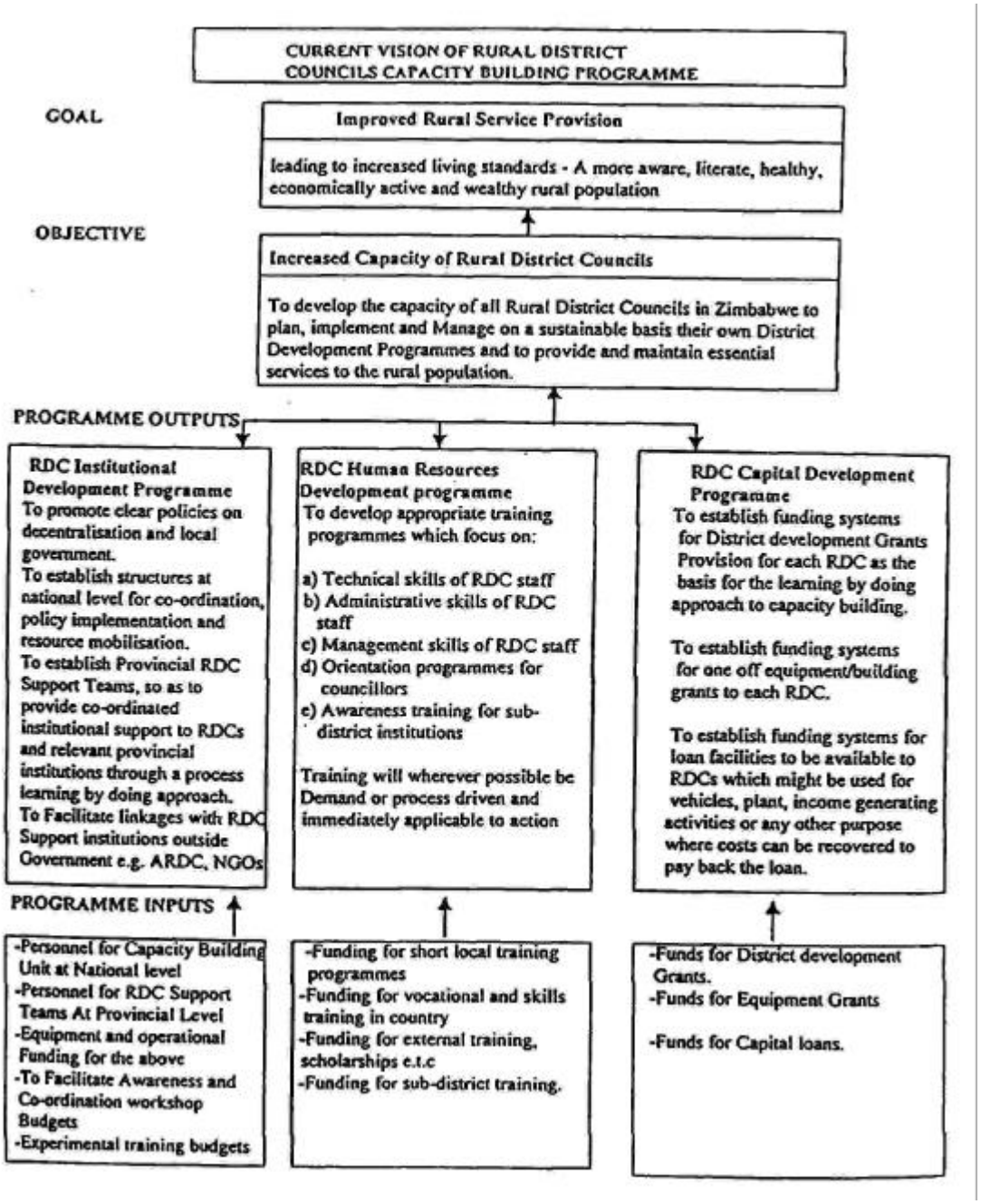
5. Monitoring and evaluation

Source: Botchie (2000)

Some decentralisation programmes have provided direct government funding to district authorities to implement their plans. In Guatemala in the late 1980s and early 1990s, 8% of the national budget was distributed directly to municipalities, based on their population. But this structure was not part of the constitution and was abandoned by the next government after two years (see Appendix 5). A more recent example is the new decentralised planning system in Ghana under which a guaranteed proportion of government revenue is passed to the districts (see Box 2.10). But there are still institutional and capacity problems. In 1995, each district in Ghana was given only three months in which to adopt new planning guidelines from the National Development Planning Commission and prepare district development plans. Given the shortages of available information and of experienced professional staff, all 110 districts appointed consultants to prepare the district development plans in 1995. A recent study of five of these plans for districts around Kumasi found that the plans contained district profiles which were very descriptive rather than analytical (NRI/UST 1997):

> 'There is no attempt to address the identified problems and constraints by putting forward alternative strategies or choices, or to bring together various sectoral proposals into an integrated co-ordinated plan. None of the five plans have (*sic*) a clear vision about what trends are likely to occur over the 5-year time period or what broad longer-term spatial trends would be appropriate for their area. Consequently, each district ends up producing a series of project proposals for implementation during the 5-year period, but these are often conceived independently of the goals and objectives or analyses of current problems.'

Figure 2.4: Current Vision of the Rural District Councils Capacity-Building Programme, Zimbabwe
Source: PlanAfric 2000



Box 2.10: Ghana's new decentralised planning system

In the past, Ghana had a highly centralised government planning system which marginalised local government. More recently, a decentralised system of planning has been introduced which is participatory and 'bottom-up' (see Figure 2.5). Each of Ghana's 110 districts now has full responsibility to develop and implement its own medium-term (5 year) and annual district development plans. This responsibility lies with the District Assemblies (DAs) which are either metropolitan (population >250,000), municipal (one-town with a population >95,000) or district (population >75,000). Members of DAs are elected every four years from people ordinarily resident in the district. In addition, the President, in consultation with traditional authorities, can appoint one third of the members - in practice from individuals nominated by the districts to ensure the inclusion of people with skills and expertise so that the business of local government is properly conducted. The District Chief Executive (DCE) is also appointed by the President and is subject to approval by the Assembly. A District Planning Coordinating Unit acts as the secretariat to the DA for planning purposes.

The National Development Planning Commission has prepared guidelines for district-level planning (NDPC 1995)). Each district plan must be subjected to a public hearing. District development plans are harmonised at the regional level by Regional Coordinating Councils, and these regional plans are then consolidated with individual sector plans (prepared by line ministries and also subject to hearings) by the National Development Planning Commission (NDPC) into a National Development Plan. The NDPC undertakes this task through cross-sectoral planning groups which have representatives from the public sector, business, university, districts, scientists, trade unions and farmers. The country is currently implementing the first of these rolling medium term development plans covering the period 1997-2000 (Ghana NDPC 1997).

Through new financial arrangements under the Constitution, at least 5% of internal government revenue is allocated by parliament to the District Assemblies Common Fund. Each year, parliament agrees a formula for the distribution of the fund. This takes into account the population of each district, weighted by its development status (judged pragmatically by indicators of socio-economic development such as the number of pupils attending school, the presence of a commercial banks) and its revenue mobilization effort (the percentage increase over the amount collected in the previous year). DAs are able to use these funds for capital expenditure of a development nature within the district plans. For example, at present, five districts are implementing a poverty reduction programme and the targeted communities decide upon what action is to be taken.

The base level for planning lies in Unit Committees for settlements or groups of settlements with a population of 500-1000 in rural areas and 1500 for urban areas. Community problems are identified here and goals and objectives set out and passed up through higher level councils to the DA. Committees of the DA consider problems and opportunities, and prioritise them. Departments of the District/Municipal/Metropolitan Assembly together with sectoral specialists, NGOs and other agencies collaborate to distil the ingredients of the district plan. The District Planning Coordinating Unit integrates and coordinates the district sectoral plans into long-term, medium-term and short-term with annual plans/budgets for consideration by the DA.

Whilst legislation has given power to the DAs, there is limited capacity to undertake these new responsibilities at district and sub-district levels. The DAs have also been pressured by line ministries to establish a variety of district committees, e.g. for environmental management, disasters, health, etc. According to the Ministry of Local Government and Rural Development (Ghana MLGRD 1996), districts still lack decentralised departments of many line ministries. In the past, line ministries operated centrally-determined programmes. Under the Local Government Services Bill, district offices of line ministries will become departments of the DAs answerable to the DCE. There is some resistance to the new arrangements from the ministries; there is lingering allegiance of district level staff to their regional and national headquarters; and some staff have been reluctant to accept postings, particularly to deprived districts. The quality of district staff is relatively poor although it has improved following training and refresher courses, and postings of national/regional staff to districts. As a result, some DAs have turned to consultancy firms to assist in the preparation of their plans. The new system also faces continuing logistical problems (inadequate office and residential accommodation, equipment, vehicles, etc.).

Initial financial constraints have been ameliorated through the establishment of the District Assemblies Common Fund.

District planning officers have received some training to facilitate community meetings through which communities can identify their concerns and needs. This process has led to some unexpected requests. One

village, for example, wanted funds for a brass band, reasoning such a band at their weekly village market would attract people from other villages and enhance economic growth. However, brass bands are mainly used in Ghana for festive and social occasions and would be more likely to be a distraction rather than enhance economic activity at a busy market.

Aims in the short-, medium-, and long-term

Placing the focus of the new planning system on the districts provides an unprecedented opportunity for local communities to participate effectively in the conception, planning and implementation of local development programmes and projects.

In the *short-term*, the aim is to translate the new planning process into reality. Through this, Ghana expects to achieve:

- Restructuring of the political and public administrative machinery for development decision-making at both national and local levels;
- Organisation of spatial development to attain functional efficiency and environmental harmony;
- Integration of local government and central government at the regional and district levels;
- Decentralisation of the development planning process;
- Adequate transfer of financial, human and other resources from central government to local authorities.

Significant progress has already been made, e.g.:

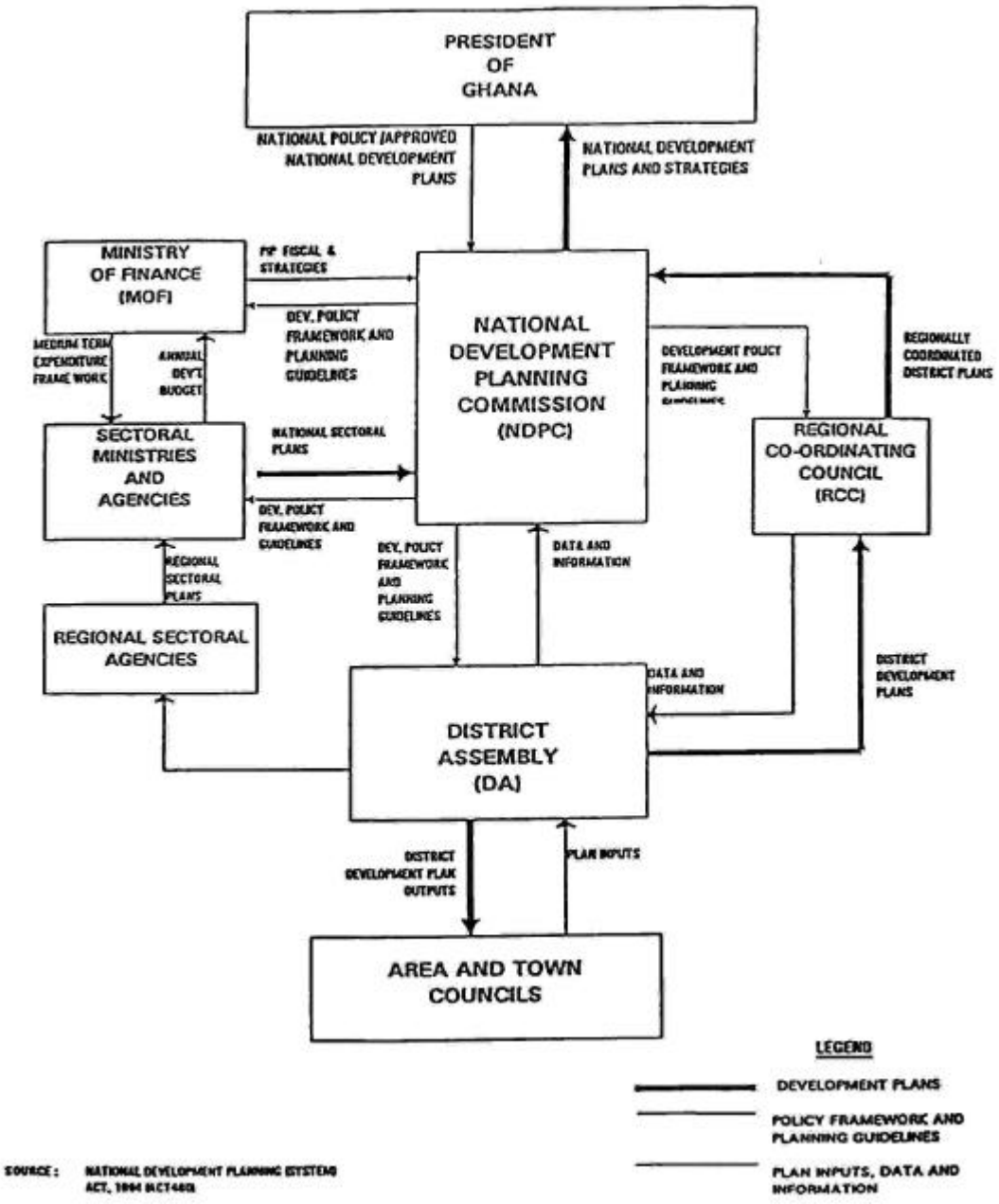
1. Clear objectives for decentralised planning and a structure for this have been established (see above);
2. The necessary legal instruments have been put in place, notably the Local Government Act 462, 1993. This instrument conferred legislative, executive and deliberative powers on the Das. It did not represent a shift against those with more power, but gave legal authority to the Das to promote the development of their districts to ensure equity and the reduction of poverty and vulnerability;
3. The establishment of the District Assemblies Common Fund and ceded revenues;
4. Training to improve human resource capacity for DAs.

In the *medium-term*, further progress towards achieving these aims is expected through the implementation of the National Medium-Term Development Plan and the 5-year district development plans (both in progress).

The *long-term* perspective is provided by the National Development Policy Framework (Ghana Vision 2020) and both the National Medium-Term Development Plan and the District Development Plans are meant to be consistent with this framework.

Sources: George Botchie (2000 and pers.comm), Dalal-Clayton and Dent (2001, in press)

Figure 2.5: The New Planning System in Ghana
Source: Botchie 2000



This diagnosis typifies the state of district planning in developing countries. Furthermore, the plans tend to concentrate on the provision of social and economic infrastructure, particularly on education, health or public latrine projects. Analysis of land capability has not been undertaken and maps are not available. Settlement planning is absent and none of the plans put forward an environmental management strategy. Community participation, seen as a priority in the planning guidelines, was weak. At best, in one of the five districts, workshops were held for assembly members, heads of departments, chiefs and other opinion leaders.

The NRI/UST study revealed a continuing gap in the linkages between district level planning and village planning in Ghana - a major problem in most developing countries:

> 'Town or village development committees do not appear to have been actively involved in village planning and doubt exists about the degree of consultation which is taking place in most villages. The traditional authorities appear to be making *ad hoc* short-term decisions about the sale of land in advance of the preparation of any village plan and often without considering the long-term consequences or implications on the environment. Currently, the district town and country planners are handicapped in offering development control advice or preparing layouts at the village level because they lack information both about the activities of the chiefs in releasing land for development, as well as on housing and other constructions which have been developed.'

Echoing points made in previous studies, e.g. Dalal-Clayton and Dent (1993), the study concludes that, for forward planning, up-to-date information is required (e.g. about which villages have been growing or declining, and on the distribution or use of natural resources) and that better natural resource management requires that the necessary information is both accessible and usable for planning and management purposes.

In sub-Saharan Africa, and particularly in the wildlife sector, Namibia has experimented with innovative approaches to decentralisation through processes of empowerment and participation, but there are constraints at all levels of the planning process related to 'discontinuities' between national frameworks and local realities (see Appendix 3).

2.6 Some planning responses to the challenge of sustainable development

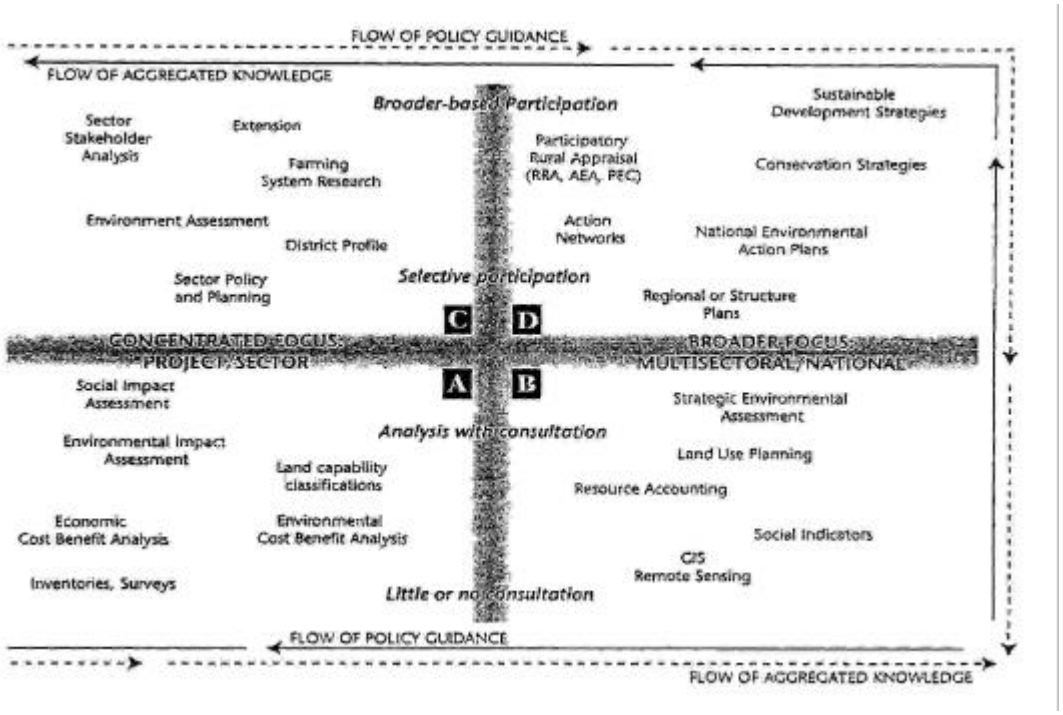
The Report of the World Commission on Environment and Development (WCED 1987) (the Brundtland Commission) emphasised that sustainable development could not be achieved without the active participation of local communities in the development process, including the management of natural resources.

The issues to be addressed in responding to this challenge clearly include good governance, equitable access to resources, and institutional coordination.

2.6.1 Techniques

Our perception of the present situation and of the tasks ahead is built up from a range of techniques which, taken together, form a framework that has been called sustainability analysis (Dalal-Clayton 1993a). Figure 2.6 plots some of these techniques in relation to the degree of participation - for example GIS and remote sensing score low on participation while participatory rural appraisal absolutely depends on it.

Figure 2.6: Techniques of sustainability analysis and participation
Source: Carley 1994



2.6.2 National and regional planning exercises

The means to link planning at national and local levels to actively involve local communities have been slow to develop. The publication of the World Conservation Strategy (IUCN/WWF/UNEP 1980) stimulated many countries to prepare cross-sectoral National Conservation Strategies to integrate environmental concerns into the development process. National Environmental Action Plans, initiated by the World Bank in 1987, also involve reviews of the natural resource base and environmental problems. On a sectoral basis, many countries have prepared National Forestry Action Plans and water master plans. International response to catastrophic flooding in Bangladesh in 1987 and 1988 led to the Bangladesh Flood Action Plan, funded by a wide range of donors and coordinated by the World Bank. It was launched in 1990 as a series of regional and supporting studies aimed at identifying appropriate action. Despite its promotion as a comprehensive exercise, the regional planning studies which have emerged have focused mainly on flood control. They have not dealt with inter-regional issues (and vast amounts of water move through Bangladesh!); have not captured the wealth of historical experience in Bangladesh concerning water management; have involved very little effective participation of the people the plan aims to protect; and have suffered from a lack of reliable baseline data (Hughes *et al.* 1994).

2.6.3 Sustainable development strategies

Agenda 21 (UNCED 1992) urges all nations to develop a national strategy for sustainable development (nssd) to implement, at the national level, its priorities and recommendations.

Five years after Rio, the UN General Assembly Special Session review meeting in 1997 revisited the issue and set a target date of 2002 for introducing such strategies in all countries. Similarly, the OECD Development Assistance Committee, in its *Shaping the 21st Century* document, has set a target day 2005 for the same goal (OECD-DAC, 1997a), while the

OECD's *Principles for Capacity Development in Environment* stresses the importance of strategies providing a framework for donor coordination (OECD-DAC, 1997b).

There is little doubt that those countries with a clear national strategy for sustainable development are more likely to secure investment as aid agencies move away from funding piecemeal projects and demand that development projects fit into national frameworks.

However, despite these international targets, there is a lack of clarity on what an nssd actually is (there is no internally agreed definition, nor any official guidance on how to prepare an nssd). But there is a growing view that the focus of an nssd should be on improving the integration of social and environmental objectives into key economic development processes and should, therefore, be seen as "a strategic and participatory process of analysis, debate, capacity strengthening, planning and action towards sustainable development" (OECD-DAC 1999).

This view also holds that an nssd should not be a completely new planning process to be conducted from the beginning. Rather, it is recognised that in an individual country there will be a range of initiatives that may have been taken in response to commitments entered into at the Rio Earth Summit (UNCED) or as part of commitments to international treaties and conventions and that these may be regarded in that country, individually or collectively, as the nssd. Some of these initiatives are government-sponsored, some are led by NGOs and others are multi-stakeholder initiatives. Many are built on earlier or existing processes such as national conservation strategies and national environmental action plans. But the challenge is: to gain clarification on what initiative(s) are regarded as making up the country's nssd; and then to identify what improvements need to be made to these initiatives – or developed between them such as umbrella frameworks, systems for participation and national sustainable development forums – so that they meet the (above) definition of an nssd.

This task should be helped by an initiative currently being undertaken by the OECD Development Assistance Committee (DAC) which is seeking to learn from the past and current experiences of developing countries in undertaking strategic planning processes. The initiative involves stakeholder dialogues in a number of countries on such processes which aim to identify best practice and provide lessons and guidance on how development cooperation agencies can best help developing countries in developing and implementing nssds. A key focus of this work is to develop principles for nssds which should help those involved in any strategic planning initiative to judge the adequacy of the processes concerned in responding to the challenge of sustainable development. Details of this DAC project and a comprehensive set of key literature on nssds can be found on the project website (www.nssd.net).

Donors are increasingly seeking long-term partnerships with developing countries and other actors to develop and implement nssds. The World Bank, for example, is currently promoting the concept of the Comprehensive Development Framework (CDF) as a mechanism for such a partnership approach. Building on past research and recent thinking on nssds (e.g. Carew-Reid *et al.* 1994; Dalal-Clayton *et al.* 1998), the CDF is underpinned by four principles (Watson 1999):

- The country, not assistance agencies, should own its development strategy;
- Governments should build partnerships with the private sector, NGOs, assistance agencies and civil society to define and implement their development needs;
- Governments and their partners should articulate a long-term collective vision of needs and solutions;
- Structural and social concerns should be treated equally with macro-economic and financial concerns.

Countries routinely prepare national development plans and undertake sector policy-making and planning and sustainable development imperatives are increasingly being placed at the centre of these activities. Importantly, there has recently been a trend to sub-nationalise such approaches with attention being given to provincial strategies and plans (e.g. the Sarhad Provincial Conservation Strategy in Pakistan's North West Frontier Province) and more local processes such as district environmental action plans (DEAPs) (see, for example, Box 2.11) and Local Agenda 21s - usually at the city level.

Box 2.11: The DEAP Process in Zimbabwe

The Zimbabwe District Environmental Action Plan (DEAP) process was initiated in 1995 as a follow-up to the 1987 National Conservation Strategy. The latter had not been implemented due the lack of an action plan, assigned responsibilities, legislative approval by Cabinet and Parliament, budgetary allocation for multi-agency actions, and an appropriate institutional framework. Supported by UNDP and with IUCN providing technical support for training in participatory approaches and strategy development, the DEAP process is being implemented by the Department of Natural Resources (DNR) in the Ministry of Mines, Environment and Tourism. Whilst other government departments are supposed to be involved as collaborating agents, the DEAP concept is not widely understood by them.

The objective is to prepare environmental action plans in eight pilot districts - each to include budgeted portfolios for the sustainable development of the natural resource base in the district and each to include one immediately-implementable activity to tackle environmental issues identified by villagers in the district. The DEAPs focus on poverty alleviation, socio-economic issues and environmental degradation. Activities in each district include:

- Developing guidelines (for all districts) for the participatory methodology to be used systematically to engage villagers (before the process started) in identifying environmental problems and setting priorities and (later) initiating action;
- Training government, NGO and CBO staff and community leaders in using participatory methods;
- Collecting relevant environmental, economic and institutional data in all wards;
- Scanning all environment projects/programmes being planned and implemented by the government, NGOs and CBOs;
- Mobilising technical inputs from scientists, NGOs and relevant government institutions in developing the plans;
- Documenting relevant institutions and expertise, and defining their roles in plan implementation;
- Identifying and designing projects/programmes to constitute the main elements of each plan;
- Documenting all goods, materials, services, manpower and financial resources necessary for the realistic implementation of each plan;
- Disseminating each plan within each district among institutions and groups as well as building consensus on its appropriateness;

The overall DEAP programme is overseen by a steering committee of senior officials. Provincial strategy teams are responsible for the training of district, ward and community strategy teams. In each district, a district strategy team (comprising government, NGO and community strategy team staff operating at district level) is responsible for facilitating the DEAP process and reports to the relevant sub-committee of the Rural District Development Committee. It was intended to establish community strategy teams (comprising representatives of all stakeholders at ward level and reporting to the Ward Development Committee) to facilitate the process at this level, including program implementation.

Source: Munemo (1998)

More countries are now developing broader visions or perspectives for development over longer time frames, e.g. a generation into the future. Ghana's National Development Policy Framework (Ghana Vision 2020) represents a leading example of such an approach at the national level. At the more local level, in South Africa, under the Development Facilitation Act (DFA), Land Development Objectives (LDOs) are now being set which provide for

negotiated five-year development plans for all local authorities and District Councils using visioning and priority setting processes (Box 2.12).

Box 2.12: Land Development Objectives, South Africa

In South Africa, the Directorate of Land Development Facilitation in the Department of Land Affairs is responsible for guiding the implementation of the Development Facilitation Act (DFA). The DFA consists of a number of different elements for which the responsibility is shared between all three spheres of government. The most important element is the setting of Land Development Objectives (LDOs) which provide a negotiated five-year development plan for all local authorities and District Councils.

The Local Government Transition Act (LGTA) (209 of 1993) as amended (97 of 1996) compels municipalities to develop negotiated integrated development plans (IDPs) for their respective areas of authority. The Departments of Constitutional Development and Land Affairs have established that local and rural governments and district councils will develop separate integrated developmental plans, following one common process that meets both the requirements of the Development Facilitation Act or DFA (67 of 1995) and the LGTA.

Land Development Objectives are short- and medium-term negotiated development plans which will allow a municipal area to achieve a 25-year vision, and these plans must be revisited every year. The process includes:

- Visioning and identifying of priority areas
- Development framework and status quo
- Development objectives, strategies and plans

Integrated development planning is focused within the municipality as an organisation. It consists of three elements:

- Restructuring of the organisation to deliver the LDOs
- Transformation of the budget to achieve the LDOs
- A communication plan between the council, municipality and residents.

The performance of the municipality will be monitored and evaluated against the objectives set in the LDO.

Source: Khanya-mrc, (2000)

Thus, for most countries, there is unlikely to be a single national strategy for sustainable development. Rather the notion of such strategy is likely to encompass the sum of these kind of initiatives being undertaken in an individual country.

Even so, nearly all these procedures have been undertaken on the presumption that governments drive and are dominant throughout the development process.

Many of these national and sectoral plans overlap in subject and geographical scope, and some have been duplicated in the same country.

Some form of public consultation has been a feature of the development of most conservation strategies, environmental action plans and of some sectoral plans and strategies, but rarely have the results of such consultations been included in any obvious way in the final documents. The preparation of national plans or strategies has frequently involved (foreign) consultants talking to the same small group of people in governments and the public service who, in turn, have had to meet conflicting demands. One notable advance has been the recent

work to develop a National Forestry and Conservation Action Plan (NFCAP) in Papua New Guinea. The extensive consultation of all types of NGOs in this process has resulted in a sharing of responsibilities for NFCAP planning and implementation between NGOs and government. It has also stimulated NGOs to form a coordinating organization (Mayers and Peutalo 1995).

The processes of developing strategies for sustainable development should provide an enabling environment, not a strait jacket – particularly for district and local planning. In diverse and complex rural areas, creative and flexible participatory learning approaches will need to be tried and tested, with institutions adapting to local realities – not the reverse. In Chapter Five, we consider some options and, in Appendix 2, describe some approaches that have been developed in Kenya

2.6.4 Sustainable development indicators

Since the 1972 UN Conference on the Human Environment in Stockholm, several attempts have been made to define broad, general indicators of sustainable development (e.g. Kuik and Verbruggen 1991, Hammond 1995, Winograd - undated). In practice, these have never been applied successfully at the level of a project or set of activities, as they are frequently too broad to be useful when planning these. Renewed interest followed the 1992 'Earth Summit' in Rio de Janeiro, and the UN has put considerable energy into developing a practical set of 'sustainable development indicators'. For example, in 1995 at its Third Session, the United Nations Commission on Sustainable Development adopted a work programme on indicators for sustainable development. Currently there are 134 such indicators which include both the commonly used economic indicators of well-being (e.g. GDP spent on education or health), as well as social, environmental and institutional indicators (e.g. unemployment rate, annual withdrawals of ground and surface water, mandated environmental impact assessment). Some countries are testing these indicators (e.g. Ghana). This work is still underway (perhaps an 'indicator' itself of how difficult this task is in practice) and the goal is to have a good set of indicators for sustainable development by the year 2000 (DPCSD 1997). The CSD indicators are available on its website (gopher://gopher.un.org:70/00/esc/cn17/1996-97/indicators/introduc.ind) and the OECD has a similar list available on its website (http://www.oecd.org/dac/indicators/htm/list.htm).

Whilst it is possible to establish such indicators of sustainable development, the availability and reliability of basic data by which to measure them in developing countries is likely to be a problem. This is one reason why there has been a tendency to continue to rely on easily-derived indicators such as GDP - which are rather meaningless in terms of sustainable development.

Efforts are needed to seek cost-effective ways in which communities themselves might gather the data needed to monitor agreed indicators.

Broad, national level indicators may have some use in national or regional level strategic planning, as they shed some light on a country's development priorities and trajectory over a period of time. Nevertheless, these type of indicators are so broad as to be irrelevant in practice to most applications of rural planning.

For these reasons, we do not examine the issue sustainable development indicators in detail in this report. Rather we take the view that a good planning system (at whatever level - national to local) should have a monitoring system (with indicators) in order to track progress, As a consequence, indicators for rural planning purposes are best developed on a case-by-case basis as part of the planning process itself. Local criteria emerging from this process should be the primary guide to suitable indicators. As in the rural planning process itself, local communities should be involved in identifying locally-meaningful indicators.

2.7 Pros and cons of conventional approaches

Problems of land use involve both land and people. They involve physical, biological, social and economic issues, so decision-makers need information on each of these aspects. Integrating this diverse information is difficult, and is usually done intuitively, the decision-maker placing greatest reliance on the information that is best understood and perceived to be important.

The decision-making process may be represented as a series of 'What if ?' questions, the answer to each determining the next question. This means that decision-makers need dynamic interpretations of data on natural resources that keep pace with the changing nature of the questions asked of them. The decision-makers' question is not simply 'What is the depth to groundwater ?' but a sequence: 'Is there groundwater at reachable depth (if so, what depth) and will there still be groundwater at reachable depths if we install wells every km and pump at 10 000 gallons a day?' Answers need to be area-specific, so that particular areas, people and projects can be identified and, usually, answers need to be quantitative.

Throughout the cycle of a development initiative, from conception to feasibility study, to bidding for funding, to detailed design and implementation, to monitoring and evaluation, the need for information changes. A different mix of political, social, economic and biophysical information and a different level of detail or generalisation is needed for sequences of decisions that have to be made at different stages of the cycle. And if the project extends over many years, new needs appear and old data require updating (see Box 2.13).

Ideally, policy-makers and managers need to use the data iteratively in the course of the evolution of projects, planning exercises or development programmes. A static, one-shot survey cannot fulfil this need. Unfortunately, poor countries in general lack the capability for re-interpreting, updating and upgrading their natural resources data base.

2.7.1 Common Limitations of Natural Resources Surveys

Terms of Reference

The most important part of any natural resources survey is a clear statement of purpose. Explicit objectives are needed to avoid, on the one hand, the danger of collecting irrelevant data and, on the other hand, omitting something important. Terms of reference for natural resources surveys have usually failed this test. The objectives of the whole exercise have been vague while the operational procedures have often been laid down in some detail. Thus, they have imposed standard recording of standard characteristics, standard intensities of survey and standard interpretations.

Box 2.13: The Accelerated Mahaweli Project, Sri Lanka

Confirmation that there was enough water and enough land for very big hydro-power and irrigation developments in the Mahaweli basin came from reconnaissance land resources surveys (especially Hunting 1962) and a good topographic base map at one inch to one mile. An order of magnitude more analysis (and eighteen volumes instead of one) was needed to produce a *master plan* for basin development (FAO 1969), although little more systematic resources survey was undertaken. Decisions by international donors to fund the elements of the Accelerated Mahaweli Project were taken mainly on political grounds, although the economic case for the hydro-power component alone justified these decisions.

Feasibility studies undertaken to terms of reference laid down by the donors *followed* the decision to fund, which was taken on trust. In the event, these feasibility surveys served as design and implementation surveys of the land development component which went ahead without any more detailed information, other than topographic surveys. Sophisticated models of land use recommended by the consultants have not been adopted. Neither the administrative and planning capacity nor the natural resources data base are adequate. Farmers in the Mahaweli area grow rice, and a lot of water seeps through permeable soils whose distribution or permeability is not known. Neither soil permeability, available water capacity nor even soil texture are diagnostic characteristics of the soil classification used in the soil survey.

A new phase of investment with detailed attention to market opportunities, product processing, infrastructure, hydrology, soil permeability and nutrient status, agronomic development and extension will be needed to upgrade the farming system to meet the social and economic challenges of the next few decades. Equivalent effort, again needing better land use, soil, hydrology, and farming systems information will be needed to arrest land degradation in the catchment and protection of water supplies which were not seriously considered in the original development.

Source: Dent and Goonewardene (1993)

This criticism applies to donor organisations supporting resource surveys for development projects or supporting survey organizations and to indigenous survey organizations that simply follow established, scientifically-respectable methods. Sometimes the procedures are modified but, essentially, no new thinking is involved. As a result, in feasibility surveys, excessive time is spent fulfilling the terms of reference and early data are not available to other team members when they are framing their own concepts. Soils data, in particular, are all too often placed in appendices - collated long after the recommendations have been made - and remain largely unused. In systematic national surveys, the responsible organization often runs itself into the ground with little areal coverage to show for many years of effort. Thus, when a question is asked about a particular area, the answer is likely to be 'We have no information for that area'.

In fact, terms of reference and surveys tend to be the product of the same, quite small group of people. There is an incestuous cycle that breeds overweight surveys that serve the scientific and professional interests of the instigators but are ill-adjusted to the needs of decision-makers. To give three examples:

> Ive *et al.* (1983) noted that in the South Coast Project in New South Wales (Austin and Cocks 1978), 150 data items were collected against 5 300 mapping units, but only 20 data items were used in the subsequent land allocation phase.
>
> For a resource inventory of the Gambia (Dunsmore *et al.* 1976), LRDC expended more than 20 man years of effort, the greatest component of which was in establishing soil series characterised by detailed laboratory data, only to publish the soil information as 1:100 000 maps of soil associations that could have been completed in a tenth of the

time. Subsequently, consultants to the Gambia Barrage Project (Coode and Partners 1979) found key data lacking on the soils of the tidal flood plan (which had resisted soil series characterisation), and no information on contours, river discharge, land use or mangrove timber resources. A rapid appraisal, which discovered 13 000 ha of potential acid sulphate soils in the project area, and dynamic modelling based on approximate data, killed the project in three man months. These results were then confirmed by a further three man years of conventional survey and laboratory analysis (Thomas *et al.* 1979). LRDC surveys in The Gambia, classics of their kind, simultaneously achieved overkill of superfluous data and missed crucial information needed for development.

Dent and Goonewardene (1993) describe the collection of exhaustive data on market opportunities, farm economics, and regional socio-economic evaluation by an FAO team in Sri Lanka. More than six metres of shelf space, some documents costing more than £ 1 000 a page at today's prices, assembled as the basis for a land rehabilitation and settlement project, still lies unused by the project management. The natural resources data, though collected and analysed by state-of-the-art methods, is incomprehensible to the decision-makers; the planning recommendations are too complex; the recommended farming system is unpopular; and the market economics data are now out of date.

Comprehension

Natural resources data are under-utilised because land users, planners and other professionals, let alone policy-makers, do not appreciate their utility. There are several reasons for this. The two most commonly complained about, though not necessarily the most fundamental, are:

First, they are simply not understood by anyone except the specialists who produce them. Jargon and the intimidating welter of data are obvious reasons for this. Natural resources reports are, quite clearly, written for the benefit of natural resources specialists and not for anyone else. Reports should be addressed to the users and presented in a way that they can clearly understand, which means that the users should be known in the first place.

Secondly, the information does not tie in with the experience of the potential users. Apart from the language, the level of detail or generalization of the information is not the same, and the resource mapping units may not be recognised by the decision-maker. Information must coincide with the effective management unit, generalized at national level but detailed and precise at field level, if its applications are to be recognized.

Usefulness

Natural resources information of all kinds is very interesting to natural resources professionals. It helps them build up their model of the world. But much is irrelevant to the kinds of decisions actually being taken about land use. Box 2.11 draws attention to the use in irrigation projects in Sri Lanka of a pedological soil classification that ignores permeability and available water capacity. Perhaps the most common use of inappropriate data is the use of small-scale survey data for detailed planning because no large-scale data are available. For most developing countries, the best soil map is still the FAO 1:5 million soil map of the world completed 30 years ago !

That there is a problem of comprehension is well understood. In response, survey interpretations have been provided both to simplify the data and to integrate them. Examples include the Storie Index, land capability classification and others discussed in earlier in this chapter. Each of the well known interpretations was originally designed for a specific, practical purpose which it fulfils very well. However, it has since been adopted as a stock interpretation, offered off-the-

peg by survey organizations or demanded by clients simply because it is less intimidating than, for example, a sheaf of soil maps.

In truth, the usefulness of an off-the-peg interpretation is extremely limited and this is especially so in poor countries that are already densely settled and farmed to the limits, or beyond the limits, of the present capacity of the land. We are not starting with a clean sheet. Decisions already taken and acted upon severely limit our room for manoeuvre and it is not helpful to a subsistence farmer to tell her that her land is suitability class S3 or even class S2 for millet ! If all that comes out at the end of an exhaustive natural resources survey is a ranking of S1 to S3 or N, essentially on the basis of slope angle, the cost-effective procedure would have been simply to measure the slopes.

Relatively few mature systems of resource survey and evaluation have developed. There appears to be little or no consultation between land resources professionals and any of the supposed beneficiaries of development or supposed users of information. Natural resources professionals, rather than users, drive the methods used. Henry Ford had an expression for it: 'The customer can have any colour he likes, so long as it's black.' As a consequence, natural resources surveys and land evaluation are usually addressing yesterday's problems.

The syndrome is exaggerated in developing countries where scientific and technical staff are few and very inadequately resourced. Their natural resources professionals do not have the benefit of frequent exposure to a wide range of approaches and methods. They work in an institutional environment where skills and information are hoarded rather than shared, and they find it safer to continue the *status quo* or defer to outside consultants than to strike an independent course. Short-term consultants are also constrained by inappropriate terms of reference and unwillingness of their clients to allow any change of these, suspecting attempts to cut corners for some commercial advantage.

2.7.2 Inappropriate planning methods and inappropriate data: A failure of institutions

Development planners have to integrate several discrete sets of information:

- Development is not sustainable if it will degrade or even destroy the natural resources on which it depends. Therefore, information is needed about the condition and trends of natural resources. Information about their present status is only the starting point. We also need to know about the interactions between the resources and their use under each management option being considered.

- Unless the development under consideration meets the need for production and profit, it is unlikely to be adopted. Data on demand, production, markets, costs and returns are essential. The difficulty of forecasting future costs and prices is evaded to some extent by discounting but this gives a distorted, essentially short-term perspective. In particular, private profitability may not coincide with the needs of the wider community or the necessity of conserving resources for the future.

- Any development brings an element of risk, which must be assessed and judged to be acceptable by the parties concerned if a plan is to be implemented. Risks lie in both biophysical factors like the reliability of rainfall, and in the uncertainties of markets and availability of essential inputs.

- Proposals must marry with the social structure and mores of the place. In particular, unless they are widely felt to be equitable they will not command widespread support. Rights of land tenure and water use are often key issues that are difficult and dangerous to

tackle but which are often constraints upon the sustainable use of resources. Information is needed about the motivation of the people, their perceptions and aspirations.

No one set of data is all important. The failure of so many development plans that have emphasised just one physical, economic or social component demonstrates that little benefit is likely to be achieved unless all relevant aspects are considered. This is a big task and cannot be achieved without better planning procedures and a revolution in the attitude and training of planners and decision-makers.

Failures of land use planning have been as much a failure in working with people as a failure of natural resources data. Land use planning has been a centralised and top-down activity. This is well illustrated by the Zambian *land use planning guide* (Zambia Dept. Agric. 1977):

> 'The aim of [catchment conservation] planning would be to **direct the people** to cultivate suitable land, to use the best methods applicable to the area and to make sure that **controls to land use** are implemented in both the mechanical and cultural spheres.' (Our emphasis)

This approach is flawed because the methods advocated by the Department of Agriculture (or any other department) have not been the best and most appropriate in the eyes of local farmers - and thus official control of land use is scarcely possible except by coercion. The loads that governments impose on themselves in attempting to plan, implement and administer land use soon exceed their administrative and logistic capabilities, and outstrip both the abilities of their professionals to supply natural resources information and their own capability of using it. Governments must learn the limits of their own capacity. Yet they hanker after the tried and tested and failed procedures of physical planning - in which experts prepare maps that indicate in considerable detail how land should be used. The supposed beneficiaries of development have little opportunity to articulate their needs in terms of development, technology or information. Nor do they have the opportunity to contribute their own local knowledge. Box 2.8 highlights some principles that might bring planning and people closer together.

Table 2.4 summarises the pros and cons of the conventional survey and planning approach. Conventional surveys are often very good at providing basic data, and these data are potentially of great value. But the shortcomings of the approach are by now all too obvious and radical changes are called for. This is no less true for the elliptical contributions of economists and other social scientists.

In the next chapter, we examine the experience of more participatory approaches to local planning in rural areas. In Chapter Four, we discuss principles for collaboration and, in the final chapter, chart some ways forward for the planning process and its supporting information services.

Table 2.4: Pros and cons of conventional natural resource surveys and rural planning in developing countries

	Pros	Cons
Natural resource surveys	Provide vital baseline information Methods are well-proven and provide reliable data Consultants are able to interpret natural resources data for a variety of purposes, including forecasts and assessment of development options	Policy and development decisions are usually taken on political and economic grounds. Natural resources (NR) information plays a minor role. Surveys and recording networks demand years of effort by skilled staff. Standard data are often not directly relevant for planning or decision-making. Standard data and interpretations are often used for purposes for which they were not designed. Planners and decision-makers are confounded by the jargon and intimidated by the welter of details. Survey data are usually static, and lacking interpretation of interactions between resources and their use. There is little consultation between end-users and providers of NR information. NR professionals are few and usually inadequately resourced.
Planning	Plans provide a necessary framework for development and management of natural resources; guide investment to areas where it will have greatest benefit; and coordinate local and government initiatives	Planning has been a centralised, technocratic activity. Participation by local people has been weak at best and, usually, lacking. Plans have been descriptive, lacking analysis and vision. Planning has been dominantly sectoral and coordination between institutions absent or very weak. Linkages between district authorities and both local communities and higher-level authorities are weak. Planning departments are overloaded, especially since decentralisation, and chronically under-resourced. There is a chronic lack of professional capacity.

CHAPTER THREE

APPROACHES TO PARTICIPATION IN PLANNING

3.1 The need for participation

Many governments have taken upon themselves the management of land. The top-down systems of management that they have spawned are inefficient, vulnerable to corruption, and take responsibility away from local people - excluding or marginalising many groups. Half a century of professional development planning has demonstrated the shortcomings of the top-down approach. Plans drawn up by outsiders, with little or no reference to the priorities of the people who have to implement them, are not implemented, at least not in anything like the shape envisaged by their architects.

Nearly always, the decisions about land use that really matter are still those taken by the actual users of the land. In spite of the efforts of the planners, some degree of local management for local ends continues and people revert to the old ways once control or financial incentives are withdrawn. There are innumerable instances of external initiatives in soil conservation, grazing control and conservation of forests and wildlife that, if not undermined during implementation, have been discontinued once external funding ceased. For example, an evaluation of 25 projects sponsored by the World Bank recorded that 13 had been abandoned a few years after financial assistance ended, and concluded that the main causes of failure were lack of participation by the local communities and lack of attention to building local organisations (Zazueta 1995). On the other hand, there are many local examples of successful development based on participation of the local community (see Boxes 3,2, 3.6, 3.10, and 3.12). There are also many instances of enthusiastic and widespread adoption of new practices that yield immediate benefits to the land users and, at the same time, fit easily into the existing system of management - for instance the spread of minimum tillage farming in southern Brazil (Tenberg *et al.* 1997).

It has become clear that outsiders cannot necessarily identify local priorities nor understand how best to meet them. Where development is led at national and international level, with specialised agencies planning and supporting development by and for others, means have now to be created to rebuild broadly-based participation in policy-making, planning and management. Only thus can the process of development be made acceptable to society as a whole (Box 3.1).

The World Bank's Learning Group on Participatory Development (1994) has defined participatory development as:

- 'A process through which stakeholders influence and share control over development initiatives, and
- the decisions and resources which affect them'.

It is a measure of the distance that has opened up between development planning and ordinary community decision-making that such a high-powered group should be needed to define and explain the concept of participation for the benefit of development agencies.

3.2 Perceptions of participation

Participation is nothing less than the fabric of social life. People have always participated in the development of their own livelihood strategies and cultures. Whether through formal or informal organisations, autocratic or democratic means, a variety of structures and procedures has evolved to

define and address collective needs, to resolve conflicts, to make plans and take the steps necessary to implement them, see for example Box 3.2.

Box 3.1: Top-down and Bottom-up planning

Top-down planning describes the conventional procedure of systematic, technical surveys on the basis of which plans are devised centrally and worked out in detail by professional staff to meet goals that are, also, decided centrally. Implementation is, again, typically the responsibility of line ministries or other government agencies. Examples include sectoral plans (forestry, fisheries, agriculture departmental plans); watershed management planning; town and country planning; individual land development projects (e.g. Accelerated Maheweli Project in Sri Lanka, The Tanganyika Groundnut Scheme, the Gezira irrigation project in Sudan).

Bottom-up planning describes planning that is initiated locally and involves the active participation of the community. The pooled experience and local knowledge of the land users and local technical staff are mobilised to identify development priorities, draw up plans and implement them. The advantages are:

- A strengthening of the community's sense of responsibility and confidence in land resource management, and strengthening local institutions to take on further responsibilities;
- The building of popular awareness of land use problems and opportunities;
- The enthusiasm for a plan which has a broad base of ownership;
- The full use of local knowledge and skills and close attention to local goals and local constraints, whether related to natural resources or socio-economic issues;
- Better information fed upwards to higher levels of planning, educating upper levels of management to the realities of the situation on the ground.

The disadvantages are that:

- Limited technical knowledge at local level means that technical agencies need a big investment in time and manpower in widely-scattered places;
- Difficulties occur in integrating local plans within a wider framework;
- Local efforts may collapse through lack of higher-level support (or even obstruction);
- The local community's interests may not be well represented, i.e. village leaders or businessmen may dominate decision-making and local planning;
- Local interests are not necessarily the same as national interests.

Source: Dalal-Clayton and Dent (1993)

Box 3.2: Planning by the people for the people in Central and South America

Indian communities in Central America and the Andean region of South America have developed quite effective ways to identify, plan, and carry out activities that meet their collective needs. Community issues are discussed and decided in organised meetings, which are run by elected community leaders and attended by representatives from all households. It is expected that all participants provide input in the discussions, where options are assessed and decisions for action taken. Decisions are made by consensus - or near-consensus - and are binding for all. Culturally sanctioned means of carrying out plans include labour pooling (known as *minga* in the Andes and *tequio* in Oaxaca, Mexico) and cash or in-kind contributions by each household in the community. Enforcement takes the form of social recognition for households that consistently fulfil their duty, or ostracism, fines, or incarceration for those who do not contribute their labour to the community's well being.

Zazueta (1995), citing Aguirre Betrán (1962) and Wolf (1957)

Increased participation is now being demanded by international donor organisations, many NGOs and, more recently, government departments in the South. In Namibia, the Ministry of Environment and Tourism sets out to promote more participatory planning in the introduction to its policy document on land use planning:

> 'The Ministry of Environment and Tourism supports rational, sustainable integrated planning of land use in all environments throughout Namibia according to the sound ecological principles contained in Article 95(1) of the National Constitution. To facilitate appropriate land-use planning and subsequent land use, this Ministry supports the process of consultation with appropriate institutions to ensure that local communities are involved in all decision-making processes and to ensure that they enjoy maximum sustainable benefit from the land and natural resources with which they are associated and upon which they depend' (MET 1994).

The terms *people's participation* and *popular participation*, like *sustainability*, are now part of the everyday language of development agencies. They appear in the public statements and stances of even those agencies that have little to do with people or participation. Adnan *et al.* (1992) observe:

> 'the meaning of the phrase has become even more elusive after its professed adoption by the most unexpected quarters. It is often difficult to understand whether those talking about people's participation mean the same thing or simply use the phrase as a kind of magical incantation.'

Rahnema (1992) asserts that:

> 'people are dragged into participating in operations of no interest to them, in the very name of participation'.

This has created several paradoxes. The term *participation* has been used on the one hand to justify the extension of control by the state, and on the other to build local capacity and self-reliance. It has been used to justify external decisions as well as to devolve power and decision-making away from external agencies. It has been used for data acquisition by experts and for more interactive analysis. The varied perceptions of participation are illustrated by the opinions voiced during the development of the Bangladesh Flood Action Plan (Box 3.3).

The many ways that development organisations interpret and use the term *participation* can be resolved into seven clear types that range from manipulative and passive participation, where people are told what is to happen and act out pre-determined roles; to the stage where communities take initiatives on their own, which may or may not challenge existing distributions of wealth and power (Table 3.1). Simply encouraging local people to sell their labour in return for food, cash or materials distorts perceptions and creates dependencies. It may give the impression that local people support an externally-driven initiative, but the impacts rarely persist once the project ceases (Bunch 1983, Reij 1988, Pretty and Shah 1994, Kerr 1994, Pretty 1995). Despite this, development programmes continue to justify subsidies and incentives on the grounds that they bring quick results, that they can win over more people, or that they provide a mechanism for disbursing food to poor people. As little effort is made to build local skills, interests and capacity, local people have no stake in maintaining new practices once the flow of incentives stops.

A study of 230 rural development institutions employing some 30 000 staff in 41 countries of Africa found that, for local people, participation was most likely to mean simply having discussions or providing information to external agencies (Guijt 1991). Government and non-government agencies rarely permitted local groups to work alone, some even acting without any local involvement. Even where external agencies did permit some joint decisions, they usually controlled all the funding.

Another study of 121 rural water supply projects in 49 countries of Africa, Asia and Latin America found that participation was the most significant factor contributing to project effectiveness and

Box 3.3: Some perceptions of participation in the Bangladesh Flood Action Plan

Villagers:

- 'Participation is about doing something for everyone's benefit' (A villager in Gaibandha).
- 'Oh yes, the foreigners were here one day, last month. But they only went to the school and spoke in English. We are not educated. We could not understand' (A poor peasant).

Government officials:

- 'Yes, we're doing people's participation. We have had people working in Food for Works programmes since the seventies' (Top official in Bangladesh Water Development Board).
- 'Your idea regarding women's participation is not correct for the overall national interest'.

Foreign consultants:

- 'Another idea from the social scientists. Only slogans! First, "poverty alleviation". Then "women" and "environment". Now "people's participation"! It's just a new fad!' (Engineer).
- 'You have to consult my socio-economist, not me. I have no time for this participation. I'm working 12 hours every day on the project' (FAP Team Leader).

Source: Adnan *et al*. (1992)

Table 3.1: Types of participation in local-level development
Source: Adapted from Pretty (1997)

Type		**Characteristics**
1.	Manipulative participation	Participation is a sham.
2	Passive Participation	People participate by being told what has been decided or has already happened. Information shared belongs only to external professionals.
3	Participation by consultation	People participate by being consulted or by answering questions. No share in decision-making is conceded and professionals are under no obligation to take on board people's views.
4	Participation for material incentives	People participate in return for food, cash or other material incentives. They have no stake in prolonging practices when the incentives end.
5	Functional Participation	Participation is seen by external agencies as a means to achieve project goals, especially reduced costs. People may participate by forming groups to meet predetermined project objectives.
6	Interactive Participation	People participate in joint analysis, which leads to action plans and the formation or strengthening of local groups or institutions that determine how available resources are used. Learning methods are used to seek multiple viewpoints.
7	Self-Mobilisation	People take initiatives independently of external institutions. They develop contacts with external institutions for resources and technical advice but retain control over how resources are used.

maintenance of water systems (Narayan 1993). Most of the projects referred to community participation or made it a specific project component, but only one in five scored high on interactive participation. The best results were achieved when people were involved in decision-making through all stages of the project from design to maintenance. If they were involved only in consultations, then the results were much poorer.

Whilst the terms consultation and participation are frequently used interchangeably, consultation is only one form of participation along a spectrum, as illustrated in Table 3.1. Rahnema (1992) concludes that passive, consultative and incentive-driven forms of participation marginalise groups which have no stake in defining the balance between economic, social and environmental goals, and between the present and the future. The 'superficial and fragmented achievements have no lasting impact on people's lives'. If the objective of development planning is to achieve sustainable development - social, economic and environmental - then none of these types of participation will suffice.

In short, participation has been used more as a means for information/communication than for shared decision-making. In industrialised countries, government agencies seem to exhibit what Walker and Daniels (1997, cited in Dubois, 1998b) call the '3 I Model': inform (the public), invite (comments), and ignore (opinions). In developing countries, and elsewhere where natural resources are key to livelihoods and power differences are strong, participation is often limited to community participation, therefore limiting the scope to influence any initiatives and preventing any questioning of existing power structures.

Some have argued that government commitment towards a "bottom-up" paradigm of development has been conducted without any meaningful reforms of the power relations between government and local communities (Degnbol 1996). Participation has been seen as means to ensure the more efficient implementation of pre-conceived plans, often through existing government structures. Degnbol goes on to argue that it is possibly naive to expect governments to redefine their roles and that genuine participation will only come about with the emergence of a strong and representative civil society.

All the evidence points to the need to seek people's ideas and knowledge and to give them power to make decisions independently of external agencies. The dilemma of the authorities is that they both need and fear people's participation. They need the agreement and support of diverse groups of people - development is not sustainable otherwise - but they fear that their greater involvement is less controllable, less predictable and likely to slow down the planning process. But if this fear allows only stage-managed participation, then distrust and greater alienation are the most likely outcomes.

This dilemma is all the more acute in the field of policy-making. Table 3.2 lists six levels of participation revealed by an analysis of policy processes, which closely parallel the typology in Table 3.1.

The greatest degree of public participation achieved in policy-making and planning is in reaching consensus on the elements of a strategy (level 5 in Table 3.2). Fundamental decision-making on national policies and strategies (level 6) remains the prerogative of the national decision-making process, democratic or otherwise.

One of a number of methods that has been used to promote participation in policy-making is the *future search conference*, a multi-stakeholder forum introduced by the Australian systems thinker Fred Emery (Emery and Emery 1978). It has been used throughout the world for a wide range of other purposes, e.g. to help develop a nature tourism strategy in the Windward Islands (Box 3.4), Pakistan's National Conservation Strategy and Colombia's energy sector policy. As described by Baburoglu and Garr (1992);

'The conference [usually 35-40 participants, 2-3 days] uses a systematic process in which groups design the future they want and strategies for achieving it. The "search" is for an achievable future. This may be a future that is more desirable than the one that is likely to unfold if no action is taken, or a future that is totally unexpected. Designing a future collectively unleashes a creative way of producing organisational philosophy, mission, goals and objectives enriched by shared values and beliefs of the participants. This process is especially useful in times of social, economic and technological turbulence' [characterised by unexpected changes, uncertainty, unintended consequences and complexity].'

Table 3.2: Levels of participation in policy processes and planning
(Bass *et al*. 1995)

1. ***Participants listening only*** - e.g. receiving information from a government public relations campaign or open database
2. ***Participants listening and giving information*** - e.g. through public inquiries, media activities, hot-lines
3. ***Participants being consulted*** - e.g. through working groups and meetings held to discuss policy
4. ***Participation in analysis and agenda-setting*** - e.g. through multi-stakeholder groups, round tables and commissions
5. ***Participation in reaching consensus on the main strategy elements*** - e.g. through national round tables, parliamentary/select committees, and conflict mediation
6. ***Participants involved in decision-making on the policy, strategy or its components***

Box 3.4: Search conferences and nature tourism strategies in the Windward Islands

Search conferences were held in four Windward Island countries in the Eastern Caribbean during 1991/92 as part of a process to develop nature tourism strategies. The stimulus was the threat to banana exports in the face of an impending change in trade relations with the UK in 1992 which was expected to lead to increased economic dependence on tourism. Limited potential for expanding traditional tourism resulted in a growing interest in nature tourism (also called eco-tourism).

The search conference process was initiated by senior officials in government agencies with a direct interest in tourism (planning/economic development, tourism and forestry)). The Canadian *Adapting By Learning Group* acted as catalysts. In each country, key stakeholders were brought together by the government body acting as the lead agency - either tourism or planning. Stakeholders included: government agencies (economic development, planning, tourism, agriculture, fisheries, finance, forestry), environmental and heritage groups, community organisations, women's and youth groups, farmers' cooperatives, and private business. An initial task was to form National Advisory Groups to direct the process.

The search conference allowed the political implications of nature tourism to be addressed by the full range of interests involved: e.g. environmentalists examining the validity of nature tourism as an economic development strategy; hotel associations incorporating environmental conservation into tourism strategies; and finance officials working with agricultural ministry personnel to support small businesses in the provision of local produce for tourist consumption.

The objectives off the conferences were to:

- Develop comprehensive national perspectives on nature tourism;
- Connect this alternative approach to existing tourism initiatives;
- Examine the potential of an integrated nature tourism strategy as a basis for future economic development that is environmentally sustainable;
- Discuss the planning, design and management needs of such an approach;
- Advise on ways in which the search conference initiative could assist in creating an integrated and on-going planning capacity both nationally and regionally.

Each conference involved alternating plenary and small group sessions with presentations (by local participants with special skills and experience) to provide a basis for discussions. The small groups generated issues and concerns which were reported in plenary. Key issues were selected to focus subsequent group sessions during which constraints and opportunities were identified. Ideas and concerns were then integrated into a set of recommendations for action, and submitted to the National Advisory Groups to be carried forward into further planning and implementation.

Source: Franklin and Morley (1992)

3.2.1 Horizontal and vertical participation

In their study of participation in strategies for sustainable development, Bass *et al.* (1995) distinguish between *horizontal* participation and *vertical* participation. *Horizontal participation* refers to the interactions needed to ensure that issues are dealt with across sectoral interest groups, ministries and communities in different parts of the country. *Vertical participation* is required to deal with issues throughout the hierarchy of decision-making from national to local levels, or from leaders to marginalised groups (see Figure 3.1). The deeper the vertical participation within a given institution or nation, the better the understanding and support for the strategy is likely to be.

In respect of recent national conservation strategies, any participation at national level has been restricted within government and academic contributions. Much multi-disciplinary analysis has been undertaken; there have been improvements to national-level government institutions; some regulatory instruments have been introduced; and policies have been changed, at least on paper. However, there

appear to be many blocks to implementation of these policies, for example lack of money, lack of local institutional capacity, or lack of commitment. Even when all views have been sought and consensus achieved, it may remain difficult for politicians to make an honest response and for establishments to change their ways.

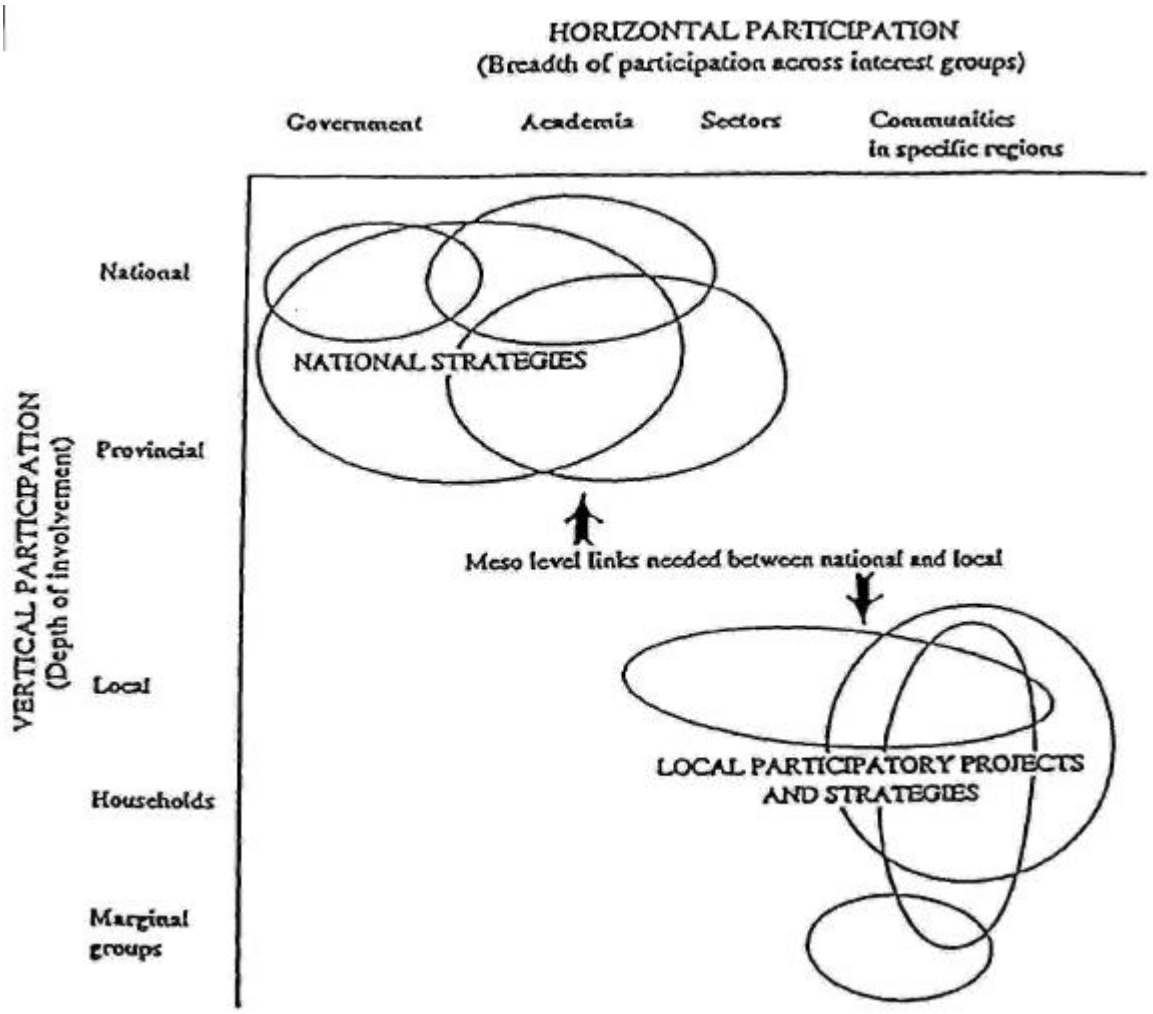
In contrast to the national level, there is ample evidence of interactive participation of communities and sectoral interests at local levels - resulting sometimes in impressive work on the ground, with generation of much local information and some localised institutional change. Particular progress has been made in:

- Joint community/business/local government initiatives in urban or peri-urban areas, often facilitated by local governments and NGOs, e.g. Groundwork UK, Local Agenda 21s in Australian and UK local authorities;

- Buffer zones (economic support zones) around national parks, with joint government/community management. There are many well-documented examples, e.g. in India, Nepal and Zimbabwe (IIED 1994) and several Man and Biosphere Reserves worldwide;

- Rural development projects based upon social organisation and/or environmental protection, often at river catchment level, again facilitated or managed by NGOs.

Figure 3.1: National and local participation experience
(Source: Bass *et al.* 1995)



3.3 Participatory learning and action

The natural sciences have developed a wide range of objective methods to gather and analyse data but the situation is different when it comes to management information, social issues and determining opinions: you can't stick an auger into a farmer. Social scientists have usually used *extractive* techniques such as questionnaires because large numbers of people can be surveyed and statistics can be applied to determine the reliability of the results. However, these methods are weak at revealing local complexities: many of the contextual grounds for understanding the data are systematically removed or ignored, there is a tacit assumption that the correspondent and researcher hold the same values, and cultural divisions affect the types of response. Multiple perspectives - so essential for knowledge of the land and land use - are lost. Gill (1993) has captured a real problem with interview and questionnaire approaches:

> 'The stranger then produces a little board and, clipped to it, a wad of paper covered in what to the respondent are unintelligible hieroglyphics. He then proceeds to ask questions and write down answers - more hieroglyphics. The respondent has no idea of what is being written down, whether his or her words have been understood or interpreted correctly... The interview complete, the enumerator departs and is probably never seen again.'

There is an alternative that has now won acceptance and credibility. In the 1980s and 1990s, there has been a blossoming of *participatory approaches* - unfortunately accompanied by a babel of acronyms. Some focus on problem diagnosis, e.g. AEA (Agro-ecosystems analysis), DRR (Diagnostico rural rapido), RRA (Rapid rural appraisal), MARP (*Methode Acceleré de Recherche Participative*); others are oriented toward community empowerment, e.g. PAR (Participatory action research) and TFD (Theatre for development); some facilitate on-farm or user-led research, e.g. FPR (Farmer participatory research); others are designed simply to get professionals in the field listening to resource users, e.g. SB (*Samuhik Brahman* - joint trek). Some have been developed in the health context, e.g. RAP (Resource assessment procedure); some for watershed development, e.g. PALM (Participatory analysis and learning methods); some in government extension agencies, some in NGOs. The diversity of names, derivations and applications is a sign of strength, because each variation is, to some extent, dependent on its local context. However, they are underpinned by some common principles (Box 3.5), the principal amongst which is the new learning path that needs to be followed.

Box 3.5: Principles of participatory learni ng and action

The term *participatory learning and action* (PLA) is now used to encompass a suite of techniques for diagnostic analysis, planning, implementing and evaluating development activities. Principles include:

- *Cumulative learning by all the participants*. Interaction is fundamental to these approaches and the visual emphasis enables all people to take part on an equal basis.
- *Seek diversity* rather than attempt to characterise complexity in terms of average values. Different individuals and groups make different evaluations of situations, which lead to different actions. All views of activity or purpose are laden with interpretation, bias and prejudice. Therefore, there are many possible descriptions of any activity.
- *Group learning.* The complexity of the world will be revealed only through group inquiry and interaction which requires a mix of investigators from different disciplines, from different sectors, outsiders (professionals) and insiders (local people).
- *Context-specific*. The approaches are flexible enough to be adapted to suit each new set of conditions and actors, so there are many variants.
- *Facilitating role of experts.* The goal is to bring about changes that the stakeholders regard as improvements. The role of the expert is to help people in their particular situation carry out their own study and make their own plans.
- *Sustained action.* The learning process leads to debate about change, and debate changes the perceptions of the actors and their readiness to contemplate action. Action is agreed, so implementable changes will represent an accommodation between different views. The debate and/or analysis both defines changes which would bring about improvement and seeks to motivate people to take action to bring about those changes. This action includes strengthening local institutions, so increasing the capacity of people to take the initiative.

Source: Pretty (1994, 1995)

Participatory learning and action is the antithesis of teaching and technology transfer, both of which imply transfer of information from one who knows to one who does not know. Its assumptions are completely different from those of conventional surveys, and have grown more distinct as the techniques have evolved. For example, early work in farming systems analysis and rapid rural appraisal was essentially extractive. Researchers collected data and took it away for analysis. There has been a significant shift toward investigation and analysis by local people who share their knowledge and insights with outsiders. Methods such as participatory mapping, analysis of air photos, matrix scoring and ranking, flow and linkage diagrams and seasonal analysis are not just means for local people to inform outsiders. Rather, they are methods for local people to undertake their own research (Chambers 1992b). Local people using these methods have shown a greater capacity to observe, create concepts and undertake analyses than most outsiders had expected and are, also, proving to be good teachers.

The techniques of participatory learning fall into four groups (Table 3.3): group and team interaction, sampling, dialogue, visualisation and drawing. One of the strengths of participatory inquiry has been the emphasis on pictorial techniques. By creating and discussing a diagram, model or map (see, for example, Figure 3.2), all who are present - both insider and outsider - can see, point to, discuss and

Table 3.3: Techniques of participatory learning

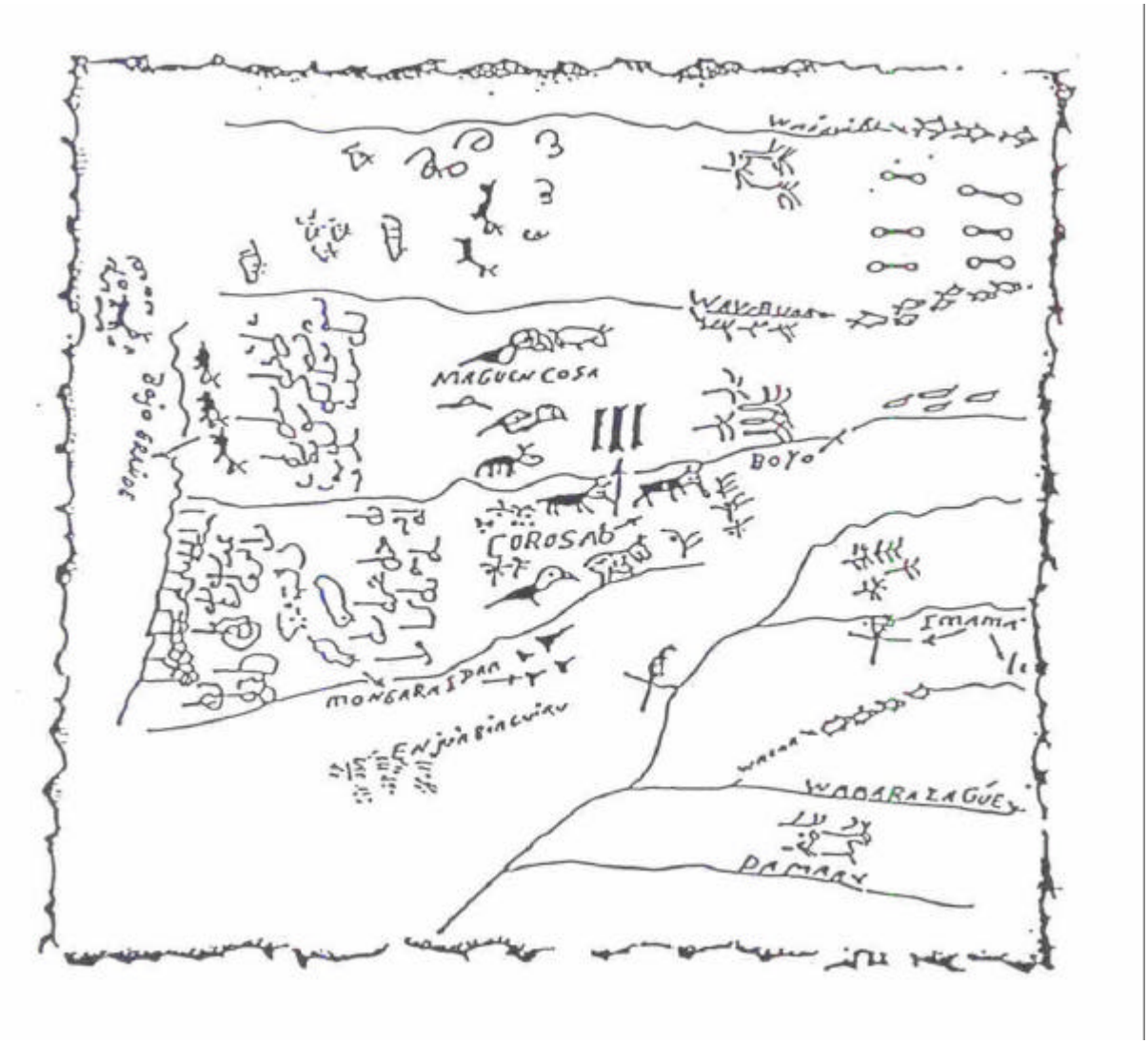
Group and Team Interaction	*Sampling*	*Dialogue*	*Visualisation and Drawing*
• Team contracts • Team reviews and discussions • Interview guides and checklists • Rapid report writing • Energisers/Activators • Work sharing (taking part in local activities) • Villager and shared presentations • Process notes and personal diaries	• Transect walks • Wealth ranking and well-being ranking • Social maps • Interview maps	• Semi-structured interviewing • Direct observation • Focus groups • Key informants • Ethnohistories and biographies • Oral histories • Local stories, portraits and case studies	• Mapping and modelling • Social maps and wealth rankings • Transects • Mobility maps • Seasonal calendars • Daily routines and activity profiles • Historical profiles • Trend analyses and time lines • Matrix scoring • Preference or pairwise ranking • Venn diagrams • Network diagrams • Systems diagrams • Flow diagrams • Pie diagrams

refine the picture, sharing in its creation and analysis. Non-literates are not excluded; everyone who can see has visual literacy which allows them to participate actively - although, admittedly, not everyone may be able to speak up in such gatherings.

Early approaches (notably rapid rural appraisal) emphasised speed and were, sometimes, quick-and-dirty. As the discipline has evolved, the emphasis has moved from exploitation of local people's labour or knowledge (to push through projects or facilitate research) toward sharing, with contributions from both sides and patient iteration (Box 3.6). This avoids some of the biases of rapid rural appraisal: spatial (used in connection with construction projects, e.g. roads), personal (led by

leaders, entrepreneurs, professionals, English-speakers, males, living), often undertaken only in the dry-season (when access is easiest/possible), carried out with politeness/timidity (e.g. outsiders not shown the worst conditions and will not ask searching questions).

Figure 3.2: Portion copied from a hand-drawn land use map made by an indigenous ` surveyor and villagers of the Marwa Sub-Region, Panama
(Source: Denniston 1995)



Box 3.6: RRA and PRA compared

Amongst the various approaches of participatory learning and action, perhaps the best known are *rapid rural appraisal* (RRA) which emerged in the late 1970s and evolved a decade later into *participatory rural appraisal* (PRA). RRA developed as a response to a growing awareness that conventional planning approaches failed to meet the needs of the rural poor. It was introduced as a planning approach to help minimise existing investigatory biases, provide an alternative to the limitations of questionnaire surveys, and to give timely information for externally-driven planning. PRA built on the principles and methods of RRA but placed added a new emphasis on enabling local people to undertake their own appraisals, to analyse and act on them, and to monitor and evaluate local changes. Both approaches use similar methods (see Table 8.3) but differ in their purpose and process. RRA is mainly used to collect information and enable outsiders to learn. By comparison, PRA is more relaxed and creative and places emphasis on facilitating local processes of learning and analysis, sharing knowledge and building partnerships amongst individuals and interest groups for local-level planning and actions. Consequently, it is a much longer and open-ended process.

Source: Guijt and Hinchcliffe (1998)

It is not simply the techniques themselves, but the combination and sequence in which they are used, that makes PLA invaluable for understanding the myriad perspectives of natural resource use at the local level. For example:

- Social mapping and well-being ranking can identify diverse socio-economic groups within a community and help understand how wealth and social aspects affect people's dependence on resources:
- Seasonal calendars and timelines show how the use and importance of natural resources varies over the year and over a longer time;
- Maps,models and transects can be used to locate particular resources. When developed with elders, these can help understand historical changes in resource use and status;
- The values of natural resources can be elicited using a variety of matrix scoring and ranking techniques. These reveal not only how valuable different resources (e.g. tree species) are to different people but, also, the ways in which they may be important (including non-financial values) and their relative importance compared to other resources and activities;
- Product-flow diagrams and tenure maps can be used to understand how resources and access to them are controlled, and to clarify who is and is not involved in their use, harvesting and management.

The usefulness of participatory approaches is also determined by the attitude of mind and behaviour of the professionals towards the people with whom they work. Success comes from rapport, dialogue and fair sharing of information and ideas - which means that the professionals too must have attractive trade goods and must appreciate what they are getting in return.

Pretty *et al.* (1995) give details of how to train in these methods and IIED's PLA Notes (published regularly three times a year by its Sustainable Agriculture and Rural Livelihoods Programme) report on how they have been used and adapted in the field.

As participatory approaches have gained sway, attempts have been made to move away from sectoral development projects to integrated development programmes; and also to go beyond the use of participatory techniques just in the appraisal stage of development activities. A good example comes from coastal region of Kenya where the Kilifi Water and Sanitation Project has followed a participatory and integrated development approach which includes PRA but is, also, concerned with project approval and implementation (see Appendix 1).

3.4 Participatory planning

Participatory planning is now promoted as an alternative to top-down planning but it faces problems of undefined lines of authority, a weak information base and an institutional culture at both policy level and within organisations that is not conducive to participatory processes. Generally applicable methods of natural resource survey and planning have yet to evolve. They need local legitimacy and for this to be recognised by central authorities.

Progress on the ground is most likely to occur where there is an equal and long-standing partnership between land users, planners and natural resources specialists. Box 2.6 in Chapter Two illustrates a step towards participatory planning in Tanzania taken after more than ten years involvement of the British Land Resource Development Centre in resource assessment and land use planning in Tabora Region. Box 3.7 illustrates how a superficially similar procedure, also in Tanzania, can fail completely in the absence of interactive participation and adequate natural resources data.

Box 3.7: Different perceptions of participation. An example from Tanzania

Under the Town and Country Planning Ordinance, villages can receive legal title to their land only on completion by government officials of a land use plan, showing what land is to be used for residence, agriculture, grazing, etc. This is then gazetted and becomes legally binding. Following the official planning of Dirma village in Arusha Province, an independent rapid rural appraisal (RRA) assessed the effectiveness of the planning procedure.

The officials had invited leaders from neighbouring villages to discuss and agree the boundaries, which were mapped accordingly. Some conflicts were settled by voting in the Ward Development Committee. Some village leaders had also been consulted to help identify where settlement, farming and grazing should take place, so this was considered to have been participatory planning.

Water is the limiting natural resource. Its availability determines land tenure, settlement, land use and migration yet the land use plan merely stated that each settlement should have water - without specifying ways and means. Unrealistic proposals included zero grazing and the introduction of grade cattle based on 30 acres of pasture per household and a maximum of 18 livestock units (but no proposals for destocking); irrigated agriculture without adequate water supplies; and tree planting (bizarre given the 20 000 acres of *miombo* forest in the village area). Settlements were shown where no one lived, and the area under cultivation was estimated at three times the actual area.

Villagers told the RRA team that, whilst they had checked the boundaries thoroughly, they left the land use plan to the experts and thought it was merely a formality for securing title. The RRA also revealed that the village leaders were Party appointees and represented mainly the permanently-settled villagers, whereas the majority registered in the village are semi-nomadic pastoralists who do not participate in Party affairs, who had not been told of the plan to privatise grazing land, and who were afraid that they would lose their right to move in and out of the village in search of water and grazing.

This kind of prescriptive replacement of all existing agricultural and pastoral practices by modern methods does not build on local people's knowledge of their resources; it could not be implemented without force; and forcing it on the villages would damage both their economy and the environment, and confidence in their own government.

Source: Johanssen and Hoben (1992)

3.4.1 Examples of local-level resource planning

Many programmes in Africa are promoting community wildlife management. One of the best known can be found in Zimbabwe, where the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) is devolving power over wildlife and other resources to local people. Box 3.8 gives an example of the approach. Its success has been attributed to the tangible benefits from wildlife that now accrue to the local communities. These benefits have generated increased local support that has enabled the programme to embrace other communal resources such as grazing, water and woodlands. Despite the wide acclaim it has received, CAMPFIRE has not been without problems. It has to operate within a confusing institutional framework that has undermined traditional and clearly understood structures (Box 3.9). An independent assessment found that impact on individual household income has fluctuated considerably but has, on average, been low and insufficient to compensate for damage done by wildlife (Plan Afric 1997). It also noted examples of financial abuse by some individual community leaders and found that very little infrastructure could be attributed to CAMPFIRE - and some of that which has resulted from CAMPFIRE was found to be poorly planned (e.g. silted-up dams). There has undoubtedly been an increase in capacity to plan and implement projects at the community level, but the rapid expansion of CAMPFIRE has meant that training resources have been thinly spread.

Box 3.8: Community wildlife management in Mahenye Ward, Zimbabwe

Mahenye is a collection of villages extending over about 600 km^2 on the border of the Gonarezhou National Park in the south-east of Zimbabwe. Most of the people were relocated there to make room for the national park. At Independence in 1980, rural people were desperately poor, poached as often as they dared, and were extremely hostile to the wildlife, particularly elephants which raided their fields.

To counter this situation, in 1984 the government permitted safari hunting of elephant and buffalo migrating out of the park. The dividends of this hunting were channelled into the local community which was given security of tenure and the right to manage its wildlife resources in the long term. Today, the people have their own committees and other internal government structures and they make responsible decisions. Ten years after the scheme was initiated, there is a welcome resident population of over 300 elephants in Mahenye.

At a meeting of the Mahenye community in 1995, attention was drawn to the fact that a man from the neighbouring community, a successful entrepreneur who owned 500 head of cattle, was in the habit of grazing his cattle on Mahenye land that had not been used for anything else. What were they to do? They could charge him a nominal rent, or ask him to take his cattle elsewhere and put that land under wildlife. They decided unanimously to put it under wildlife.

Mahenye is an example of how decision-making by consensus can lead to the sustainable use of wildlife resources to alleviate rural poverty.

Source: Murphree (1995)

Box 3.9: Institutional framework for development in Zimbabwe

In 1984, in an effort to increase the involvement of local communities in the planning and development of their communities, the government of Zimbabwe introduced an institutional framework for local development.

Village Development Committees (VIDCOs) were designated as the fundamental planning units and it was envisaged that each VIDCO would represent 100 households (approximately 1000 people). The VIDCO would submit plans annually to the Ward Development Committee (WADCO) representing six villages. The WADCO would coordinate the plans from all VIDCOs in its jurisdiction and submit this ward plan to the District Development Committee which would incorporate ward plans into an integrated district plan for approval by the District Council and subsequent submission to the Provincial Development Committee.

By 1989, the Minister of Local Government, Rural and Urban Development stated:

> 'What is disturbing is that in some areas there is an unacceptable level of participation in the planning process by residents at the village and ward levels. Reports reaching my ministry suggest that **people are not sufficiently involved or active in the village and ward development committees**. They are not being effectively mobilised to actively participate in development committees in order for them to identify, prepare, and plan their development needs' [emphasis added]

There are several reasons for this apathy. First, much of the legislation enacted since Independence has extinguished traditional leadership. The chiefs, sub-chiefs, headmen, and kraal heads are the effective communal lands administrative and legal institutions, with historically-defined areas and sets of rules that are clearly understood by the rural people. There is no place for them in the new institutional structure. Predictably, the transition from traditional and chiefly authority (local, hereditary, and long-standing) to elected and bureaucratic (transient and possibly immigrant) has been a source of conflict.

VIDCOs and WADCOs were perceived as instruments of local administration. Ostensibly representative of the rural populace, having been democratically elected, they were essentially implementation units for plans that continued to be developed in a top-down fashion.

Moreover, VIDCO and WADCO boundaries were not necessarily aligned with legal boundaries between communal lands, thereby creating uncertainties over institutional jurisdiction (a situation further complicated with the amalgamation of Rural and District Councils in 1993/94 when some wards were merged whilst others were sub-divided). Administrative structures within many communal lands remained confused, at least from the perspective of the inhabitants.

The government's intention to train VIDCOs and WADCOs in administrative skills has proved over ambitious, not least because of a lack of sufficient financial and human resources. VIDCOs and WADCOs have tended to operate, if at all, in a vacuum, without the wherewithal to enable them to function effectively and with no mandate from their constituency. Rural people have had little option other than to get on with their lives, much as they did before Independence. The air of optimism which introduced the 1980s has given way to resignation.

The above criticisms of VIDCOs and WADCOs appeared in the reports of the Rukumi Commission on land tenure (Govt. of Zimbabwe 1994) and were partly accepted by parliament - particularly in terms of the desirability of re-investing the traditional leaders with some of the former powers. A Traditional Leaders Act (TLA) was passed in 1998 which sought to make the old WADCOs and VIDCOs elected committees of new structures - Ward and Village Assemblies (led by traditional leaders). The functions of the VIDCO remained as described in the Rural District Councils Act and those of the WADCO, previously undefined, were set out in the new LTA. However, the provisions of the LTA had not been implemented by November 2000 due to a lack of resources.

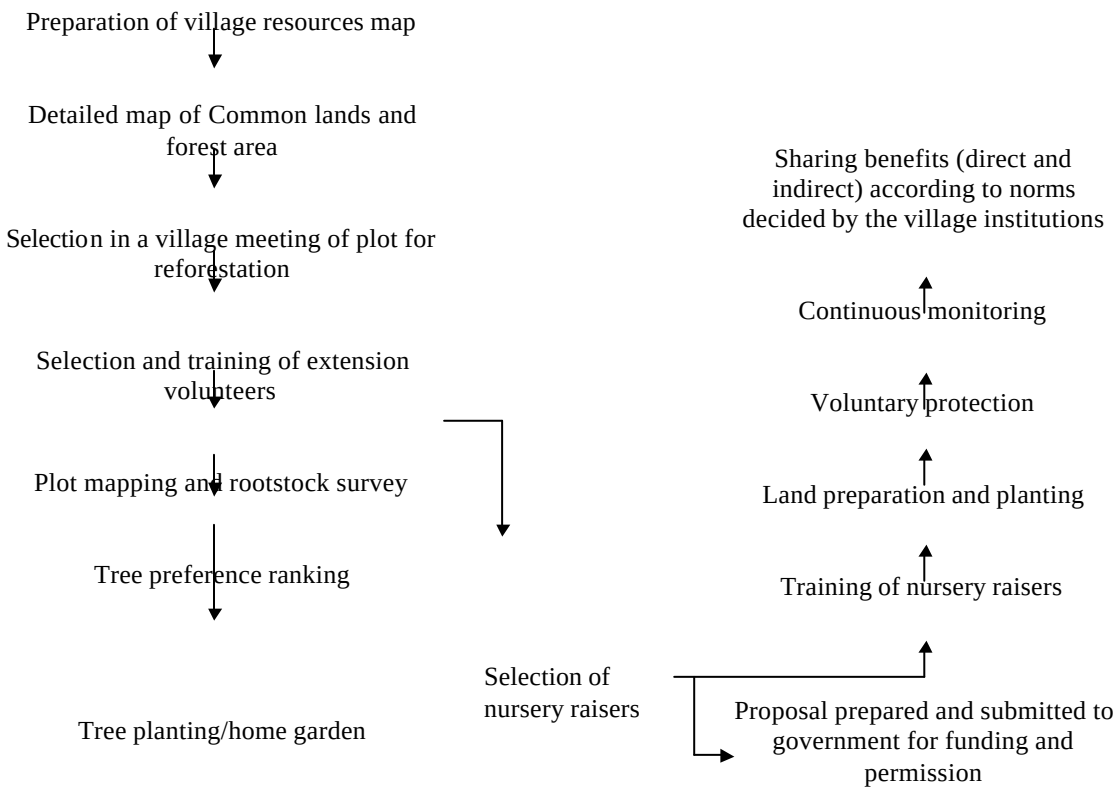
Sources:Thomas (1995); Derek Gunby, Plan Afric consultants, pers.comm.

The Aga Khan Rural Support Programme in India and Pakistan has used community-level analysis of problems to determine priorities and investment of both local and external resources. The programme has concentrated on strengthening existing village institutions or establishing new ones as a vehicle for its work. In Pakistan, more than 2000 village organisations have been formed embracing 75 000 households (World Bank 1995b). In India, village institutions, supported by the programme (established there is 1985), have undertaken diverse activities like water resource development (lift pumps, community wells, percolation tanks, check dams, minor canal irrigation); reforestation of degraded forests; agricultural extension; savings and credit; and group marketing.

Reforestation and protection of degraded common lands has been identified as a priority by a number of villages in the Bharuch District. A total of 2500 ha of land had been reforested and protected by the village institutions in this district by 1993 (Shah 1995). The *Participatory Rural Appraisal and Planning* approach is supported by the professional staff with the interactive participation of the villages. The process starts in a village with the preparation of a natural resource inventory by the people using maps, transects, time lines and seasonality analysis. The resources are analysed in terms of their use, productivity, ownership, status and the access people have to them. Social analysis is carried out at the same time using social mapping and wealth/well-being ranking. Social and economic information is then analysed along with the resource inventory and classification of resource users/owners to identify different focus groups within the community. Focus groups separately analyse the status of their resources and the problems/constraints they face. Each group prepares a resource-problem-opportunity matrix, listing different problems in using each resource and the solutions to these problems, and arrives at its priorities for action.

The various analyses are then presented in a village meeting. The listed problems and solutions are discussed and a village plan is negotiated by prioritising the different concerns presented by the groups. Figure 3.3 illustrates the process in Bharuch District.

Figure 3.3: Participatory rural appraisal and planning (PRAP) process Bharuch District, Gujarat, India
Source: Shah (1995)



3.4.2 Scaling-up and linking bottom-up and top-down planning

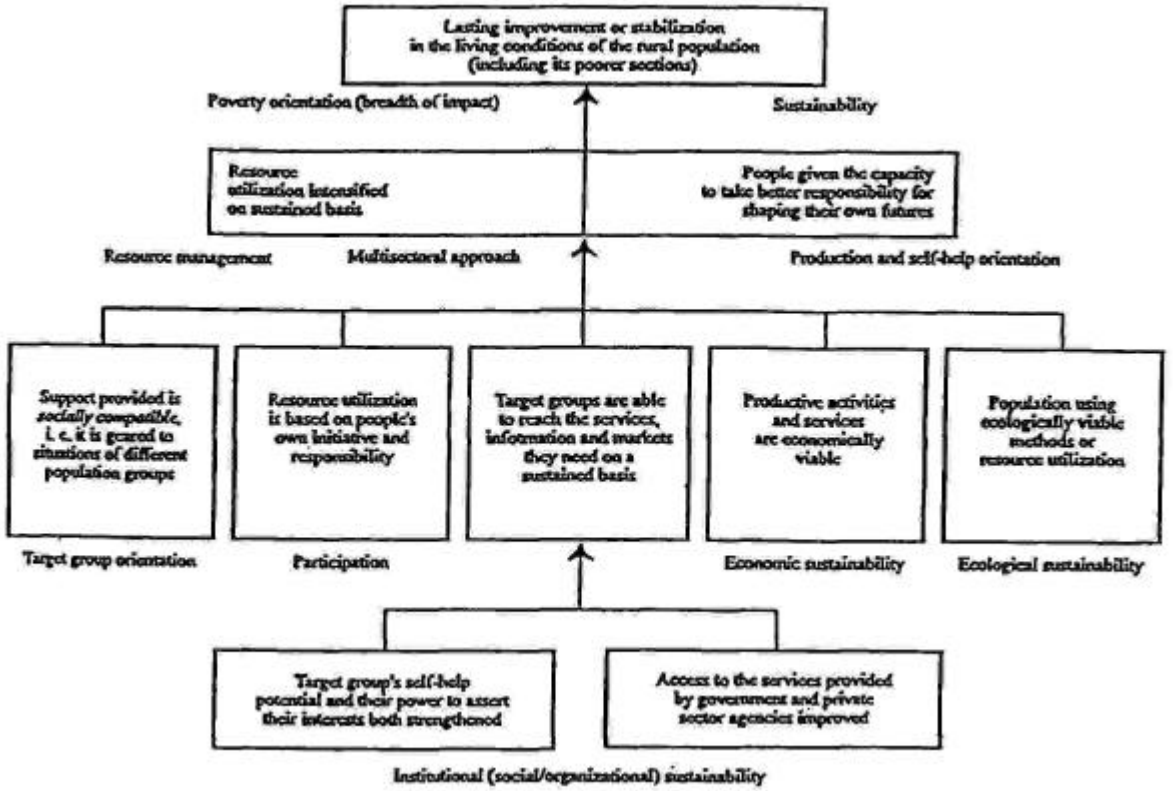
Regional rural development

There have not been many examples of successful scaling-up of local planning initiatives to the national level. A response of the German development agency GTZ in the 1980s is known as Regional Rural Development (RRD):

> 'The concept entails giving the broad bulk of poorer population strata the capacity to make better use of the resources available to them with the aid of support measures adapted to specific situations and established on a participatory basis, and consequently providing them with an opportunity to become involved in the process of regional development' (GTZ 1993)

RRD encompasses two basic principles: poverty orientation and sustainability, combined in the overall goal of sustained improvement (or stabilization) of living conditions for a region's population, with special emphasis on the participation of the poor. All other development policy targets, principles and guidelines included in the RRD concept are linked to this goal in a hierarchical system of objectives shown in Figure 3.4.

Figure 3.4: The RRD system of objectives
Source: GTZ 1993



RRD particularly aims to ensure the participation of disadvantaged *target groups* in the planning and decision-making process. It promotes procedures which are practicable under local conditions and the capacities of the regional or district planning offices or agricultural advisory services as part of their planning routines. There is an emphasis on *participatory dialogue* so that decisions are mutually coordinated between development programme sponsors and the beneficiaries. The procedures are based on *free choice* which implies a restriction on government decision-making authority concerning the use of public funds and channelling of private-sector economic activity. GTZ (1993) suggest that target groups could participate through a range of instruments:

- *Unearmarked grants* to village communities for communal activities - a far-reaching means to strengthen self-determination and, in practice, decentralisation to the very local level;
- *Multi-purpose funds* from which government complementary services for local self-help could be provided on application - allowing communities to select from a pre-determined range of supported projects;
- *Unearmarked loans* to individuals or groups - allowing them to make an autonomous decision on how funds are to be used;
- Governments could offer a *broad selection of inputs, means of production and recommendations* that return some of the responsibility for production planning to small producers themselves (allowing them to organise matters in their own way and to experiment);

- Measures to *improve local transport facilities* provide farmers with greater opportunities of access to larger input and output markets and broaden the available choices;
- Measures to *improve rural information services.*

Even mechanisms which only increase people's decision-making indirectly need to be included in a strategy to increase target group participation. As GTZ notes:

> 'If (s)he can personally travel into town to buy seed, this gives the small farmer a lot more decision-making power than if a non-elected representative joins in the discussions on what type of seed the marketing authority ought to provide to the villages, without even having consulted the people (s)he is supposed to represent'.

Target group participation is expected to increase the chances that:

- Problem analysis during development planning will reflect the way problems are viewed by various groups (particularly the disadvantaged);

- The decision-making processes will take account of solutions put forward by the target groups and their assessment of the alternatives under discussion;

- Target group activities and governmental support measures are mutually coordinated;

- The government monitoring system systematically records how the measures are judged by the target groups;

- Target groups are aware of, and are using, the ways and means available to them for making their needs, complaints and suggestions known to the responsible bodies.

No one standard procedure for participation is laid down. GTZ (1993) lists various options for engaging target groups which can be used, as appropriate:

- Questionnaires;
- Institutionalised (and formalised) information channels between villages and those responsible for programmes/projects (e.g. through representatives of target group organisations, the extension services or political representatives);
- Informal group discussions or one-to-one conversations;
- Formal gatherings (e.g. meetings of self-help groups, cooperatives or associations; official village meetings);
- Official application procedures, e.g. for support to local infrastructure;
- Joint agreements;
- Participatory action research, in which target group representatives are involved in establishing what compatible measures should be carried out locally (one of the participatory methods in the PLA family - see Section 3.3);
- Participation in government planning events by target group representatives.

Table 3.4 indicates how these approaches can be deployed in different stages of the planning process.

GTZ argues that "in order to achieve a dialogue with target groups, planners must go into the villages, and individual planning stages must be relocated into the villages".

Table 3.4: Forms of participation for RRD at different stages of planning

Source: GTZ 1993

Forms of participation	Questionnaire surveys	Voicing of positions without having to ask	Institutionalised information channels	Conversations Group discussions	Meetings empowered to make proposals and applications (target group level)	Participation action research	Participation in planning meetings at government level	Official application procedures	Written agreements
Stages in planning									
Situation analysis	1	0	0	1	0	0	0	0	0
Objectives analysis	2	0	0	1	0	0	0	0	0
Problem analysis	1	2	2	1	1	2	2	0	0
Consideration of alternatives	0	0	0	2	1	0	1	1*	0
Planning of measures	0	0	0	1	2	1	1	1	0
Operations planning	[-]	[-]	[-]	2	0	0	2	0	1*
Monitoring, Feedback, Plan adjustment	1	1	1	1	2	1	0	0	0

1 = very important [-] = not worthwhile,, or impossible
2 = supplementary importance * = for self-help promotion projects
0 = unlikely in rural development

Rapid district appraisal (RDA)

To date, participatory approaches have been used quite successfully at local levels. Practitioners have also been concerned about the question of 'scaling-up' participatory approaches for application at broader and higher levels, particularly the district level. The District Environmental Action Plan process in Zimbabwe (Box 2.11) is strongly based on local participation and ownership. In Indonesia, the Institut Teknologi Bandung has introduced a postgraduate training programme for regional planning which aims to promote rapid district appraisal (RDA) as a broader-scale application of RRA (Box 3.10).

Box 3.10: Rapid District Appraisal in Indonesia

Rapid district appraisal (RDA) is an approach to understanding district conditions based on a mix of methods from different modes - written, verbal, visual and interactive - based on participatory approaches. The application of RDA can be wide-ranging, from medium- or long-term spatial planning (in the Indonesian context, the five-year planning framework - REPELITA), to annual planning (as in the Indonesian REPETADA), to policy research, environmental assessments or programme evaluations.

The application of RRA at district level would require RRAs in all settlements of the district - a clearly impossible task. Instead, RDA structures a district according to natural and/or socio-economic features, and selects villages representative of each zone. *Exemplary case studies* are then undertaken in these villages. The approach follows the concept of *recommendation domains* - spatially defined areas defined by homogenous criteria (e.g. agro-ecosystems/resource endowments, topography, accessibility, socio-cultural grouping) – developed in farming systems research (Harrington and Trip 1989).

The initial steps are secondary data collection, field reconnaissance and preliminary analysis to yield a general picture of the conditions in the district, based on which recommendation domains can be established. If the necessary data are available, GIS could be used. Alternatively, a representational model could be built and the main natural and socio-cultural features discussed and verified with groups of local experts. To help select representative sites, it is necessary to define in advance the issues to be analysed and indicators for these.

Sub-districts or villages can be selected which highlight key issues and problems which lend themselves to particular RDA methods. For example, particular sub-districts may have a high incidence of poverty. Further examination of secondary data might reveal that there are at least two agro-ecosystems in the area in question and that some of the villages are located in hills and isolated from transportation corridors. In this situation, two contrasting villages could be selected: a typical isolated hill village and one from a different eco-system without such locational problems. The causes of poverty in each will probably be somewhat different and require different solutions.

RDA uses a basket of methods, but not in any standard sequence, including:

- Mapping, preferably with or by key informants from the area;
- Developing a 3-dimensional model of the region;
- Transect walk or transect sketch;
- Semi-structured interviewing with individuals;
- Focus group discussion(s);
- Institutional diagramming;
- Feedback meeting on local or regional level.

Source: Kievelitz 1995

Participatory approaches in large-scale projects

There is little significant and documented experience of the transfer of participatory approaches to hierarchical organisations and large-scale projects. However, one example is provided by Sri Lanka's North Western Province Dry Zone Participatory Development Project (Box 3.11) which illustrates some of the problems that arise when transferring the participatory approach from one institutional culture to another.

Box 3.11: The North Western Province Dry Zone Participatory Development Project (DZP), Sri Lanka

The DZP is a large investment programme funded by IFAD and GTZ, implemented through provincial government agencies and coordinated by the Regional Development Division of the Ministry of Finance and Planning. It aims to facilitate participatory planning in 500 villages (located in 13 administrative divisions) over a seven-year period and establish Village Resource Management Plans for each of these villages. The government services can use these plans to assist poor farmers by providing technical advice and funding for the resource management activities selected by the farmers. The project assistance, however, is limited to a list of pre-defined project components such as the (small-scale) development of water resources for irrigation, upland farming systems development, goat rearing, land regularisation and credit.

One and half years after project inception, participatory activities have taken place in about 40 villages.

High expectations were raised during the participatory fieldwork but government service officers have found it difficult to fulfil promises. Also, after PRA training, people tend to revert to their old hierarchical social system. Tacking on PRA to field officers' methods doesn't necessarily lead to fundamental changes of attitude or better rapport with beneficiaries - indeed some officers were tempted to invent PRA results.

'Government agencies cannot be expected to implement a participatory project successfully and instantly. An orientation or transition phase (which might require two to three years) is needed to enable staff to learn and to adjust, and for strategies to be developed and tested. The adoption of a participatory working style in a hierarchical organisation has to be a continuous step-by-step process. It requires experienced and qualified people to facilitate the process of discovery and learning. Formal staff training, although important, is not sufficient. Continuous backstopping and coaching are more suitable. For this process, the usual short-term inputs of consultants and trainers are of limited usefulness. What is required are persistent "changes agents" coming from outside the organisation who are available over a longer period of time.'

Source: Backhaus and Wagachchi (1995)

The catchment approach

Success in adopting participatory approaches requires a long-term commitment. In Kenya, for over a decade now, the Ministry of Agriculture has pursued an interdisciplinary *catchment approach* to soil and water conservation, seeking to involve all interested parties at local level, both resource users and external government and non-government agents, in planning, decision-making, implementation and maintenance (Box 3.12).

A similar approach for water catchment planning is now being followed in Zimbabwe where catchment and sub-catchment structures have been established with stakeholder representation, including local communities (Box 3.13). In Tanzania, the HIMA programme in Iringa Region also adopted a catchment approach from the outset (see Appendix 4).

Box 3.12: The Catchment Approach to Soil and Water Conservation, Kenya

In Kenya, soil conservation is the responsibility of the Soil and Water Conservation Branch (SWCB) of the Ministry of Agriculture, Livestock Development and Marketing (MOALDM) which operates in 222 divisions in all 47 districts of the country. The c*atchment approach* to soil and water conservation was adopted in 1988 as a response to a realisation that conventional approaches (through farmers being advised, lectured, paid and forced to adopt new measures and practices) were not effective. The objective was to concentrate resources and efforts while ensuring participation of the community within a specified area (typically 200-500 ha) for a limited period of time. In this approach, the term catchment is closely associated with a specific community of people known to each other, rather than a strict physical watershed.

Local communities are purposefully involved in the analysis of their own farming and conservation problems, and decisions and recommendations made with their active participation. Community mobilisation is achieved by interdisciplinary planning teams, the formation of catchment conservation committees by farmers themselves, and intensified publicity and training through field days, public meetings, demonstrations and tours. This process enables information to flow to the community, the development of better understanding of the conservation problems specific to each area by the SWCB, and closer collaboration between farmers, the SWCB and other agencies.

Each divisional planning team (DTP) typically works in 3 or 4 catchments each year. Priority is given to catchments where local people or administrations have requested support, where soil erosion is serious, or where the SWCB has not worked before.

Multidisciplinary teams drawn from various government departments work for about a week in the catchment: beginning with a day of orientation and introduction to the methods, followed by 2-3 days building up a picture of local skills, knowledge and perspectives on problems and concerns using a variety of participatory inquiry methods, with a public meeting on the final day to present the findings in visual form.

Following the dialogue, a catchment conservation committee (CCC) of farmers is elected to coordinate action within the catchment (typically 8-15 people with the local Technical Assistant as an ex-officio member). The divisional team then prepares a catchment report to serve as a baseline document for planning, implementation, monitoring and evaluation, and for the coordinated action by extension professionals based at divisional and district level. The DTP makes a detailed map of the catchment, and plans the soil and water conservation measures for each farm, working with the catchment committee. The CCCs receive support in the form of basic tools, equipment and technical training and advice from ministry staff. In return, committee members assist fellow farmers in planning and implementing various individual and group soil and water conservation activities, and support the DTPs in laying out and implementing plans for each farm.

The success of the approach is, in part, due to the ownership of the plan and commitment that has been achieved by active CCCs working with DTPs. Lines of communication have been established and farming communities can exert a pull on the services of extension agents.

Kiara *et al*. (1996, in press) report that evidence in Kenya is growing for positive impacts arising because of the catchment approach. They note, for example, that a recent comparison of two catchments in Trans Nzoia, one planned with the catchment approach and PRA and the other through the contact farmer individual approach, found very significant differences. Crop yields and returns per person per day have grown more rapidly on the farms in the community where the catchment approach was used. As a result, land values have increased dramatically, together with some increase in leasehold prices. Farming has become more diverse in the catchment approach area with a greater range of crops grown and more livestock kept.

The number of farms conserved each year through the catchment approach has hit the 100,000 mark - the highest since the government gave soil conservation a priority in 1974 (MOA/MOALDM, 1988-1993). In addition, each year, some 500,000 - 800,000 m of cut-off drains and 50,000 – 100,000 m of artificial waterways are constructed, some 1250 - 2700 gullies controlled and 1780 - 3600 km of riverbanks protected.

The SWCB was proposing in the 1995-96 financial year to launch participatory planning in 809 catchments covering 177,000 ha and 93,000 farm families (John Thomson, quoted in Chambers 1995).

Some impact studies carried out by MOALDM-SWCB show that in the conventionally planned catchments, the process begins with a *baraza* (community meeting), which is held for publicity purposes. The catchment committees are sometimes elected, but more frequently are selected by chiefs or local leaders. Women are rarely represented on the committees, and farmers are not involved directly in planning and layout. The committees tend to become inactive soon after intensive contact with extension staff ends.

However, where there is mobilization of the community, support to strong local groups, committed local staff and collaboration with other departments in interdisciplinary planning and implementation of the catchment approach, there is increased agricultural productivity, diversification into new enterprises, reduction in resource degradation, enhancement of water resources, improvement in the activities of local groups and independent replication to neighbouring communities within two years. The land treatment plans (LTPs) that are developed in consultation between farmers, catchment committees and DPTs also indicate that recommendations are broad-based and especially for soil fertility, unlike the past where the main emphasis was on structural erosion control methods. These improvements have occurred without payment or subsidy, and therefore are more likely to be sustained.

A recent review of the catchment approach and its contribution to capacity development for soil and water conservation provides a summary of the approach (Harding *et al*. 1996): the major actors, HQ staff, the district and other staff, and the farmers and farming communities, were linked by what might be called virtuous cycles. These cycles virtuously reinforced the exchange and linkage between policy development, practice in the field, and training at all levels. This was at the heart of the learning culture. The factors which helped to drive the cycles (which to some extent also turned themselves) included: a strong political push from the government; Sida as flexible funders and facilitators; the Regional Soil Conservation Unit providing critical assessment and broader views; and additional external support from organisations such as IIED, providing training and advice. This review also notes that there have been constraints and difficulties to implementing the approach. But these are well recognised by SWCB which is constantly re-assessing and re-working it to deal with them. The report concludes, amongst other things, that the Kenyan experience "illustrates well a hard reality of much development work; that all progress is partial and qualified, and that the impact of constant change forces continual re-assessment of even 'successful' approaches".

Sources: Pretty *et al*.(1995), Harding *et al*. (1996)

Box 3.13: The Mazowe Water Catchment Planning Pilot Project, Zimbabwe

Establishing the structure

Mazowe catchment covers part of Mashonaland East and Mashonaland Central. The project was established through the users having a vision for some form of user board which embraced all water users and covered the whole catchment. Following a workshop held in July 1996, a working group was formed to set up Water User Boards (between ward and district level), each nominating two representatives to Sub-Catchment Councils (between district and provincial level) each, in turn, nominating two representatives to a Catchment Council. The process took a year to build awareness, trust, participation and transparency. These institutions have representation for a range of user sectors, e.g. communal areas, mining, industry and agriculture. Civil servants and other experts act as advisers.

Building the lower tiers

The Mazowe Catchment Council has undertaken a lot of work including establishing the lower tier structures (Sub-Catchment Councils and Water User Boards). Educating the tiers of structures about their responsibilities is a challenge. Attendance at meetings is erratic, especially for members living in remote communal areas due to poor communications and the costs of travelling.

Publicity and awareness campaigns

The Catchment Council has embarked on an awareness campaign to inform water users about water sector reforms and activities in the catchment area. Publicity materials, prepared by the Water Resources Management

Strategy (WRMS) project in English, Ndebele and Shona, have been distributed. But there is a constant demand for more materials and efficient distribution of these is a major challenge.

Catchment plan

It is taking a long time to prepare an integrated plan for the Mazowe catchment. The task has been found more complicated than originally anticipated.

Source: PlanAfric 2000 (adapted from WRMS Bulletin, Oct 1998)

NGOs as catalysts

NGOs have been important catalysts in the development and application of participatory planning at local level and, also, at national level. For example, in 1992, the Mexican government delegated its Tropical Forest Action Plan to its strongest critics led by a consortium of NGOs; and other cases where NGOs have assisted local communities to identify their own priorities and State representatives participating in these discussions have suggested ways and means to carry out the plans. Pooling of community priorities at regional or national level enabled them to link with the development of policy. Other examples from Latin America are described in Appendix 5. Another excellent case is in Papua New Guinea where an almost unprecedented opportunity has been created for NGOs and customary landowner groups to participate in decisions about the management of national forests as part of the development of the National Forestry and Conservation Action Programme (see Mayers and Peutalo, 1995). And in India, participatory methods have now

> 'spread well beyond the confines of the NGO and academic circles where they were developed and where their use was characterised by innovation and flexibility. PRA methods have become part of guidelines for major state initiatives, such as the new national watershed development programme, in which speed, scale and bureaucratic management give shape to their use' (Mosse 1995).

The gestion de terroir approach in francophone West Africa

Following the 1984 Regional Conference of Sahelian States in Nouakchott, most countries in the region initiated national plans to combat desertification, several of which adopted an approach known as *gestion de terroir* (GT). Two terms, *gestion de terroir* and a*ménagement de terroir*, are commonly used, often synonymously, to describe the range of community-focused projects. *Terroir* refers to a socially-defined space containing resources and associated rights, within which a particular community is assumed to satisfy most of their needs. *Gestion de terroir* refers to the management of natural resources: allocating land to certain uses, limiting access at certain times, and controlling levels of resource use. *Aménagement de terroir* refers to the improvement of resources, involving a variety of investments to raise productivity, reduce crop risk, and conserve soil and water.

Over the course of the 1990s, the GT approach to local land use planning for improved natural resource management has been adopted by a myriad of government projects, donors and NGOs operating in the Sahel. In 1994, in Mali alone, over 200 GT projects were engaged in natural resource management, setting up local land use committees to establish local land use plans, and financing complementary development activities to encourage the adherence of the local people to the approach (UNSP 1994). Experience of rural planning in Mali is discussed in detail in Appendix 6.

The driving principle of GT is the devolution of decision-making powers for rural land-use planning and natural resource management from government services and projects to the local people. This stems from the recognition that governments are not well-equipped to manage land at local level, and that local people often have both sound technical knowledge and a range of institutional structures capable of managing resources. There are many variants of GT which can be differentiated by the relative attention paid to either the degree of local participation, or the extent to which they address natural resource management (NRM) or socio-economic issues (Winckler *et al*. 1995; Yacouba *et al*. 1995).

Three broad approaches have been taken by GT projects:

The NRM approach focuses on the physical improvement of the natural resource base with emphasis on soil and water conservation and agro-forestry through existing institutions (modern and traditional) as well as with individuals. Initially, the focus was on collective erosion control structures, nurseries, etc. Later, emphasis shifted to activities managed by individual farmers themselves, including soil fertility management. Initial training is provided in improved soil conservation but, over time, this is extended to broader issues of land use planning and management. The assumption of this approach is that local people can see immediate benefits in the form of improved agricultural yields which also encourage the adoption of conservation techniques by farmers in neighbouring communities.

The main shortcoming is that the projects do not address any other (and maybe more pressing) socio-economic needs of the population.

The institution building approach focuses first on establishing and training community-based institutions to design and implement a land use management and development plan. Funding is available to assist with the implementation of selected activities that meet local priorities (e.g. wells, dams, credit). Such an approach generally consists of two phases: phase 1 involves establishing and training a village GT committee, carrying out a participatory study of village resources and institutions and drawing up a land use management plan. Phase 2 involves implementing this plan through NRM and socio-economic activities and the enforcement of new NRM rules and regulations.

In principle, this approach should establish a village-based institution trained in holistic land use planning and management that is capable of promoting a sustainable development strategy for the community. In practice, however, the capacity of the committee to carry out its mandate is often compromised by a lack of legitimacy: either because it has displaced existing customary institutions, or because of its non-democratic and non-representative. Each GT-programme tends to create its 'own' village-level committee. In addition, several years filled with meetings and making plans can pass before local people see any tangible benefits for their involvement in the project, leading to disillusionment.

The local development approach is a more recent adaptation of the two former GT approaches and tries to address their limitations. It also reflects the growing donor and State interest in decentralisation and privatisation. Three aspects differentiate the local development approach from the institution-building and NRM approaches:

(i) Community organisation and fund-raising is located at a supra village level even though specific activities may be carried out at village or group level. Emphasis is on collective investments.

(ii) Financial responsibility for rural land use planning and NRM is transferred from the project to community-based land use and planning committees. These are given control of a credit fund provided by the project to implement its activities, and must also raise

complementary funding. The committee has to set its priorities for allocating the limited funds available to projects proposed by the various communities.

(iii) This committee is expected to call for tenders, select and sign a contract with a local contractor to build infrastructure and implement other development activities. They must also monitor the performance of contractors.

In giving the local community power to decide how to allocate funds, there is the risk that community organisations will give priority to relatively capital-intensive investments to be able to absorb the available funds. They may also succumb to local pressures to invest in social infrastructure activities to address immediate priorities (e.g. village water supply) at the expense of investing in longer-term sustainable NRM activities. Some projects have reacted by earmarking funds (e.g. 70% on NRM and 30% for other issues) or requiring that these investments are linked to NRM (e.g. treeplanting around a well). Issues related to management and regulation of natural resources are likely to receive less attention in the local development approach, particularly when accompanied by large funds that have to be invested locally.

In theory, these approaches have sought to promote an integrated and participative process to rural land use planning and NRM based on the involvement of local people according to customary practices. In practice, however, they have not fully lived up to expectations (Box 3.14).

Box 3.14: Some problems with the gestion de terroir approach

a) ***Policy vacuum***. Despite a general commitment to the GT approach, most Sahelian governments did not articulate a specific policy for the manner of its implementation (UNSO 1994). Burkina Faso is a notable exception in this respect. The government of Burkina Faso made GT a specific policy in their efforts to promote rural development and created a national land use planning and management programme to ensure a harmonised and coordinated approach (*Programme National de Gestion de terroir* within the Ministry of Agriculture). Elsewhere, although government departments were set up ostensibly to co-ordinate and monitor the implementation of GT projects, they were largely ineffective. In Mali, for example, the two government departments responsible for ensuring a co-ordinated application of GT projects failed to carryout their mandate. This situation is partly explained by insufficient funding, lack of political will, poor communications across government departments and independent-minded donors and NGOs promoting GT projects. When other organisations took the initiative to stimulate exchange and co-ordination amongst the multitude of NGOs, donor-led projects and parastatals involved in GT programmes, they met with resistance (CMDT 1991). As a consequence, GT programmes took place in an institutional vacuum.

b) ***Technical focus with a pre-established methodology***. Most GT projects have tended to focus on the physical characteristics of NRM and ignore the more complex social, economic, political and cultural factors that affect how households can most effectively use these resources. GT projects are frequently seen as a technical exercise to produce a plan for several years, according to the implementation of a pre-established series of steps (extensively described in project manuals) to be taken by project field staff. Emphasis is often put on the preparation of maps (soils, vegetation, land use zones) which generally are produced by project staff. The activity plan sometimes resembles a 'wish-list' to be presented to potential donors.

The GT approach is seldom regarded as a planning process undertaken by local stakeholders to assess and negotiate resource use, establish rules, regulations and land use practices to better manage their resource. There is seldom an emphasis on developing long-term contingency plans to allow for changing circumstances such as drought, government policies and world markets.

In the analysis of land use problems, the GT approach has also tended to focus heavily on farming at

both household and village territory levels. Individual farm holdings are seen as autonomous, technical entities which is not conducive to understanding the complexity and diversity of rural production strategies (e.g. crop-livestock interactions, multiple and integrated cropping regimes on the same piece of land).

A preoccupation with technical issues and the assumption of uniform community interests has resulted in insufficient focus on the socio-economic and cultural heterogeneity of communities. Differences in access to land, labour and credit resulting from village power relations, gender, age and caste tend to be over-looked (Painter 1993, Painter *et al.* 1994). Committees are dominated by local elites to the exclusion of certain groups (see below).

c) ***Misapplication of the methodology***. The formal procedure for the implementation of the GT approach is to entrust the local community with the authority to carry out their own analysis of the situation and design a plan to meet their priorities. But, in practice, many GT projects adopt a very top-down approach.

Degnbol (1996) argues that most GT projects have been implemented as conventional extension packages in a political and institutional climate which does not seriously question or redefine the relationship between the State and the local population. In addition, project staff who are in direct contact with the population and who are responsible for the implementation of the GT activities, have a limited basic education and receive little training in participative methods. A GT programme either contracts its own staff or works through existing government staff. They may also face transport constraints, while others link their involvement to the *per diems* they will receive. Mobility and flexibility of government field staff can also be limited when planning is rather inflexible and personal initiative is not valued. The use of more participatory methods has seldom resulted in changes in the institutional functioning of an organisation.

d) ***Sectoral approach***. GT demands a holistic approach with close collaboration between the various government services dealing with livestock, agriculture, forestry, etc. The local development approach will also explicitly include socio-economic issues such as health care, sanitation and water, education, roads, etc. However, this integrated approach goes against the grain of existing government rural development structures which are organised along sectoral lines with their own distinct areas of responsibility and limited horizontal communication or collaboration. In Mali, a promising development is the restructuring of the Ministry of Agriculture and Water which started in 1997. The livestock, forestry and agriculture divisions have been dissolved and replaced by three new divisions focusing on 'community organisation', 'rural equipment and land development', and 'legal issues and control'.

e) ***Lack of a rural finance infrastructure.*** The absence of agricultural credit banks or community-based credit and savings banks has been a serious handicap. Funding of rural planning and NRM activities has been almost exclusively covered by donor and NGO projects, thus limiting the role of the community to that of recipient and executor rather than decision-maker and manager. The project FIL is an interesting exception. Credit at the moment is only readily available in cash crop growing areas (e.g. cotton, groundnuts, rice). A promising development is the installation of several community-based savings and credit co-operatives like the *kafo jiginew* in the cotton-growing belt of southern Mali, in the 1990s.

f) ***Local bias with limited attention for institutional issues or influencing policy***. There has been a tendency only to address problems prevailing at the community level. Institutional issues such as land tenure and local rules of access and management of resources were initially rarely addressed. Many projects operated in an autonomous manner even though formally attached to government structures. Degnbol (1996) makes the point that while many GT projects have had some successes in addressing NRM issues at the local level and in improving the livelihoods of those involved, they have had a limited impact in tackling the structural causes of rural poverty or influencing national policies in this domain. In Degnbol's view, rural planning and NRM policy in Mali has so far been mostly influenced by large donor and government driven projects, each operating in a specific region. These projects tend to focus on technical and administrative solutions for problems which are fundamentally an issue of power relations between the state and civil society. This lack of interest in the legal, policy and

administrative environment changed in the 1990s when some GT programmes started to address land tenure issues, e.g. the forest law, and supported the decentralisation programme.

g) ***Village land focus***. The basis of a GT rural planning exercise is the village land (*terroir villageois*) that is traditionally managed by a village which has recognised rights of occupation and use. This *terroir* focus, however, is often biased in favour of settled communities. It does not easily allow for integrating the interests of nomadic groups into community-level planning and management of natural resources. Local land use plans are rarely developed in consultation with transhumant herders who may rely on these resources. The poor integration of seasonal visitors' needs is increasingly recognised by GT programs although they still face serious practical difficulties in involving non-resident populations in the planning and implementation of GT activities (Diarra, 1998)

The GT approach has also been criticised for its implicit supposition that the village territory represents the sole livelihood resource for the community. Painter *et al*. (1994) and others argue that Sahelian farmers and agro-pastoralists exploit a far wider "action-space" than that found in the immediate vicinity of their village, and urban-rural linkages are likewise not accounted for.

Participatory planning in Latin America

The World Resources Institute has studied several cases in Latin America where, first, local priorities were identified by local communities with assistance from NGOs. State representatives participated in the discussion of local plans, reacted to ideas emerging from communities and provided information and ideas about means of carrying out the plans and about potential constraints. Pooling of community priorities at regional or national level enabled them to link with the development of policy (Lori Anne Thrupp, personal communication). Of course, such linkage depends on willingness to empower local institutions and the building of a planning framework in which it can occur. In a number of countries, such as Mexico, Colombia and Chile, laws have been passed requiring the establishment at the provincial or local level of environmental planning committees with broad social representation (Zazueta 1995) and governments are increasingly delegating the planning and implementation of programmes to independent sectoral organisations, e.g. the Mexican Program for the Protection of the Tropical Forests (PROAFT) (Box 3.15).

Approaches in the forestry sector

The forestry sector has undergone a sea change over the last 10 to 15 years, from production forestry to management forestry. In many countries, there have been many initiatives in collaborative resource planning and management which include social forestry, community forestry, joint forestry management, participatory natural resource management, environmental stewardship, co-management of protected areas and integrated conservation-development projects. Nepal's community forestry programme is well known and frequently cited as a good example of successful participatory forest planning and management. Originally concentrating on involving local people in the management of new plantations on degraded land, the focus has now shifted to management of natural forest, and user groups can incorporate than own management practices where these are effective (Box 3.16).

Box 3.15: Delegating planning: the case of PROAFT in Mexico

Like most of its contemporaries, the Mexican Tropical Forest Action Plan (TFAP) had been drawn up with little consultation with local people and was heavily biased toward the forestry sector. Officials within the Ministry of Agriculture and Water Resources recognised that it did not address key policy issues, such as intersectoral policy linkages, the needs of forest dwellers, and the impoverishment of marginal populations, and so could not arrest rapid deforestation and loss of biodiversity in the Mexican tropics.

To address these concerns within the Ministry, in mid-1992, the Undersecretary of Forestry invited some of the strongest critics of the government's forestry policy to propose an alternative. As a result, the top-down Mexican TFAP turned into PROAFT, a highly participatory process that involves stakeholders in planning with action. At a time when the side agreements for the North America Free Trade Agreement were under negotiation, tropical forest conservation became an important concern for former President Salinas. Indeed, he personally conferred decision-making authority to PROAFT.

Over the next three years, a team of five people from two established NGOs (Gestión de Ecosistemas AC, and Grupo de Estudios Ambientales AC) and the National University was assembled and a new NGO (PROAFT AC)
was formed to act as a counterpart and procure funds for the three-pronged initiative:

- A series of 16 tropical forestry studies. Some were generic, such as those on the expansion of cattle herding and legislation on resource use in the tropics, while others were specific, such as performance evaluations of specific commissions or programmes. These studies provided an overview of the condition of natural resources, summarised the outcomes of government programmes in tropical areas, and contained recommendations for improving those programmes or initiating new activities or policies.

- A series of Tripartite Alliances, through which PROAFT would promote grassroots initiatives to improve forest management by financing and providing technical assistance to projects identified by the communities. NGOs and universities were invited to provide technical assistance to these community groups - thus the name Tripartite Alliances (the Ministry, the community, and an NGO or university).

- A process of consultation through workshops carried out in various regions of the country. PROAFT presented priorities that were debated and amended in open discussions by representatives of NGOs, grassroots groups, business, and government officials from other ministries and state governments. On average, 60 people attended each workshop.

Through this process, PROAFT had by late 1994 produced a new Mexican TFAP that harnessed a broad spectrum of knowledge and viewpoints; identified six priority lines of action, each of which included a series of proposed activities; and identified organisations that could implement them.

Zazueta (1995) reported: 'Mexico's political and economic crisis in late 1994 and early 1995 has placed many government initiatives on hold, PROAFT amongst them. Nonetheless, PROAFT's participatory approach has led the new administration to review and approve the proposal. Because PROAFT is not only technically sound but, also, incorporates the views of the various stakeholders, it appealed greatly to new government officials seeking to respond to the democratisation of Mexican institutions.'

Box 3.16 Nepal community forestry programme

In Nepal, forests were nationalised in 1957, placing them under the control of the Forest Department. It soon became clear that the department lacked the capacity to manage the forest effectively. Regulations made life difficult for the people whose farming system depends on a variety of forest products, browse and compost but people continued to use the forest illegally - they had little choice although, if caught, they were subjected to significant penalties. Control was inconsistent and, to a large extent, the authorities ignored the forests in the hills, except for attempts to police forest use.

In the late 1970s, innovative thinking by a number of Nepali foresters led to a new approach involving handing over forests to local *panchayats* (official politico-administrative units) that were willing to protect them. Legislation allowed for the use and harvesting of forest products by the people of the *panchayat*, subject to the Forest Department's approval of a management plan. In practice, however, very little forest was handed over prior to the late 1980s, and very little of that was governed by management plans that allowed any significant forest use. In some areas, the establishment of plantations and the protection of natural forest were successful but, with few exceptions, the benefits to people were few, particularly in terms of access to forest products.

The completion of a national forestry master plan in 1988 and the issue of operational guidelines to assist implementation of the plan pending revised legislation (The Forestry Act, January 1993) resulted in easier implementation, increased incentives for people's participation and, consequently, a rapid expansion of the programme. Significant features of the programme as it now stands are:

- Forest management agreements (operational plans) are negotiated between the Forest Department and user groups (i.e. groups of people with a direct interest in use of a particular forest and claiming usufruct) rather than larger administrative units.

- Under the legislation and guidelines, the user groups are involved in operational planning. There is the potential for considerable flexibility in management and for a high level of local control, subject to the ultimate authority of the District Forest Officer. Substantial forest use and harvesting are possible. In practice many plans are not as flexible as they could be, nor do they provide as many benefits, largely because foresters find it difficult to cede control. Nevertheless, the legislation provides for flexible management and substantial benefits, and there is a significant number of cases where the agreements match the potential.

- There is no benefit-sharing by the Forest Department. At present, communities are entitled to use all products raised through management and may use all income raised for development purposes. Whether this will be extended to allow for greater levels of income from more substantial commercial use of forest products has yet to be tested.

- Increasingly, indigenous systems of forest management have been recognised. Many of these have developed in the near vacuum of forest management that existed after the nationalisation of forests in 1957. Community forests guidelines provide for agreements to be made with existing user groups. This is a major shift from the previous emphasis on official boundaries and newly-established formal committees. The guidelines also permit existing groups to incorporate their management practices, where they are effective, into management plans.

Source: Fisher (1995)

Landcare in Australia

Probably the largest community-based movement is Landcare in Australia, initiated in 1989 by the Australian National Farmers' Federation and the Australian Conservation Foundation. Landcare groups are voluntary associations of rural people who work together and in collaboration with long-established state agencies to look after their own neighbourhoods. Their varied activities, which are almost identical with those of farmer groups in the long established *conservation districts* in the USA, include:

- Development of a catchment or district plan, identifying major problem areas, and proposals for dealing with them (Box 3.17):
- Active involvement in natural resource monitoring, often in conjunction with schools, state agencies and other professionals;
- Documenting local knowledge about land and its management;
- Study tours of their own and other regions;
- Joint research with universities, research bodies, and state agencies;
- Production of educational materials.

Box 3.17: The Landcare catchment planning process, Australia

'Preparing a catchment plan as a framework for individual property plans is a valuable strategic activity for Landcare groups. Various planning processes are evolving in different circumstances, but common ingredients include the following:

- A base map of the district is prepared, often using an enlarged aerial photograph and group members receive base maps for their own properties at a larger scale;
- The group, with the aid of a facilitator, drives and/or walks around their district, developing a common understanding of its characteristics, and agreeing on a common local language for describing the different types of land - the ecological land units;
- Group members use their local knowledge and the information generated in the group to analyse and map the land units on their own properties and this information is aggregated to compile a land unit map for the catchment;
- The group discusses land management issues and potential elements of more sustainable systems, both at the farm scale and at the catchment scale. Property and catchment planning processes can assist individual land users at the paddock and farm scales, and groups of land users at the whole catchment scale, to gather, analyse, synthesise and apply information to move towards sustainability.'

Source: Campbell (1994)

Landcare groups are concerned with a wide variety of issues: erosion and degradation; water/river-related issues, weeds, nature conservation and biodiversity, education, wetlands, waste minimisation, extractive industries rehabilitation, tourist impact management, salinity, feral animals, and both conservation and sustainable farming.

Landcare pays particular attention to *land literacy*. This involves activities which assist people to *read the land*, e.g. overflights for farmers to see their land and the extent of degradation, publications and kits to assist land users in recognising emerging problems such as soil salinity.

Campbell (1994) observes that

> 'the key ingredients of Landcare are its lack of structure, the primacy of land users in determining group directions and activities, the integration of conservation and production issues, the involvement of people other than farmers in groups and the extent to which groups assume responsibility for their own problems and resources'.

There has been a phenomenal growth in Landcare, from 350 groups in 1989 to 2500 in 1996, involving representatives of about a third of commercial farming operations in Australia. Some measure of this success must be attributed to a shift of government funding from state agencies to Landcare so that groups can commission and direct work that they believe they need. However, Martin and Woodhill (1995) point out that Landcare groups do not have structures for environmental monitoring, evaluation and regional coordination. Their local initiatives cannot deal with issues that extend over wider areas and long time-scales: the link between their bottom-up approach and equally necessary strategic planning of land use has not been forged.

The success of Landcare has been widely heralded and its influence has undoubtedly been well beyond its agrarian roots. Lockie and Vanclay (1997) highlight struggles over the meaning of Landcare and key concepts such as *empowerment*, *participation*, *partnership* and *community*, and focuses on finding suitable criteria against which to gauge its success. It is clear that Landcare is a long-term process and still faces many challenges, especially given changes in policy and funding arrangements ushered in by the change in the federal government in 1996. Curtis and de Lacy (1997), for example, argue that additional resources are required to increase landholder adoption of best-bet practices, and Landcare group activity needs to be integrated within regional planning processes.

Landcare has evolved in a well developed democracy. Efforts are underway to examine its applicability in South Africa, but it remains to be seen whether the approach can be transferred as a generic model to other countries and particularly to poor countries with an immature institutional fabric.

3.5 Limitations of participation

3.5.1 The quality of information

Various limitations arise from the principles of participatory methods, particularly in relation to influencing policy. Guijt and Hinchcliffe (1998) point out that the methodologies emphasise micro-level details and diversity at the local level, local social processes, and presentation in terms of specific local narratives. This means that the resulting information is too detailed for policy-makers and not analysed in terms of policy implications. However, policy analysis can be enriched by presenting the findings of participatory approaches as case studies.

It is often difficult to quantify this context-specific information. Issues are discussed in groups and there is an emphasis on relative, rather than absolute, values. So despite the widespread uptake of participatory techniques, their findings are still greeted by the question 'but how do they compare with real data?' Pretty (1995) complains:

> 'It is commonly asserted that participatory methods constitute inquiry that is undisciplined and sloppy. It is said to involve only subjective observations and so reflect just selected members of the community. Terms like informal and qualitative are used to imply poorer quality.'

But as Robert Chambers (1997) has reiterated, the purpose of rigour is simply to assure that data provide an accurate reflection of physical and social reality, and that personal judgement is minimised. Whilst rigour is traditionally linked with measurement, statistical tests and replicability, these can overly simplify reality: in order to be counted, the real situation has to be dismembered. The resulting simplifications miss or misrepresent much of the complexity, diversity and dynamism of the system.

Criteria of trustworthiness, authenticity, and rigour can be applied to demonstrate the soundness of participatory approaches (Guba and Lincoln 1989, Marshall 1990) and there can be no argument that they are technically worse or better than any other.

Good facilitation is the key to effective use of participatory methods, and if they are to inform policy-making and become a key part of planning, then complementarities with other disciplines must be sought.

If the objective is data gathering, then rapidity will probably take precedence over local analytical processes. If local action is the aim, then the priority is likely to be building capacity and competence for local analytical processes. Guijt and Hinchcliffe (1998) point out that the active involvement of people and interest groups in research, analysis and planning means that all participants should have knowledge of the results. This implies effective and timely feedback, the sharing of reports, and the recognition of all contributions.

3.5.2 Some costs of participation

As the value of participation in planning and decision-making has come to be accepted, some planners assume that the maximum participation of all of the people all of the time is necessary and a good thing. It is not. Complete participation may actually lead to complete inertia, due to the costs involved and practical difficulties such as transportation, reaching a quorum, time and energy (Box 3.18).

Box 3.18: The costs of participation

1. **Cost of providing access to information**: If people are to be actively involved in planning, they need to have a thorough understanding of the process as it unfolds and decisions that are being made. This requires effective and timely feedback, the sharing of reports and a recognition of the contribution of different groups and individuals;
2. **The cost of raising expectations**: Participation may generate considerable excitement and expectations may be raised. If there is no follow up to early discussions, disillusion may set in and jeopardise peoples' willingness to continue to participate. This can be minimised by cautious initial discussions that focus on problem identification and which provide all stakeholders with clear idea of what is possible and what is not, given the resources that are available.
3. **The cost of facilitation**: Open and frank discussions over resource allocation and use can lead to conflict that needs to be addressed. This requires specialist skills and it is questionable whether planners have these skills. They may need to be brought into a planning team.
4. **Transaction costs** of maintaining institutional mechanisms for local management include the non-market costs involved in conflict resolution, time spent in meetings, and time spent on resource management.
5. **The costs of being actively involved**: Participation has costs in terms of both money and time for local people, who must take time out of already busy lives. There are also costs for food and accommodation, and the potential of political and social disputes that surface or are generated by the intervention of outsiders. These need to be compensated.

Based on IIED (1998)

It is essential first to identify the most appropriate form of participation (whether at a local, district or higher level) that is desirable and feasible, and when particular stakeholders need to be involved. Stakeholder analysis can assist (Box 3.19). The difficulty lies in assessing stakeholder's influence

Box 3.19: Stakeholder analysis

Stakeholder analysis involves the identification of the key stakeholders in an activity (e.g. developing a plan or policy), an assessment of their interests, and the ways in which these interests affect the riskiness and viability of the initiative. The *stakeholders* are the persons, groups or institutions with interests in a project or process.

Primary stakeholders are those ultimately likely to be affected, either positively (beneficiaries) or negatively (e.g. those involuntarily resettled). They can be categorised according to gender, social or income classes, occupational or service use groups, and these categories may overlap in many activities (e.g. minor forest users and ethnic minorities).

Secondary stakeholders are the intermediaries in the process (e.g. funding, implementing, monitoring and advocacy organisations, NGOs, private sector organisations, politicians, local leaders). Also included are groups often marginalised from decision-making processes (e.g. the old and the poor, women, children, and itinerant groups such as pastoralists) - some of these may also be considered as primary stakeholders. Some key individuals will have personal interests as well as formal institutional objectives (e.g. heads of departments or agencies). There may be some people who fall into both categories, as when civil servants try to acquire land in a new scheme.

Stakeholder analysis, undertaken at the beginning of a process or activity can help to:

- Draw out, at an early stage, the interests of stakeholders in relation to problems/issues which the process or activity is seeking to address;
- Identify conflicts of interests (actual or potential) between stakeholders which will influence the riskiness of the initiative before efforts (or funds) are committed;
- Identify relations between stakeholders which can be built upon, and may enable coalitions of sponsorship, ownership and cooperation;
- Assess the appropriate type of participation by different stakeholders and the role(s) each might play, at successive stages of the development and implementation of an initiative.

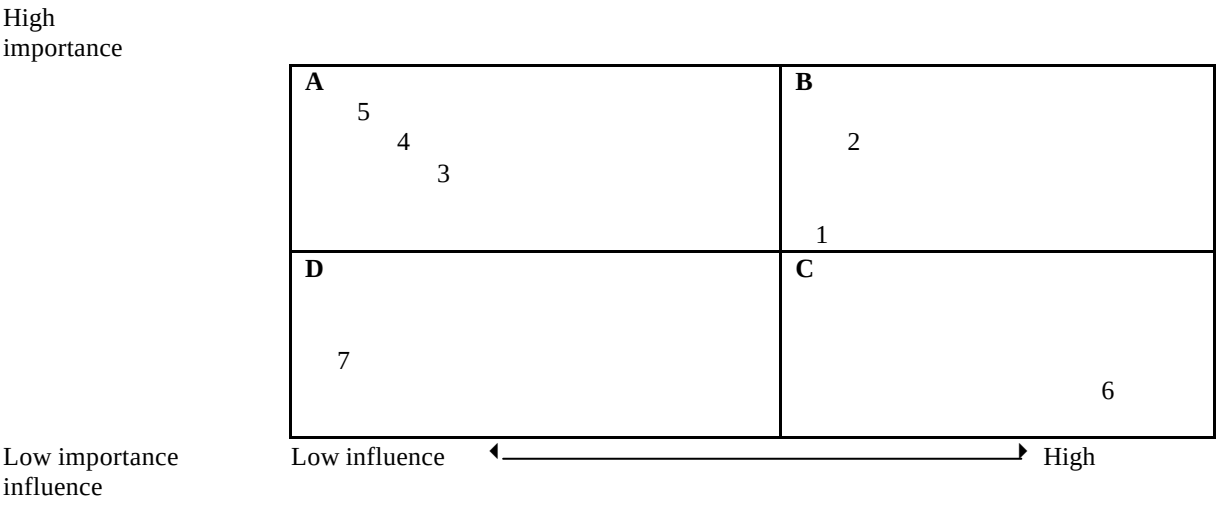
There are several steps in stakeholder analysis:

1. Drawing up a stakeholder table - listing the stakeholders (primary and secondary) and identifying their interests (overt and hidden). Each stakeholder may have several interests - in relation to the problems being addressed by the project or process;
2. Developing a matrix to 'map' each stakeholder's importance to the success of the process and their relative power/influence (see Figure 3.5) and indicating what priority should be given to meeting their interests;
3. Identifying risks and assumptions which will affect the design and success of any actions, e.g. what is the assumed role or response of key stakeholders if a project or plan is to be successful?, Are these roles plausible and realistic? What negative responses might be expected given the interests of particular stakeholders? How probable are they, and what impact would these have on the activity?
4. Identifying appropriate stakeholder participation, e.g. partnership in the case of stakeholders with high importance and influence, consult or inform those with high influence but with low importance.

Source: adapted from ODA (1995)

Figure 3.5: Matrix classification of stakeholders according to relative influence on, and importance to, a proposed private sector population project, Pakistan

(Source: ODA 1995)



Stakeholders:

Secondary: 1 Ministry of population Welfare. 2 Pharmaceutical companies & distributors. 3 ODA
Primary: 4 Lower-middle income groups. 5 Women
External: 6 Islamic clergy. 7 Traditional birth attendants

and importance. This can be investigated through public or group interviews, but it is often the project staff that carry out the assessment on their own. A stakeholder identification process has recently been used in the shared forest management project in Zimbabwe (supported by DFID) which led to extensive stakeholder meetings (both separately and as joint fora) resulting in the successful involvement of all parties in the project design process, reducing suspicion and generating a strong sense of ownership among stakeholders.

Another way to reduce transaction costs is to involve representatives of different stakeholder groups in negotiating agreements. Representativeness is a key factor for achieving durable settlements through active participation/negotiation. We develop this point further in Chapter 4, section 4.5.1.

3.5.3 Great expectations

Local participation in research and planning usually raises expectations. Consequently, before engaging in such approaches, it is important that there is a commitment to follow through with actions (see costs).

3.5.4 Dealing with power

Active participation implies more multilateral relationships between stakeholders. This means that more time is needed to reach a decision. However, and perhaps more importantly, it forces shared decision-making and, thus, leads to a redistribution of power. Often, issues of power matter more than active involvement in decision-making in reaching durable agreements. Some argue that where there is significant disparity in power, and this is used to

achieve an outcome, usually that outcome is potentially less stable than in situations where parity in power favours negotiation (Sidaway 1995).We return to this issue in section 4.2.4.

3.6 Conclusions

The more successful examples of participatory planning and management discussed in this chapter are part of a new development paradigm:

- Decentralisation of power and decision-making, particularly over common property resources, to the level of user groups;
- Recognition of indigenous knowledge and practices as a basis on which to develop resource management systems;
- Attention paid to institutions, their effectiveness, governance, and the role of land tenure;
- Limitation of the role of government to maintenance of an *enabling environment* that provides incentives to manage resources, rather than simply policing and sanctions.

If participation has so many intrinsic merits, why is it so difficult to institutionalise? Several constraints were identified in a study of the Indian experience of Joint Forest Management (Bass and Shah 1994) and, although local situations will differ, many of these constraints will be present elsewhere:

- *In the initial phase, participation requires a great deal of time and effort in development of human resources.* Generally, no incentives are provided to staff for the extra effort required and most institutions and programmes feel constrained in making such investments as they are currently evaluated according to tangible physical and financial targets.

- *Measurement of participation and institutional development is difficult*, requiring a combination of quantitative and qualitative performance indicators. Existing monitoring and evaluation systems cannot measure these well.

- *Participation is a long-drawn-out process and needs an initial period of interaction and evolution before being scaled-up and replicated.* Most development programmes tend to settle on a process of participation and institution-building in the early phases, without enough experimentation.

- *Participation requires a reversal in the role of external professionals*, from management to facilitation. This requires changes in behaviour and attitudes, and can only be gradual. It needs significant retraining to which, usually, inadequate resources are devoted.

- *Participation threatens conventional careers*. Professionals feel a loss of power if they have to deal with local communities as equals and include them in decision-making. This discourages professionals from taking risks and developing collaborative relationships with communities. National professionals feel more threatened than expatriates.

- *Programmes retain financial powers for themselves.* While many programs initiated by external agencies use participatory methods for planning, they do not make corresponding changes in resource allocation to local institutions. While it is obvious

that effective auditing is essential if financial control is ceded, responsibility without financial power is just as bad as power without responsibility.

- *Participation is directly linked with equity, which threatens the existing hold of elites upon wealth, power and influence*.

Paradoxically, some of the most successful participatory projects and programmes have evolved in countries where the government has had few structures and little support for public participation. In these cases, planning structures well-suited to local circumstances have had to be re-invented, and independent groups have communicated with and worked directly with each other without being confined by the bureaucratic strait-jacket of formal institutions.

Community initiatives like Landcare and social guarantees like security of tenure cannot, in themselves, bring about sustainable land use although they may be prerequisites. They must be supported by technical knowledge, land resource information, finance (if this cannot be generated locally), good management and leadership, some of which must come from outside. Local organisations must, also, find a way to communicate their needs and proposed actions to the relevant outsiders - government and development agencies. At the same time, formal planning systems emanating from government must become more inclusive, both to reap the advantage of both technical and local knowledge and to strengthen the commitment of all parties to the implementation of plans.

There will always be development issues that are national in scope, where decisions have to be taken in the broader national interest, for example development of a major catchment for hydro-electric power or the establishment of a national park. In such cases, trade-offs must be made between national and local interests. There are other instances where the initiative should rest with local communities. Centralised, top-down methods of planning and the participatory approaches described in this chapter are not alternatives, nor are they mutually exclusive. The approach to be adopted depends on purpose and context. Clearly, links need to be forged between the two approaches so that they are mutually supporting.

The next chapter discusses possible ways of moving from community participation to negotiation and the development of partnerships - in effect, how to link different decision-making levels and address issues such as power structures and ‘absorption capacity’.

CHAPTER FOUR

A BASIS FOR COLLABORATION

4.1 The natural resources battlefield

This chapter deals with the many constraints upon broader collaboration in rural development and the information needed to remove them (section 4.2); the different valuation of natural resources of the various stakeholders (section 4.3); and, finally, the institutional framework necessary for participatory planning and management (section 4.4). There are not so many examples of planning practice that have been able to bring people together to find common ground. Nevertheless, the last few years provide us with examples of attempts to manage conflict more effectively. Review and analysis of the ideas that underpin the more successful ideas provide indications of the way forward.

Participatory approaches have sometimes been presented as a *panacea* that will allow harmonious and equitable negotiations to occur. This is not born out by experience. Participation has much to offer but, also, brings with it a new set of problems, not least in the different interpretations placed on the term by different people, as elaborated in Chapter Three. In practice, participation in rural planning has usually been restricted to two types of stakeholders: community groups and development project staff. This has proved insufficient to develop sustainable initiatives in rural development, as it ignores the claims of other groups or antagonises them. For instance, community groups may wish to continue practising traditional shifting cultivation, but outside groups such as agri-businesses or environmental groups may be opposed to this, the former because shifting cultivation competes for land, the latter because they wish the forest to be left untouched. Such opposing goals often lead to a confusing battlefield for natural resource management (see Figure 4.2).

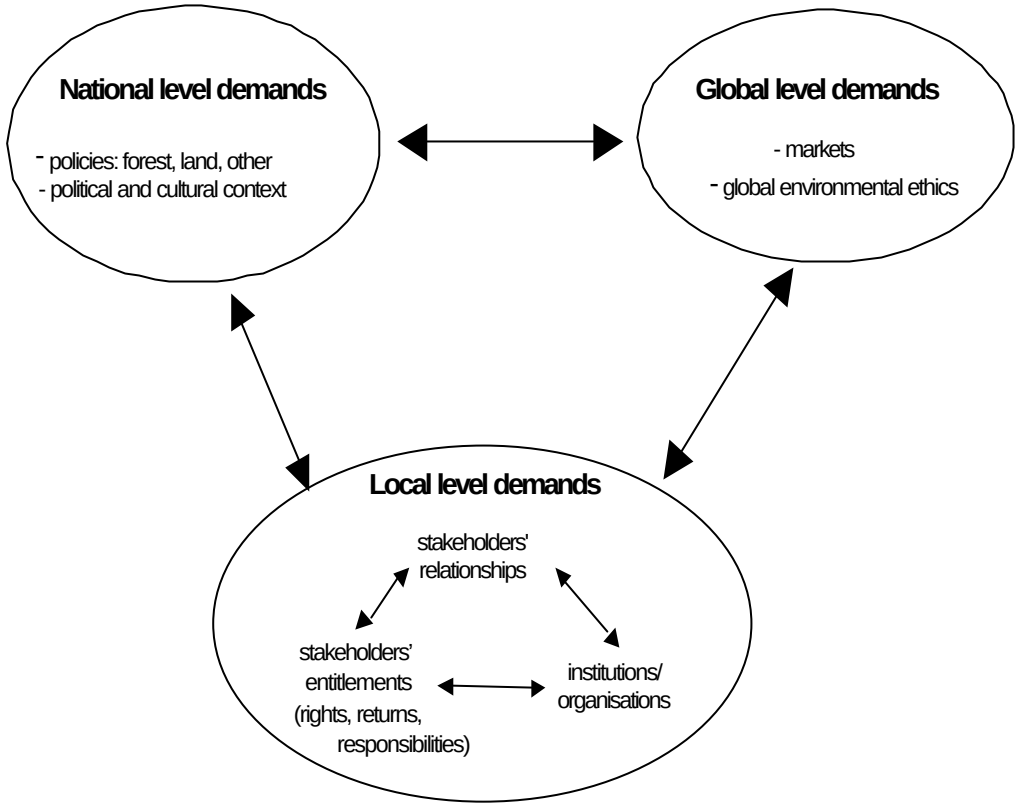
Participatory planning is more than using PRA methods. It has to be associated with institutional mechanisms to ensure that local priorities are, in practice, represented in negotiations. But this act of inclusion frequently upsets established patterns of power and control within a society or group. So PRA methods need to be augmented with knowledge of who should and can participate (Bliss 1999). Innovation is required to deal with two issues. The first is to develop and use methods that allow people to collaborate, coming together to discuss and negotiate competing claims and priorities. What are the constraints and possibilities here? The second is to provide means of valuing the resources and associated trade-offs between differing possible ways of using a mixture of resources. Money values alone do not hold the key here. What lessons can be learnt? We now take up these two issues in more detail.

4.2 Constraints and opportunities for collaboration

4.2.1 Concepts and methods in collaborative management of natural resources

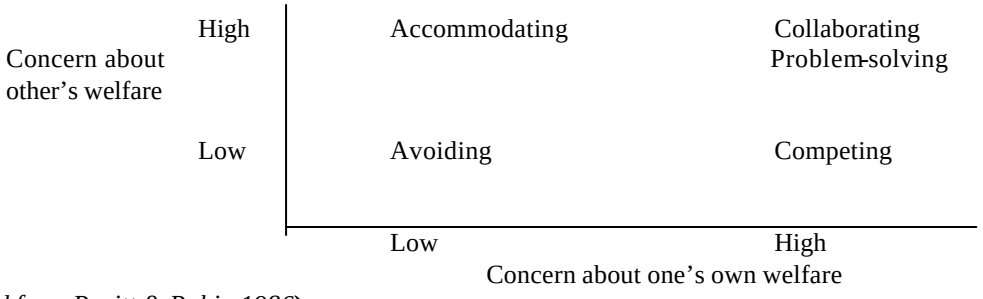
To build a strategy for collaboration, it is important to assess the level of competition or collaboration that is likely to occur before any other planning activities start. Pruitt and Rubin (1986) contend that negotiation strategies depend on the way parties balance concerns for both themselves and other parties, as represented in Figure 4.2.

Figure 4.1: The natural resources battlefield



Source: Dubois (1998b)

Figure 4.2: The dual-concern model in negotiation



*(Adapted from Pruitt & Rubin 1986***)**

In situations where the accommodating and avoiding strategies prevail, conflicts are likely to subside, at least in the short term.

Many would argue that collaboration is best. For example, Mike Dombeck, Director of the US Forest Service (cited in Walker and Daniels 1997b) calls for collaborative stewardship of natural resources:

> 'More interaction between stakeholders, not only in the process (decisions and responsibilities) but also in the outcome of situations.'

Vodoz (1994) advocates collaboration on the grounds that:

- It *improves the commitment of* stakeholders, through joint involvement in problem-solving;

- Collaborative strategies are likely to *improve the overall quality of decisions*, not least through exploration of new options, with the potential for win-win settlements;

- In case they do not achieve a settlement, collaborative strategies can nevertheless *improve the quality of the failure*, because they foster discussion between stakeholders, hence improving knowledge of each other's interests and perceptions.

We would add:

- They *allow for a freer flow of information* between stakeholders. Information flows are vital. Conflict frequently emerges because adequate information was not freely available to key stakeholders early on in the planning process (or at all).

However, collaborative strategies also have their limitations:

- Negotiation is a voluntary and non-binding process and *stakeholders can pull out at any time*, with a risk of jeopardising the process and/or the agreement. Yet, the temptation to withdraw is often balanced by the risk of marginalisation, in particular if relationships and mutual trust have improved during the negotiation process;

- They incur high *transaction costs* - mainly the time and efforts of all parties involved in interactive participation (see section 3.5.2, Box 3.18). However, Bliss (1999) argues that many of the financial objections relate to an outmoded perception of the project cycle which separates planning and implementation in both theory and practice.

Specialists in conflict management generally agree that collaboration is more likely to be achieved by focusing on interests rather than positions, following the *interest-based bargaining* approach (Delli Priscolli 1997) (Box 4.1).

Three conditions are necessary for a successful negotiation (Huybens 1994):

- None of the parties can solve the issue alone and stakeholders have some room for manoeuvre.

- The outcome from a joint decision is more enduring than the imposition of a unilateral solution, particularly given the complexity and uncertainty associated with natural resource situations, and the often divergent views on how to manage these.

Box 4.1: General principles of interest-based bargaining

(i) Negotiate on interests rather than position

Positions are based on perceptions, whilst interests are associated with underlying needs. Conflict management should attempt to move parties away from perceptions. Once interests are identified, it often turns out that parties in the dispute have some similar interests. Reconciling interests is more likely to bring about durable settlements, based on consensus rather than a compromise. More stakeholders will be satisfied with decisions based on consensus than those resulting from compromise.

(ii) Separate the people from the problem, or rather, the situation

Focusing on the situation, rather than the problem, lowers expectations. This allows step-by-step progress to be made.

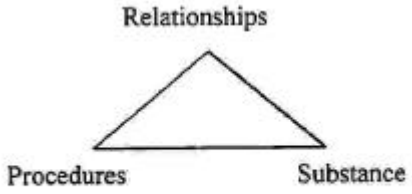
(iii) Emphasise progress rather than solutions

Both the environment and people's concerns are always changing. So an optimum, one-off solution is often illusory. What is needed instead is a process for constructive dialogue aiming at satisfactory agreements. Good management here equates with making progress, which leads to principle (iv).

(iv) Meet interests on substance, procedures and relationships to achieve durable settlements
These dimensions are seen as part of what Walker and Daniels (1997b) call the *progress triangle* in conflict management.

Practitioners tend to agree that, although arguments are usually about substance and procedures, progress towards durable settlements usually hinges on relationships. However, changes in the quality of relationships are often influenced by interaction, e.g. through discussions on substance and procedures!

Figure 4.3: The conflict management progress triangle (Walker and Daniels, 1997b)



(v) Invent options for mutual gains

This implies that sufficient time must be given to allow for iterative analysis of the situations and interests, reaching partial agreements, searching for overall common interests among parties, etc.

(vi) Use objective criteria in the discussion

This follows the same idea as principle (iv), i.e. that it is more effective to discuss substance and procedures than values and emotions. Objective criteria are important when it comes to evaluating trade-offs. However these less tangible factors are key to make progress.

- There is a fair balance of bargaining power between the parties. This is a tricky issue and is discussed in section 4.2.4. The principles in Box 4.1 place significant value on relationships (including confidence-building), power sharing, open communication and mutual gain.

4.2.2 Stakeholders

It is clear that early identification of relevant stakeholders is essential for effective collaboration. Methods for stakeholder identification and analysis, describing their stakes, and agreeing how they can be incorporated into planning, are discussed in Chapter Three (Box 3.19).

Stakeholders may view their participation in a number of ways (ODA 1995a):

- Being in control. Only consulting, informing or manipulating other stakeholders;
- Being in partnership with one or more of the other stakeholders;
- Being consulted by other stakeholders who may have more control;
- Being informed by other stakeholders who have more control;
- Being manipulated by other stakeholders.

While nobody likes to be manipulated, it should not be assumed that all stakeholders wish to be fully in control. Some may be happy to be kept informed, or consulted as necessary. If partnership is seen to be desirable for the sustainability of activities stemming from any plan, this has to be consciously constructed in an informed manner.

Certain key issues come up again and again in developing and maintaining partnerships (Table 4.1). Some of these may be potential stumbling blocks along the path to collaboration but they can be addressed by training. Such support to stakeholders may be one of the costs of participatory planning but the returns on this investment accrue well beyond the planning period and can contribute to the sustainability of activities that emerge from the plans.

4.2.3 Donors as stakeholders

Donors are not only a source of funds. They also have their own agendas, driven by their own political imperatives and may need quick results from the projects they support - which works against the fostering of participatory processes. In response to criticism along these lines, many now explicitly support more participatory processes with less pressure for an early definition of outputs.

However, there is still a tendency for donors to focus on sectoral issues (e.g. water; afforestation) rather than specifically on marginalised social group or regions. Even where higher level objectives are framed in terms of such broad themes, they become subsumed into sectoral plans at lower (activity or project) levels (Bliss 1999). If donor agendas are to give priority to marginalised regions and/or social groups, then initial activities must focus on a process to enable such marginalised groups or regions to develop their own plans. Planning would then become closely interwoven with the implementation of plans. This has major implications for donors: it requires that a broader set of activities (such as training and institutional support) be funded which, in turn, should support an equitable and effective planning process.

Table 4.1: Partnerships with primary stakeholders: some key issues and ways to deal with them

Based on: ODA 1995a

Issue for stakeholder	Support for stakeholder
Lack of political or institutional power.	Support representative, decision-making institutions.
Lack of appropriate information for decision-making.	Ensure access to appropriate media; training. Mutual learning, and sharing of available information; targeted research
Less powerful than other primary stakeholders.	Ensure access to planning of powerless groups such as women or ethnic minorities; incorporate activities that directly benefit minorities (economically or socially) while not threatening more powerful stakeholders.
Time and/or money costs of collaborating are high.	Planning activities specifically designed to accommodate the means of all stakeholders.
Legitimacy of one stakeholder group challenged by others.	Case-by-case assessment of importance of insisting on full participation, regardless of any adverse impact this may have on participation of others.
Discouragement by non-participatory hierarchical management structure of the agency implementing/co-ordinating planning process.	Agency needs to change its way of working; Training and consultancy report to adapt working practices and structures.
A secondary stakeholder, seeking to represent interest of primary stakeholder, has management structure or value system incompatible with the primary stakeholder.	Training support to NGO or seek a more appropriate representative!

DFID policy for aid now focuses on poverty and livelihoods. This contrasts markedly with the sectoral focus which dominated only a few years ago but DFID can draw upon significant experience to manage work in this way, for example, ODA 1995a,b,c. It will have to fund activities that do not result directly in physical outputs, and fit activities to rural livelihoods rather than attempting to force livelihoods into a sectoral framework. Institutional issues and, especially, the lack of institutional capacity are clearly important in any new look at planning, and these are discussed further in sections 4.4 and 4.5 below.

4.2.4 Dealing with relationships and power

Whilst stakeholder relationships are important in collaborative management of natural resources, information on ways of assessing stakeholders' relationships is scarce. GTZ (1996) categorises relationships as:

- Service;
- Legal/contractual;
- Market (determined by demand and supply of goods and services);
- Information exchange;
- Interpersonal;
- Power.

These various relationships are not mutually exclusive.

The interactions between relationships and power are complex. For example:

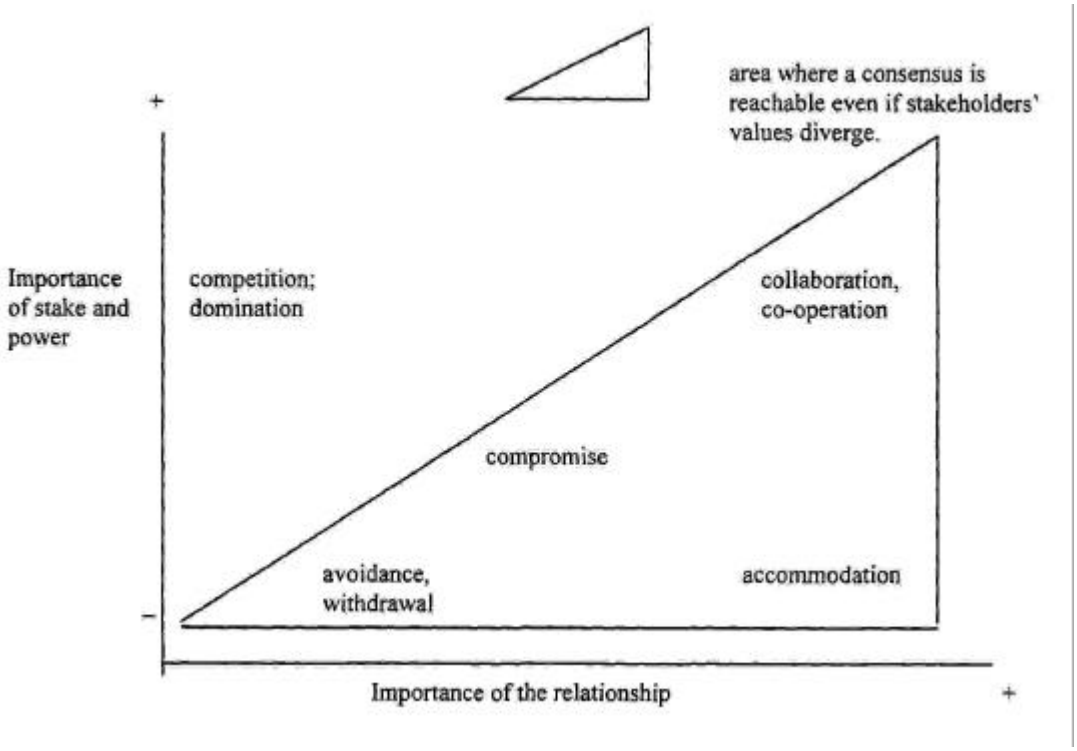
- In Senegal, charcoal traders have a monopoly of supply to Dakar, the capital city. They give priority to maintaining their overwhelming power even if this affects their relationships with both villagers and the State. Hence, they often threaten to strike, for instance, when the government wishes to increase the tax on charcoal products. This is a situation of competition or even domination.

- Despite having financial and political power over local villagers, a logging company might give priority to maintaining good relationships with them, especially if it fears social unrest that could lead to the sabotaging of its equipment or the blocking of roads. It would, therefore, favour collaborative strategies.

Figure 4.4 depicts the influence of such interactions on negotiating strategies.

Figure 4.4: Interactions between power and relationships in negotiation strategies

Source: Vodoz 1994



Two key points emerge from this analysis:

1. It is possible to reach agreements through negotiation between stakeholders even when their positions are at variance if the stakes/interests are less important than positions. This explains why it is important to focus on **interests** rather than **positions** in conducting collaborative negotiation, the former being more influenced by power;

2. Collaboration between stakeholders is usually not achievable if the importance of relationships is less important than the stakes or the importance of keeping power. Under such circumstances, negotiation should not be used to manage conflicts before bargaining powers are levelled off, as it might result in competition. Time must be therefore be given

to address power differences. Van Keulen and Walraven (1996) suggest some ways to deal with power differences (see Box 4.2).

Box 4.2: Some suggested "power-regulating" techniques

- Use a facilitator/mediator when power differences are too important. The facilitator/mediator must be strong in their own right and command respect.
- The powerless position should not be perceived as inherently powerless but limited by the specific circumstances.
- Start with an aspect everyone agrees upon.
- Present alternatives.
- Weaker groups should seek coalition with similarly weak parties.
- Turn objections into conditions.
- Mildly threaten. This is particularly useful when the powerful parties fear losing reputation or market shares.
- Do not allow the powerful party to lower itself.

Source: van Keulen and Walraven (1996)

Prior to negotiations, it is important to assess the power of the parties. GTZ (1996) suggests that three key issues need to be addressed:

(i) On what basis is power built?

This relates usually to some type of *dependence* and many researchers argue *that the power of the powerful is the dependence of the powerless:* economic (e.g. financial dependence), social (e.g. hierarchical dependence, expertise) and emotional (e.g. personal dependence due to nepotism, cronyism, etc.).

(ii) How does power affect the relationship?

Power can affect the relationship physically, materially or in terms of social status. In many instances, the mere potential to exert power is sufficient to make relationships work.

(iii) When and how do power relations change?

Focus on tangible elements that allow for *indirect assessment.* Vodoz (1994) suggests using *stakeholders' roles,* and assessing when and how these change. Roles, in turn, can be assessed by answering questions such as:

- Who has the right to do what, and how?
- Who does what, and when?
- Who is committed and willing?
- Who pays?
- What is the best alternative to a negotiated agreement, especially for the most powerful stakeholders?;
- What are the parties' means and capacities?
- What is the procedure in case agreements are breached?

Recent work by IIED on developing capacity for sustainable forestry in Africa has provided a working definition of stakeholders' roles via the balance in *their Rights, Responsibilities, Returns/Revenues and Relationships* (summarised as the 4Rs).

In Africa, in particular, there is an imbalance between the '4Rs' of the primary stakeholders involved in forestry This limits local capacity to move toward more sustainable forest management:

The State	- Has too many responsibilities relative to its means; - Usually has ownership rights over forest resources; - Often receives inadequate returns from forest resource use; - Relationships with the local communities and the private sector are usually uneasy and depend on local, often covert, arrangements. There is mutual distrust amongst these stakeholders.
The Private Sector	- Is given concessions to exploit the resources; - Is not responsible for the long-term management of resources for the public good, although it has the means; - The level of returns is not clear and is a controversial issue. The private sector claims it is too low to finance sustainable forest management; yet other stakeholders believe it is high, especially when compared to the price paid for the right to exploit the resource; - Often has opportunistic relationships with local communities
Local communities	- Usually have no or few formal responsibilities; - Have no significant rights besides user rights. Customary rights are often more important than formal rules; - In theory, need permits to obtain tangible benefits from the resources, and such benefits are usually small.

This situation creates an imbalance in power relationships and conflicts of interests. In turn, this makes it difficult to achieve good relationships between stakeholders and clarity concerning their roles. What prevails is a patchwork of local arrangements and quasi open access to land resources. Use of the '4Rs' framework has helped in teasing out issues and highlighting leverage points in relation to collaboration between stakeholders. Some possible uses of the 4Rs framework are presented in Appendix 7.

Using stakeholders' roles to address power issues reduces the risk of what Vodoz (1994) calls *soft consensus,* i.e. a settlement where nobody formally disagrees but nobody fully backs it either. Under such circumstances, there will probably not be much support when it comes to implementing whatever agreement has been reached.

4.2.5 Prerequisites of collaboration

For all the apparent advantages of collaboration in the management of natural resources, it is very little in evidence, particularly as far as powerful interests are concerned. Partly, this is because of mistrust[6] between the various stakeholders, partly because the benefits accrue to the common good and not directly to the powerful. There have been many local initiatives, some of which are detailed in Chapter Three, but their impact remains limited so long as the institutions that nominally govern rural resources lack the will or capacity to act as effective counterparts. There are several preconditions for improvement of this situation:

[6] For example, Khanya-mrc (2000) cite the situation in the small rural town of Wepener in the Free State, South Africa, where the relationships between elected leaders and the residents are strained due to lack of experience, high exectations and conflicts amongst leaders.

(i) *Political will*. Local political and traditional leaders have to accept and believe that broader-based interactive participation is the best path to development. Enserink (1998) goes further, arguing that participation should be a goal in its own right. He argues that the insistent focus on the technical aspects of planning (solution-driven planning) means that the political discussions are ignored, only to be collided with later by a planning process that is unprepared for them. He argues that large planning projects should be considered as radical social transformation. By integrating social and political aspects into all stages of problem formulation, problem solving and decision-making processes, potential or actual conflicts will become apparent sooner. These issues could become major stumbling blocks and mitigate against widespread partic ipation, simply because the potential for positive dialogue collapses into conflict. To avoid this, it is important to gain an understanding of the stakes of various interest groups at an early stage, so that gaps between their different perspectives can be identified and bridged.

De Graaf (1996) suggests some mechanisms to win the necessary political commitment - including review of formal policies and their implementation, mapping out who does what and how, and a range of mechanisms for regular interaction between decision-makers and other stakeholders (workshops, high-level steering groups, one-to-one contacts)

(ii) *Renegotiation of roles*. The new development paradigm centred on participation means that various stakeholders must re-negotiate their roles to accommodate the changes:

- From domination by government, private operators interests and professionals to reconciliation of different interests;
- From management based on evidence to a learning process that acknowledges uncertainty;
- From reliance upon technical expertise and proposals put forward by planners to the inclusion of local knowledge and proposals from stakeholders, and the need for people-oriented skills;
- From a narrow focus on commodities and land users to multiple objectives including environmental management and social development.

This does not mean that all stakeholders need or want to be involved at all stages. An important part of stakeholder analysis is to ensure that those managing the planning process adequately understand the stakes of different interest groups, so that participation is not watered down by an unrealistic and unnecessary pressure to get all stakeholders to participate at every stage.

(iii) An enabling institutional environment

The new requirements need institutions that facilitate rather than dictate the course of rural development. Decentralisation is often presented as the cure-all for institutional ills. However, here, as in many other areas of rural development, there are no miracle recipes, and realism over what can be achieved is needed.

(iv) Capacity

Agreement on roles and tasks inevitably places different demands on stakeholders. The issue of capacity development is difficult and often contentious because donors (or others providing support) are often reluctant to move beyond technical matters and address factors such as management capacity and good governance, because of their political dimensions. Moreover, defining 'capacity needs' often involves value judgements to answer basic questions such

'For what and for whom does capacity need developing?' and ' Who should assess capacity requirements?'.

4.2.6 Putting stakeholder participation into practice

The greatest hurdles are the disparity in the power of different stakeholders, and mutual distrust. Space for dialogue has to be created, and enough time allowed for confidence-building measures. Hurdich (1996) argues that these two further prerequisites of collaboration require relational proximity between the stakeholders (the case studies covering South African and Zimbabwe both recommend the need to 'institutionalise interaction'). In operational terms:

- *Directness*, through face-to-face dialogue rather than third-party association or remote communication. However, a mediator might be useful at some stage in the case of considerable power differences;
- *Continuity*, through repeated encounters of stakeholders over time rather than a one-off negotiation;
- *Multiplicity*, through the involvement in a range of issues rather than a single matter;
- *Parity*, with participants being afforded equal opportunity for input and consideration;
- *Commonality*, through a mutually desirable objective in collaboration.

Discussion of micro-projects and stakeholders' roles has proved a useful way to begin constructive dialogue. Other ways to encourage interaction between stakeholders include task forces, joint training and workshops. However, this often needs to be preceded by a mechanism that increases each others' knowledge and confidence. Fora for dialogue have often been used by both national governments and donor agencies to achieve this goal.

Two national government initiatives are detailed in Appendix 8: District Conciliation Courts in Burkina Faso and the Land Tenure Commission in Niger. Both have assembled a mix of local government representatives, respected members of the communities and leaders to enable a balance of opinions to be heard but inbalance in representation favours government representation over local representation and the new bodies have struggled to maintain the semblance of independence. Also, there has been a lack of clarity about the relationship between governmental regulation and customary rules and, so, inevitably tensions. Fora for dialogue are not a simple solution and do not necessarily lead to 'good' decision-making. The 'rules' that govern such fora, particularly the status of any decisions reached, need to be thought about carefully in advance, and described in a way that all parties understand. If these initiatives do not work in practice, the result is disillusion amongst the local community.

Various structures have been created to manage *gestion de terroir* in francophone Africa (section 3.4.3). Bonnet (1995) has reviewed five such projects to assess the abilities of the structures to regulate and represent local interests (Box 4.3). Modes of representation are still a problematic issue and there is much experimentation to find a good balance between local communities, project staff and local government. An even more serious problem is the lack of legitimacy of structures that are the creatures of the donors (who almost always shoulder the running costs). These institutions depend on the goodwill of established administrations if they are to function, and they can be spiked by political forces which cannot control them (Firmin Ouali, 1996, pers.comm.).

Box 4.3: Local structure for regulating natural resource use in the Sahel: key lessons

Bonnet (1995) reviewed five donor-funded projects in the Sahel, each of which had created structures to regulate the use of natural resources: Projet Développement Intégré du Houetkossi et Mouhoun *(PDRI-HKM) and* Projet Développement Rural du Ganzoogrou *(PDRG) in Burkina Faso;* Projet Gestion des Terroirs Filingue *(PGTF) in Niger;* Fonds d'Investissement Local *(FIL) and* Mali Nord *in Mali. Lessons from this review include:*

- The first structures were created at village level but, later, inter-village structures were introduced to widen the scope of their activities.

- The most effective bodies began informally and have evolved by taking on board early lessons from their experience of natural resource management[7]. However, this evolution is a slow process with up to 10 years needed for maturity.

- Only one project (FIL-Sikasso, Mali) actually shares decision-making about the design and implementation of activities between project staff and local people. There is a tendency to sub-divide the organisation to separate financial and advisory functions.

- The new structures are not effective in managing local use of natural resources! Their legitimacy is limited by the power of traditional chiefs and confusion between customary and formal rules. The notable exception is the Nord Mali project, maybe because of the absence of effective local administration and the weakened traditional power structures following the war between the government and Tuareg tribes.

- There is much experimentation to find the right balance of representation from the local communities (i.e. proponents of activities, village delegates and traditional chiefs), project staff and representatives from the local government agencies:
  - villagers are always present, in one project without representatives from the other stakeholders (PGTF);
  - in four of the projects, project staff are present;
  - in two projects (FIL and PDRG), villagers have refused to involve staff from local government units.

  Experience shows that, when present, the technical staff from government agencies should be in the minority, otherwise the debates tend to be dominated by technical considerations (David, 1995; Bonnet, 1995).

- The Nord-Mali project does not even consider election of representatives, which would exclude some social groups from committees. Instead, members are appointed to reflect the existing balance of ethnic groups, gender, social groups and age according to locally-decided criteria.

- A prerequisite for broad representation is the capacity to analyse proposals and official documents, calling for literacy.

[7] The choice between creating structures that answer to administrative requirements and letting them shape according to local circumstances is never easy. In the latter case, local bodies represent more local interests and are likely to last longer, but shaping takes time (e.g. referring to South-East Asia, Ridden (1993) considers that this process, encompassing promotion, mobilisation and consolidation, may take up to 10 years.

4.3 Valuing resources

Any decisions on the use of natural resources needs to be informed by valuation of their worth. But this is not easy. It can be difficult to distinguish high- and low-value goods. For example, woodfuel is of very high local value but of little value outside the local context (see section 4.2.4 and Box 4.10 for discussion of role of private operators in the woodfuel business in the Sahel). Clearly society can place a social value on a resource, e.g. the very high value of essential drinking water supplies for all members of the population, including the most poor and vulnerable. But there is also a longer-term value or environmental requirement for ensuring the sustainability of particular natural resources.

We are used to dealing with ecological and market values but many natural resources are not marketed, e.g. the biodiversity of a forest or its role in maintaining regional water supplies, and market values may not adequately reflect the perspective of poor and marginalised people who scarcely enter the market. Also, as indicated above, there are social values and beliefs, and indeed societies that do not chime with the tenets of liberal economics. The following sections explore the factors to be considered and an array of ways to arrive at robust and comparable valuation of natural resources.

4.3.1 Differentiating goods and services

(i) Classifying goods and services according to concepts of welfare economics

Welfare economics conceptually separates *public* and *private* goods. However, some goods are private goods in some contexts but public goods in another. Bass and Hearne (1997) discuss the concepts of s*ubtractability* and e*xcludability* to categorise goods and services:

> *Excludability* refers to the ability of an individual to deny the use of the good or service to another individual. Thus, if a good is excludable, then those who have not paid for it are excluded from consuming it.
>
> *Subtractability* refers to the amount that the consumption of a good or service subtracts from the repeated consumption of the good or service. In other words, if a good is subtractable, its consumption by one person reduces its availability to others.

Table 4.2 lists examples of these concepts as applied to forest goods, services and activities.

Goods and services may thus be categorised as:

- Highly excludable and subtractable goods, like timber, are often considered to be best controlled by market mechanisms, and are therefore considered *private goods*.

- Goods and services that are characterised by low excludability and low subtractability, such as watershed protection, do not provide much incentive for individuals or groups to replenish them, and they are therefore commonly referred to as pure public goods.

- Cornes and Sandler (1986) define a third category - *club goods* (also known as toll goods) which include goods whose benefits are excludable but partially non-rival (e.g. hunting). If these goods or services have significant externalities, this might justify tight control and also assistance by public bodies. However, not all members of a community benefit from club goods and services, and may resent public funds being used to support them. As a result of such sensitive situations, it is frequently necessary to make trade-offs between equity and efficiency in rural planning and management. We explore this issue further in section 4.4.2 (promises and realities of decentralisation).

- Finally, there is the important category of *common-pool good:* at once not easily excludable but highly subtractable, e.g. groundwater.

Table 4.2: Characteristics of forest goods, services and activities

Adapted from Bass and Hearne (1997)

Forest-based goods, services, and activities	**Excludability**	**Substractability**	**Type of good**
Timber	High	High	Private good
Forest management services			
Road construction	High	Medium	Depends on context
Fire protection	Low	Medium	Depends on context
Research and extension	Low	Medium	Depends on context
Marketing services	High	Medium	Depends on context
Non-timber Goods/Services			
Hunting	Medium	Medium	Club good
Hiking	Medium	Low	Club good
Camping	Medium	Medium	Club good
Watershed protection	Low	Low	Pure public good
Grazing	Medium	High	Depends on context
Fuelwood collection	Medium	High	Depends on context
NTFP	Medium	High	Depends on context
Biodiversity conservation	Low	Low	Public good
Micro-climate moderation	Low	Low	Public good
Carbon sequestration	Low	Low	Public good

While these categories are useful in determining planning approaches and especially in establishing the roles of the various stakeholders involved in rural development, differences often depend on local circumstances and are not always clear-cut. Even services with low excludability and subtractability, such as watershed protection, can sometimes be managed in a private way, e.g. eco-tourism activities can help to protect resources. Rather than highlight differences between categories of goods and services, it is better to view the categories as elements of a continuum with their attributes evolving over time.

Nevertheless, the differentiation between private and public goods has been often used as a key element to define planning and management strategies. For instance, governments often justify their control over natural resources on the basis of a risk that the resources will become degraded if they fall into private hands. In some situations, the difference between private and public character is ambiguous and/or changing, and these are often better handled by partnerships between stakeholder groups. Typically, these goods and services need international support, particularly when they support global or regional ecosystems, e.g. carbon sequestration.

(ii) Differentiating agriculture from natural resources

Agriculture brings about rapid and significant environmental change over very wide areas. Some investments bear fruit within a cropping season, so are particularly attractive to the poor who cannot afford to wait for their returns. Agricultural activities are commonly in the hands of individuals or small, homogenous groups.

This contrasts with the exploitation of the natural resources, in particular forests that are commonly exploited by powerful concessionnaires and which are renewable over a long period - so private operators are reluctant to invest in conservation or replenishment (e.g. reforestation) unless they receive advance financial support from public bodies. Some investments in agriculture also have relatively high costs with long payback periods and so farmers, particularly poorer ones, are reluctant to invest in them. Frequently these activities are more closely related to natural resource management than to immediate cropping needs. Soil and water conservation is a classic example of this.

Planning and management strategies for natural resources therefore require more negotiation, and often government intervention to regulate operators.

(iii) Market value of natural capital

Collaborative management is not appealing when the commercial value of resources is low, e.g. when resources are so degraded that poor returns on labour make joint management activities unattractive.

When natural resources have a high market value, this generates market opportunities. This is an important factor in the success of natural resource management initiatives that involve local users. For instance, referring to tree planting, Arnold and Dewees (1995) have found that removing impediments to market access for tree products can be more effective than providing subsidies for tree planting. Another example concerns community-based wildlife management under the CAMPFIRE[8] programme in Zimbabwe (section 3.4.2) where the most successful initiatives (i.e. those with high revenue generation and timely distribution of revenue to households and projects) were also those with large amounts of wildlife, high species richness and low livestock and human populations. In this case, according to Campbell *et al.* (1996), a high ratio of wildlife density to human population density explains in great part the success of the management scheme Following this line of argument, they suggest that collaborative forest management initiatives in Zimbabwe are less likely to be as successful as the CAMPFIRE project because the resource capital of the miombo forest is less marketable than wildlife.

Commercialisation of resources also puts pressures on common property resources because of the mix of local and outside interests it generates and the power relations involved. First, there is a risk that the most powerful - local elites or outsiders - will reap most of the benefits. High stakes attract outside speculators, as evidenced by the proportion of foreign interests involved in timber exploitation in Central Africa. This inevitably increases the external pressures on local stakeholders, and even sometimes governments, while reducing their ability to control the use of the resource involved (Box 4.4).

It is difficult to reach agreement on collaborative management of highly valued resources (e.g. timber). In such situations, it might be best to focus first on trying to negotiate the sharing of benefits - and responsibilities and rights - for those resources in the area which have more medium-level commercial value (e.g. non-timber forest products). Once trust is established, and benefit-sharing is seen to be working, it might be possible to build on this and talk about sharing the more valuable resources, but this is being optimistic.

[8] CAMPFIRE: Communal Areas Management Programme for Indigenous Resources. See section 3.5.1 for details.

Box 4.4: Commercialisation pressures on common property systems

- Incentives for appropriating the commodity and not co-operating are high.
- Enforcement of rules is likely to be complicated by high-value items, especially if the item is wanted by elites. Bribes and coercion to escape enforcement are more likely when high values bring in cash.
- Many organisations may not be flexible enough to adapt to rapid changes induced by commercialisation. There may no current rules on commercial products and there may be no past rules to learn from.
- High value resources and commercialised products create incentives for outsiders and the state to appropriate the land and dispute legal claims.
- Legitimacy of resource use is contested by regional, national or international organisations who see their interest at stake in use of a resource or commodity.

Source: McElwee (1994)

A second important issue is that highly-priced resources also influence national natural resource management strategies. For example, in most African countries, the State asserts ownership of the trees that produce high-quality timber. Experiences of collaborative forest management are more advanced in the Sahel and dry eastern-southern Africa (with deciduous/miombo type forests) than in central Africa where the monetary value of forest is higher and more important to the national economy. In the Sahel, there have been genuine moves towards decentralisation of natural resource management (including forest) – though with mixed results so far – but in the Congo Basin, attempts to introduce such approaches have been cosmetic at best.

Foreign business interests in forests in Central Africa are very important and there are great opportunities for financial gain – at both government and individual levels. Covert forest policy, driven by foreign timber companies, has significant power and influence over planning and management strategies in rural areas in that region. By contrast, in the Sahel, interests in forest resources are confined within national borders. Although these can play a significant role in local development[9], governments themselves are not under foreign pressures and cannot generate substantial revenues from the resource base.

Some natural resource managers and academics argue that areas with poor natural capital endowment are protected from vested and powerful interests, and that this, in turn, is likely to lead to better governance and synergy between civil society and local governments. Examples of such situations have been documented mainly in Latin America where there has been a longer tradition of politically-driven rural (decentralised) development than in Africa or Asia (see, for example, Tendler and Freedheim (1994) for North-East Brazil; Faguet (1997) for Bolivia; and Bebbington *et al.* (1997) for Colombia).

[9] This role can often be negative to local development, when outside stakeholders tend to reap most benefits of resource exploitation, as in the case of the powerful charcoal lobby in Senegal.

(iv) Political values

Political values have a great deal of impact on the way that negotiation and collaboration occur in practice. Political values reflect power relationships and do not necessarily coincide with market based money values.

Conventional economic valuation, using methods that assume market-based, apolitical forces of supply and demand determine value, ignores these political impacts on the value of natural resources. Below, we look at three major ways that political values effect decision-making.

1. The poll factor

Recent literature on rural planning in decentralised governmental systems shows that, almost invariably, central governments are frequently much more willing to relinquish authority over social matters (e.g. health, education), small infrastructures and sometimes agriculture, than they are over natural resource management (e.g. Blair 1998, and Romeo 1997). For instance, for several years Mali has operated a privatised health service but it is currently struggling with the development of decentralised natural resource management. Likewise, in Senegal, health and education have been decentralised since the mid-seventies but a decision to decentralise the management of forests by the end of 1996 was taken only in order to comply with the law on 'regionalisation'. This reluctance to cede control of natural resources certainly has much to do with the interests at stake, as discussed above. However, it is also probably related to the fact that social infrastructure and agriculture have a greater potential to secure votes, since these issues concern everybody and cut across all sections of society.

2. The crisis situation factor

The fact that social infrastructure and agriculture concern a broad range of citizens, might also explain why policy responses to crisis situations are more rapid in these fields than in the case of natural resources (e.g. IUCN-Vietnam 1998). As a result of national and election interests, top-level decision-makers and politicians often consider that the impacts of crises concerning such matters as widespread agricultural pests or water quality must be handled more diligently than, say, crises over protected area management, soil erosion or forest degradation. Of course, this ignores the potential danger of cumulative effects of natural resource degradation, which can bring about dramatic consequences, e.g. the recent forest fires in Indonesia and large-scale landslides in Honduras following hurricane Mitchel.

3. The power factor

Local power structures are of key importance in rural areas and land resources are often key components of power in such areas. Control of land tenure determines power over social affairs, be it in less-developed countries (e.g. the headman in African villages or owner of latifundias in Latin America) or in industrialised countries (e.g. the landlords in Scotland). Inevitably, power disparities influence the outcomes of agreements (section 4.2.4).

It is clear that the valuation methods need to acknowledge the key role of politics and power in rural planning.

4.3.2 Combination of different valuation methods

It is clear from the previous section that conventional financial valuation alone is not an adequate basis for rural planning. Its is necessary to combine a wide range of stakeholders' valuations.

(i) Combining PRA and economic methods

IIED (1994b) has reviewed the economic evaluation of forest land use options in the tropics and argues that such evaluation must encompass both production /market and non-market benefits. Three types of values are distinguished:

- *Direct use* values, i.e. for consumption or sale;
- *Indirect use* values, i.e. environmental functions;
- *Non-use values*, i.e. cultural, religious and existence values.

Most studies concentrate on the direct use values because of the difficulties in quantitatively estimating non-marketed values. Such a bias can be misleading and there is a need to carry out a differentiated analysis. Non-economic methods such as participatory rural appraisal (PRA) can complement economic valuation methods and, also, help capture inter-annual and inter-seasonal variations in values of forest products (Tables 4.3 and 4.4).

Table 4.3: Key questions in valuing wildlife resources and complementarities in PRA and economic methods

Source: IIED (1995)

Questions to be answered	PRA	Economics Methods
What resources are there, and where are they ?	Participatory mapping; transects, interviews; mobility maps	Resource inventory; quantification of stocks, differentiated by cost and/or quality factor
When are they used/ available?	Seasonal calendars; historical timelines, and maps; product flow diagrams	Household surveys; market surveys
Who uses them ?	Wealth ranking; social maps	Consumption surveys
How are they controlled ?	Tenure maps; Venn diagrams	Analysis of market concentration
What are they worth - marketed values ?	Household interviews; mobility maps	Household analysis
What are they worth - indirect use and non-use values ?	Role plays; ranking and scoring matrices; daily and seasonal labour and activity calendars	Production function approach; cost-based valuation; survey-based valuation
How sustainable is the resource use?	Historical maps and transects; interviews with community elders; matrix ranking for abundance	Optimal control modelling; cost-benefit analysis of alternative land use options

Table 4.4: Limitations to economic and participatory valuation methods

Based on IIED (1998)

Economic Valuation Methods:	
Limitations	**Effect on analysis**
1. Concepts terms and units imported from western experience, and are defined and interpreted in different ways by different disciplines	The definitions are critical as they structure how information is both gathered and analysed. e.g. The 'household' is frequently the basic unit of analysis, but this means that intra-household and inter-household interactions, which may effect the way a particular resource is valued, are overlooked
2. Dominated by a set of assumptions that present a limited reflection of 'reality'.	Underlying assumption is that individuals and households are driven by welfare (or utility) maximisation. This ignores other rational motives such as maximising chances of survival or fulfilling social duties and rituals
3. Simplified analysis can be especially misleading in dealing with non-marketed natural resources	For example, during droughts, wild foods may mean the difference between life and death, so their value increases compared with other periods. How can these values be incorporated in long-term planning?
4. Assumes everything can be valued. Important economic role of some resources may be lost or underestimated.	For example, certain species may play a vital role in rituals and so be irreplaceable. Many ecological functions are too difficult or costly to estimate reliably.
5. Data collection methods can result in biases an inaccuracies (even when assumptions are relatively realistic). Interview-based questionnaires are notoriously prone to bias and inaccuracies	If data collected through questionnaires is fed uncritically into analysis, the results may be highly misleading
Participatory Valuation Methods:	
Limitations	**Effect on analysis**
Micro-level detail and local-level diversity combine with an the emphasis on social processes	Information generated is too detailed for policy makers and is difficult to analyse for policy implications (although detailed case-study approach can enrich policy analysis)
Information is frequently context specific. Relative, rather than absolute values are commonly emphasised	This makes quantification difficult as well as comparison between regions or communities.
Inadequate facilitation skills	The dependence of the methodologies on good quality facilitation to provide trustworthy and representative findings means that, if good facilitators are absent, the methodology may not provide good quality data.

A major benefit of combining economic and participatory valuation is that it enables the simple question 'What is it worth' to be expanded to 'What is it worth, to whom, when and in what way' (IIED 1998).

(ii) Commodity chain analysis

This approach follows the distribution of benefits from exploitation of resources to give a crucial political dimension to the analysis of the local economy. In steps:

- Identification of the actors involved, from the extraction to the retail level;
- Evaluation of income and profit at each level and within each level of the commodity chain;
- Evaluation of the distribution of income and profit within each group along the chain; and
- Using the distribution of benefits to trace the mechanisms by which access to benefits is maintained and controlled.

As (Ribot, 1998a) puts it, 'Direct control over forests renders little profit. It is through control over markets that profits accrue.'

Commodity chain analysis reveals the importance of securing rights of access to the market, and some control over market conditions as well as more secure rights to the resources.

(iii) Linking resources to users

In relation to forest products, Campbell *et al.* (1996) note that literature on marketable products is scarce, uneven in its coverage (e.g. much on firewood, little on edible insects), often limited to classification of products, and focuses on resources rather than users. Seeking a more analytical approach, they used a multivariate technique to explore variation in product type according to criteria based both on the resource and the user, e.g. time of harvesting (opportunistic/non-opportunistic), ecological impact of harvesting, economic value of the products, source of the products, etc. (see Figure 4.5).

Campbell *et al.* also argue that the combination of economic and behavioural approaches leads to a better understanding of:

- The temporal dimensions of markets and marketing channels;
- The contribution of natural resource products to livelihood strategies and gender differentiation;
- Their impact on local institutional arrangements;
- Their impact on the status and functions of natural resources.

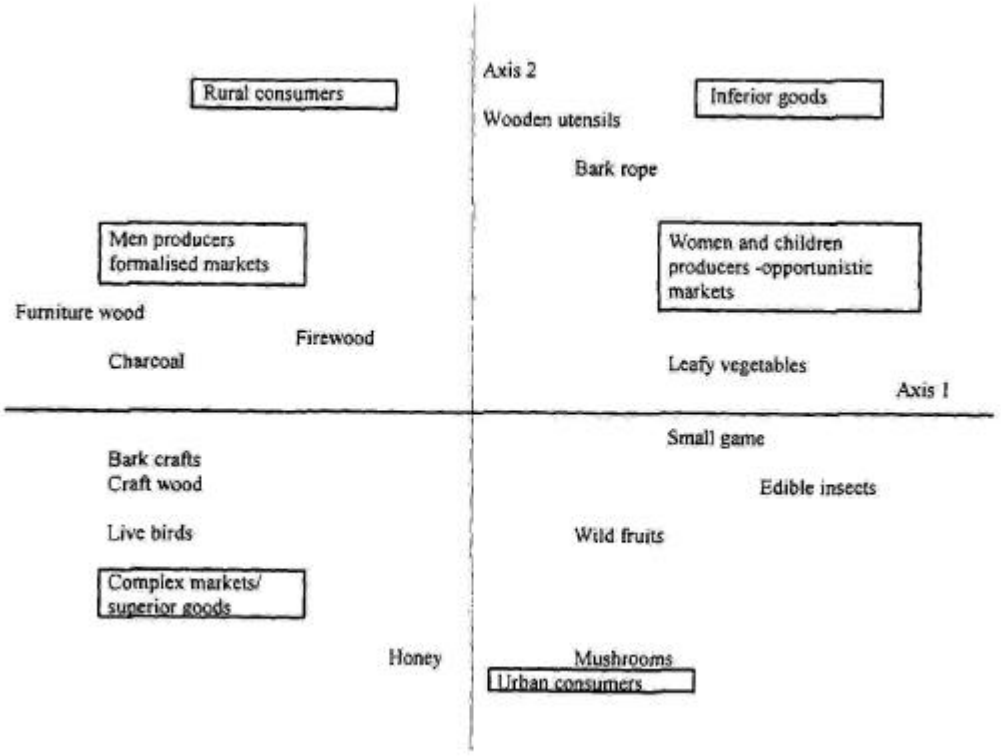
This knowledge can help local communities to better negotiate their rights to access, use and trade natural resources.

(iv) Forest resource accounting (FRA)

Forest resource accounting (FRA) was developed to assess forest resources but the principles apply to all natural resources. It is characterised by:

- A focus on the supply of, demand for and uses of forest resources, as the key elements of an information baseline;
- A combination of quantitative information about ecological aspects and potential of the forest asset, and more intangible elements of forest use and management, such as stakeholders' needs, roles and entitlements;
- An incremental implementation, allowing for information to be generated as needs arise and with the involvement of key stakeholders.

Figure 4.5: An example of relationships among woodland products
Source: Campbell *et al.* (1996)

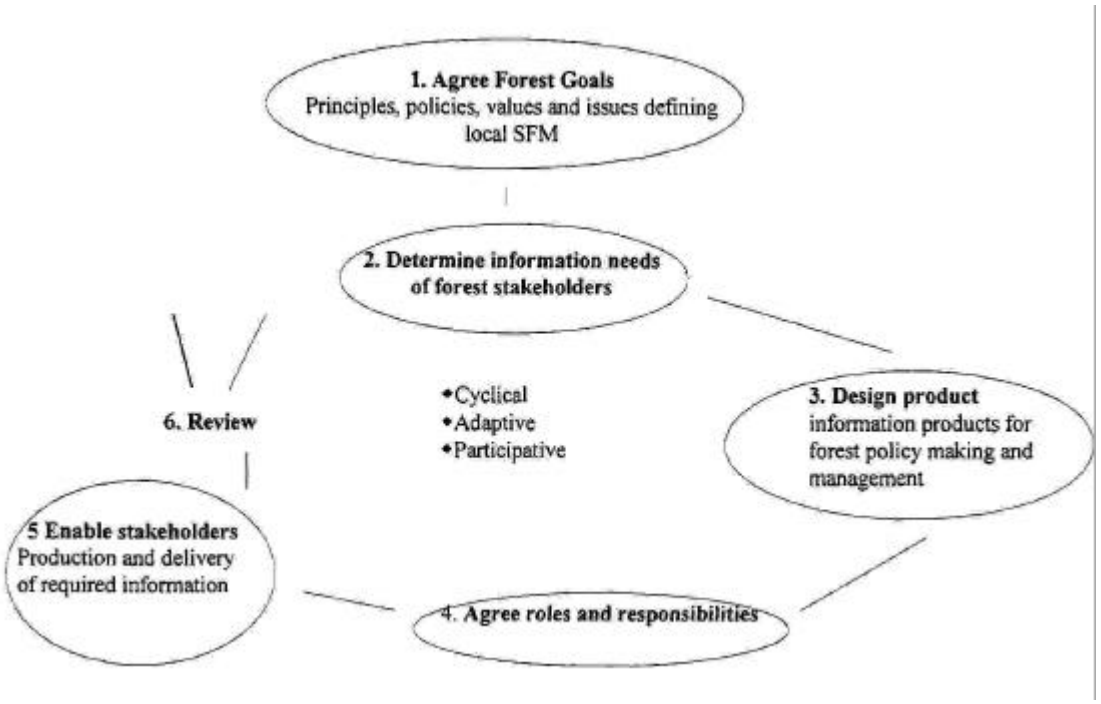


Note: distances between products represent the differences between them in terms of the 12 variables used in the analysis, e.g. inferior/superior good (in economic terms), gender, opportunistic/non-opportunistic markets. Only a few of those variables are shown.

Figure 4.6 illustrates a typical FRA cycle and shows five processes elements, one of which – agree forest goals – should be undertaken before the others. This stage requires a high degree of interaction between stakeholders, a process that itself helps build (or restore) confidence and facilitates co-operation. Indeed this is also the first essential step in the process of land use planning (see section 4.2.6).

While many places have information about standing forest resources, they do not have a system to gather and maintain information on other aspects that stakeholders agree are critical for sustainable forest management. The remaining four steps of the FRA cycle provide this information system - a feasibility study to establish information needs; if the need is established, an implementation proposal that sets out the products required to meet the needs; agreement on who should do what; and delivery of the information.

Figure 4.6.: The forest resource accounting cycle



To date, national forest departments in Ecuador, Guyana, Pakistan, Himachal Pradesh (India)[10] and Cameroon have expressed interest in FRA; in all of these countries except Cameroon, feasibility studies have been requested and undertaken between 1993 and 1998 by a team from IIED and the World Conservation Monitoring Centre. However, none of these countries has progressed to actually implementing FRA. Aside from technical difficulties in some cases, a common explanation for the delay seems to lie in the resistance to transparency and sharing of information by those who hold it (particularly government agencies) combined with institutional inertia (e.g. linked to very hierarchical administrations in India and Pakistan).

These difficulties illustrate an unwillingness from the outset to share natural resources in a collaborative fashion. Yet, there is also broad agreement that this is the way forward to achieve convergence between conservation and livelihood requirements, if not sustainability. Technical and expertise-based modes of planning and resource management cannot address the diversity of interests, and arbitration often leads to less durable settlements than negotiation. The following sections consider negotiation and partnerships in the management of resources in rural areas.

[10] In this instance, FRA has been revived recently through its inclusion as support to forest policy development (Pallot 1999).

4.4 Institutional support for rural planning

4.4.1 Institutional realities

The very real problems in building partnerships in rural development discussed in section 4.2 are compounded by ineffective institutions. Smoke and Romeo (1997) summarise the institutional environment:

(i) Complex and poorly co-ordinated institutional framework

The institutional setting usually combines some oversight by one central agency (e.g. Ministry of Home Affairs, Ministry of the Interior) over local government affairs; control of sectoral matters by line ministries (e.g.. Agriculture, Public Works); and sometimes some involvement of a co-ordinating body such as the Ministry of Planning or Finance. The dispersion of responsibilities across agencies and lack of co-ordination at all levels are pervasive hindrances to rural development. Table 4.5 gives an example, from South Africa, of the range of systems and institutions that can be involved in planning.

Table 4.5: Planning systems in South Africa
Source: Khanya-mrc (2000)

Planning systems	Institutional Framework	Requirements	Approach and status
Land Development Objectives and integrated development planning	TRCs, TLCs and District Councils	Rolling 5-year plans, evaluated and adapted annually; which cover all aspects of development needs	Participatory, involvement of authority, municipal officials and residents In the process of implementation
Water services plans	Water Services Authorities, usually TLCs	Within framework of available water resources	Top down, expected to bring to attention of consumers and to invite comment; link with LDOs. In the process of implementation
Land transport plans	TLCs, TRCs and District Councils		New legislation
Environmental implementation plans Environmental management plans	Every national department with functions that may affect the environment and every province Every national department with functions involving the management of the environment	Co-ordinate and harmonise environmental policies, plans, programmes and decisions; prevent unreasonable actions by provinces	Internally compiled. New legislation
Water catchments management plans	Catchment Management Authorities;	To control water use in catchment	Participatory, users responsible for management of resource. New legislation
Spatial or physical planning	TLCs, private land owners	Site and layouts New township developments	Technical, top down ; increasingly participatory. Well established

Note: TLC/TRC =Transitional Local/Rural Council

(ii) Incentives to maintain confusion

Sectoral ministries compete for funds whether from national budget allocations or from donors or other external sources. The more funds that individual officers have access to, the greater their prestige and the more power they can exercise. There is, therefore, little incentive for government officials to co-ordinate their work, as this limits opportunities for promoting projects or programmes. Poor co-ordination results in confusion, overlap, duplication of efforts, lack of accountability and enhanced opportunities for corruption.

(iii) Poor public accountability

In many developing countries, this problem pervades institutions and political circles. Good rural planning requires transparency and public accountability through cost-effective means. We discuss this further in section 4.4.2 (promises and realities of decentralisation).

(iv) Inappropriate performance incentives

In many developing countries, promotion is linked to ability to fulfil administrative tasks (e.g. to submit monthly reports, provide statistics, maintain accounts) rather than to performance in management or in promoting/supporting development. So there is little incentive to do other than meet such administrative responsibilities. For example, foresters in Mali spend much of their effort in collecting fines, especially as a proportion of these top up the meagre salaries of civil servants. Poor performance is seldom punished, and job satisfaction is low.

(v) Unsatisfactory donors' strategies

Donor funding often compounds the existing imbroglio by:

- Adding yet another layer of poorly co-ordinated initiatives;
- Circumventing poor local co-ordination by developing sectoral projects;
- Channelling money into poorly equipped institutions in order to meet their expenditure schedules.

The case study for Zimbabwe shows how structural adjustment programmes can also sometimes hamper rural development initiatives by shifting priorities from 'development' to 'macro-economic stability' and from 'equity' to 'economic growth' (PlanAfric 2000).

(vi) Little absorption capacity

This is a controversial issue. In many developing countries, managerial and technical capacities are often weak, particularly in rural areas. However, other factors tend to foster and even sometimes create such weaknesses. For instance, lack of financial resources increases dependency on donors and hence on the views and priorities of outsiders. Several examples - mainly from Latin America - show that, when given the chance and the appropriate conditions, local authorities show good skills in administering development initiatives and achieving their own objectives (e.g. see, e.g. Fizbein (1997) on Colombia, and Faguet (1997) and Kaimowitz *et al.* (1998) on Bolivia). The perceived lack of capacity has been addressed by no end of capacity-development initiatives but these have failed, in the first place, to identify weaknesses and to assess needs. Often there are misunderstandings between the supporting (central or foreign) and recipient (decentralised) agencies. Frequently, these misunderstandings are caused by diverging objectives, unrealistic scale of initiatives, conditionalities attached to the use of funds, and institutional realities such as those

mentioned above. In the case of donor-supported programmes, difficulties are often compounded by cultural differences. Box 4.5 illustrates the cultural gap in the case of Vietnam.

Box 4.5: Aid and culture in Vietnam - sources of misunderstandings in aid programs

The following quotations come from interviews with government and international staff with long experience in negotiating projects in Vietnam. They provide interesting insights into some possible sources of misunderstandings in aid programmes.

'Courtesy demands that I am not going to disagree with you.'

'Many terms can be used to infer *No* - even *Yes* under some circumstances. A common way of saying no sensitively is to say "that is going to be difficult.'

'The government has difficulty in saying *No* when it disagrees with a project design element - they prefer to agree, then fail to co-operate.'

'To the government official, the agreement may be the beginning of negotiation; to the donors, it may represent the end.'

'A contract is just the legitimisation of the negotiation process, not necessarily the end of it.'

Source: IUCN-Vietnam (1998)

There are also many meanings of *capacity* and donors have often ignored the political/power dimension - the capacity for good governance. Dia (1996) emphasises this in distinguishing between technical and institutional capacities.

Technical capacity focuses on resources, i.e. the supply of skills and transfer of new technology, methods and systems. In this context, capacity development is essentially associated with training, education, and technical assistance that complements local supply. Technical capacity relates to the *supply-side* approach to capacity development. A major concern is the adequacy of resources: does the country (or department, community or other organisational unit) have enough qualified and experienced staff, money, infrastructure and equipment to do the job? If not, then the implication is that missing resources should be provided. The supply approach has dominated aid agencies' attempts to promote capacity development.

Institutional capacity focuses on the ability of the country to make optimal use of the existing technical capacity and resources. The focus here is on capacity utilisation and absorptive capacity. It is more a *demand* approach, i.e. 'What are the features of this institutional environment that will encourage striving to do a good job, and make good use of the resources they have available?'. Here, the main issues are:

- Commitment of leadership;
- Local ownership;
- Legitimacy of institutions;
- Accountability to clients;
- Autonomy of organisations;
- Incentives to service and improvement of performance;
- Enforceability of rules.

4.4.2 Promises and realities of decentralisation

Decentralisation is a pre-requisite if local planning is to be really effective. The problem is that decentralisation, like participation, means different things to different people (Box 4.6) and, as the case study of Zimbabwe points out in its recommendations, it is important to clarify the vision of decentralisation, to have an agreed timetable, to plan for sufficient financial resources and not see it as a cost-cutting exercise, and to build and sustain capacity (PlanAfric 2000).

Box 4.6: Concepts and definitions of decentralisation

Decentralisation is the transfer of the locus of power and decision-making either downwards (vertical decentralisation) or to other units or organisations (horizontal decentralisation). The power that is transferred can be political, administrative or fiscal. Five types of decentralisation are commonly recognised: devolution, deconcentration, delegation, deregulation and privatisation; though, in reality, most situations entail a mixture of all types. French usage is more specific: decentralisation corresponds to the English devolution.

Deconcentration or *administrative decentralisation* is the vertical decentralisation of the power to act but not to decide or, ultimately, control within the administration or technical institution (e.g. from the Ministry of Interior to a governorship or from the national directorate of a service to the regional directorate).

Delegation may be vertical or horizontal transfer of limited executive, but not decision-making, authority from an administrative service to local government, parastatals or private companies.

Deregulation is the lifting of regulations previously imposed by a public authority.

Devolution or *democratic decentralisation* is the transfer of power from a larger to a smaller jurisdiction, e.g. from national to sub-national political entities such as states or local government. This transfer may be total or partial (e.g. transfer to local communities of the powers needed to manage the renewable resources on their village lands).

Privatisation is the transfer of the ownership and/or management of resources, and/or the transfer of the provision and production of goods and services, from the public sector to private entities (commercial or non-profit).

Sources: Goldman (1998), Thomson and Goulibaly (1994) and Bass and Hearne (1997)

Governments often mean *administrative decentralisation* - a transfer of activities within the structure of governance to local outposts without ceding power. NGOs see it as *devolution* of powers from central to more local authorities. Administrative decentralisation has often been tried in response to the failure of centrally-controlled rural development and service provision but has enjoyed only limited success, since problems encountered centrally are merely displaced to the local level without any increase in local accountability.

Nowadays, devolution (also called democratic decentralisation) is being promoted as a panacea for local development, on the basis of institutional evidence. In Latin America, decentralisation (here, also frequently called municipalisation) is a hot issue, despite questions being raised over whether the process is genuinely being ignited by legitimate concerns about the constraints of centralised government, or simply as a means to masqeurade structural adjustment (see Appendix 5).

Several recent reviews of the empirical evidence (Caldecott 1996, Manor 1997, Blair 1997, Faguet 1997, Goldman 1997, Smith 1997, and Dubois 1997) enable us to make the important distinction between the promises and existing delivery.

Promise 1: Devolution promotes participation, representation and empowerment of marginal groups

The principal attraction of devolution is the promise that citizens will have more say in delivering the course of local development: more participation leading to better representation, leading to empowerment

Most authors agree that devolution fosters participation in public affairs but this relates more to activities such as provision of information and consultation, taking part in meetings, signing petitions, contacting politicians and voting at local elections. It is much less concerned with establishing independent initiatives, joint decisions in planning, control of decision-making processes. Weaker sections of society participate less than more prosperous ones. Dubois (1997) and Manor (1997) identify various constraints upon community participation:

- Community members lack time and energy to invest in local politics. In Africa and South East Asia, this is probably linked to the fact that democratic regimes have emerged relatively recently in many countries. The picture is different in Latin America, where farmers (who often call themselves 'rural workers') have engaged in a long political struggle for land rights and other entitlements;

- Community members distrust and are cynical about government authorities - central or decentralised.

- Lack of contacts between authorities and communities, due to distances between villages and administrative posts and the often large size of local authority areas.

- Even under devolution programmes, the State tends to retain much control on issues which are crucial for rural people, i.e. rights over land and rights to earn an income from natural resources (more so in Africa than in Latin America). There is no doubt that allocating more responsibilities without a concomitant increase in rights and income possibilities creates what Ribot (1998b) calls a *participatory burden*.

- Lack of effective representation of community interests. Candidates for election to local authorities are often members of village elites who behave as such. However, this bias is mitigated in remote areas, where the population mainly comprises ethnic groups whose representatives tend to be elected alongside elites. Nevertheless, it is clear that elections alone do not guarantee good representation of local interests.

- Another problem arises where the heads of rural councils are not elected but appointed by central government – as exemplified in the case studies of Ghana (Botchie 2000) and Zimbabwe (PlanAfric 2000). This limits representation of the local population since those appointed are not accountable to the electorate, and there is a risk that they might favour the government rather than the local constituency in their decisions.

The effectiveness of devolution in empowering local groups depends on the groups concerned. It has been successful in the case of ethnic groups that are geographically concentrated and are able to increase their access to public debate. In contrast, women are often poorly represented on local councils (e.g. in Bolivia and Honduras) and, in Karnataka in India,, women occupy a third of council positions, though they tend to remain silent and participate only as directed by their husbands (Blair 1997). Similarly, mobile groups such as pastoralists may face resistance

from both local authorities and more settled groups. Blair (*op.cit.*) argues that, whilst direct empowerment of marginal groups appears difficult, indirect empowerment through advocacy and mobilisation at higher levels has better prospects.

Promise 2: Devolution entails more equitable distribution of benefits and reduces poverty

In considering the achievements of devolution, Manor (1997) distinguishes between distribution of benefits and poverty reduction. Devolution has been fairly successful in reducing financial disparities *between regions or localities*. However, this requires:

- Financial transfers from the central level downwards. This is one of many reasons why successful decentralisation requires strong central governments;

- Empowerment of poorer areas in order to effectively bargain for their interests at higher levels.

Results are less encouraging when it comes to benefit-sharing and poverty alleviation *within regions or localities*. Local elites often reap the benefits of development in rural areas, including those enjoying some sort of decentralisation. Fox (1994) argues that there are two crucial prerequisites for the fair distribution of benefits and some poverty reduction at local level: poorer groups need to be well organised and be willing to engage pragmatically with government institutions. Both conditions are met more commonly in Latin America than in Asia or Africa.

Both between and within regions/localities, improving the participation and representation of weaker sections of society, has led to financial improvement of the majority of rural people.

Promise 3: Devolution entails more financial autonomy at local level

This is an important issue, as financial autonomy is deemed to be a key condition for effective devolution. Funds to finance local development can come either from above - though higher-level government allocation, or from below – through mobilisation of local resources.

<u>Central government allocation to local government units (LGUs)</u>

Manor (1997) argues that allocation from central government is necessary in the first stages of devolution, while LGUs develop credibility amongst their constituencies. Financial transfers from central government are also necessary to overcome disparities between regions, with poorer ones less able to generate their own funds. Blair (1997) reviewed cases from Bolivia, Honduras, Karnataka (India), Mali, the Philippines and Ukraine, many of which revealed generous central government allocations to LGUs. But allocation from the centre often comes with strings attached. This constitutes an indirect form of control of local affairs by central government although there are examples where LGUs have proved well capable of administering local funds when given sufficient autonomy, notably in Latin America (e.g. Fizbein 1997, for Colombia; and Faguet 1997, for Bolivia). Faguet (1997) studied decentralisation in Bolivia and found that Funds are administered better in poorer municipalities than in wealthier areas, maybe because corrupt politicians tend to seek office in relatively resource-rich areas, and the social means of supervision and control are stronger in small rural areas. This is linked to the issue of empowerment in benefit-distribution discussed in the previous section.

Mobilisation of local resources

Local resources may be mobilised through local taxes, or through investments in cash or kind by local people. Tax collection following decentralisation has usually proved unrewarding, not merely because of scarcity of money in many rural areas but due to more informal factors (Blair 1989):

- At central level, reluctance to equip LGUs with authority and means to raise local taxes;
- At LGU level, disinclination of local politicians to annoy their constituents - especially the people who own/control most of the locally valuable resources but who are, also, those in the best position to evade taxes. Moreover, LGUs often lack managerial skills to handle local taxes and also financial resources to collect them;
- At community level, unwillingness of local residents to pay taxes, dismayed by failed previous experiments with decentralisation and overall distrust of government officials;
- Local communities may not administer their own share of local taxes equitably, especially where they lack social cohesion.

One way to promote *local investment* is to transfer functions from the government to the market. Private and club goods and services (see section 4.3.1) - which have higher market value - are the most amenable to private management but, often, this is not appropriate for multiple objective (conservation and development) projects and can easily further marginalise the poor. Co-financing through the State or donors may mitigate these problems.

Another way to foster local investment is through stakeholders' associations and partnerships. Such associations are typically concerned with 'club' goods and services that are influenced by economies of scale, e.g. rental of equipment or acquisition of technical information by farmers' or pitsawyers' groups. On the other hand, partnerships are often cited as powerful mechanisms for developing local capacities, including in investment (e.g. Fizbein (1997) cites a study of Argentina, Bolivia, Colombia, El Salvador, Jamaica and Venezuela; WCFSD (1999) gives examples for Africa; and Thirion (1997) discusses the development of partnerships in Western Europe under the EC-funded LEADER Programme). However, willingness to engage into partnerships and their quality depends largely on the type of stakeholder relationships and power structures at local level. We have discussed these issues in section 4.2.6.

In conclusion, experience shows that local mobilisation of resources has to be complemented by allocation of funds by central government. One major consequence of this is that, despite what many proponents of decentralisation claim, it may actually lead to an increase in overall government expenditure. However, funds are likely to be used more cost-effectively than in highly centralised systems, provided the constraints discussed above are overcome.

Promise 4: Devolution improves local accountability

Accountability mechanisms are the crucial element in successful decentralisation. Kullenberg *et al.* (1997) identify three types of accountability: accountability of civil servants to local leaders[11]; accountability of local leaders to local citizenry; accountability within decision-making bodies.

[11] Given the shortcomings of elections in many developing countries – already alluded to - we prefer to use the term local leaders rather than elected officials.

Accountability of civil servants to local leaders has been difficult to ensure, mainly because of the incomplete devolution of authority from central to local authorities. Blair (1997) gives the example of Bolivia where a mayor can order his health officers to keep required clinic hours, but has no authority to sanction them if they fail to do so. However, local civil servants are also often reluctant to be placed under the authority of local officials because the prospect of a future post at central level is a greater incentive than being acknowledged for performing well in contributing to local development. Improvement will come only if the structure of incentives to perform well is reversed, and if high level authorities support lower level ones to achieve this.

Accountability of local leaders to local citizenry might be improved through devolution due to the role of elections (e.g. Blair 1997, Manor 1997). However, low accountability to citizens often stems from their lack of representation, and elections do not guarantee representation of marginal groups. Based on experience in Africa, Anyang' Nyong' (1997) warns against the 'fallacy of electoralism'. He argues that democracy needs not only free elections but also a wide variety of other mechanisms to represent civil society and guarantee checks and balances in government. These include 'independent legislative and judicial bodies, interest groups, civic associations and political parties within society'. In section 4.5.2(iii), we discuss further various ways to increase accountability to citizens.

Accountability within decision-making bodies Two types of entities are considered here: government line agencies and civil society associations.

Accountability within line agencies is particularly important with respect to financial transfers from central level. It also concerns the need for local authorities to comply with higher level strategies. Lack of accountability to higher levels often leads to contradiction between local and national rules. For example, in Vietnam, provincial and district authorities raise taxes on land tenure certificates although this is forbidden by national decree. Accountability to higher administrative levels is a necessary mechanism to moderate excessive administrative autonomy.

Lack of accountability within village-based associations and NGOs is often overlooked and leads to all sorts of abuses. Development initiatives can provide opportunities for local despotism leading, in particular, to the unfair distribution of benefits and the exacerbation of existing power disparities.

Promise 5: Devolution increases the effectiveness of LGUs in delivering goods and services

Devolution usually improves service delivery by local governments, in particular where governance is enhanced and where LGUs have increased financial and administrative autonomy. However, local development is often biased towards small-scale social and economic infrastructure. This is, of course, welcome as it improves the living conditions of the majority of rural people but this bias ignores the calls for action in the area of natural resources (which are often prioritised during participatory exercises at community level). This highlights the frequent lack of communication between communities and the lowest administrative levels, even under devolution programs.

The relationship between devolution and the quality of government services also depends on the size of the area in question. For small countries, such as many islands in the Caribbean and the Pacific, regional co-operation is preferable to decentralisation in dealing with regional environmental matters.

There are some weaknesses in the performance of local government when compared to higher administrative levels, in particular in the field of planning (Manor 1997, Blair 1997, Romeo 1998, and Kullenberg *et al*. 1997):

- There are tensions between local planning and local politics. Local authorities tend to resist formalised interactive participation as it reduces their own discretion. Such resistance is not surprising when there are no incentives to enhance synergy between State and civil society (e.g. where participation is not seen as a means to prevent conflicts, or where performance is not linked to service delivery). Moreover, there is often a lack of financial resources to finance participatory processes;

- Local capacity is often lacking. This problem is often exacerbated by the surge in demand from citizens for tangible achievements when participatory processes are used effectively;

- There is a risk that priorities are not set, so resources become spread too thinly in order to provide improvements in all localities. This leads Kullenberg *et al.* (1997) to suggest that equity considerations should be balanced with concern for efficiency. However, this implies that local leaders can legitimately justify decisions that may seem unfair to those being affected by them;

- It is very difficult to change the attitudes of authorities and planners in favour of more active participation, especially when the local planners are selected from local administrations;

- There is a risk that local elites will take advantage profit-making opportunities opened up by local planning;

- Elected leaders often see planning as the compilation of 'wish lists' during the annual budgeting process;

- Decentralised planning can lead to bureaucratic inflation. Many donor-supported rural development projects call for the development of long-term, village-based natural resource management plans. However, such plans often result in documents that are unrelated to the daily coping strategies of rural communities; and their main use is to be shown to outside visitors. Blueprint development initiatives often result in useless bureaucratic inflation which overburdens already limited local capacities. This issue is linked to subsidiarity which we discuss further in section 4.5.2(iv).

Clearly, there is a difference in performance between decentralising planning and delivery of LGUs under devolution programmes. In section 4.5, we consider ways to improve local planning.

In the past, decentralisation has rarely lived up to expectations because it has been deconcentration, not devolution. Moreover, decentralisation has often failed because it has not addressed what Richards et al. (1996) call the invisible institutions problem (individuals seeking financial gain from assets they control (but do not own), patronage, personal power struggles, negative attitudes to participation, etc.). More recent attempts to introduce devolution show more promise, especially in socially homogenous areas with poor natural resources. Priority has been given to the easier tasks: social matters and providing small-scale infrastructure for education and health, rather than income-generating activities and the management of natural resources. Examples of successful local development initiatives (with or without donor's support) which do include the management of natural resources are only islands of success and lessons are rarely fed into the wider process of development. One reason for this is because natural resource management requires that politically sensitive

issues are addressed (e.g. land tenure, control over resources) and this can be seen as threatening by local and national elites. In short, whilst decentralisation might have a facilitative role in local management, it is not a prerequisite, nor a guarantee of good local management.

To be effective, decentralised systems must have:

- Sufficient power to exercise substantial influence over political affairs and over development activities;
- Sufficient financial resources to accomplish important tasks;
- Adequate capacity (both technical and institutional[12]) to accomplish those tasks;
- Reliable accountability mechanisms.

Two factors seem key in designing support programmes to meet these requirements:

- They should be tailored to the local context rather than desired outcomes and imported principles;
- They need to acknowledge the highly political dimension of local development, and thus place special emphasis on means to address the *invisible institutions problem* in a pragmatic and non-antagonistic fashion.

4.5 Better institutions to make rural planning and development work: possible ways forward

In this section, we focus on some possible ways to improve planning, development and management of natural resources in rural areas. Three levels of management are discussed: the resource/community, the local government and the central State. Approaches to linking these different levels are considered.

4.5.1 The resource/community level

Here, we are concerned only with the involvement of communities and private operators; government involvement is dealt with in the next section. Local communities are not used to having formal authority to make their own decisions on natural resource management. More usually, government officers tell local people what is to be done and community members tend to be reluctant to accept responsibilities for resource management, at least during initial consultations. Community involvement in management will be difficult to achieve if the proper ingredients are not in place, including:

- Real power and rights - if not ownership rights, at least management rights allowing villagers to commercialise resources without needing to follow cumbersome and sometimes restrictive procedures;
- Competence;
- Economic interest;
- The wish to play a responsible role which, to a great extent, depends on the previous factors.

[12] See section 4.4.1(vi) for definitions of technical and institutional capacities.

The '4Rs' framework, introduced in section 4.2.4, iii, is one way to address these issues, not just for communities but for all stakeholders involved in natural resource management. Box 4.7 sets out some criteria to assess the probable effectiveness of local institutions and organisations involved in local natural resource management.

People's participation is not sufficient to induce sustainable management. It needs to be accompanied by adequate representation in decision-making bodies and empowerment. Both are necessary to ensure local communities have enough bargaining power in the negotiation over local resources. Ribot (1998b) argues that representation is crucial for it addresses the issue of to whom should control over resources and benefits be devolved. If communities do not have adequate representation, participation is pointless because they cannot (as a whole) interact meaningfully with other stakeholders. There is much debate and experimentation to find appropriate modes of representation, covering, for example, the pros and cons of decisions taken by committees which represent one or several villages, as compared to general assemblies in which everyone can listen and make their opinions known.

Mechanisms which complement local elections can enhance the representation and empowerment of communities. Examples include:

- Mandatory inclusion of members from marginal groups in local councils, e.g. women in the Philippines and Mali, the scheduled casts in Karnataka;

- Ensuring that a proportion of the voting membership of local councils are members or representatives of NGOs (e.g. 25% in the Philippines);

- Local mechanisms which promote trustworthiness - a key ingredient - e.g.:

- setting up structures in parallel to the local administration, where important decisions are actually taken. These can be formal, like the local councils in Uganda, or informal and more culturally-entrenched, as in Tanzania and many places in francophone West Africa;
- working through traditional leadership structures, e.g. the re-introduction of traditional leaders and traditional leader boundaries in Zimbabwe (see Box 4.8);
- creating sub-committees in order to separate management from advisory functions, e.g. in some gestion de terroir projects;
- appointing honourable citizens who command respect in local parastatal conciliation bodies, e.g. district conciliation courts in Burkina Faso (see Box A8.1 in Appendix 8), village forest committees in the Duru Haitemba and Mgori woodlands in Tanzania (see Box 4.9);
- allowing independent candidates to stand for elections to decision-making bodies. In extreme cases, political militants have been barred from standing in elections, e.g. in Burkina Faso, Uganda and Ghana.

Box 4.7: Success criteria for community institutions managing local natural resources

The chances of success are greater when:

1. The costs of any exclusion technology (e.g. fencing) are high, but only if local stakeholders are paying themselves;

2. The rules for access to the resources make sense in terms of the local economy;

3. Relationships between resources and user groups

   (i) (Location) - there is overlap between where users live and the location of common-pool resources,
   (ii) (Demand) - the resource is vital to users,
   (iii) (Knowledge) - users have knowledge of sustainable management practices;

4. User groups

   (i) Groups are small - not more than 30-40 members,
   (ii) Boundaries are clearly defined,
   (iii) Local resource users are able to maintain their rights to the use and management of common resources in the face of competition from both outside and within the group,
   (iv) There are good arrangements for discussing common problems,
   (v) The mutual obligations of users affect their social reputation,
   (vi) There are rules, and graduated sanctions to punish offenders,
   (vii) There is consensus about who are the users and this is negotiated when the group is established;

5. Most individuals affected by the rules can participate in modifying these rules;

6. Monitors, who check and report on compliance to rules, are themselves resource users or are accountable to the users;

7. All parties have rapid access to low-cost conflict resolution mechanisms;

8. The rights of users to devise their own institutions are not challenged by external governmental authorities.

9. Governance and provision of services are organised in a nested hierarchy, matched to the geographic scale of the resources to be managed - very local for management of village wells and pastures, large scale for catchment water management, larger still for integrated coastal area management.

Source: Hobley (1995) based on work by Wade (1988) and Ostrom (1990)

Box 4.8: Re-introducing traditional leadership in Zimbabwe

Zimbabwe plans to establish village and ward assemblies which will re-introduce traditional leader boundaries and traditional leadership and allow a voice to all villagers. These may be contradictory aims. But the move illustrates the desire to test new forms of community-level institutions, recognising that the old administrative structures of VIDCO and WADCO (see Box 3.9) have largely failed. However, the costs are huge and will be likely to delay the implementation of this plan for a considerable time. Several thousand villages and wards are involved, each of which will require definition, assistance in being established, capacity-building, etc. Under the new Traditional Leaders Act, villages are now seen as the guardians of the land and natural resources. But the outstanding question is where does Zimbabwe find the financial resoucres to implement the Act and how can democratic and traditional leadership principles be balanced.

Under the proposed national Land Policy Framework, the accent is on village democracy, with traditional leaders placed in honorary positions. This is probably not what the government had in mind.

Source: Derek Gunby, PlanAfric (pers.comm.)

Box 4.9: Local forest management in the Duru-Haitemba and Mgori *miombo* woodlands, Tanzania

Up to 1994, these woodlands were under government control and management. Their condition has been steadily degrading due to encroachment for farming, grazing , hunting and charcoal-making by local people, and timber extraction mainly by outsiders.

In the case of Duru-Haitemba, plans to establish a forest reserve prompted local inhabitants from five villages to take as much as they could from the forest as fast as possible, undermining the conservation effort. Hence, local authorities informally agreed with project staff that gazettment would be suspended, subject to demonstration that local communities could halt forest degradation. This implied that local communities would be responsible for daily management and control of the forest. This launched a very dynamic process by the villagers, including:

- Drawing-up simple but effective management plans, which mainly comprise rules concerning the use of the resources, and the modalities of fining offenders. Any use considered damaging was banned, even if it provided income to some local groups (e.g. charcoal burning, tree felling). Plans were refined and validated during village assemblies.
- Setting up of village forest committees, as parallel decision-making bodies to the official village councils. The composition of the committees rapidly shifted from village leaders to ordinary villagers, as a response to previous mismanagement of funds and the consequent need for greater accountability.
- Selection of 100 village forest guards to control abuses by both outsiders and insiders - government had previously employed only two forest rangers.
- Later, village plans and rules have been re-written as bye-laws, formally approved by the district authorities to provide the necessary legal back up to informally-derived regulatory instruments. This and the entitlement of village land has turned communities into legal owners and managers of their own forest reserves.
- Local foresters and outside advisers have provided only *ad hoc* assistance, e.g. advice on legal matters and resolving of inter-village boundary disputes.

Since the process began, degradation of the forest has reduced significantly, at no cost to the government. On the other hand, communities have gained power, through ownership, increased responsibility but also access to benefits from the resource. Finally, local foresters have been liberated from the coercive role which failed to protect the forest, and are better able to provide technical assistance.

In 1995, a similar dynamic process was launched by local communities in the Mgori forest, with similar outcomes.

A major reason for the success to date of this lies in the fact that it has been locally initiated, without outside pressures, nor the use of blueprint schemes. The important role of the government has been to let go of its powers..

Source: Wily (1997)

Another approach to empowering community-level groups is the development of alliances – often with NGO assistance. It also helps in establishing credibility vis-à-vis other stakeholders and, in particular, the State. A very interesting example of a local association of small private operators, created without any outside assistance, is the Masindi Pitsawyers and Wood Users Association in Uganda (see Box 4.10).

Box 4.10: The case of the Masindi Pitsawyers and Wood Users Association (MPWUA) in Uganda

MPWUA was legally constituted in 1994 and currently has a membership exceeding 100 pitsawyers. The association requested a concession in a local forest reserve in exchange for helping to control illegal activities.

Bye-laws developed by MPWUA are aimed at preserving forest resources. For instance, each pitsawyer cannot have more than four saws. Moreover, MPWUA has a say in the issuing of sawing permits by the District Forestry Office.

The main incentives for the establishment of MPWUA were:
- Financial, i.e. secured revenue, as legally processed wood will not be seized and is, therefore, guaranteed to provide income;
- Environmental: assisting the forestry service in counteracting illegal pitsawing and other wood uses, contributes to sustaining their source of income;
- Social: achievement of good relationships with the local population and the forest department staff;
- Technical: as a group, it is easier to justify and finance training, e.g. for forest management, waste recovery, and other types of assistance. In 1995, MPWUA funded the Forest Department to map timber stocks in the concession area and it plans to helps in opening and maintaining local roads in the concession.

The activities of MPWUA are also advantageous to the Forest Department:
- They assist in the control of illegal activities;
- They have increased the collection of taxes from pitsawing and other wood uses;
- MPWUA provides financial assistance for forest management tasks.

Source: MPWUA Chairman, pers. comm, 1997

Regulations and institutions to control the use of resources by small-scale entrepreneurs are often weak. But in some cases their activities are controlled and/or legalised, e.g.:

- In some instances, there are informal arrangements between individuals: for example, in some areas of Zambia, charcoal burners have verbal arrangements to help shifting cultivators clear the land and, in return, they benefit from the felled trees (Makano et al. 1997).
- In other instances, communities themselves exert a regulatory role, as in the case of rural markets in Niger (see Box 4.11).

- In the Ivory Coast, many technical tasks have been subcontracted to local entrepreneurs and/or forest co-operatives by SODEFOR, the parastatal body in charge of forest management, and generate significant off-farm income at local level.
- Through the development of associations (see, for example, Box 4.8).

Box 4.11: The rural markets in Niger

Niger's firewood marketing system in the 1980s, based on government control through permits, was anarchic, and mainly benefited merchant-transporters. Donors promoted reform under the Energie II project which culminated in a new law in 1992 that introduced radical changes:

- The creation of rural markets (RMs), subject to the existence of local management structures (LMSs) composed only of representatives who have usufruct in the area. In practice LMSs are created at village level and represent different user groups (woodcutters, farmers, herders; but women have not been included). The Forestry Service chooses the villages according to production potential. LMSs manage the RMs and supply them with woodfuel.

- Three types of markets have been created:
  - *Controlled* markets, supplied by delineated and managed production zones;
  - *Oriented* markets, supplied by delineated but non-managed areas;
  - *Uncontrolled* markets, tolerated during a transition period.

- Taxes are now based on volume of wood transported to the cities. Firewood from RMs is charged less than that from other areas as an incentive for traders to purchase where production is organised by villagers. Tax revenues are to be divided between the Public Treasury, the LMS and the local municipality. The more controlled the market, the more revenues are allocated to the LMS. Tax recovery within RM has been almost 100 %..

- Annual quotas are determined by committees comprising one representative of the LMS, two Forestry Service officers and one municipality staff member.

Between 1992 and 1995, 85 RMs were created covering an area of about 352 000 ha. In 1995, they supplied 15% of the needs of Niamey (the capital city). The creation of new RMs has been steadily increasing - most in the oriented markets.

A national information campaign aimed at rural populations, merchant-transporters and urban consumers was seen as a prerequisite to the launching of activities, to reduce rural people's distrust of the official dialogue promoted by the 1992 Law.

Despite its achievements, the project has faced some problems and several criticisms have been made concerning :

- The overemphasis on woodfuel, at the expense of other categories of forest resources;
- The exclusion of women from the LMS;
- The slowness of the process of registration of LMS and RMs. Actually, the process is being privatised, with consulting firms and NGOs assisting the local forestry service in the follow-up process.
- The merchant-transporters lobby putting pressure on the government to overturn the 1992 law and resume the old uncontrolled trade in woodfuel. This has been resisted by the government.
- Its dependence on cities as important market outlets, which limits its scope.

Source: various authors, cited in Dubois, 1997.

4.5.2 The local government level

(i) Assessing local institutional capacity

The local government (district) level is the focus of bcal provision of public services and rural development planning. At this level there may also be structures outside of government, some with a narrow remit (e.g. internal drainage board, hospital management committee) and some with a wider remit (e.g. Landcare groups in Australia, inter-village committees in g*estion de terroir* projects in francophone Africa). Existing institutions at this level are hugely variable in size, quality and capacity, and this existing capacity should be assessed prior to further capacity development for rural planning. Kullenberg *et al*. (1997) have suggested a framework to assess local institutions in terms of what they call institutional topography and political commitment to transfer power and resources to the local level.

The local institutional topography relates to tangible features of the areas under the authority of local authorities, which have clear implications for the scope of local development programmes. To illustrate this, Kullemberg *et al.* (1997) contrast between:

- Mali, where *Communes* of 10 000 - 15 000 inhabitants have a few low-grade employees, a budget of several thousand dollars, but no fiscal autonomy since all locally-generated revenues must be sent to the central treasury; and

- Uganda, where District Councils govern at least 500 000 people, have several hundred employees (many graduates), a budget of several million dollars, and clear statutory fiscal and legislative powers and responsibilities.

The mapping of local institutional topography in the form of simplified databases also helps to make planning decisions more objective, offsetting the *ad hoc* allocation of funds on political grounds (Smoke and Romeo 1997).

Political commitment for LGUs to transfer power and resources to the local level has already been discussed in Sections 4.2.5 and 4.2.6. Development institutions outside government are usually recognised at national level only if they serve the interests of the government. The fact that committees established by donor agencies in *gestion de terroir* projects are not recognised by government severely hampers their ability to manage natural resources. In contrast, the adoption of spontaneous Landcare groups and the support from the Commonwealth of Australia government has lead to an almighty expansion of their area and scope of operations. The formalisation of self governance bodies can prevent their suspension by central authorities on a spurious pretext. It makes sense to accept and legitimise decision-making structures - formal or informal - where they achieve good results in sustainable development and natural resource management.

(ii) Autonomy to undertake development activities and modify local rules and institutions

LGUs require this autonomy in order to secure support from local political leaders and local public interest. To achieve this, locally elected bodies also need sufficient resources (notably financial) to govern. In a transitional phase, such resources can be provided from higher levels, as long as mechanisms are introduced to progressively enable self-financing. There is the usual risk that local elites will use increased autonomy to further their own interests. Olowu (1990) suggests that this risk can be reduced by providing autonomy in an incremental fashion, linking it to performance.

The United Nations Capital Development Fund (UNCDF) has developed a pilot programme on Local Development Funds (LDFs) to provide financial autonomy to local authorities (Box 4.12).

Box 4.12: The LDF programme of UNCDF

Over the last seven years, the Local Development Fund (LDF) component of UNCDF has developed programmes that provide ceiling capital budgets and technical support to local governments and decentralised State authorities in various less developed countries. These projects average US$3 to 9 million over 3-5 years, typically corresponding to $1-5/capita. The LDF aims to promote decentralised planning, financing or rural development and institution-building at the local level. A key aspect is participatory planning and building capacity at local government level to develop viable development activities. Important features of LDF projects include:

- In contrast to most other types of programmes supporting local financial autonomy, allocation of LDF funds is not demand-driven, as this often results in funding 'wish lists'. Rather, ceiling funds are allocated to match existing transfers from central level.
- The funds are fixed to force local authorities to prioritise actions. Participatory planning is used as a tool to facilitate prioritisation.
- An up-front entitlement is provided to promote the mobilisation of local funds.
- LDF projects focus on local governments because they are assumed a comparative advantage over NGOs in delivering a range of infrastructure and economic development that have broader and more sustainable impact.

LDF projects typically face three key challenges:

- Ensuring the transparent allocation of resources;
- Making planning participatory. The planning process is entrusted to a body that must be representative both of local government and civil society. Moreover, some planned activities may be beyond the scope of LDF and local authorities, e.g. private income-generating activities or *common-pool* degraded natural resources.
- Linking activities to natural resource management. Given the focus on local governments, LDF activities tend to be biased towards small-scale and social infrastructure.

Source: Kullenberg *et al*. (1997), Smoke and Romeo (1997), Romeo (1998)

(iii) Greater accountability of local institutions

In designing development programmes, the provision of checks and balances to guarantee fair distribution of profits from local use of resources is often overlooked. The State has an important role to play in this, both at central and local levels. One of its roles is to hold regular and fair elections. However, where a government's ability to regulate local affairs is weak, other mechanisms can assist in promoting accountability, e.g.:

- *Improvement of citizens' access to information*, thus enabling more informed participation in public debates. This can be achieved through the use of local media (e.g. through the hundreds of AM broadcasting stations in rural areas of the Philippines); and training in numeracy and literacy;
- *Mechanisms to control daily operations* which are based on shared responsibility, e.g. the need for several signatures to approve financial expenditure;
- *Transparency* in review and authorisation of contracts and verifying expenditures;

- *Formal procedures of redress* against elected officials. This is essential for themobilisation of local initiatives in the long term. But such mechanisms, where they exist, are often deliberately designed to be cumbersome so as to limit their use by local people. Recent innovations in Bolivia which aim to overcome such problems include a new law that sets special circumstances under which municipal councils can formally dismiss a mayor, and the creation of municipal vigilance committees (see Box 4.13);
- Better *representation* of local interests.

Box 4.13: Municipal Vigilance Committees in Bolivia

These committees were established following the Popular Participation Law of 1994, to oversee municipal spending and propose new projects. They comprise representatives from local groups within each municipality, and are legally distinct from local councils. At first, local people opposed the creation of such committees, fearing that they would compete with their traditional unions (*sindicatos*). However, they changed their minds when they realised that these groups could be part of the vigilance committees.

The power of the vigilance committees lies in:

- Their ability to lodge an official complaint to the senate seeking to suspend disbursements from central government to a municipal council if it is judged that such funds are being mismanaged.
- The moral authority that they command at local level, which stems from their degree of representation of citizens' interests.

Source: Faguet 1997, Blair 1997, Kaimowitz et al. 1998.

(iv) Subsidiarity

The principle of subsidiarity principle is the devolution of powers to the lowest, most local level of government that can effectively discharge these powers. In the case of rural development, this principle may be interpreted in various ways:

Firstly, in many developing countries, subsidiarity often happens by default, i.e. when central government is so weak that it exerts little influence in rural areas. Then, local management of natural resources is a patchwork of local arrangements which tend to favour the most powerful stakeholders - a situation that is usually not conducive to sustainable development.

Secondly, for the sake of economic efficiency: (i) services should be controlled and financed at that scale where there are no spill-over effects (e.g. at district level if there are no significant spill-overs into surrounding districts – Smith 1997); and (ii) decentralisation of management should concern goods and services for which economies of scale cannot be achieved.

Thirdly while economic efficiency considerations are important, so is social efficiency. Weber (1996, pers. Com.) argues that devolution should be linked to the highest level at which stakeholders know each other well enough to be able to control each other in a cost-effective way. Equity aspects may also come into play. As discussed earlier, decentralisation may lead to greater inequities between social groups if accountability and representation mechanisms are weak.

Finally, there is the crucial and contentious issue of capacity, particularly that related to governance (e.g. transparency of information, accountability). The debate here often revolves around the tension between long-term support to build capacity and short-term efforts to enable donors to meet their disbursement schedules whilst achieving tangible results to justify the use of the funds.

Debate continues about the appropriate roles and levels of devolution, especially over the choice between communities (section 4.5.1) and LGUs. The appropriate level of subsidiarity might be negotiated with local stakeholders and will vary according to the resource at stake. It is sometimes argued that the local governance at village level is not cost-effective but the costs of such governance can be reduced by simplifying procedures and conditionalities associated with local management of natural resources. For instance, land use management plans at village level could be replaced by locally-decided sets of norms and rules[13], as in the case of Duru Haitemba and Mgori woodlands in Tanzania (see Box 4.8);

Table 4.6 shows that the appropriate level of subsidiarity depends on the resource/sector concerned. However, it also demonstrates that, apart from issues which have an obvious national scope (e.g. land reform), the administrative level immediately above villages is often key in decentralisation - it is the first level where marketing operations occur and where the State should begin to play its role as a referee. This explains why planning initiatives such as UNDP's Local Development Fund Programme (see Box 4.12) focus on the district level. In Zimbabwe, the 'A Give a Dam' campaign shows that field operations should be based at the district level, although the programme itself is coordinated at the provincial level (Box 4.14)

This implies that linkages between different levels of authority must be developed to avoid inconsistency between initiatives managed at different levels. Linking different levels has proved to be one of the biggest challenges for decentralised rural planning and development. The issues fall in two groups: linking between different administrative levels; and linking communities and the lowest administrative levels.

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13 Local management of natural resources can be compared with a football game:

- In football, rules are set by a federation in order to determine mainly what cannot be done on the pitch;
- There are no official plans aimed at telling players what to do; this is the role of the coach as far as 'long-term' strategy is concerned. The players decide on actions on an ad-hoc basis within this framework.

The comparison holds if one equates the federation to local governance, the coach to local leaders of user groups, and the players to different individuals or groups in the community.

Table 4.6: Some factors affecting decentralisation for different sectors (Adapted from Goldman, 1997)

Factors	Decentralisation issues			
	Agriculture	Water supply	Wildlife	Implications for agriculture
Economies of scale	Only for large processing/businesses	For large urban supplies	For large parks/major tourist ventures	Favours decentralisation
Technical system	Small farmers – simple	Simple for basic systems – not major pump schemes	Complex knowledge of wildlife required	Favours decentralisation
Complexity of environment	Complex – local knowledge needed for appropriate solutions	Simple	Wide range of issues-attitudes of community / tourists/ demand for land	Favours decentralisation
Diversity of clients, livelihood systems, etc.	Depends on the area – often very diverse	Not a major issue – some tension between household, industrial and agricultural use	Diverse-community, employees, tourists, 'guardians of biodiversity' with multiple uses	Favours decentralisation
Unit size / span of control	Dealing with many small farmers	Many villages/wells/pumps. Few large schemes	Whole area can be dealt with in conservation approach. Few/large parks	Varies-can mean efficacy of central mass media campaigns, but also need for support to local groups
Cross area boundaries	Large projects	Catchment management and major dams	Parks and conservation may well overlap	Only major projects. Favours decentralisation
Stability	Depends on rate of change, but can change year to year.	Depends on variability of rainfall	Depends on issues such as poaching, invasions, etc.	Need for flexible systems to respond to dynamic situation. Favours decentralisation
Political issues	Land – e.g. land reform. Subsidies	Availability. Location of schemes. Charging structure	Highly political as users are often not local-if benefits do not accrue locally. Develop stakeholder forums	Issues such as land reform best handled centrally
Fiscal issues	Payment for extension? Subsidies on inputs/ crops. Tax on land/crops. Free-rider issues	Payment for water – differential payments for types of users	How does revenue accrue locally?	Favours decentralisation, although if tax is to be raised, local politicians may find it difficult. Maybe more possible with *club* goods
Institutional issues	Best handled locally – can be decentralised with specialised services provided centrally/ regionally	Village water best locally, also municipal schemes. Bulk distribution perhaps regional. Catchment schemes regional	Must be local benefits and so link to local gov. and community structures. Parks: central/regional	Extension services can be handled locally; specialist services such as adaptive research better at regional level; basic research at national level

Source: Goldman, 1997

Box 4.14: The Give a Dam Campaign, Zimbabwe

This campaign started in late 1995, born out of the experiences of national and international NGOs involved with drought relief activities in Matabeleland South Province. NGOs, donors, rural district councils representing the communities in this province, and government agencies formed a consortium. Its aim was to construct small-to-medium sized dams to provide water for irrigation and domestic use and for livestock. The partners included:

Africare	Africa 2000 Network	Christian Care
CADEC	Dabane Trust	Matabeleland Development Foundation
Six RDCs	Government agencies	German Development Service
Oxfam USA	ORAP	Lutheran World Fund
Oxfam Canada	Evangelical Fellowship	UNDP and World Vision

The campaign is jointly chaired by the Provincial Administrator of Matabeleland South and the UNDP Resident Representative.

Achievements

- 22 dams substantially completed
- 7 dams under construction
- 21 dams surveyed and awaiting confirmation of funding
- 3 irrigation schemes operational
- 26 new irrigation schemes surveyed (5 are under implementation)

Training and ownership

Each dam constructed under the campaign is managed by the dam management committee – selected by the communities. Its main responsibility is to help the community to participate fully in all dam-related activities. Training has been provided to 33 committees and to 47 animators drawn from the communities. Training is conducted at community, district, provincial and national levels and all training processes are facilitated by district training teams composed of extension workers from central and local government.

Source: PlanAfric 2000 (based on an extract from the Give a Dam Annual Report 1998)

Linking between different administrative levels

Romeo (1998) sees two major challenges in achieving this:

- How to provide incentives for co-operation between different administrative bodies at a given level in order to take advantage of economies of scale? This will have to be fostered from higher levels, e.g. through the establishment of consultative platforms. But how to finance these platforms? In many instances, donor support is needed. Another approach is to separate formal co-ordination functions from day-to-day collaboration (Dubois *et al.* 1996)

- How to promote the involvement of local authorities and communities in the planning, financing, implementation and monitoring of regional/national programmes. Contractual arrangements might be a way forward here (Romeo 1998).

Linking communities and the lowest administrative levels

This is necessary not only in order to include more initiatives on natural resource management, but also in relation to the key role that local administrations play in providing support to the marketing of community projects and the formalisation of village entitlements (e.g. their '4Rs'). The federating of different interest groups in communities has proved helpful in co-ordinating their collaboration with LGUs. NGOs often play a mediating role to help communities voice their concerns. Here again, representation (as a step towards accountability) and cost-effectiveness (to avoid bureaucratic inflation) are key ingredients of success. In this respect, the eventual implementation of the new Traditional Leaders Act in Zimbabwe might provide useful insights (see Box 4.8).

Co-ordinating different donors' initiatives

Lack of co-ordination between different donor-funded initiatives often exacerbates weak linkages between government line agencies. Frequently, efforts are made to establish co-ordinating committees, but practical difficulties (particularly insufficient finances to support regular meetings) means that such committees often fail to meet expectations. In Appendix 8, drawing from experience in francophone West Africa, we discuss this issue further in the case of both administrative and project specific committees, and consider possible ways to overcome such difficulties.

From integrated rural development to integral local development

Ribot (1999) argues that while the concept of integrated rural development *per se* had great merit, the mechanisms for integration were flawed - they were designed by outside agencies and often excluded local governments and local people form decision-making processes. He suggests that integrated rural development should be re-cast using a bottom-up approach – which he calls *integral local development* – with the aims of rehabilitating the role of local government in rural areas. Ribot argues that it is integral because:

- It depends on authority that is integral to the community;
- Ecology and environment are not separated from other matters of local government;
- All local funds are allocated according to local people's needs and aspirations, not according to the origin of the funds.

Therefore, integrated local development can only occur if LGUs are entrusted with real powers and resources, and if they are made much more accountable to local communities. A similar focus on LGUs has been adopted by UNDP's LDF programme (see Box 4.12).

Even though it is now accepted that outsiders should not drive the process of local development, in practice, donor-funded initiatives can often help to test improved mechanisms for entrusting local governments with power and resources and for making them more accountable (e.g. see Box A8.3. in Appendix 8), through:

- (Regarding entrustment) embedding project structures in local government agencies, with an emphasis on capacity building;

- (Regarding accountability) involving villagers in the monitoring – and control - of government staff activities associated with projects (e.g. notes on visits to villages, villagers being responsibility for the delivery of fuel);

- Increasing the role of the concerned line agencies in project design and implementation can further enhance both entrustment and accountability.

(v) Capacity development

Mapping out capacity

Given the controversies over capacity issues (see section 4.4.1), and the usually disappointing performance of capacity-building programmes, a step-by-step approach may be the best way forward:

- Start by *agreeing on objectives* of development initiatives with local stakeholders;
- *Clarify/(re)negotiate roles* between the main stakeholders;
- The above two steps should serve as a basis for jointly *defining capacity needs*, as opposed to capacity-building objectives being decided mainly by donors and/or national governments;
- Assess jointly with local stakeholders what can be achieved using the existing capacities, thus focusing on *capacity use* prior to capacity development;
- Assess *where weaknesses lie* and what types of local partnerships might overcome them;
- Encompass *both technical and institutional capacities* so as to address the key *hidden institutional* problems related to good governance;
- An initial build-up phase through a series of small-scale experimentation projects is often advisable.

From the above, it follows that a learning-by-doing philosophy should prevail in rural areas, at least in the early stages of capacity development.

Training

Mayers and Kotey (1996), reviewing several community-based initiatives in Ghana, confirm that the provision of training is not necessarily a prerequisite for successful initiatives in local management. Assistance can be provided as needs arise and as part of a partnership process.

Training should concern not only technical but, also, managerial and planning matters. Materials relevant to training are best conveyed in the context of real issues and activities. This closely links training and the application of knowledge - a very effective way for trainees to gain tangible benefits from their newly acquired skills (SOS Sahel 1998). Private organisations such as NGOs or local consulting firms have a vital role to play in that respect (see, for example, Bonnet 1995).

Information - The right to know

The capacity of local institutions to manage natural resources depends upon the quality of *information* they receive. Yet information on the formal roles of stakeholders (e.g. their '4Rs') as well as formal information about the resources to be managed is lacking in many rural areas.

In the wake of recent decentralisation strategies, legislators and local communities have been increasingly concerned that communities should be informed about their new rights and duties - the assumption being that they would thus become more involved in the management of natural resources, albeit as stewards or servants of the state. Transparency seems to be a fundamental feature in building trust between stakeholders but the quality and quantity of information to be conveyed as well as its cost are also important issues to consider.

In the case of the 4Rs, the interpretation of rules also plays a key role. Differences of interpretation often originate from differences in power - and threats to it. Therefore, information alone is insufficient to guarantee appropriate implementation of rules. It needs to be accompanied by the development of mechanisms which provide checks and balances.

4.5.3 The role of the central government

Government policies on natural resources have a poor track record and it is becoming evident that local communities have some comparative advantages in this respect (Baland and Platteau 1996):

- Local communities are *well informed about local ecological conditions*, although they sometimes misapprehend the causes of some environmental changes;

- They are well *aware of local technical, economic and social conditions* as well as *cultural values*. Hence they are in a good position to devise management systems well adapted to their own needs, if not always to purely conservationist purposes;

- Being relatively small, local communities *can easily adjust their local rules* of use to changing circumstances. But this depends on the nature and magnitude of the pressures placed on the resources and their livelihoods (e.g. externalities such as pollution are difficult to cope with);

- They usually have very *cost-effective mechanisms to solve* intra-community and interpersonal conflicts;

- *Self-monitoring* by the resource-users themselves often proves cheaper and much more efficient than centralised control, as long as the community is convinced of its necessity.

Given these advantages of local control, the State would do well to let go of power to local initiatives in resource management, even if they do not comply with any extant formal rules. This does not mean that the State has no part to play in the management of natural resources.

In addition to facilitating local initiatives in community management of natural resources, central government must play other important roles. For example, it should provide an overall vision for development. In the case of Zimbabwe, Plan Afric (1999) argue that such a vision at national level should be complemented by others at provincial and district levels and recommend the creation of a national think tank to help in this process. Box 4.15 lists some of roles of government that apply to forestry.

Box 4.15: Possible role of central government in local forest management

Assistance and guidance because it can more efficiently monitor the external effects of forest use. Main areas concerned include:
- Perceiving environmental changes;
- Convincing local groups that there are remedies to environmental stress;
- Disseminating information on environmentally sound techniques, and sharing information both between the State and local groups and between groups.

Provision of economic incentives for conservation-oriented practices, especially where communities struggle to meet their basic needs and/or are at the mercy of powerful outside interests;

Clarification of group territorial rights and provision of a legal framework which enables user groups and their rights and benefits to be officially recognised;

Protection against broad-scale external pressures (e.g. pollution) and/or other economic sectors which central government is better able to respond to;

Provision of formal rules for conflict-resolution whenever locally-derived rules are insufficient, especially in the case of conflicts between different communities and/or with broader-based stakeholders;

Financial assistance to complement the mobilisation of local resources

Provision of incentives and a framework to **link different decision-making levels**.

Source: Mainly Baland and Platteau (1996)

CHAPTER FIVE

THE WAY FORWARD

Conclusions and Recommendations

In this concluding chapter, we summarise the lessons from half a century of professional natural resources surveys and development planning that are relevant today. The developing world (or *less developed countries* to use the terms of the Brundtland report) is a very different place from what it was 50 years ago. Its human population has more than doubled from 1.7 billions to 4.5 billions and, at the same time its natural resources have been hugely degraded. In the next 50 years, human population will increase to at least 6 billions (the lowest projection) and may well more than double again to 12.8 billions (the medium projection). Fifty years ago, only 17 per cent of these people lived in towns and cities, now it is 35 per cent. It is impossible to forecast the extent of the shift to urban areas over the next 50 years, but the rural population will still be increasing in absolute terms (Lutz 1996). There has never been a greater need for development planning and good management of natural resources, and this is no time for faint hearts.

This report demonstrates that there is a wealth of experience, and knowledge of the land, that points the way forward. The main problems that continue to dog development planning, and recommendations to overcome or at least mitigate them are presented under the headings of *Planning strategy* (5.1), *Natural resources surveys* (5.2), *Principles of development planning* (5.3) and finally *Institutional support* (5.4) and *Implications for donors* (5.5).

5.1 Planning strategy

- To be effective, local-level planning should operate within a truly domestically-driven vision of the future at national and also sub-national (where appropriate) levels - not tied to party, tribe or sect – within which participation can operate, and for coordinated strategies at national and district level to work toward this vision so they pull together and do not overlap. The three case study countries provide the spectrum of progress toward this goal. In South Africa, political accommodation is so recent that effective institutions of local government have yet to be built. Zimbabwe, a decade or more along this track, attempted to sweep away both the colonial imbalance of land and power and, also, long-established customary authority. But after several false starts, there is still no coordinated rural development strategy and participation is taking place in a vacuum. A Vision 2020 plan has been prepared but not implemented. In Ghana, the national vision (Ghana Vision 2020) and strategy are now in place and being implemented although capacity at district level is still wanting.

  Recommendation

  A vision of the future that commands wide support is a prerequisite of effective development and a necessary framework within which rural planning should operate. A process to develop this vision (e.g. round tables at local to national levels, future search conferences) must include all the stakeholders - resource users, other rural people including minorities, urban people, government, and NGOs. Sectoral, district, national and donor strategies should be coordinated to realise this vision.

- The concept of sustainable livelihoods provides a focus for development strategies. It concentrates attention on the need for secure livelihoods underpinned by sustainable management of natural resources and by human, social and financial capital - both capital generated within the rural area and that operating through external institutions. It is a holistic perspective, in contrast to previous piecemeal support for physical infrastructure and specific commodities.

  The *livelihoods perspective* is described by fairly elaborate frameworks (Carney ed. 1998, Bebbington 1999 and Figure 1.1). It remains to translate the new perspective into practical guidance for effective decision-making. Planning surely holds the key to this conundrum - *if* it enables decision-makers to work effectively and equitably on the basis of sound information about the status of natural resources and the other forms of capital; and people's social and economic aspirations.

  Recommendation

  The SL concept is a powerful tool for analysis, and for the development of visions and strategies, providing that it is not over-elaborated. It is not a planning procedure in itself.

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- Putting the needs of rural people at the heart of the planning process requires an open and inclusive planning process. This is not a neutral technical activity. It is highly political as illustrated by the three case studies for Ghana (Botchie 2000), South Africa (Khanya-mrc 2000) and Zimbabwe (PlanAfric 2000). It also takes time – 10 years in the case of SARDEP in Namibia (see Box A3.3 in Appendix 3).

  Recommendation

  Political reform will be required in many situations if rural people are to be allowed to genuinely plan for themselves.

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- It is unrealistic and unhelpful to consider rural planning and urban planning as separate entities. Urban centres are absolutely dependent on their hinterlands for water, fuel, food and waste disposal; there are important flows of people, goods and capital between them as well as more subtle social links; *urban* activities like industry occur in rural areas and *rural* activities like urban farming occur in urban areas. It does not help that rural planning, land use planning and town planning are quite different schools that scarcely communicate.

  Recommendation

  Urban-rural links should be recognised in the planning process and there should be dialogue between town planners, rural planners and economic planners.

5.2 Natural resources surveys

- The information provided doesn't fit into the decision-makers' economic concepts and can't be used directly to assess risk. It is asking a lot of policy-makers, planners and land users to bridge the gap between a soil map, biodiversity inventory or table of climatic data to an assessment of the various development options available and forecasts of their

effects. Where interpretations of basic data have been provided, they have been taken off-the-peg, not tailored to the decision-makers' requirements. This latter point can be applied equally to much other information: social. demographic, economic, financial, etc.

Recommendations

Natural resources agencies must establish who their customers are. Then there must be dialogue with them to establish the precise information needed.

Blunderbuss surveys should not be continued. If the immediate use of data is not known, don't collect them.

Simulation models can provide production and input data for economic models, and forecasts in terms of probability. Existing survey data are rarely adequate for simulation models but expert knowledge can be used to devise 'transfer functions' that relate existing data to the parameters required.

- There is a gap between the scale at which information is needed and the scale at which it can be provided quickly. Survey coverage and recording networks are incomplete at any level of detail and there is no strategy for completion, no continuity of survey effort and no continuity of staff. As a result, methods are not compatible, expertise is not built up, and institutional memory is short. A great deal of information that was gathered by professional teams in the 1950s to 1980s is now being lost.

Recommendation

Greater investment in land resource information would be beneficial but, at the same time, we need procedures for survey and for maintenance of the data base that can be implemented by imperfect and modestly-funded institutions.

- Data are of variable quality and detail. This limits the use that can be made of the better data. For example, soil profile data gathered by land systems surveys are often cursory (*e.g.* 'reddish brown earth') so little interpretation is possible. Other data are generated by remote sensing without adequate (or any) field checks.

Recommendation

Surveyors must develop and stick to rigorous quality control. Users should be able to ascertain the date and accuracy of data from the files. GIS managers must ascertain the compatibility of different data sets.

- It is difficult to disentangle primary, factual data from interpretations.

Recommendation

Make explicit the distinction between 'What is the land like?' and 'What is it good for?'. Data banks should store these different kinds of data in separate files, e.g. 'physical' files for climatic data, soil data etc.; 'use' files for the results of experimentation and practice, e.g. crop yields, water yields; and 'interpretation' files for judgements, e.g. land suitability.

- There is a critical shortage of competent land resources specialists able to provide a service to policy-makers, planners and land users, both in specialist institutions and in-house. The lack of a career structure in land use planning is a major constraint. The secondment of staff from established institutions is universally unsatisfactory. While information gaps can be plugged by overseas-funded and managed survey programmes, these do not maintain the data base for iterative use or provide new interpretations at a later data.

  Recommendation

  An attractive career structure is necessary to attract and retain able people. Technical training in natural resources survey and land use planning is urgently needed for professional staff in developing countries but it will be more realistic in the physical, social and economic environment of the home country or a regional centre: training in rich countries invariably emphasises hi-tech and laboratory techniques that are inappropriate where state-of-the-art technology cannot be afforded.

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- Indigenous, local knowledge of the land has been ignored by technical specialists and policy-makers alike. Following Robert Chambers' *Farmer First* ideas, a tidal wave of people-oriented approaches has swept the field to the extent that hard-won, significant physical data are ignored, even dismissed, in favour of 'participation' and 'bottom-up' planning. But no amount of participation or political will can make it rain.

  Recommendation

  Links should be forged between top-down and bottom-up planning. Professional training should encompass BOTH the techniques of participatory enquiry and those of the natural sciences, so that information gleaned from both approaches can be combined.

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- Natural resources information is incomprehensible: confounded by jargon and fogged by the sheer mass of data.

  Recommendation

  The comprehension barrier is raised as soon as we snap the links with the logic based on common sense and everyday experience. Apart from using plain words and few, it is necessary to communicate knowledge of the land by analogy with common experience, even if this takes some time and trouble.

  A lot of jargon and complexity arose from the needs of manual systems of storage and retrieval of information through maps and abstract hierarchical classifications. This need has been swept away by computer-based information technology, although the new Nirvana has gatekeepers of its own.

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- 'We have been pouring information into the sand!'

  Recommendation

  Specialists must carry their information to the point of decision. Synthesis and generalisation from factual detail cannot be accomplished by generalist planners and

policy-makers, only by a master of the information, otherwise much is lost or corrupted along the way.

- Despite the problems listed above, baseline surveys are still important, They are critical for future monitoring but are often divorced from other aspects of stakeholder and community participation. There is a need to gather and integrate baseline information with other aspects of rural planning and to ensure that, where possible, it is participatory and reflects project log-frames.

5.3 Principles of development planning

Planning has been very much a technocracy and putting the security of rural livelihoods and the sustainable use of natural resources at the heart of the process will require fundamental shifts in what currently goes by the name of planning. Strategic rural planning has now moved on beyond farm planning writ large. It has to integrate elements that have been the domain of quite separate professions – not just soil and water resource conservation, irrigation and drainage, but water resource allocation and total catchment management; development of sustainable production systems and their supporting infrastructure; and the development of the human capital of rural areas.

Our recommendations are set out in seven principles:

Recommendations

i. *Planning should not be undertaken exclusively by professionals remote from the area concerned. To be successful, a plan needs to be developed in partnership by all of those with a legitimate interest, particularly residents of the area and those whose livelihoods depend on its resources. Identify these people first, and establish a mechanism for them to participate in the planning process.*

ii. *Acknowledge the existence of conflicting interests in developing, implementing and benefiting from land use plans and develop processes to deal with this. The needs and goals of all the interest groups should be clarified in the light of the aims of the plan.*

iii. *Address social issues, especially land tenure and access to resources, as well as physical or environmental issues.*

iv. *To the extent possible, try to reach consensus, taking particular care to include marginalised groups, e.g. women and minorities.*

v. *Consensus-building and meaningful negotiation require equal access to information about the issues, problems and development options. Build on:*

vi. *Indigenous systems of local knowledge, land use and planning, taking care to retain their diversity and flexibility;*

vii. *The experience and expertise of other sectors and NGOs.*

viii. *Build and support local institutions that can manage common property resources and devolve authority to them.*

ix. *Common property (or unpriced) resources such as land, water, pastures, forest and wildlife have important economic values and are not infinitely substitutable. There needs to be an accounting system to assess depreciation of these natural resources and a mechanism to ensure their sustainable management, otherwise they are likely to be exploited to the point where the system is destroyed.*

Strategic rural planning seeks to achieve deliberate voluntary change of land use and management. This can only occur where there is knowledge, the capacity to change and the motivation to change:

Knowledge Information about natural resources is essential at all levels of decision-making so that emerging problems can be recognised. Good information is also needed about the social and economic consequences of change in land use and management, and of not changing. There is no single way to inform all stakeholders, and a range of approaches will need to be tried, modified and repeated.

Capacity to change Lack of time, people, management skills, appropriate institutional structures (tenure, laws or decision-making systems), equipment and money are all constraints. Financial and managerial resources are needed for activities that do not give a quick return and, often, benefit urban people more than those in rural areas, *e.g.* safeguarding water resources.

Money and managerial skills are scarce in poor rural areas. It is hard for the poor to invest in costly interventions, but not all improvements are expensive and cheaper interventions may be more cost-effective in the long-term.

Motivation to change Education, information and persuasion will be effective only if the change interests and benefits the people for whom change is deemed desirable, and where such change is socially acceptable.

5.4 Institutional support

The State does not make a good manager of natural resources. All the evidence points to the need for active involvement of local people in managing the resources they depend upon, and in planning their own development. But they need institutional support from various levels of government:

- Platforms for decision-making at local and district level where stakeholders can meet on equal terms to negotiate development goals and the allocation of resources (discussed further in Appendix 8);

- Responsive, effective services provided at district level;

- In big countries, coordination across districts and provision of specialist services at provincial level;

- Strategic direction and redistribution of resources at national level.

This is a subject of its own with a huge literature that we have not been able to deal with completely. Our recommendations are therefore about what needs to be done rather than how it should be done.

- ***At the local level***, there are rarely any institutions with a mandate for development planning and, consequently, little or no capacity or experience. However, there are many examples of good management of resources such as irrigation water, drainage, pastures, forest and wildlife by local communities and it should be possible to build on these existing management structures.

Recommendations

i. Where institutions have to be built from scratch, critical elements will be:

- *Management of the local area by the local community, focusing on what people can do for themselves - not just bidding for handouts;*
- *Local structures developing local plans that contribute, in turn, to a more comprehensive district plan.*

ii. Features of successful management include:

- *Participation by resource users and other major stakeholders [e.g. partnership institutions between user and government agencies];*
- *Transparency in decision-making;*
- *Financial autonomy, e.g. funding through user fees;*
- *Adequate monitoring to identify rule-breakers and assess changes in the status of resources;*
- *Timely, effective conflict-resolution mechanisms;*
- *Sufficient knowledge and skills;*
- *Matching of institutions, responsibilities and scales of operation.*

- ***At the district level***, the key functions are:

  - Delivery of local services (schools, clinics, technical advice, etc.);
  - Strategic planning of infastructure and services. Allocation of rights to water, common grazing, timber, wildlife and other resources, according to national legislation – and monitoring and policing of this use; and coordination of local development plans.

Decentralisation in some form is promoted as the cure-for-all ills in rural development, promising:

- *Participation and empowerment* of marginalised groups;
- *More equitable distribution of benefits*;
- *Improved local accountability*;
- *More effective delivery of services*.

It has usually failed to deliver - because central governments have been reluctant to cede any real power, resources have not been commensurate with responsibilities, and because local governments have succumbed to *invisible institutions* (patronage, rent-seeking, antipathy to participation, *etc*.).

Recommendations

If they are to be effective, decentralised systems must have:

- *Devolution of enough power to exert significant influence over affairs;*
- *Reliable accountability mechanisms;*
- *Finance sufficient to accomplish important tasks;*
- *Adequate technical and institutional capacity to accomplish those tasks.*

- The task of building adequate technical and institutional capacity at the district level is formidable. There are weaknesses in technical capacity to do the planning and in the financial resources to implement and monitor the plans.

  Nearly all experience worldwide shows that devolution of service delivery to the district level improves effectiveness and responsiveness to local needs. However, this requires devolution of commensurate powers and resources to the districts, accountable financial autonomy and a big investment in professional capacity at the district level. This last point applies equally to professional capacity for development planning. At the moment, districts do not have this capacity and cannot build it unless their staff are accountable at the district level, not to a higher level.

  Capacity is also weak in representation, negotiation, transparent procedures and mechanisms. All need support that enables rural people to appropriate the process and use it to make and implement plans to meet their own development priorities.

  Recommendation

  Outside assistance should take care not to corrupt the process of capacity-building by imposing an external perspective. Capacity development might proceed step-by-step, e.g.

  i. Agreement of development goals between stakeholders.
  ii. Clarification/negotiation of roles between the main stakeholders.
  iii. Definition of capacity needs by the stakeholders, as opposed to capacity-building objectives decided by donors or national government.
  iv. Assess what can be achieved using existing capacities.
  v. Identify weaknesses and what local partnerships might overcome them.

  _____

- ***At provincial level.*** In some countries, the switch of responsibilities to districts has much reduced the role of the province. Sometimes this has created a support gap. Certainly in big or very diverse countries, there are several continuing functions for the province;

  - Capacity building for districts, because there are able staff at the province level;

  - Technical support where there is not enough demand or supply for a full professional complement at district level, *e.g.* for an irrigation engineer;

  - Audit of local government with sanctions against poor performance;

  - Coordination of development plans across districts, and development of strategic opportunities at province level, *e.g.* for tourism, water/power resources.

- ***At national level,*** the push toward decentralisation is often seen as a threat to the power of central government and the budgets of line ministries. In an important sense this is true, but it is still in the long-term interest of government staff and politicians to improve service delivery - they will get the credit for this. Decentralisation is not a loss of role for the centre but a change of role, for example:

- An increased demand for higher-level, specialist services which will be provided by line ministries, possibly at the province level;

- Increased information flow, replacing control by signature (or many signatures) by control through monitoring and by ensuring financial and legal discipline;

- Strengthened policy-making, taking a more strategic approach to development, seeking points where state initiative and support can make the most impact.

Situations in rural areas are very diverse and often complex, calling for creativity and flexible approaches. On the face of it, it is important to develop interim management measures, and test them over time by trial-and-error. A range of possible solutions should always be assessed. As a result of this participatory learning approach, institutions should adapt to realities rather than the reverse. Such an approach requires a shift to a more locally based strategy to regulate the use of natural resources.

Recommendation

Governments might consider a contractual approach between themselves and local communities, whereby mutual obligations concerning the use of natural resources are negotiated. This would lead to a gradual shift from (Karsenty 1996)

laws/institutions ® tools ® project ® participation

towards

general legal principles ® negotiation ® definition of long term objectives ® common choice of instruments and setting up of local institutions ® evolution and adaptation.

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- All experience shows that government approaches need to be

Progressive, i.e. tenure practices, regulations and institutions should adapt to stakeholders' needs and wishes;

Selective, acknowledging the need for a transition phase;

Pragmatic, supporting and improving rather than replacing existing practices.

Recommendation

Development should be based on a continuous and mutual learning process allowing for:
- *Experimentation with platforms for decision-making at local, district and higher levels;*
- *Confidence building between stakeholders;*
- *Better communication, i.e. through information, negotiation and mediation; and finally*
- *Time for the process to materialise into effective policies*.

5.5 Conclusions

The case studies for Ghana (Botchie 2000), South Africa (Khanya-mrc 2000) and Zimbabwe (PlanAfric 2000), undertaken in conjunction with this overview, illustrate a problem frequently encountered in the rural areas of developing countries: plans are often not implemented and sector projects are executed in a policy vacuum. In several instances, this stems from mandates which lack sufficient authority and the resources to implement them. It also suggests that rural planning can be used as a bargaining tool for local stakeholders in the negotiation of priorities and, hence, acknowledges the political dimension of local planning.

If rural planning is to become effective and make a difference to the well-being of rural peoples and contribute to more sustainable management of natural resources, each of the foregoing issues must be tackled.

Local strategic planning requires information about the condition and trends of natural resources, social and economic conditions. Methods to gather, synthesise and interpret this information are well established. Methods and mechanisms to enable the participation of stakeholders also exist. It should be obvious that there is a also a requirement for skilled and dedicated people to use these methods; for a planning framework within which they can be brought together; and for financial resources sufficient to do the job at the local level. At the district level, the key level for both service delivery and local strategic planning, professional and financial resources are not sufficient for the task, partly because we are dealing with poor countries and, partly, because – in most cases - the district level has not been entrusted with responsibility for strategic planning or the raising of money (e.g. through taxation). Nevertheless, we conclude that it is at the district level that the most immediate needs and priorities of both rural and urban communities can best be met.

Implications for donors

The implication for donors is clear. Assistance in rural planning in a particular country will require a structured response which should first involve an assessment of current rural planning arrangements (planning framework, institutional roles and responsibilities, skills-base, etc.) and an assessment of needs. The lead in such an assessment should be taken by nationals as part of the raising of awareness of the issues and possible responses. The issues raised by this study indicate clearly that donor assistance is likely to require considerable investment in training, building capacity and skills, and providing incentives which will encourage bureaucracies to change - this will need a long-term commitment. Without this, continued investment in, or support for, projects which arise from flawed planning processes will not, except by luck, lead to improvements in livelihoods.

A key issue for donors is to identify the possible ***entry points*** to assist planning processes and for capacity-building. Possible initial activities should be developed at a local level from the consultative *needs assessment* or *scoping* activity which provides all primary stakeholders with the opportunity to express their aspirations and concerns. These activities should be the first stage of any planning process. A common sense approach to this suggests that initial activities should be those which have a reasonable chance of success. Success breeds self-confidence, and increased self-confidence in turn assists people to tackle more difficult issues.

In this way a *process* which supports building local capacity is also initiated. The planning process does more than merely produce a plan, it also builds people's skills and ability to produce a plan.

The assessment of existing capacity should be used as a foundation to build increased planning capacity. Initial activities should be selected that stretch, but not by so much that it breaks down, existing planning capacity.

It is also useful to remember that the classic development assistance or NGO 'project' may not be the only possible *entry point*. Local, community-based initiatives may also be identified during a needs assessment or scoping study. These may provide an *entry point* to a wider planning process.

There is always a pressure to provide firm guidelines and procedures around which to structure planning approaches. We do not believe that blueprint approaches are useful – they

tend to lead to routine or mechanical adherence to procedures, leaving little room to respond to the realities of situations on-the-ground or to think creatively and innovate.

Nevertheless, current thinking on ways of engaging in the development and implementation of national strategies for sustainable development (as discussed in section 2.6) offers a framework for planning which is equally valid at more local levels – one which is centred on participatory processes of analysis, debate, capacity-strengthening, planning and action. Following this type of thinking, Tanzib Chowdhury of the World Bank (pers.comm.) suggests that it might be possible to build upon the new partnership approach adopted by the World Bank's initiative on City Development Strategies and promote District Development Strategies (see Box 5.1).

In practice, this is not an entirely new idea – indeed, the case studies for Ghana, South Africa and Zimbabwe all illustrate clear aspirations to move towards a such a dynamic rural planning system: the new decentralised planning system in Ghana, the integrated development plans of South Africa and the rural master plans in Zimbabwe all aspire to be effective tools for coordination, management and gathering community inputs. District development strategies could act as a vehicle to strengthen such emerging planning systems which currently are faltering because of institutional problems and lack of technical capacity and guidance within planning departments. Whilst there is considerable rhetoric in promoting participatory, integrated and decentralised planning systems, practice has not lived up to expectations. Sectoral planning systems continue to work against efforts to promote an integrated approach. Donors continue to respond to rural development needs with individual projects or sector loans which fail to address the multi-sectoral and multi-dimensional problems faced by rural areas (including rural-urban interactions). The lack of an enabling framework (political, administrative and fiscal decentralisation) and the lack of an empowering framework for community participation are major constraints to decentralised planning. Development plans are largely descriptive and factual rather than analytical and do not explore the inter-relationships between different sectors , issues and actors. These issues should be collectively analysed, prioritised and addressed to stimulate or sustain economic growth and to improve the quality of rural life. The concept of a district development strategy aims to address these particular weaknesses in current planning systems.

Box 5.1: From City to District Development Strategies

The World Bank has launched a new "partnership approach" to city assistance - the City Development Strategy (CDS). Recent trends in urban affairs (decentralisation, democratisation, emphasis on participation in governance), the limited impact of individual urban projects and sectoral loans, and the growing recognition that cities are increasingly contributing to national economies are all critical factors which have led to emergence of the CDS concept. The CDS aims to analyse the key urban growth issues (economic, environmental, poverty, governance, etc.) seen from the perspective of the city stakeholders, to consult and advise on priorities, and to suggest priority assistance and a future work programme. The CDS would not necessarily be equally comprehensive for every city as the impetus for the strategy exercise can arise from various priorities perceived by the stakeholders. The key elements of the CDS include: extensive participatory activities with large numbers of actors; in-depth examination of the composition of the city economy; development of a coordinated framework for donor assistance. There has been widespread interest expressed by cities and countries to undertake CDSs. They are being piloted in Vietnam, Philippines, Thailand, China, Indonesia, Bangladesh, Sri Lanka, Colombia, Uganda, and South Africa.

A similar pattern can be traced in rural areas which are subject to the same forces of decentralisation and democratisation, yet district authorities don't have the capacity to plan effectively and engage communities in the process. Projects and departments work on a sectoral basis. Usually, there is a very limited understanding of how the local rural economy works and its relationship with the urban economy.

A similar model to CDS could be developed in rural areas. Put simply , a District Development Strategy (DDS) would be a framework for doing business at the local level in a more integrated, coordinated, participatory way which pays particular attention to promoting the local economy or sustainable livelihoods.

The emerging planning systems in Ghana, South Africa and Zimbabwe are all trying to move in this direction. Some donor assistance is also being targeted to promote and support this process (e.g. in South Africa, GTZ is supporting an Integrated Planning Support package). But there are considerable gaps and obstacles, as this overview of international experience clearly demonstrates. A DDS would be concerned with defining this approach more sharply, concentrating efforts in a few localities to develop good practice, and targeting assistance in a significantly more coordinated way".

The DDS would seek broad coalitions of local stakeholders and development partners, both local and international, to work together to develop a strategy for a particular rural district that reflects a common understanding of the district's socio-economic structure, constraints and prospects (an analytical assessment) and a shared 'vision' of goals, priorities and requirements (a strategic plan of action). The DDS would be both a process and a product which together identify ways of moving towards sustainable development. The process would be defined by the district but might be expected to involve the following stages:

- ***Preparatory phase***: A quick assessment of the readiness of the district to engage in the process, and the key concerns of district officials and other key local stakeholders;
- ***Analytical phase***: An in-depth analysis of the structure and trends in the local economy, the various obstacles – institutional, financial, environmental and social – which may impede progress. The information base should be compiled from existing knowledge and data with a particular emphasis on inter-relationships among issues and actors. A number of options would be developed according to the analysis;
- ***Consensus-building phase:*** Setting priorities, building consensus, making decisions and identifying sources of assistance. This would include determining how local and international partners can help the district achieve its goals.

The process of developing and implementing the strategy should be directed and owned by the district. Donors should support fascilitation of the process and perhaps provide some technical inputs if requested. A DDS would be expected to define development priorities for the district but could go further and identify potential sources of assistance to realise strategic components. This process could help to coordinate donor assistance in a more effective and targeted manner.

Uncertainties

The key uncertainties are:

- Are bureaucrats willing to do things differently ? - to think and behave in new, open, participatory ways that provide for dialogue and consensus-building to agree what is needed and how to get there. There is a need to be identify those motivations that will encourage bureaucrats to work differently;

- Are institutions willing to work in support of each other to achieve cross-sectoral integration and synchronisation?. There is a need to identify and support, in each situation, the constructive institutional relationships that exist; and ways must be identified to face up to the initial severe capacity constraints and to build such capacity through action in order to overcome the constraints; and perhaps most critically;

- Is there political will to give effect to the necessary changes and introduce planning frameworks that support rather than inhibit such approaches ? Such political will needs to be harnssed to achieve realistic objectives and a practical process of change; and finally;

- What is the appropriate role for government ? This needs to be clarified, particularly in relation to private enterprise – the latter represents an important resource (often virtually the only resource in many countries, albeit it at a low level) to drive effective development.

Appendices

The following appendices provide details of experience in rural planning in particular countries and regions:

1. Kilifi Water and Sanitation Project (KIWASAP), Kenya
2. Recent Land Use Planning Approaches in Kenya: Some Examples
3. Rural Planning in Namibia: National Constraints, Local Experimentation: State-led Initiatives and Some Rural Realities
4. The HIMA Programme in Tanzania
5. Rural Planning in Latin America
6. Rural Planning in Mali
7. Some possible uses of the '4Rs' framework
8. Experience with local level dialogue
9. District planning process in Nepal

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APPENDIX 1

Kilifi Water and Sanitation Project (KIWASAP), Kenya

As participatory approaches have gained sway, attempts have been made to move away from sectoral-based development projects to integrated development programmes, and also to go beyond the use of participatory techniques such as PRA just in the appraisal stage of development activities. A good example comes from coastal region of Kenya where the Kilifi Water and Sanitation Project (KIWASAP) in Kilifi District sought to bring about fundamental changes in the prevailing development approach in the district (Schubert *et al.* 1994):

- from top-down to bottom-up;
- from sectoral to integrated;
- from reaching mainly the better-off to reaching the majority of the poor with special emphasis on the poorest;
- from teaching and informing to listening, observing and learning from villagers;
- from supply orientation to demand orientation;
- from centralised to decentralised planning and decision-making;
- from agency ownership and management to community ownership and management of development project.

KIWASAP has followed a participatory and integrated development approach (PIDA) which includes PRA but is also concerned with project approval and implementation. Integration is taken to encompass holistic problem and potential analysis at community level and aims at combining several sectoral activities in such a way that synergistic effects are achieved. The steps in the PIDA process, which begins with the community requesting its initiation, are listed in Table A1.1. The estimated cost of the PRA phase is put at about US $ 3 500 (for salaries for 10 person PRA team, allowances, transport, materials).

In 1994/95, KIWASAP organised village workshops in eight communities in the district. Interdisciplinary groups of representatives of various government departments/organisations spent a week with each community to discuss problems and assist the community to develop plans of action and - after the village workshop - to implement their own projects (see Box Box A.1.1). A project review workshop in 1995 concluded (Dzumbe *et al.* 1995):

> 'PIDA fits very well into the District Focus Strategy for Rural Development and should be institutionalised within the existing structures of the district. The appropriate organ therefore could be the District Planning Unit. The District Development Officer is supposed to play a key role in co-ordinating PIDA activities in the District'.

Schubert *et al.* (1994) recommend that a PIDA Coordination Committee be established as a sub-Committee of the District Development Committee to coordinate all PRA and PIDA activities in the district, receive applications for PIDA, and act as a neutral institution to appoint organising/coordinating agencies for individual PIDA projects. Sectoral departments could assume specific functions with regard to PIDA, e.g. allocating personnel for PIDA activities, acting as an organising agency, funding the follow-up phase. NGOs could act in a similar way and credit institutions/programmes could also fund specific projects. It is argued that increasing numbers of village workshops will lead to a flow of information from communities to the district which will inform and facilitate improved decision-making, priority-setting and regional planning at district level.

Table A1.1: Steps in the participatory and integrated development approach (PIDA), Kilifi District, Kenya

Source: Schubert *et al*. 1994

Phase	Step
Initiating phase	1. Application for PIDA 2. Identification of organising agency
PRA phase	1. First meeting in the community 2. Selection of development agencies, forming a PRA team and logistical arrangements 3. PRA training 4. Second meeting in the community 5. Planning the village workshop 6. Conducting the village workshop 7. Report writing - by the PRA team 8. Evaluation of the PRA process
Follow-up phase	1. Draft project proposal (based on the Community Action Plan and the village workshop report) 2. Discussion within the community and with other parties involved on the project proposal 3. Project application (through the channel: Sub-locational, Locational, Divisional, and District Development Committee 4. Parallel to 3: Channelling information for soliciting support and funding 5. Parallel to 3: Initiating other development activities, identified through the PRA village workshop within the community 6. Operational planning of the approved project 7. Project implementation 8. Monitoring and evaluation

The issue of local power relations is a recurring problem in participatory processes which seek to provide empowerment. In the case of KIWASAP, Dzumbe *et al.* (1995) note:

> 'The role of the local administrators (councillors, chiefs, assistant chiefs) has been seen as important. Chiefs have the legal authorisation in mobilising the community. There is fear that this can conflict with the PIDA purpose of community self-mobilisation. It depends very much on the sensibility of the chiefs whether they are receptive to the approach or not. In some communities, the chiefs accept that PIDA projects have to come *from* the people. There are other communities where the chiefs do not want to loose their influence, cling to their authority and refuse to collaborate with the community project or dominate the committee.'

Box A1.1: Experience from PIDA gathered by the Kilifi Water and Sanitation Project (KIWASAP), Kenya

1. The communities were found during the village workshop to be competent in identifying their own potential, problems and solutions. PIDA created awareness within the communities about the possibility that the situation can be influenced by the communities themselves.

2. The representatives of the various departments/organisations were very ambitious during the village workshop. They practised the PRA tools well and developed a good relationship with the community.

3. Communities in different divisions (Bahari and Ganze) have different core problems. Although women, men, elders and youth can have different problems or give them a different weight, the community is able to agree on a common goal for development.

4. The project proposals developed by the communities integrated community participation and facilitation through different departments/organisations.

5. The expectations of the communities in some cases are still rather too high. The process of learning to be self-reliant is still going on.

6. The question of giving more input such as material into PIDA approaches (e.g. machinery for pan scooping) has not been sufficiently cleared yet. There is till the fear that the community will lose the "ownership feeling" and the responsibility for the project.

7. The progress of the projects has been slow. PIDA projects seem to need more time to take off. Too much might have expected much from the communities from the beginning, but the idea of PIDA is still there in the communities.

8. The communities need more and continuous facilitation through the co-ordinator. This will have to include training for the elected committee on its new role and for the local administration about PIDA, and continuous assistance and dialogue in difficult situations with the community and the committee.

9. Follow up of PIDA projects must be taken seriously by KIWASAP - otherwise PIDA could get a bad reputation in Kilifi District at both community and district levels.

10. There is some (albeit still initial) involvement of some departments in implementing PIDA projects.

11. PIDA projects are mainly poverty-orientated. Poor people are more willing to provide their labour for development activities concerning basic needs than those who are better off.

12. The communities were able to monitor the progress of their own projects. They didn't give up despite elections of new committees and long-lasting discussions between and within the community and the committee.

13. Access to communities has improved

Source: Dzumbe *et al*. (1995)

APPENDIX 2

Recent Land Use Planning Approaches in Kenya: Some Examples

Source: Muchena and van der Bliek, 1997.

The Netherlands government has been financing several rural development programmes in the arid and semi-arid land (ASAL) in Kenya where (semi) nomadic pastoralism and wildlife conservation are the main resource uses. Several approaches to land use planning have been developed, with different entry points. Resource use is considered the main source of income for the majority of the inhabitants in these areas, while resource degradation is considered the major threat, with often irreversible consequences for these fragile areas.

Laikipia District

At the start of the programme in Laikipia, the district was zoned. Specific land use systems of the sub-divided ranches in the district were then selected for closer scrutiny. A scenario analysis (Huber and Opondo 1995), with predictions for the future, led to preparation of strategies for these different land use systems. In general, the programme in Laikipia has focused on a top-down technological analysis of resources use problems and tries to provide technological solutions to these problems.

Using on-farm testing, the Applied Research Unit, together with extension staff and land users, develops technological innovations. Some attention is paid to local institutions, e.g. through working with women's groups. The program also links up with higher-level institutions (district and national levels) to bring to the fore major land use issues in the district. Methodology development in land use planning, particularly at local level, is very limited.

Keiyo-Marakwet District

Here, much attention has been paid to methodology development, particularly at local level. After several years of intensive guidance, this has now resulted in an operational system with a sound methodology (the *transect area approach*, TAA) and, at the local level, an institutional framework (transect area committees) and capacity-building. The emphasis on technological solutions, especially new external options, has been limited so far.

The TAA addresses inter-related land use issues of the highlands, the escarpment and the rift valley in a physical and organisational framework of a transect. The planning steps are:

- Setting up a basic organisation to identify partners;
- Elaborating the TAA approach;
- Selecting a transect area (TA);
- Training divisional staff, local leaders and committees;
- Collecting data through participatory rural appraisals (PRAs)
- Establishing the organisational framework with the TAs;
- Planning and design (area plans);
- Endorsement of workplans;
- Implementation;
- Monitoring and evaluation;

The output of the planning process is transect area action plans which are implemented through the transect area committees.

Kajiado District

Land use planning has been introduced at two levels, district and local, each with distinctive goals and activities:

- *District level planning*: synthesising information and policies, and prioritising areas and activities on the basis of this information;

- *Pilot areas* (selected for local-level land use planning): participatory planning of land use improvement and enhancing planning capacities of the actual land users;

Initially, much emphasis was placed on initiating participatory land use planning processes in three selected pilot areas in order to achieve:

- information on the needs of the local population, and the potentials and constraints of the area they live in, fed into the district-level database (and capable of being extrapolated to similar areas);

- the establishment of a local-level institution (committee or informal group) to respond to the challenges of a changing resource base;

- the development of activities leading to improved and sustainable land use;

- management agreements, whenever required, between competing resource users.

A district-level planning framework is being developed by dividing the district into resource management areas. These are a relatively homogenous from a natural resource management perspective and are described in terms of natural resources and their use, and constraints, opportunities and main strategies. This should provide the external planning framework, considering broader and long-term issues and impacts over a larger area for the wider community.

The two planning levels (district and local) aim to complement each other in analysis and action. Through local-level planning, user needs are signalled and solutions are sought at that level; and understanding of the resource management areas (district level) leads to a broader understanding of the issues and of the impact on the wider community in the longer term.

Local-level planning has focused much on methodology development, user needs and capacity-building. New technological options were supposed to be introduced, but has not yet happened to any great extent.

<u>Balancing the needs of individual resource users and the wider community</u>

In analysing resource use issues and seeking solutions, different spatial and temporal dimensions need to be considered. Experience in these three districts indicates that individual user needs cannot be considered in isolation, especially in areas which are fragile or the types of resource use have impacts on wider areas, e.g., where livestock and wildlife move over large distances. With input from local-level experience, a higher-level authority (e.g. district authorities) will need to develop 'ground rules' or a framework focusing on major issues and how these should be dealt with. This will require consideration of two important aspects:

- analysis at different levels (individual user/user group and larger area, leading to recommendations (in Kajiado, group of irrigation farmers = user group; and the whole group ranch = larger area);

- decision-making (who makes decisions, and what type of forum is needed for decision-making).

APPENDIX 3

Rural Planning in Namibia: State-led Initiatives and Some Rural Realities

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For sub-Saharan Africa, and most notably in the wildlife sector, Namibia is widely viewed as being at the forefront of innovation in rural planning initiatives intended to foster local empowerment and participation through decentralisation. However, constraints to the success of new initiatives are apparent at all levels of the planning process, deriving substantially from discontinuities between national frameworks and local 'realities' (related, to some extent, to differences in urban and rural planning experience and requirements). Further problems arise from complexity and diversity at local levels, which make full participation in rural planning extremely difficult. This overview critically highlights some of these issues in Namibia and emphasises their broader relevance, particularly to the southern African region. It aims to draw out conflicts of interest, disparities between state-led agendas and local contexts, and issues warranting detailed exploration prior to the implementing of new planning proposals.

Three major aspects of the national policy context affect rural planning in Namibia:

- Developing an enabling administrative framework for planning in the new administrative regions;
- National land policy and rural land management initiatives;
- Implications of local diversity and complexity.

1. Developing an enabling administrative framework for planning in the new administrative regions

Following independence in 1990, and as a first step towards dismantling an apartheid-legacy of managing and allocating land along racial lines, the new government set about reforming the administrative system and delineating new administrative boundaries. As in South Africa, new regions and districts have been established and the old Regional Authorities of the 'homelands' completely transformed.

A perhaps inevitable outcome of this process is a recognised administrative weakness at regional and district levels accompanying 'strong centralization of all government functions' (Seely, 1998: 271 following Tvedten and Mupotola, 1996). In part, this is linked to the new planning challenges facing post-independence administrations. These relate particularly to integrating, in regional policy, the commercial farming interests of settler farmers holding freehold title to land, with the aspirations of people living in communal areas. When there has been a recent and dramatic change of government, it is also inevitable that institutional capability at different administrative levels will lag somewhat behind centralised policy changes, and that a huge investment in training will be required to equip new public service personnel with the skills necessary for management and planning at all levels - a situation observed for national and provincial contexts in South Africa (G.Sullivan, *1999*: pers. comm.).

These are real constraints to the meaningful devolution of appropriate authority to regional and district levels. They are perhaps exacerbated by some apathy at the centre towards

relinquishing power to the periphery. So, a pertinent question is: what are the remaining, or emerging, institutions currently relevant to land-use planning in the regions?

For example, the official position of 'traditional' leaders is increasingly compromised by the concentration of decision-making power in central government, including the choice of appointees to regional government. Nevertheless, the impotence of the new regional administrations concerning issues of relevance to rural land-users means that, in many cases, tribal leaders, as well as extension officers of the former authorities, continue to fulfil important roles in relation to rural planning. As Hangula (1995: 15) states, while 'all communal land is *de jure* vested in the State President … its *de facto* control and allocation rests, by delegation, with the competent traditional institutions of the respective communal areas'.

Similarly, regional and local administrative weaknesses have led to the growing involvement of NGOs in sectoral planning. In some cases, NGOs work in what seems like equal partnership with State institutions in the formulation of new policy recommendations. For example, two NGOs - Integrated Rural Development and Nature Conservation (IRDNC) and World Wildlife Fund (WWF-US) (through the Living in a Finite Environment programme (LIFE) - have worked closely with the Ministry of Environment and Tourism (MET) to develop a conservation policy appropriate for communal areas (MET, 1995: 6). MET policy on conservancies in communal areas includes scope to draw up Memoranda of Understanding with conservation-oriented NGOs for individual projects or within regions (MET, 1995: 6), emphasising that some caution is required in appraising such institutional relationships: NGOs are not publicly accountable and, although providers of necessary expertise, are oriented towards pursuing institutional and donor, as well as public, agendas.

The relationships between public administration (at all levels), traditional leadership structures and NGOs are complicated and dynamic. The roles of these institutions in relation to rural land-use initiatives are not sufficiently transparent, and there is a need for training and capacity-building within these institutions. Both are crucial constraints to the success of rural planning (cf. Jones, 1996; Tarr, 1998).

2. National land policy and rural land management initiatives

As in South Africa and Zimbabwe, Namibia has inherited a situation of extreme inequity of land distribution, favouring a minority of white settler farmers who occupy large freehold farms whilst the majority of the population inhabit less than half of the country in communally-managed 'homelands' (President of Namibia, 1991: 4). The lack of land reform legislation to address this situation and the policy vacuum concerning the allocation and management of existing (or expanded) communal lands seriously hampers local and regional rural planning initiatives. As a consequence, 'local authorities have suspended action pending directions from the centre; the centre, unaccustomed to dealing with the perplexing problems of small farmer and communal area development has been waiting for inspiration and direction from elsewhere' (Adams and Devitt , 1992: 17).

Despite the absence of an overarching land policy framework, new policy initiatives have been initiated concerning rural land-use and planning in communal areas. It remains to be seen how these might be affected by any forthcoming land tenure legislation and policy.

For example, concern over the future of wildlife on communal land stimulated the development of policy enabling rural communities to establish 'conservancies' in order to benefit directly from the consumptive and non-consumptive use of wildlife (cf. Jones, 1995). To date, four conservancies have been gazetted under the 1996 conservancy legislation

(Jones, 1998: 4), and five more are expected to be proclaimed in the near future (Baker, 1999, pers. comm.).

Amongst the main criteria for gazetting a conservancy are that its physical boundaries and community membership must be defined (Jones, 1998: 3-4). The lack of a legal procedural basis for establishing tenure rights to land in communal areas directly hampers the first criterion and implicitly affects the second one. There are also complications arising from local diversity and unequal power relations (discussed below). It is anticipated and hoped that 'the conservancy approach, even if embedded only in wildlife legislation, could help shape appropriate tenure reform' (Jones, 1998: 5). At the same time, however, and without effective means of ensuring the full representation of potentially marginalised people (e.g. the poor, women), the conservancy 'opportunity' could also be used by the relatively powerful as a means of establishing possibly exclusionary rights to land in the absence of any other legitimate way of doing so.

The situation is complicated by the fact that the Agricultural (Commercial) Land Reform Act (1995) and the Draft Communal Lands Bill (1995) indicate that, instead of expanding land available for communal use and management, the emphasis will be on subdividing and demarcating land into individual small-holdings[14]. This policy trajectory - favouring individualism - could undermine conservation and development initiatives based on instituting and strengthening communal forms of management of natural and fiscal resources. It is also worth noting that current debate on managing drylands does not support the notion of private tenure in communal areas (Box A3.1).

Box A3.1: Academic views on private tenure in dryland areas

There is much current debate amongst both social and natural scientists on managing dryland areas. Argument tends to oppose the institution of private tenure in drylands, where productivity is driven by unpredictable rainfall events, and where social complexes incorporating pastoralism are oriented towards managing this unpredictability through mobility and membership in dynamic social networks*.

Recent research for arid north-west Namibia supports this view by demonstrating that movement, organised via negotiation within expansive social networks based on kinship, has remained a fundamental component of herd management for both commercial settler farmers in the 1950s and 1960s, and communal farmers who were later resettled on the same demarcated farmland (Sullivan, 1996b; archival reports in Kambatuku, 1996).

*: Key references include Sandford 1983; Coughenour *et al.* 1985; Homewood and Rodgers 1987; Ellis and Swift 1988; Behnke *et al.* 1993; and Thomas and Middleton 1994. For north-west Namibian see Fuller 1993; Rohde 1994; and Sullivan 1996a and b.

The draft land legislation also indicates that potential small-holders will have to satisfy certain 'minimum qualifications' before they can be allocated land (Agricultural (Commercial) Land Reform Act, 1995: 42-43; Draft Communal Lands Bill, 1995: 30). Given the continuing lack

[14] The 1997 draft National Land Policy (NLP) was unavailable for review. Robertson (1998: 21-22, 25, 48), indicates that the NLP remains committed to allowing the privatisation of communal land, or at least of areas already fenced off by wealthy herders, but also 'gives communities a leasehold tenure option'.

of an effective social welfare system (despite the government's stated socialist intentions) and slow growth in urban employment, the inevitable implications of this are an increase in the numbers of landless among those unable to satisfy the qualifying requirements. A similar situation has been observed in Zimbabwe (Potts and Mutambirwa, 1990: 679) and has been implied as a possible outcome of settlement and land acquisition grants in South Africa (Carnegie *et al.*, 1998: 5). This potential to alienate the poorest households from their land and means of livelihood suggests a less than enabling policy environment for implementing ideals of full community participation and devolution of power in rural development and land-use planning.

Also relevant to the national policy context for rural planning issues is a recognised need for greater coordination between different sectors. For example, in both the Khorixas and Gam areas, water provision (through drilling boreholes) has been treated essentially as a water engineering problem and this approach is identified as causing social, economic and ecological problems (Tarr, 1998: 17). There have been some national efforts to strengthen sectoral coordination, e.g. the Environmental Management Act of 1998 includes the establishment of a Sustainable Development Commission and a requirement that environmental (including socio-economic) assessments be made prior to the implementation of any future planning and development proposals.

3. Implications of local diversity and complexity

As indicated above, rural planning in relation to environment and development in Namibia is informed by the ideal of devolving resource ownership and decision-making power to local 'communities'. This approach is advocated not only as a more socially equitable and participatory means of 'sustainable development', but also as a way of transferring responsibility (and costs) to resource-users. Although the latter is often masked by the participatory rhetoric used to frame 'community-based' projects, very real concerns exist at the national level to increase user-accountability and reduce dependency on resources previously provided and maintained solely by the state (cf. Tarr, 1998: 4). The opacity of the term 'community' used in framing rural land-use planning initiatives carries its own problems, not least because it obscures both the implications of local socio-economic and cultural diversity and the need for transparency in facilitating full community representation. These issues need to be addressed explicitly if community-based initiatives are to succeed in their stated progressive aims.

Two sectoral case studies for Khorixas District, north-west Namibia, illustrate this point. The aim is to highlight issues of community management and representation, rather than the management or engineering problems which may be associated with the particular resources, i.e. water and wildlife in these cases.

a) Water-point committees: problems of local diversity for instituting 'community-based' management of a focal resource

In an arid environment such as western Namibia, water is the primary limiting factor for both human settlement and land-use opportunities. Planning in the existing communal areas is thus inextricably tied up with issues of how this valuable focal resource is managed and who shoulders responsibility for the costs of maintaining the infrastructure (i.e. boreholes and pumps) necessary to ensure its continued availability.

The provision of water is currently the official responsibility of the Ministry of Agriculture, Water and Rural Development (MAWRD), but the practical aspects are primarily implemented by the Department of Water Affairs (Africare, 1993: 7). The former South African administration in Namibia imposed a condition of State-controlled and subsidised water provision for the creation of communally-managed 'homelands' and for the associated

resettlement of indigenous farmers, often to farms formerly demarcated for occupation by commercial settler farmers. This long-term situation of State-ownership over water and the infrastructure necessary for its supply has fostered a strong tendency to perceive current communal area farmers as rather passive 'dependants' of the government in terms of water supply. However, whilst they technically lack ownership rights over basic water-related infrastructure, farmers are actively involved with its day-to-day management and maintenance, and invest considerable amounts of time, energy and resources on maintaining infrastructure during their occupancy of a farm. Moreover, they are engaged in continual processes of negotiation regarding who has rights of use to these key resources.

With annual operating costs of over US $1 million for maintaining water provision in the north-western Kunene and Erongo Regions alone (Africare, 1993: 8), the government is understandably anxious to find ways of dispersing some or all of these costs away from central coffers[15]. In an attempt to make the transition between institutionalised dependence on government for water provision and user-accountability, the Ministry of Agriculture, Water and Rural Development requested the NGO Africare to support and implement a programme 'to provide technical assistance and training to establish a maintenance system and capacity' for water provision in drought-prone communal areas (Africare, 1993: 7). The primary aim of this programme has been to empower communal farmers and rural people by encouraging their participation in the rehabilitation and maintenance of boreholes, through the establishment and training of water-point management committees at 'village' level (cf. Fry, 1995: 170-171); i.e. to promote 'community-based' management of water resources. The establishment of these committees involves the identification of one or two individuals as 'water caretakers' responsible for simple repairs and routine maintenance checks, and the management of a fund comprising cash or in-kind payments by consumers to cover the costs of water-point maintenance (Africare, 1993: 10).

To illustrate some of the problems faced by this and other initiatives designed to encourage community participation and empowerment, detailed material is presented for Rietkuil, a farm settlement in Khorixas District, southern Kunene, where the establishment of a 'water-point committee' was being piloted in 1995 and 1996 (Box A3.2). In particular, the example highlights the 'real world' variability and complexity in background and socio-economic factors characterising the households which compromise so-called farm 'communities' in this area. Given a range of contemporary ethnographic and survey material for the former Damaraland 'homeland' (cf. Fuller, 1993; Næraa *et al.*, 1993; Rohde, 1993, 1997; Sullivan, 1996b, 1998), this material can be considered broadly representative of the diversity of inhabitants occupying farmland in southern Kunene.

This case study illustrates the reality of factors such as the largely drought-driven movement of livestock and people between farms, varying periods of farm occupancy by different households and individuals, varying degrees of absentee herding, and the retention of claims to farms by individuals over sometimes prolonged periods of absence from the farm. All of these are expressions of the fluidity and flexibility which overlays the apparently static geography of the surveyed commercial farms, and through which people in the former

[15] This is in fact less than US $10/person/year.

Box A3.2: Case material: Fluidity and heterogeneity at Rietkuil Farm, Khorixas District, southern Kunene Region

In October 1995, Justine !Haraës from Rietkuil Farm attended an Africare and Department of Water Affairs workshop for the training of 'water-point committee' treasurers, to be responsible for collecting and managing funds paid to the committee for the purposes of maintaining infrastructure related to water resources. There are two boreholes at Rietkuil, from which water is drawn by wind-pumps.

Rietkuil Farm is known to its Damara inhabitants by the name !Haoberos: interestingly enough, this is derived from the word !Hao which was explained as describing the pleasure and significance of social communication around the evening cooking fire; of participating in, and creating a 'sense of community'. After the 1970s redistribution of commercial farmland to communal farmers, the main Rietkuil Farm was allocated to three sisters of the !Nawases family from Otjikondo settlement in Outjo District, whose movement to Rietkuil in 1972 was assisted by government-funded transport. They were the first communal farmer inhabitants of the old commercial farmhouse at Rietkuil. Today, a fourth sister, Justine !Haraës (*née* !Nawases), runs the household at the old farmhouse, and she and a daughter of one of the original !Nawases sisters are now the only remaining members of this first family of communal farmers at Rietkuil. Justine is also originally from Otjikondo where she was a domestic worker for a settler household. Together with her husband, a builder, she moved to Fransfontein and then to Khorixas, where she again entered employment as a domestic worker. During this time their livestock were in the care of her mother at Smalruggens Farm, north of the Fransfontein Reserve. Following her husband's death in 1981, she applied to the Regional Authorities in the administrative centre of Khorixas for permission to move her livestock from Smalruggens Farm to Rietkuil where her sisters were farming. In recent years, as her elder sisters died and family children departed for school, she has encouraged the movement to Rietkuil of additional farmers.

Occupiers by household, and their livestock in 1995-1996

Justine lives with varying numbers and identities of children, sibling's children and grand-children. Her herd consists of her own animals plus some belonging to her children. In 1995 she had 77 goats, and roughly 50 cattle. She is also responsible for her sister's grandson's livestock, which then amounted to 8 cattle, 24 goats, 2 horses and 1 donkey. Following her move to Rietkuil in 1982, there have been times when, in response to drought-induced lack of grazing, Justine wished to move her livestock to other farms. She has been unable to do so, however, because of a lack of labour. Consequently she reportedly experienced significant livestock losses; her livestock 'Owner's Record Card' for 1985-1990 indicates that her goat herd fell dramatically from 24 with 11 young to only 4 animals in total.

Michael, a primary school teacher in Khorixas, and his wife Susana, have been farming at Rietkuil for four years. This is their first independent farming endeavour, although Michael's family have a history of farming. He heard that Justine was looking for another farmer to move to Rietkuil through Justine's brother-in-law who is the headmaster at a second primary school in Khorixas. Michael visits the farm most weekends with his wife and eight children. In 1995, Michael and Susana had 6 cattle, 67 mature and 68 juvenile goats, 7 female sheep and 9 lambs, 2 donkeys and 12 chickens with 2 cockerels.

Living separately from Michael are two Damara labourers who look after his livestock while he is not there. They are paid informally a monthly wage of N$100 and N$80[16], plus food rations.

Philippina, Justine's niece, has had a separate house at Rietkuil since her mother died, where she lives with her partner, Emmanuel. They have no livestock and appear to be largely dependent on food given by Justine. Neither Emmanuel or Philippina receive a state pension, although she has repeatedly applied for one. They own 3 chickens.

One other house at Rietkuil is inhabited on a temporary basis only. This belongs to Justine's half sister Alberta, who works at a primary school hostel in Khorixas. She comes to Rietkuil in the holidays with

[16] In 1995-1996, £1 = approx. N$7; deflation of the South African rand has caused the Namibian dollar to fall to up to N$12:£1 since 1997.

her five children. In 1990 Alberta moved her 6 cattle to graze near the Huab River. Due to the drought, however, only 1 of these survived and in 1995-1996 was being looked after by Justine at Rietkuil.

Finally, in 1992, on hearing that Justine was farming alone at Rietkuil, her brother-in-law moved there together with his livestock. His residence at Rietkuil, however, ceased with his death in 1993, following which his livestock were divided among family members in the Fransfontein and Khorixas areas.

The following features of this case study material bear crucial significance for strengthening 'community' management of focal resources such as water:

The heterogeneity embodied by farm occupants on many different levels cannot be overemphasised. Superficially, farm settlements give the appearance of being coherent groupings of households, an impression which is emphasised for the demarcated farms of southern Damaraland by the relatively enduring patterns of settlement on these farms. This, however, is largely a function of the importance of water in focusing the location of households, and not necessarily because of strong underlying relationships binding these households. There are many instances of heterogeneity in the case study of Rietkuil Farm.

For example: While many of the farm's current occupiers are related by kin in some way, this is certainly not the basis for the settlement of all households on this farm. As for herding populations throughout sub-Saharan Africa, family ties are extremely important in facilitating the movement of livestock between farms, and in former Damaraland often affect decisions related to choosing a farm for more permanent settlement. It is equally true, however, that people who have no prior knowledge of each other are often settled together on a farm. Reciprocal relationships may or may not develop between these individuals over time.

Wide disparities in wealth, both in terms of livestock and access to alternative sources of income, *also* exist between farm occupiers. This raises a plethora of issues fundamental to instituting ideals of 'community-based' management of focal resources, related in particular to the real danger of promoting systems in which the less wealthy shoulder the costs of the more wealthy, but often absentee, farmers. For example, should contributions towards the maintenance of farm water-supply be translated in some way to the income or wealth of farmers and their households, perhaps based on numbers of livestock herded at the farm? Given that many farmers have significant alternative sources of income, should this be taken into consideration when deciding their share of the costs? With so many of the more wealthy farmers spending varying and sometimes prolonged periods of time away from the farm, how can their contribution to the costs of watering their herd be elicited? In fact, follow-up visits to Rietkuil Farm demonstrated that these are precisely the problems being experienced in the establishment of a water-point committee on this farm (and also observed in Okongo, Ohangwena Region, north-central Namibia in Dewdney, 1996: 103); despite informing the other farmers that they would have to set-up *a* fund to carry the costs of maintaining infrastructure related to water, the household of Justine the 'treasurer', remains the only one to have contributed any money. The household with the largest herds utilising grazing resources on the farm had yet to contribute to the fund *after* almost a year had passed since the water-point committee was first piloted at Rietkuil. Inhabitants of the farm remain convinced that the government will continue to take responsibility for water provision.

Damaraland manage the land and its resources to maintain and increase the movable property (i.e. livestock) which comprise household wealth. In many cases, and as elsewhere in southern Africa (cf. Potts and Mutambirwa, 1990), rural-urban household linkages are also crucial for livelihoods and suggest a need for the integration of urban and rural planning. The overall implication is that the success of 'community-based' approaches to the management of focal resources will depend on their ability to respond creatively and flexibly to dynamic and diverse social networks, requiring explicit departure from conceptions of communities as easily defined entities in time and space.

b) Community-based natural resources management (CBNRM): 'community' = full representation?

The post-independence process of establishing community-run conservancies to foster CBNRM, in most cases of animal wildlife, began with a national series of 'socio-ecological survey' meetings between officials of the Ministry of Environment and Tourism (MET), NGO staff and communal area farmers. In 1994, meetings were conducted at settlements in the Sesfontein District, southern Kunene Region.

Two short caveats in relation to the survey process in this area are of interest here. First, despite the rhetoric of 'community' and 'participation' framing the survey process, all the local women who had attended the final summary meeting of the survey were constrained to sit outside the shelter where the meeting was held. When asked why this was the case, it was explained by the convenors of the meeting that they were trying to observe 'traditional' sensibilities. Notwithstanding the subversion and distortion of 'traditional' institutions that occurred under the German and South African administrations this century (cf. Gordon, 1991; Krieke, 1991; Fuller, 1993), this stance is particularly ironic given that the whole aim of the survey was to begin a process of new (i.e. non-traditional?) local institution-building.

Second, a subsequent survey based on open-ended interviews in some 20% of 'households' in a focal settlement of the MET survey revealed that, despite the emphasis on 'community participation', none of the adults interviewed had actually attended the MET meeting (Sullivan, 1995). The majority of interviewees, in fact, indicated that they had no idea the meeting was being held, and no-one interviewed considered that they had a 'right' to 'participate' in the discussions. In this case, the MET and conservation NGOs conducting the socio-ecological survey had relied on the then 'Sesfontein Development Committee' to disseminate information about the forthcoming meeting to the wider community. Clearly this process had been less than satisfactory.

Similar problems with the representativeness of community institutions have also been identified with regard to the Nyae Nyae Farmers' Cooperative (NNFC) in Eastern Tsumkwe District (formerly Bushmanland) and the wider Ju/'hoan San community. Jones (1996: 25) concludes that, after some five years of pursuing activities framed specifically as CBNRM in this area, 'there has not yet emerged a community institution which has been able to fully integrate the interests and activities of other community institutions' existing from local to district levels; and that this was primarily because, 'while the government and NGOs were legitimising the NNFC by working through it and strengthening it, its legitimacy within the community was far less strong than was realised by many outsiders'.

Meanwhile, Ju/'hoansi land rights are not growing any stronger in relation to large influxes of repatriated Herero-speaking cattle herders (Botelle and Rohde, 1995; Tarr, 1998). This, together with the fact that Namibians can now move to wherever they choose on communal land, provided that they 'take account of the rights and customs of the local communities living there' (Republic of Namibia, 1991: 28-29), seems set to raise further complications regarding the establishment of criteria for community 'membership'.

4. Conclusions

As already stated, this review has taken a critical look at the constraints on rural land-use planning in Namibia. The intention, however, is not to suggest that all is doom and gloom. In many instances, policy changes have been extremely progressive and a large degree of energy and commitment is devoted towards furthering self-determination, in the broadest sense, of Namibia's diverse rural population (see, for example, Box A3.3). Instead, the aim has been to

draw attention to overriding issues which might derail current initiatives if not addressed explicitly, and which might have relevance for rural planning contexts beyond Namibia. In the main, the constraints identified point to the need for institutional development and training at all administrative levels, for more detailed research prior to the definition of problems in order to counter inappropriate 'solutioneering', and for greater transparency in the monitoring and evaluation of planning and policy impacts.

Box A3.3: Institutionalising participation in Namibia: the case of SARDEP

In late 1991, the Ministry of Agriculture, Water and Rural Development (MAWRD), with support from GTZ, launched the 10-year Sustainable Animal and Range Development Programme (SARDEP) in the Communal Areas. The *aim* is to promote animal production and rangeland utilisation that is sustainably adjusted to the natural resource base in these areas. All activities are based on a participatory approach and, in the orientation phase (lasting to late 1995), communal farmers have been assisted to plan, implement and monitor test technical measures focusing on improving livestock production and rangeland conditions. Activities have included:

- Technical and organisational training as well as exposure to other areas within and outside the country to raise awareness about the current situation of the natural resources and to promote the self-help potential of the farmers;
- Encouraging community-based organisations (CBOs) co-operating with SARDEP to raise their own funds to reduce their dependence on governmental and external support;
- Assistance to CBOs to play a major role in coordinating test measures at local level and promoting promising experiences to neighbouring communities;
- Introduction of Participatory Rural Appraisal and Planning (PRAP) to assist farmers in planning concrete test measures and to encourage self-help;
- Technical advice and financial assistance to farming communities to implement such technical measures (to qualify for grants, communities must make a cash contribution towards the envisaged costs);
- Assistance in finding additional support from governmental, non-governmental and private institutions.

A workshop with farmers in 1994 and service delivery organisations (e.g. veterinarians, Departments of Water Affairs and Marketing) showed that farmers have a clear vision of the future but have low self-help capacity and don't know where to get support, whilst few of the service organisations can meet farmers' demands on-the-ground. This led to SARDEP's adopting a strategy to:

- Support CBOs;

- Identify problems and create a policy framework conducive to sustainable development;

    - people from communal areas and policy-makers have been brought together in workshop to discuss issues; and the aim is to 'take policy-makers to the ground';
    - documents and studies have been provided to policy-makers to influence their thinking;
    - SARDEP has played a constructive role in developing the National Agricultural Policy and the Drought Strategy and Policy, and has provided information to the Ministry of Lands during the preparation of the Communal Lands Bill.

- Support organisations in re-orienting services towards the needs of communal farmers.

Sources: Laue and Kruger (1995), Kroll and Kruger (1998), Bertis Kruger, pers.comm.

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APPENDIX 4

The HIMA Programme in Tanzania

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Introduction

HIMA (Hifadhi Mazingira, a Swahili phrase meaning 'conserve the environment') is a natural resource programme, funded by DANIDA, which operates in Iringa Region in Tanzania's southern highlands (Figure A4.1). To date there have been three phases: Phase 1 (October 1989-1995), Phase 2 (July 1995 - 1997) and Phase 3 (January 1998 - 2002). HIMA began in Iringa Rural District in October 1989. In 1995, it was extended to cover Njombe and Makete Districts. In 1998, Mufindi and Rudewa Districts were added.

Figure A4.1: Iringa Region location map

At the outset, it was established as a catchment conservation programme (mainly tree-planting) in response to catchment land degradation with the idea of supporting a DANIDA-funded project providing water supply schemes. Iringa Rural was selected as a pilot district. Participatory approaches were followed and these, together with recommendations from reviews, led to HIMA changing emphasis to focus on meeting village needs. DANIDA has recently re-oriented its policy of assistance to Tanzania and is providing support through the Agriculture Sector Support Programme (ASSP). In Phase 3, HIMA is financed under Danish support to ASSP and is now focusing more on agricultural development.

Matovu *et al.* (1997) provide a summary of the scope of HIMA:

> 'HIMA is trying to improve the ecological balance, through tree planting, and to increase the efficiency of natural forest and district, village and individual or private plantation management. This is done in close collaboration with central government, local government and local communities through research, extension and training. HIMA is particularly keen to ensure a sustainable and equitable use of resources by preventing and controlling the degradation of land, water and vegetation. It furthermore attempts to protect high biodiversity forests (e.g. Udzungwa Eastern Arc forests) and to improve the productivity of degraded, formerly forested areas or farmland which previously had a high tree cover through natural regeneration. Awareness raising and participation are central elements of the strategy.
>
> HIMA is supporting village institutions in allocating land to its most productive use, and is supporting the improvement of farming systems within a given sub-catchment (watershed).
>
> Since about 70% of farmers in villages are women, the program pays special attention to the needs of poor women and female-headed households, especially those who are involved in program activities'.

The approach of HIMA in Iringa Rural District, described below, has broadly been followed in the other districts covered by the programme.

HIMA-Iringa

HIMA-Iringa operates in three Divisions in Iringa Rural District: Kilolo, Mazombe and Isimani (starting in the latter only in Phase 3 and building on work by the Irish NGO, CONCERN which had focused only on tree-planting). The programme is currently implemented in 55 villages out of a total of about 180 villages in the district. An administrative sub-centre is maintained in each of the operational divisions. That in Kilolo Division has training facilities used by both the extension staff and villagers with accommodation for about 20 people, and runs a workshop to maintain project's motorcycles. The centres have radio links with the main office in Iringa and other sub-centres, powered by solar panels.

A catchment approach has been followed, starting with selecting villages in the upper catchments of rivers and then adding further villages. It is intended to cover all 94 villages in the three divisions in Phase 3, covering some 7000 sq. km and accounting for over half of Iringa Rural District.

The approach in each phase has involved:

- Developing a logical framework;
- Preparing guidelines for holistic studies;
- Training workshops for HIMA staff;

- Initial village visits and development of a work programme;
- Holistic studies in villages (first year only);
- Annual village planning;
- Submission of plans to HIMA and District Council (via Ward and Divisional Committees);
- Implementation of activities.

Logical framework

The preparation of logframes (for HIMA as a whole) was facilitated by expatriates in Phase 1, by nationals in Phase 2, and internally by project staff for Phase 3. In each case, those taking part in logframe exercises included: ward and division representatives, village-based extension staff, selected representatives of villages (progressive farmers, knowledgeable people) - HIMA provided criteria for selecting such people, the District Executive Director (DED), and district heads of departments.

Guidelines for holistic studies

These were prepared by heads of units responsible for HIMA operations in the district (forestry, agriculture and community development) supported by the expatriate or national adviser to each unit. In Phase 2 and to date in Phase 3, there were separate guidelines for HIMA in each district. But with HIMA coming under ASSP, a single overall set of guidelines for HIMA in all districts has been prepared by representatives from the districts and was to be tested from March 1999.

Training workshop

The next step in each phase has been a 2-3 day training workshop for HIMA staff in the divisions (especially extension officers) to elaborate the procedures and information to be collected

Village visits and developing a work programme

Suitable villages are then selected and visited to explain the forthcoming activities and to determine dates for holistic studies. A work programme is prepared setting out the villages selected and a timetable for studies and distributed (in Swahili) to the villages concerned and to Ward and Divisional Secretaries.

Holistic studies

A HIMA team visits each selected village to undertake holistic studies. In Phase 1, the teams were large and numbered as many as 22 people comprising staff from:

- Extension unit	- Land use planner - Crop Officer - Livestock Officer
- Community Development Unit	- Community Development Officer - Women and Gender Officer
- Forestry Unit	- Forestry Officer (District) - Catchment Forestry Officer (representing Central - Government in the District) - Beekeeping Officer

The teams spent about two weeks in each village and were able to capture a broad balance of information. Each team split into sub-groups working in parallel to concentrate on particular themes (e.g. socio-economic data, land use planning, forestry demarcation, etc.). They used a mixed approach involving PRA, questionnaires, interviews, surveys, etc. and worked with different groups of villagers (e.g. youth, women, farmers, etc.) to compare ideas. This interactive process enabled problems, priorities and possible solutions to be identified in partnership between HIMA and the village. This was followed by data analysis and report writing - taking as long as 3 months. As a result, this process proved very expensive and time-consuming.

In Phase 2, team size was reduced to 14 and the time spent in each village to about one week. In Phase 3, teams were reduced further to 5 and then 3 (one person per HIMA unit - extension, community development, forestry). This has made the studies much cheaper but the teams carry less experience and can easily miss information or overlook issues.

The output of the holistic studies (a village profile report) sets out possible areas that might be supported in the village by HIMA. The information is also used by HIMA to monitor progress and achievement of goals.

Annual village plans

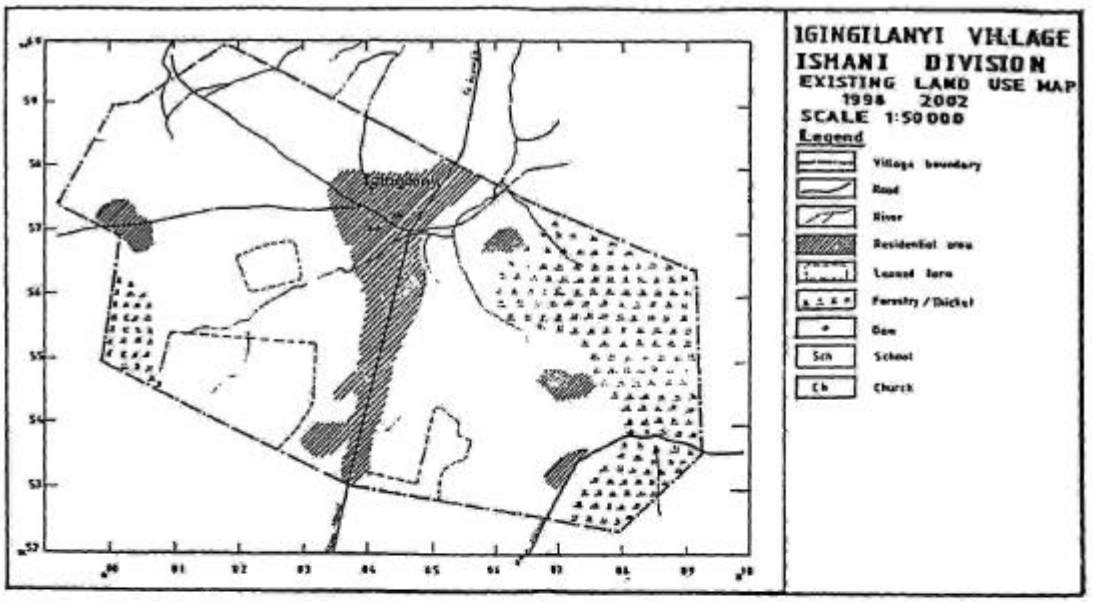
In the early years of the project, the planning methodology was developed through experience by HIMA's Community Development Officer assisted by an adviser. In later years, after villages gained experience, they prepared their plans alone.

Each annual village plan is prepared by a village 'team' comprising the village government (20-25 members), progressive farmers selected by the village government, and the village extension workers. In the first year, the plan is prepared through the holistic study process. In subsequent years, there is no such study but rather an evaluation and update process taking 4-5 days. This also involves preparing sub-plans for sub-villages by sub-groups (chaired by sub-village chairmen). These sub-plans are compiled by each of the village standing committees which constitute the village government (usually: planning and finance, social welfare and self-reliance, and defence and security, but sometimes additional ones - each dealing with the issues under its responsibility). This produces the annual village plan and a budget is prepared. The plan is then submitted for approval to the Village Assembly which all members of the village can attend. Figures A4.2 and A4.3 illustrate the village planning process showing existing and proposed land use plans for Igingilanyi Village. The village workplan listed 18 activities from brick-making and a day-care centre to bridge -building and training in soil fertility, soil and water conservation, improvement and establishment and care of fruit tree nurseries; each with timing, place, target group and supervisor identified.

Submission of annual plans

A copy of each village plan is provided to HIMA direct and is formally submitted to the ward development committee to be passed upwards through the divisional committee to the district council. The plans are consolidated and may be modified at each stage. Independent of this formal process, HIMA identifies the elements of individual village plans that it is able to support (i.e. those which falls within its remit - but excludes roads, bridges, schools, hospitals and other similar infrastructure). This is undertaken through a district planning meeting attended by district heads of department, divisional secretaries, representatives of divisional extension staff and HIMA staff. Following this meeting,

Figure A4.2: Igingilanyi Village - existing land use map



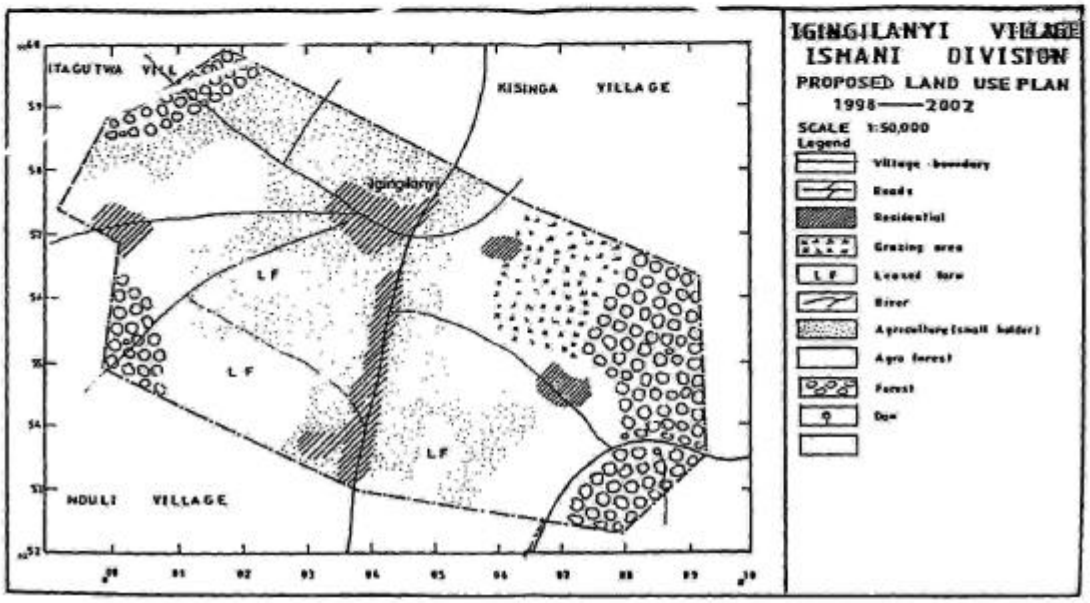


Figure A4.3: Igingilanyi Village - proposed land use map

feedback meetings are held with each village assembly to inform them of the activities that HIMA is able to support and to consider other possible options.

A final programme is then considered and approved for implementation by the District Mazingira (Environment) Management Team. Its members include: District Commissioner (Chair), District Executive Director (Vice Chair), HIMA project manager (Secretary), MPs covering relevant divisions (2), divisional secretaries, ward councillors, district heads of departments and HIMA staff (heads of unit).

Implementation

HIMA has offices in those divisions where it operates and financial support and fuel (for transport) is provided to the divisional secretary for overseeing HIMA activities. Training materials to facilitate implementation of various activities have been prepared and translated into several local languages.

Village planning - experience in Kisinga Village

Kisinga Village was one of the first villages to be included in the HIMA programme and activities started during the first phase. The programme was introduced in the village following the following stages:

District, Divisional and Ward officials first visited the village to introduce the program through public meetings. Baseline information on the village was collected by HIMA staff and a general land use plan prepared by the HIMA team. This involved six people for one week together with villagers who gave their views on the activities that needed to be undertaken in the village area. Community development officers conducted PRA and interviews. One month of basic training was given to selected villagers (20 of them including 7 women) and was conducted at the Ruaha Rural Training Centre in Iringa Town. The training covered:

- Preparation of village plans;
- Soils and water conservation methods (cut-off drains, planting of vetiver grass along contours, establishment and management of tree nurseries, crop and land husbandry, tree planting and gender issues);
- Production of village plans by the village;
- Presentation of the village plans at the village assembly;
- Implementation of plans. The villagers trained were distributed to sub villages to supervise the implementation of the plans with the extension staff.

In the initial stages, some villagers felt that some of the conservation measures (e.g. cut-off drains, tree and grass planting) was taking up their agricultural land and this affected the adoption rate of the soil and water conservation measures. The free provision of tree seedlings also raised suspicions, particularly over the ownership of trees and land - people perceived that it was the district's strategy to acquire their land. However, with time, perceptions of the value of HIMA are generally favourable. In order of significance, villagers listed the following:

- Tree planting has significantly increased and has led lead to:
    - Reduced workload for women in collecting firewood from distance sources.
    - Women now owning their own tree plots.
    - Reduced wind speed and reduced soil erosion.

- Improved incomes through sale of seedlings, poles and timber. This has in turn lead to improvements housing standards.

- Water-borne diseases have been reduced through improvements to water sources.
- Improved soils productivity through stable mulching. Chemical fertilizers are not used.
- Reduction of women workload through provision of milling machines.

Sustainability of HIMA in Iringa Rural District

In its first and second phases, HIMA was in effect operating in parallel to the district council. It had separate offices and the district council had little ownership. This has been of concern to HIMA staff themselves and has prompted processes to move towards harmonisation.

In the past, district-level planning has been undertaken according to guidelines and procedures dictated by central government. Under Tanzania's Transformation Programme (decentralisation) each district is now able to determine its own planning procedures. 35 districts have been earmarked as pilot districts in this process. Iringa Rural District is one of these. HIMA-Iringa is therefore examining how to fully integrate its planning and operating procedures with those of the district council. This involves transition to a position where all HIMA staff are district council employees. At present DANIDA funds 33 staff (both local and expatriate). From May 1999, DANIDA was due to begin phasing out paying salaries and allowances, and would concentrate on funding development activities. There was to be a 3-year transition period, scaling down by one third per year.

HIMA would move to encouraging villages to mobilise to generate their own funds, finance their own activities, and rely less on government.

In its early stages, a major focus of HIMA was on development of methodologies and training. In the last few years, the emphasis on participation appears to have reduced mainly in response to its costs and time demands, and also to the improved multi-disciplinary capacity and experience of staff. More of the planning now is undertaken by HIMA technical staff. The future appears to lie in a proper balance between participatory and technical planning approaches and building on what villages are doing themselves. It is evident that villagers need to assume full ownership of the process from the outset and there needs to be more follow-up discussions and debate within villages on the implications of plans. Plans might usefully also include a longer (up to 5 years) perspective.

HIMA has experimented with the idea of '*para-professionals*' - innovative farmers selected by the village government who can be trained in particular skills such as extension, animal husbandry, use of improved stoves, contouring, etc., with best success in Njombe District. This approach could be extended to planning skills (e.g. preparing maps). However, care is needed as this could raise expectations for full employment among such para-professionals and to conflicts between them and local leaders.

The integration of HIMA with the district council should lead to the HIMA approach making mores sense to the council (through a greater sense of ownership) and to it covering a much broader area with a wider (optimum) impact and at reasonable cost (financial and time). Integration should also de-emphasized HIMA as an institution in its own right. Political support at the different levels in the district is important.

Experience in HIMA raises a number of issues which are important if such participatory programmes are to be successful:

- Awareness-raising is important and takes time. The objectives of the programme must be clearly explained at the initial stages of the programme, and any promises made at this stage must be honoured;

- Programme support to villages should be on an equitable basis - villages included in the programme in later stage should have the same opportunities (e.g. free seedlings) - if they are withdrawn or change, resentment and discontent may follow. However, programme implementation inevitably will have to go through periods of learning and changes will be inevitable. Therefore, from the outset, the programme should include mechanisms for flexible approaches. Enough time has to be allowed for these changes to take place. Piloting is important but there has to be communication between the pilot and the non-pilot villages.

- The programme must show demonstrable impacts otherwise it cannot be accepted - people take time to assimilate and accept changes in land use patterns and conservation technologies;

- Ways must be found to address the expressed needs of local communities. If necessary, there has to be co-financing of activities outside the objectives of the programme.

- Village-level training and study tours should not target the same individuals all the time, because this demoralizes those who are left out;

- Frequent changes of the programme's objectives and strategies should be avoided because it disrupts continuity and creates confusion;

- Contradicting messages from different extension staff working in the village creates confusion;

- Promises made to the villagers must be honoured. Any policy changes must take this into account;

- The programme's strategies (selling of seedlings, farm inputs etc.) must recognise the existence of varying social economic groups in villages;

- The marketing of commodities that arise as part of the programme must be considered from the start.

APPENDIX 5

RURAL PLANNING IN LATIN AMERICA

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1. Historical context

In Latin America, there are many traditional systems of land use allocation and complex rotation systems that were devised and practised by different native cultures. This complex and evolving process was abruptly disrupted by the arrival of European colonisers, mainly by Spain and Portugal with the decimation of the native peoples and the total replacement of their systems by those of the colonisers. Under the Spanish system, land was put generally under the ownership of the crown and later distributed to the officers, soldiers and civil servants and, later, to other newcomers.

Many large tracts of land were directly granted by the King to whoever he wanted. Usually the land included everything upon it, including forests, animals and natives. No conditions were usually attached to the titles. Under this system, most land around the urban centres and the most fertile lands (usually flat, with access to water) was allocated and then transmitted by inheritance or sold, both in block or fragments.

After independence in the period 1800-1840, the different new countries kept the land distribution system inherited from Spain or Portugal, and the royal lands became public lands owned by the State. Most countries also kept intact the highly centralised style of government that characterised the colonies. Only three countries in Latin America (Argentina, Brazil and Mexico) are federal countries and, even in these, the imposing weight of the capitals is striking.

The colonisation of new lands continued after colonial times, driven by the local population, and under the same rules of "first coming, first claiming, first getting a land title". Titling, particularly in areas remote from the urban centres, was never a particularly strong practice, giving rise years later to conflicts over land tenure that much of the continent still faces.

After the Second World War, development became an important issue on political agendas. For most countries in the region, as in Africa and Asia, this period saw the beginning of rural development and rural planning. Organised colonisation and development became common issues in the plans of governments. Planning was considered as a key tool at the time because development processes were then driven by governments.

Later, planning lost its appeal with the increasing pace of the debt crisis in Latin America and subsequent pressures of structural adjustment, privatization, economic globalization and decentralization, coupled with new economic theories and economic and political realities.

Later, in the 1980s and 1990s, the issue of sustainability was introduced and planning shifted from the centralised perspective of the 1950s and 1960s to include ideas of participation as a useful and necessary tool, but not as a panacea. Subsequently, monitoring and evaluation emerged as complementary tools, with a wave of sustainability assessment methods and indicators, etc.

As always, conceptual thinking and theorising ran ahead of practice. Feedback from practice about the achievements, constraints and impact of the new participatory planning, and monitoring/evaluation approaches is emerging but slowly because of the time and effort needed. So far, feedback is generally positive, but there are also some problems:

- There is a need to improve many tools since it is proving difficult to adapt conventional top-down planning instruments to participatory planning; and new assessment tools, based on self-evaluation and reflection, need to be properly developed and tested;
- There are difficulties in adapting political decision-making structures to more participatory and time-consuming processes;
- Some issues have become more difficult to overcome than they were before (e.g. activities to increase cash incomes are more difficult because of markets globalisation);
- Development funding is concentrated in fewer but more powerful institutions.

Implications

This historical frame has imposed a number of constraints to rural planning. The most important ones are:

a) Whilst the notion of "common interest" existed in the law, it is not applied to land property rights. This means that the land owner can do almost everything on the land without prior authorization. Therefore, schemes such as those based on land use capacity failed at the outset. Disincentives such as fines did not work because of enforcement problems and incentives in the form of tax exemptions also failed in many cases due to verification problems.

b) The system of land distribution since colonial times means that the best agricultural lands are usually owned by the powerful families in the different countries. So, rural planning has usually not been undertaken in these areas but in the marginal areas (hillsides, agricultural frontiers, land with low fertility or steep slopes, or located a long distance from markets, etc.) - some of which areas act as buffers to reduce pressure on the prime agricultural areas. Therefore, most regulations and conditions have been imposed on the poorer people living in marginal lands. Moreover, the capacity of governments to enforce the law in such marginal areas is very limited. This combination - a higher level of regulations (developed in a non-participatory way) in marginal areas where people have little economic capacity to fulfil them, because the land has low productivity and governments have little influence - has resulted in widespread failure of planning in these areas. The few attempts at rural planning in the good agricultural areas have simply failed to overcome opposition from powerful interests backed by strong property laws.

c) Economic strictures over the last 10-15 years (e.g. structural adjustment and retrenchment of the civil service) have resulted in much reduced capacity of governments to enforce laws and also to undertake planning and play a convening role in participatory planning. This vacuum has partly been filled in some years by a few NGOs, but their numbers and levels of activity are declining as funding becomes more and more concentrated in inter-governmental agencies and programmes. In practice, this concentration is leading back to the centralised approach of the 1950s and 1960s, putting resources and leadership/ownership back under the control of governments. There are arguments both in favour of and against this trend. But it is worrying that these swings do not appear to be driven by a thorough analysis of the experience of and lessons from rural development in the last 50 years in Latin America.

d) Finally, but of no less importance, is the issue of sectorality. Rural areas are complex with a myriad of interactions among different actors, levels and processes. There are two obvious ways of dealing with this complexity: by sector or by dividing rural areas into small units.

Centralised countries take the first approach and so decisions over rural areas are taken simultaneously and without much coordination between different government bodies dealing with particular sectors, e.g. agriculture, forestry, protected areas, fishing and various services (health, education, communications, roads, etc.). Federal countries fare a little better as they can deal with smaller areas. Fortunately, there has been a resurgence of interest in - and processes to promote - decentralisation, and decision-making power is increasingly being devolved to provinces and municipalities, etc. Usually, the authorities at these levels are not optimally equipped to deal with their new responsibilities, but the situation is improving. In fact, one of the worst problems facing decentralisation is that the devolution of decision-making has not been accompanied with the provision of the necessary funds. So, in many countries, decentralisation is perceived more as a trick to disguise structural adjustment and reduced government budgets than as a new opportunity to deal with complex issues that are preventing faster advancement towards sustainable development.

2. Planning phases and approaches

There have been four main phases of rural planning in Latin America in the last half century, each of which represents a different approach, although there are many overlaps in different places: colonization plans; rural development plans; conservation projects and plans; and sustainable development initiatives.

Colonisation plans

Colonisation was, and in some places still is, the most basic form of rural planning. It involved the delimitation of large tracts of state land -usually in marginal areas with little or no population - and their subdivision into individual plots to be bought or claimed by the interested people. Until a few decades ago, the existence of native groups inhabiting such areas was not taken into account - they were not considered to have any rights over the land or the resources. This situation has changed significantly, although there are still problems in some remote areas.

This early type of colonisation failed to provide the expected wealth to people and resulted in a high level of environmental degradation. Colonisation schemes have now become more sophisticated. After the Second World War, following then fashionable development theories, the focus was on the provision of infrastructure and colonisation plans included roads (e.g. the opening of highways through the Amazon in the 1960s and 1970s), identification of urban areas and provision of basic services (schools, health posts, etc.). Later, the idea of planning land use according to its capacity and potential gained sway, but most studies and planning exercises were conducted in a top-down manner and this often resulted in failure in the sense that detailed plans were prepared but never implemented for the reasons mentioned previously (legal frame, planning done in marginal areas, etc.).

Spontaneous colonisation has been a very important social process in Latin America, and far more extensive than planned colonisation, and probably no worse in development and environmental terms. It has often been "enabled" due to the "laissez-faire" attitudes of governments.

Rural development plans

Rural development schemes become popular in the 1970s. They have many similarities to the colonisation processes, but are more comprehensive and complex, based on a large-scale, regional perspective and integrating regions with the national development framework (markets, policies, etc.).

In an attempt to overcome the problems of simple colonisation, rural planning was based for a time on the idea of "development foci" (*polos de desarrollo*) - specific areas or places where investment was concentrated with the aim of attracting population, generating markets, concentrating services, etc. It was assumed that such concentration in a small and well chosen area would generate development there and somehow stimulate development in the surrounding areas. Several plans were made and implemented under this scheme but, again, through top-down approaches and with short-term views. This frustrated the achievement of the higher development goals while large tracts of land were occupied and environmental degradation problems ensured.

A similar approach, regional development plans, was introduced in other places. Instead of "development foci", investment was spread along corridors and axes. But the results were little better. A later variant of this line of thinking were the integrated rural development projects (IRDPs) of the late 1970s which placed more emphasis on technology transfer to farmers. As theories of planning evolved, land use capacity increasingly came to be considered in projects. At the same time, in the most progressive IRDP processes, the need for grassroots participation was recognised and this provided a new momentum. But projects still failed because they became too large and difficult to manage efficiently due to covering too large areas, needing large numbers of staff to undertake participatory activities, and the large level of investment required to keep the whole process going including the building and maintenance of infrastructure (roads, schools, health posts, sanitation programmes, etc.).

The different approaches mentioned in this section did not take place simultaneously in the different countries, nor they happened in a particular sequence. Generally speaking this whole view of planning had its peak in the 1970s and 1980s, and vanished with the change of the role of governments that came with structural adjustment. In some countries, it is possible to find all models, while others started directly with the latter ones, But these differences do not made any significant difference.

Conservation plans

Concern about environmental degradation has also increased significantly since the Second World War and particularly during the last 20 years. Initially, attention was focused on preserving natural areas with the creation of national parks, but the concept of conservation has evolved to encompass environmental education, tourism, etc. Relatively large tracts of land were set aside and park management plans developed.

The areas with wild resources deserving conservation as parks were usually in remote areas. Consequently, in some areas, this new type of land use and planning had to be reconciled with colonisation and development plans. One of the most important outcomes was that each absorbed key elements from the other. Colonisation and development plans started to include environmental issues, and conservation projects started to consider development issues more seriously and to broaden their attention to include the areas surrounding parks as well as the importance of other categories of conservation allowing for major use. This gave rise to more emphasis being placed on protected areas as a group that included national parks and the other increasingly important categories (different type of reserves, protection forests, protected landscapes, etc.).

The initial phase of quickly creating protected areas led later to the concept of protected area systems, first at the national level and later as cross-border entities. Today, most Latin American countries manage their protected areas as systems and have system plans for their management as conservation areas and also for the sustainable use of their natural resources. The systems aim to connect isolated areas in order to gain flexibility and security against macro-processes as climate change that affect wild populations of animals and plants. The, 'corridors' which link protected areas are key issues in the conservation agenda of many

governments today. Obviously, these corridors include areas devoted to agriculture, forestry, cattle ranching, etc., and the harmonisation of these uses with the conservation needs is proving a hard task. Fortunately, the general use of participatory approaches and tools is helping to move the process forward without alarming conflicts. An interesting initiative in this context is the Central American Biological Corridor, an inter-governmental initiative to link the North and South American wild areas through a network of protected areas and corridors across seven countries with strong participation of civil society and the private sector. Similar initiatives are being initiated for the Andean ecosystems and among the Mercosur countries.

Sustainable development initiatives

a) Biosphere reserves

Biosphere reserves are conceived as regions where different areas are assigned to different but complementary uses such as conservation, extractive use, sustainable agriculture and green industries. The concept, pioneered by UNESCO, was quickly developed by different countries in Latin America. In some cases, they were used to bring together in a single block different protected areas with different goals along with native territories, protection forests, etc. For example, the La Amistad Biosphere Reserve between Costa Rica and Panama covers almost a million hectares. Others were created to address the problems of spontaneous colonisation threatening the last important blocks of natural ecosystems, e.g. the Maya Biosphere Reserve in northern Guatemala which covers more than a million hectares of natural forests, wetlands and irreplaceable cultural heritage from the Maya culture, threatened by a massive migration of poor peasants and natives from other regions (see Box A5.1).

The actual impact of biosphere reserves remains to be analysed. Experience has been mixed, but the most striking issue is that there is not a thorough analysis and systematisation of these experiences to make conclusions and to identify lessons for the future.

b) Sustainable development strategies

Sustainable development strategies, promoted in Latin America since the late 1980s by IUCN, have aimed to create specific, coherent and agreed frameworks to integrate conservation and development objectives in a participatory way. The first were organised as national ones (Costa Rica, Peru, Nicaragua) but did not lead to visible results or clear initiatives. So, in contrast to other continents, sustainable development strategies in Latin America have subsequently had a more specific and local focus, addressing the problems of relatively small areas (a province, a watershed, a biosphere reserve and surrounding areas, etc.). This approach, assisted through the work of the Latin American Network of Strategies towards Sustainability, has had a greater impact, and more than 30 local strategies are now being implemented throughout the region. Their development has been uneven as they have experienced periods when funding has been available and/or they have had political support and down-periods when this support has vanished, but there are interesting results and a large wealth of practical experience gathered in these processes.

Almost all local strategies have a local organization (NGO, grassroots, governmental or other) that functions as the engine of a participatory process that brings local stakeholders together (see Box A5.2). The usual path is the elaboration of a long-term strategy that provides orientation and concrete projects to address critical issues, supported by a variety of funding sources (local, national, international). The combination of a long-term agreed view, with concrete projects and on-going mechanisms of information- and experience-sharing seems to contain key ingredients for success.

These experiences were continuously and systematically analysed by the Latin American Network of Strategies towards Sustainability - an independent network established in 1993 and supported by IUCN, WWF, AECI and other organisations that brings together practitioners from these local strategies. Publications and other literature from annual meetings and electronic fora is accessible through the networks website (http://www.redeco.org)

There is still a need to undertake a thorough analysis of the impact of these local strategy processes to assess their actual impacts.

Decentralisation

Decentralisation - the process of devolving power from the central government to lower level structures (as provinces, departments and municipalities) - is a political process that has implications for a number of issues, including rural planning. It is not a different model of planning, but a different way of decision-making.

There is some discussion in the region about whether decentralization is a process ignited by legitimate concerns about the constraints of centralized government, or simply a way to masquerade structural adjustment. Despite this, decentralisation (or municipalisation as it is frequently called) is a hot issue today in Latin America. Almost all countries in this region proclaim their adherence to this process, and some have already taken clear steps in this direction, including decentralising the key issue of governmental income redistribution.

Undoubtedly, decentralisation is a fundamental process that should bring decision-making closer to the people, but there is no consistency in the process in any Latin American countries (except in the federally-organized ones).

In Guatemala, under a brief regionalisation process in the late 1980s and early 1990s, 8% of the national budget was distributed directly to municipalities, based on their population. Unfortunately, this structure was not made part of the constitution and it was abandoned by the next government after a couple of years. Bolivia had a similar experience, also supported by a law. The law is still in place and has not been removed by the current government, but implementation has been significantly downplayed. In Colombia, regionalization was included in the new constitution in 1991, But a federal regime was not introduced, so decentralization is being fought inch-by-inch by the central structures in Bogota and the different departments and municipalities.

As elsewhere, no attempt has been made to assess objectively these decentralisation processes, but their potential and constraints are hotly debated. On the positive side, it is argued that decentralisation has brought a wave of unprecedented public investment in badly needed infrastructure in remote rural areas (health units, schools, water systems, sewage systems, roads, etc.). Moreover, these processes have also been instrumental in igniting the organisation of grassroots groups.

Detractors point out that the investments have not happened everywhere, and there has been a lack of coordination, technical support and monitoring by the central agencies - even though these are far more experienced than the newly created or rehabilitated low-level bodies. This is an important argument because, in almost all cases, decentralisation of responsibilities from central governmental agencies to local ones has not been accompanied by training, transfer of trained staff, adequate funding, etc.

Another intensively debated issue is corruption. Whilst some argue that corruption is now widespread, others point out that the proportion of funds wasted through corruption has not increased following decentralisation.

Decentralisation has not had much impact on rural planning. In the best cases, provinces, departments and municipalities are now responsible for preparing land use plans, development plans or similar studies, depending on the country. In some countries (e.g. Colombia), there are now legal deadlines to achieve that goals. In spite of good intentions, in most cases the capacity to do undertake such planning exercises is scarce. This situation has been made worst by the fact that these opportunities for rural planning have led to the re-emergence old top-down planning practices mentioned earlier.

The lack of good and credible processes to assess the long (and frustrating) experience of rural planning in the region has contributed to this situation.

3. Case studies

Two cases (Box A5.1 and A5.2) illustrate that there is still a long way to go in Latin America in forging a clear path to achieve sustainable rural development, based on participatory planning, that delivers the development promises people expect while keeping natural resources healthy and productive. They indicate clearly the frustrations that persist in rural planning in respect of carrying planning process through to implementation. Despite this, they also show that some concrete results have been achieved which go far beyond than planning documents themselves being filed on a shelf.

Box A5.1: Peten Integrated Development Plan, Guatemala

This plan was developed over several years in the early 1990s by the Government of Guatemala with support from a German-funded project. It aimed to address the problem of massive influx of migrants into a fragile, largely inhabited region in northern Guatemala. The plan was prepared mainly by experts and environmental issues were well considered. Proposals were then presented to governmental agencies, many NGOs (mostly environmental, but non-grassroots) and representatives of municipalities, but few grassroots organisations were included. Despite this 'top-down' approach, the process was considered (by some) to be participatory. Because the process was led by the national government, this was assumed to assure integration and coordination with other government initiatives.

After its approval of the plan, implementation stalled because the national government did provide the required funding and support from the international community and banks was less than had been expected. In practice, interested external supporters 'cherry-picked' activities from the plan that fitted best with their own aid priorities (mostly dealing with forestry, environment and natural resources management), leaving the development side (roads, communications, energy, credit, industrial promotion, education, health, etc.) unaddressed.

As a result, although the plan is still being implemented, the results are far less than expected. But, at least a number of concrete actions have been taken.

Many similar cases in different Latin American countries parallel the experience of the Peten plan. They illustrate the fate of technically well-conceived plans that are not implemented properly for a number of reasons (inadequate funding, political will, bureaucratic inertia, political rivalries, etc.). The planned activities are not taken up directly by the population for other reasons such as lack of ownership, organisation, funding, and availability of technical skills.

It is difficult to judge whether such experiences should be judged as failures. Obviously, the waste of time and effort (including financial resources) is costly in terms of further loss of natural resources and frustrated hopes for a better life. On the other hand, some positive results emerged: other projects and funding sources were attracted and discussed; valuable natural resources were protected; some development opportunities were recognised and advanced, etc. But, yet again, it seems that no-one took the trouble to examine past experiences to learn from them and to avoid past pitfalls.

Box A5.2: Sierra Nevada de Santa Marta Conservation Strategy, Colombia

This strategy was originated and led by a Colombian NGO (Sierra Nevada de Santa Marta Foundation) with the involvement of many local people and long-term residents of the Sierra Nevada de Santa Marta area in Colombia. The development of the strategy document was a long and highly participatory process that involved almost everybody, from governmental agencies to grassroots organisations in small communities, and included local governments, native groups, NGOs, municipalities, the private sector, etc. Over three years, a process of training, workshops, negotiations and agreements was undertaken, with financial support mainly from Germany. The final document was praised both regionally and nationally as an example of a participatory project in which all perspectives were presented and considered.

Unfortunately, whilst this process was very good in reaching broad agreements, it fell short of identifying ways to implement those agreements. Governmental bodies were not committed to using the strategy and funding its implementation, and the international community provided little support for the initiatives identified.

As a result, implementation began in 1997 at a very slow pace through a handful of externally-funded projects. At the same time, the national and regional situation is deteriorating due to increasing violence and the activities of paramilitary groups, guerrillas and drug lords, as well economic crisis. It is probably to soon to assess the process of the conservation strategy for Sierra Nevada de Santa Marta, but in dynamic situations such as exist in Colombia, there is little time to think. Agreements and good will built through a participatory process vanish quickly if that process does not lead to visible outcomes.

This case, like many others, illustrates that the problem is not good planning, but how to attract and articulate the different elements (funds, political will, technical skills, etc.) required to implement plans.

4. Conclusions

Over the last 50 years in Latin America, there has been important progress in rural planning:

- The recognition of the complexity of the problem and the consequent sophistication of the process, changing from plotting grid squares of unknown land to integrated approaches that address ecological, social, economic and political issues;
- The strong tendency to integrate socio-economic development aspects and ecological issues in coherent frames;
- The strong tendency to use participatory approaches to involve all stakeholders, as a way to gain legitimacy and enhance conditions for good governance.
- A basic recognition about the need to shift towards more decentralised structures and processes to bring land use and other decisions closer to the people.

But there remain problems that need to be addressed properly:

- The majority of rural areas in Latin America are still underdeveloped and still face growing environmental degradation;
- There are key unsolved governance problems that constrain the implementation of plans, even when they are developed in a participatory way;
- There is a huge need for theoretical knowledge and practical experience to design a framework to plan rural areas and develop them sustainably under the region's current macro-economic system;

- A major issue is how to deal with growing inequities (in access to resources, wealth, technology, markets, etc.) that prevent a more fluid process towards a achieving sustainable development.

This combination of progress and outstanding problems suggests some actions that might be taken to move forward:

- There is a clear need for a thorough and systematic analysis of existing experience in rural planning. Planning practitioners have many lessons from the last 50 years and other important experience is contained in obscure grey literature throughout the region. This wealth of learning should be assessed and the results made accessible to everybody active in this field;

- It is necessary to assess the impact of the different processes that have been attempted in the region, in order to identify the ecological, economic and social gains and losses of the approaches and the costs and benefits (in broad terms);

- It is necessary to keep developing better theoretical frameworks to answer key questions such as those presented above. These should build on practical experiences;

- It is necessary to improve capacity to operationalise some key, but still vague, concepts, e.g. sustainable development, poverty alleviation, good governance, life quality, and environmental well-being. These powerful concepts are inadequately put into practice and this hinder many efforts to improve participatory planning, monitoring and evaluation, impact assessment, and other key activities.

APPENDIX 6

RURAL PLANNING IN MALI WITH EMPHASIS ON NATURAL RESOURCE MANAGEMENT

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1. Introduction

Rural planning in the Sahel is discussed here within the context of decentralised natural resource management for the promotion of sustainable development and livelihoods.

The prevailing argument is that past development initiatives, based on centralised forms of planning and implementation, largely failed either to halt environmental degradation or to promote sustainable development. Former development policies suffered from the lack of local participation in their design and implementation. The last 15 years has seen greater recognition by governments and donors not only of the determining role of local people, as primary users, in natural resource management, but also of the rationality and sustainability of many customary management systems. Moreover, local people have managed, and continue to manage, their resources under customary systems in spite of centralised and authoritative institutional settings introduced by colonial and post-independent governments.

The concept and practise of community-based planning and natural resource management in the Sahel is not, however, a new or recent phenomena now being promoted by governments and aid organisations. Concepts of "local participation" have been present at a policy level among governments and donors for the last 15-20 years. Community forestry projects, for example, introduced by donors and NGOs in the 1980s, sought to involve local people in their design and implementation. The regional conferences of Nouakchott (1984), Segou (1989) and, most recently, Praia (1994), as well as the International Convention against Desertification, all promote a development approach based on the participation of local people. Policy support for local participation resulted in the recognition of the need to take a more holistic approach to land use planning while formally involving local users (though in an unspecified way), as well as the need to integrate natural resource management into the overall land use management system. This cumulated into the development of the *gestion de terroirs* (GT) approach in the Sahel. In Mali, projects and programmes following a GT approach were started in the late 1980s.

These initiatives towards a "bottom-up" paradigm of development were, however, conducted initially without any concomitant changes to the broad political and institutional environment. The participation of local people was sought without any meaningful reforms of the power relations between government and local communities. There was no genuine transfer of authority for rural planning or natural resource management from the State to local people. Legislation governing land and natural resources tenure and management still invested the overall ownership and power of decision in the State.

It is only in the last five to ten years that rhetorical support for local involvement in rural planning and natural resource management has begun to influence policy-making , administrative reform and legislation. Recent democratisation and decentralisation reforms in the Sahel, and particularly in Mali, are beginning to offer a broad institutional framework in which the responsibility of resource planning and management can effectively be devolved to

local communities. Critics, however, point to the fact that the implementation of reforms has been too slow, too technically-oriented and, in many cases, does not redefine the relationship or the balance of power between the State and civil society.

2. Rural land use planning in Mali

Rural land use planning in Mali has, and continues to be, heavily influenced by the *gestion de terroir*[17] approach.

2.1 Genesis of the gestion de terroirs concept

Following the Regional Conference of Sahelian States in Nouakchott (1984), most countries developed national plans to combat desertification. In Mali, this resulted in the establishment of the *Plan National de lutte contre la Desertification et l'Avancée du Désert.* In 1987, the government identified a national programme against desertification (PNCLD[18]) within which two components[19] focused on promoting *gestion de terroir* (GT) projects.

One of the first GT projects to be implemented, in 1988, was the Canadian-funded *Projet d'Aménagement de Terroirs* in the Bani-Niger river basin area. In the same year, a number of soil conservation programmes[20] adopted a GT approach to their work. This was followed, in the 1990s, by the widespread adoption of the approach by a host of other government services, donors and NGOs[21]. In 1994, over 200 GT projects were identified (UNSO 1994) as being involved in promoting a variety of improved natural resource management techniques, setting up local land use committees for the establishment of land use plans and financing complementary development activities to 'encourage' the adherence of the local people to the approach.

The rapid adoption of the GT approach to land use planning was not, however, regulated in any way. First, in spite of government commitment to the approach, no specific policy for the manner of its implementation has ever been formulated (UNSO 1994)[22]. This was partly a result of the failure of the two government departments assigned the responsibility for this task[23], and for co-ordinating and monitoring the implementation of GT projects in Mali, to complete their mission. And when other institutes tried to take the initiative to stimulate exchange and co-ordination amongst the multitude of projects, programmes and NGOs involved in GT-type of land use planning, they met with resistance (CMDT 1991). Second, although at the local level formal authority for local land use planning lay with the regional and district administration and their development committees[24], in practice GT-land use planning was largely carried out by the staff of NGO, donor and parastatal projects - with or without reference to the administration or the technical services. As a result, this resulted in

[17] Village land management
[18] Programme National de Lutte Contre la Désertification.
[19] Elaboration de Schémas d'Aménagements du Territoire and Barrière Verte.
[20] Projets de Lutte Anti-Erosive of the Compagnie Malienne pour le Développement des Textiles (CMDT) and the Institut d'Economie Rurale, Division Recherche sur les Systèmes de Production Rurale (IER/DRSPR.
[21] the Direction Nationale des eaux et Forêts, the CMDT, the office de Développement Intégre du Karta (ODIK), the projet Aménagement Agro-Pastoral de la Région de Sikasso (PAAP), the Office de Développement du Mali-Ouest (ODIMO), the project Aménagement de terroirs dans la Zone Agro-Ecologique du Moyen Bani-Niger (ATD2), the Office du Niger.
[22] This is in contrast to Burkina Faso which formulated a specific national policy directive supported by a national land use planning and management programme.
[23] The *Direction Nationale de la Plannification* (DAT/DNP) and the *Cellule de Suivi-évaluation Environmental du Programme National de Lutte contre la Désertification* (CSE/PNLCD) within the Ministry of Rural Development and Environment.
[24] *Comités Regionaux et Locaux de Développement*

each project implementing its own GT approach without necessarily referring to the work or experience of other projects implementing similar activities.

GT projects in Mali have thus evolved in a 'policy vacuum' which, coupled with the lack of any significant co-ordination at the national or local levels, has resulted in a diverse range of methodologies and implementation approaches. This has had both positive and negative impacts. On the positive side, the plethora of experiences has contributed to extending the boundaries of methodological innovation. On the negative side, however, while all projects have claimed to be based on principles of holistic resource management with the active participation of the local population, in practice, this has not necessarily been the case. Furthermore, and more significantly, most GT programmes have failed to contribute to the formulation of a coherent policy for effective land use planning and management from local to national levels. This changed to a certain extent in the 1990s as a number of GT projects became increasingly involved in legislative and land tenure issues.

2.2 The *gestion de terroir* approach

The driving principle of the GT approach is the devolution of decision-making powers for rural land-use planning and natural resource management from the government services and projects to the local people. In practice, there are many variants of the GT approach which can be differentiated by the relative attention paid to either the degree of genuine local participation, or the extent to which they address NRM or socio-economic issues (Winckler *et al.* 1995; Yacouba *et al.* 1995).

The CILSS/Club du Sahel study identified three broad approaches which are based on the entry points used by a project to encourage the participation of the local population :

The NRM approach focuses on the physical improvement of the natural resource base with emphasis on soil and water conservation (SWC) and agro-forestry techniques and works through existing structures (modern and traditional) as well as with individuals. Initially, the focus was on collectively-constructed erosion control structures, nurseries, etc. Later on, emphasis shifted to activities managed by farmers themselves, including soil fertility management. Initial training is provided in improved NRM techniques but, over time, this is extended to broader issues of land use planning and management. The assumption of this approach is that local people can see immediate benefits in the form of improved agricultural yields which, in addition to raising revenues, can also encourage their adoption by farmers in neighbouring communities.

The main disadvantage is that the projects do not address other socio-economic needs of the population. By training a village committee to manage technical activities only, the community fails to address more urgent issues to do with its own self-determination.

The institutional building approach focuses first on establishing and training a community-based committee to design and implement a land use management and development plan. Funding is generally available to assist with the implementation of the selected NRM and socio-economic activities that meet the local populations' development priorities (e.g. wells, dams, credit schemes). It generally consists of two phases:

> ***Phase 1*** involves establishing and training a village GT committee, carrying out a participative study of village resources and institutions and drawing up land use management plan.
>
> ***Phase 2*** involves implementing this plan through NRM and socio-economic activities and the enforcement of new NRM rules and regulations.

The main advantages of this approach is that it enables the establishment of a village-based institution trained in holistic land use planning and management that is capable of promoting a sustainable development strategy for the community. In practice, however, the capacity of the committee to carry out its mandate is often compromised by its lack of legitimacy: either because it has displaced existing customary institutions, or because of its non-democratic and non-representative nature. The planning approach to be followed can be rather formal and inflexible. Moreover, each GT-programme tends to create its 'own' committee. In addition, several years filled with meetings and making plans can pass before the local people see any tangible benefits for their involvement in the project. This can lead to disillusionment and disinterest.

The local development approach is a more recent adaptation of the former GT approaches and tries to address their limitations. It also reflects the growing donor and State interest in decentralisation and privatisation. Three aspects differentiate the local development approach from the institution-building and NRM approaches:

(i) Community organisation and fund-raising is located at a supra-village level even though specific activities may be carried out at village or group level. Emphasis is on collective investments.

(ii) Financial responsibility for rural land use planning and NRM is transferred from the project to the community-based land use and planning committees subject to the latter raising their own financial resources. If the committee succeeds in raising its our resources, it is given the power to manage a credit fund provided by the project to implement its activities. The committee has to set its priorities for allocating the limited funds to projects proposed by the various communities.

(iii) The community is expected to seek tenders, make a selection and sign a contract with the local private sector for infrastructure works and other development activities. They also have to monitor the constructors' performance.

In giving the local community power to decide how to allocate funds, there is the risk that community organisations may prioritise capital intensive investments in order to absorb available funds. They may also succumb to local pressures to invest in social infrastructure activities to address immediate priorities (e.g. village water supply) at the expense of investing in longer-term sustainable NRM activities. While this risk is an inherent feature of devolving power to local people, all evidence points to them investing in their longer-term development if they are given the means to do so. For example, some projects have reacted by earmarking funds (e.g. 70% on NRM and 30% for other issues) or requiring that these investments are linked to NRM activities (e.g. tree planting around a well).

2.3 Issues in the application of the GT approach

In theory, all these approaches have sought to promote an integrated and participative process to rural land use planning and NRM based on the involvement of local people according to customary practices. In practice, however, they have not fully lived up to expectations.

Technical focus with a pre-established methodology.

Most GT projects have tended to focus on the physical characteristics of NRM and ignore the more complex social, economic, political and cultural factors that affect how households can most effectively use these resources. GT projects are frequently seen as a technical exercise to produce a plan for several years, according to a pre-established series of steps (extensively

described in project manuals) to be taken by project field staff. Emphasis is often put on the preparation of maps (soils, vegetation, land use zones) which generally are produced by project staff. The activity plan often resembles a 'wish-list' to be presented to potential donors.

The GT approach has seldom been regarded as a planning process undertaken by local stakeholders to assess and negotiate resource use, establish rules, regulations and land use practices to better manage their resource in an equitable and sustainable manner. The emphasis on developing a plan for a fixed number of years has often resulted in a certain "rigidity" in which changing circumstances such as drought, government policies and world markets, have not been taken into account.

In the analysis of land use problems, the GT approach has also tended to focus heavily on farming at both the level of households and village territory. Individual farm holdings have been seen as autonomous, technical entities which is not conducive to understanding the complexity and diversity of rural production strategies (e.g. crop-livestock interactions, multiple and integrated cropping regimes on the same piece of land).

A preoccupation with technical issues and the assumption of uniform community interests has resulted in insufficient focus on the socio-economic and cultural heterogeneity of communities. Differences in access to land, labour and credit resulting from village power relations, gender, age and caste have tended to be over-looked (Painter 1993, Painter *et al.* 1994). This has resulted in committees being dominated by local elites and certain groups being excluded (see below).

Misapplication of the methodology.

The formal procedure for the implementation of the GT approach is to entrust the local community with the authority to carry out their own analysis of the situation and design a plan to meet their priorities. But, in practice, many GT projects have adopted a very top-down and non-participative approach. The developments in participatory diagnosis and planning methodologies (MARP) were only introduced in West Africa around 1991, and it was not until 1993 that they were fully integrated into the GT approach.

Degnbol (1996) argues these GT-projects have been implemented as conventional extension packages in a political and institutional climate which does not seriously question or redefine the relationship between the State and the local population. In addition, project staff who are in direct contact with the population and who are responsible for the implementation of the GT activities, have a limited basic education and receive little training in participative methodologies. A GT-programme either contracts its own staff or works through existing government staff. The latter may have been trained in various, sometimes conflicting, methods as a result of working for different GT-programmes. They may also face transport constraints, while others link their involvement to the per diems they will receive. A further problem is presented by institutional constraints among government projects to allocate funds to communities. Mobility and flexibility of field staff from government services can also be limited as a result of an inflexible and hierarchical institutional climate which does not necessarily reward initiative especially from junior staff. The use of more participatory field research methods has seldom resulted in changes in the way government and projects function, with knock-on effects on the extent to which field staff can carry out genuine participatory work involving frequent visits to the community.

Sectoral approach.

The GT rural planning exercise demands a holistic approach with close collaboration between the various government services dealing with livestock, agriculture, forestry, etc. The local

development approach also explicitly includes socio-economic issues such as health care, sanitation and water, education, roads, etc. However, this integrated approach goes against the grain of existing government rural development structures which are organised along sectoral lines with their own distinct areas of responsibility and limited horizontal communication or collaboration. A promising development is the restructuring of the Ministry of Agriculture and Water (MDRE) which started in 1997. The livestock, forestry and agriculture divisions have been dissolved and replaced by three new divisions focusing on community organisation, rural equipment and development, and legal issues and control.

Lack of a rural finance infrastructure

Lack of rural finance infrastructure in the form of agricultural credit banks or community-based credit and savings banks has been a serious handicap to the successful implementation of GT programmes. Funding of rural planning and NRM activities has been almost exclusively covered by donor and NGO projects, thus limiting the role of the community to that of recipient and executor rather than decision-maker and manager. At present, credit is only (relatively) easily available for those who grow cotton or rice. A promising development is the installation of several 'decentralised savings and credit co-operatives' such as the *kafo jiginew*, in the 1990s.

Local bias with limited attention for institutional issues or influencing policy

An extension of the predominantly technical focus of most GT projects has been more recent attempts to address problems prevailing at the level of the community. In the initial years of GT projects, institutional issues such as land tenure and local rules of access and management of resources were rarely addressed. Whilst formally attached to government structures, many projects operated in a rather autonomous manner. Degnbol (1996) makes the point that while many GT projects have had some successes in addressing NRM issues at the local level and in improving the livelihoods of those involved, they have had a limited impact in tackling the structural causes of rural poverty or in influencing national policies in this domain. In Degnbol's view, to date, rural planning and NRM policy in Mali has been mostly influenced by large donor and government-driven projects, each operating in a specific region. These projects have tended to focus on technical and administrative solutions for problems which are fundamentally an issue of power relations between the State and civil society.

This lack of interest in dealing with the legal, policy and administrative environment changed in the 1990s when some GT programmes started to address land tenure issues (e.g. the forest law) and supported the decentralisation programme.

Village land focus

The basis of a GT rural planning exercise is village land (the *terroir villageois*) traditionally managed by a community with recognised rights of occupation and use. This *terroir* focus, however, is often biased in favour of settled communities. It does not easily allow for integrating the interests of transhumant or seasonal groups into community level planning and management of natural resources (Painter 1993, Painter *et al.* 1994). Local land use plans are rarely developed in consultation with transhumant herders even though they rely on and exploit these resources. The latter often represent critical, dry season reserves crucial for the sustainability of their livelihood systems. This deficiency is now accepted, but most GT programmes still face considerable conceptual and methodological difficulties in gaining the genuine participation of the non-sedentary population in the planning and implementation of GT activities (Diarra 1998).

The GT approach has also been criticised for its implicit supposition that the village territory represents the sole livelihood resource for the community - an assumption that is challenged,

amongst others, by Painter *et al*. (1994) arguing that Sahelian farmers and agro-pastoralists exploit a far wider "action-space" than that found in the immediate vicinity of their village.

2.4 Democratisation and decentralisation

Rural land use planning in the 1980s was heavily influenced by the emergence of the GT approach. In 1991, the downfall of the regime of Moussa Traoré brought a marked change in government policy in many areas of public life. The new government embarked on a process of democratisation, decentralisation and initiated a review of legislation on land tenure and natural resource management.

Administrative decentralisation

In 1993, decentralisation legislation created new administrative units (rural and urban communes) to replace the *arrondissement*[25]. The rural communes or *collectivités décentralisées* group together several villages. Under this law, villages and pastoral camps are not recognised as legal structures (i.e. territorial units) and, as a consequence, this introduces the risk of an upwards transfer of authority from the village to the commune. The government has created 682 rural and 19 urban communes (Sy 1998). In theory, villages were given the choice on which rural commune to join but, in practice, this differed between the various regions. In some, it was largely a top-down exercise due to the non-participation of rural communities who were either unaware or uninterested in the exercise. In other regions, villages have engaged and made proposals. However, in various cases these have been ignored, creating frustration.

The rural communes are to be presided over by an elected council drawn from the communities they represent who will then appoint a mayor. The dates for these elections, initially scheduled for 1997, were put back repeatedly for political reasons, and only took place in April/May 1999.

The rural communes are to enjoy a degree of financial autonomy[26]. They will be able to set their own budgets and levels of taxation within the boundaries set by the law[27], have their own bank accounts and sign their own contracts with external donors. The government will allocate staff to each commune. The communes will become responsible for rural planning on NRM and other issues. It is not known what planning methods and tools will be made available to the new council and if training will be provided.

Land use planning within the context of decentralisation

National to local land use planning has been a key policy issue of the decentralisation process in Mali. The starting point was the establishment of rural development guidelines (s*chéma directeur du secteur de développement rural*) in 1992 which explicitly refer to GT as a promising approach to be adopted on a country-wide level to promote decentralised NRM. This has been followed by a series of national workshops and seminars to develop the concept and identify an operational strategy.

In 1994, a national seminar on GT and decentralisation recommended that land use and NRM plans be developed for each level of government administration - village, commune, *cercle* and region - with the ultimate aim of establishing a national land use plan for the country. A national workshop in 1996 on the *"esquisse du schéma d'aménagement du territoire* (ESAT)

[25] Loi (93-008) déterminant les conditions de la bibre administration des collectivités territoriales
[26] Loi (96-051) déterminant les resources fiscales des communes.
[27] Loi (95-034) portant code des collectivités territoriales en République du Mali. Code Général des Impôts.

identified the need to strengthen national, regional and local capacities for the development and implementation of the *Schéma National* and the *Schémas Régionaux d'Aménagement du Territoire*. It also proposed the reform of NRM legislation and the adoption of measures to encourage decentralised management (fiscal and financial), and identified the need to establish a national, regional and local land use plans.

The *schéma d'aménagement du territoire* (SAT) is the overall framework for national, regional and local development and planning. The first draft was completed in 1997. The next step is to produce the definitive national and regional plans and an atlas of land use management (*atlas de l'aménagement des terroirs*). A new National Environmental Action Plan within the context of the CCD (*Plan National de l'Action environnementale et de la Convention Internationale sur la Désertification PNAE-CID*) is also in preparation.

Legislation

In Mali, the legislation that governs natural resources, tenure and land management is still mainly centrist, top-down and non-participative. The *Code Domanial et Foncier* is the main legislation governing land tenure. It maintains both State ownership of all lands not registered as private property and the role of the State as the sole legitimate authority governing land use and natural resource management. Although it does recognise customary tenure rights, it does not adequately specify them, and only gives priority to them so long as they do not conflict with national development goals. The situation is further exacerbated by the dualistic nature of the tenure regimes operating at the local level. Land tenure reforms introduced by colonial and post-independent governments have failed to extinguish traditional tenure arrangements which continue, in practice, to regulate access and use of land and other resources at the local level. This has created a situation in which certain user groups are making claims to land on the basis of provisions within modern law in order to exclude others (particularly non-residents and seasonal visitors) - thus fuelling land disputes and social conflict. The *Code Domanial et Foncier* is currently being reformed. The extent to which it will address the above issues in the future remains to be seen.

The much disputed forest code came under review after the change in government in 1991. The revision of the forest legislation started in 1992 with consultations at regional and national levels (DNEF 1993). At the end of 1995, the new laws were signed (Laws 95-003, 95-004 and 95-005). The Forestry Service commenced disseminating copies of the new laws in 1996, followed by information meetings at village level, although a translation into local languages is not available yet. The new laws apply only in particular areas, such as woodlands and to land that has been fallow for more than 10 years. Trees in agricultural fields are no longer covered by these laws.

Another change introduced by the new forestry legislation is that villages can now benefit from some part of the taxes on firewood cutting. Specially-created management committees are responsible for the organisation of firewood sales *('marché rural de bois')*. Profits are higher for this village committee if the firewood comes from a forest for which a management plan exists that has been approved by the authorities[28]. However, the forest code does not elaborate on the contents of a management plan or how it should be formulated and implemented (Hilhorst and Coulibaly 1999).

The new legislation allows a rural commune to delegate the management of natural resources to other organisations such as a village or a co-operative, by establishing a local convention or agreement. However, no guidelines have been drawn up for the format, content or procedures to be followed in such cases. The new forest code includes provisions for co-management. But the

[28] These proposals are based on experiences in Niger with the organisation of firewood provision in Niamey (Bertrand, 1995). Implementation in Mali has started in 1996 with 5 field-tests and funding from a donor consortium presided by the World Bank.

actual opportunities for villages to manage 'their' resources will depend on the interpretation of these laws and how they are supported by the authorities. It has been observed, however, that the code itself is rather ambiguous (Ribot 1995).

In 1996, additional legislation[29] defined the roles and responsibilities of the new government structures (*collectivités territoriales*) from national to local level. It provided for the division of the ownership of land and natural resources into two *domaines*: the *domaine publique* and the *domaine privé*. The *domaine publique* will include rivers, marshes, lakes, aquifers, protected areas and national parks and will continue to be managed by the technical services of the state at national level. The *domaine privé* will consist of land that has already been granted title (largely urban land), and all land that has no title (i.e. it still belongs to the State) and consisting almost exclusively of rural land. The ownership and management of the *domaine privé* will devolve to the regional, *cercle* and commune level.

The *code domanial* will identify the public lands to be transferred to the *rural communes*. The latter will then become responsible for its management and can claim part of the tax proceeds levied on resource use. Decentralisation as such is no guarantee for sustainable resource use. A rural commune, for example, may decide to maximise income from levies on resource exploitation which can conflict with the goal of conservation that villagers may have for their land.

Under the provisions of the law, rural communes will be responsible for producing a land use plan for their area of jurisdiction (*schéma d'aménagement*) which will zone areas for forest, agriculture, grazing, wildlife, fishing, habitat conservation and mining. Once this has been done, the commune has the right to delegate power to villages, pastoral groups and urban neighbourhoods to manage the resources. The State can also award contracts to private individuals or groups to manage agricultural land. In addition to these planning responsibilities, the communes will have responsibility for managing and resolving tenure disputes and ensuring responsible land use practice.

Issues arising

The past eight years has seen Mali move from single party State to multi-party democracy. Increasing commitment to decentralisation and democratisation is resulting in a fundamental review of the role of the State and its institutions in the governance of public resources and interests. Recent reforms in national land laws, public administration and natural resource legislation are offering a more prominent place for civil society and providing a broad institutional framework in which the responsibility of resource planning and management can effectively be devolved to local communities. It is a radical agenda of change challenging established power relations and ideologies that are not necessarily accepted or understood by all. There are important stakes at issue and a number of major outstanding questions remaining to be resolved.

1. *Ensuring local representation.* Decentralisation in itself will not necessarily ensure the genuine participation of local people in the governance of their affairs. The critical issue is to what extent civil society can ensure that local interests are represented in local government institutions. The vast majority of the population, including those who will be responsible for implementing policy (i.e. the *conseils ruraux*), do not fully understand either the decentralisation process and the stakes at play, or the changes made to natural resource and tenure legislation and their implications for sustainable and equitable management. Consequently, there is a risk that local government authority will be co-opted by the rural elite. There is a need for education and training in local languages to promote greater

[29] Loi (96-050) portant principes de constitution et de gestion du domaine des collectivités territoriales.

awareness and understanding of the issues, and for monitoring the consequences and outcomes of the implementation of the reform process.

2. *Limited authority*. Although decentralisation and recent reforms to legislation governing natural resources and land use planning have transferred authority for natural resource management to decentralised government bodies (i.e. the rural communes), it is by no means certain that local people will be empowered to manage their resource base as they see fit. Under the provisions of the decentralisation process in Mali, rural communes will be responsible for allocating land and drawing up local land use plans (*schémas d'aménagements*). They will also be authorised to award contracts for NRM with local, community-based groups. In theory, therefore, local communities could play an active role in the planning and management of their resources.

However, current legislation does not extend to empowering local communities to design and implement their own rules and regulation. Authority for the definition and implementation of natural resource management policy and regulation still resides with central government through the different line ministries. Communities are only authorised to mange resources in line with these provisions. Nonetheless, there are numerous examples of local communities negotiating conventions for the management of their resources with neighbouring groups which are unofficially endorsed by the local authorities. These new models are often based on customary systems and enjoy considerable legitimacy in the eyes of the community. They also promote flexible land tenure regimes which recognise multiple resource use and allow women and other marginal groups (herders, seasonal migrants) access to land under relatively secure conditions. However, the fact that current legislation does not confer customary or community-based based institutions with the legal right to exercise public authority over their resources, means that such conventions only provide very limited security and are dependent on the continuing goodwill of government authorities.

In effect, local resource users are excluded from the decision-making process governing their resource base. Until local groups have the legal right to define, implement and enforce policies through the establishment of local rules and regulations for the management of their resources, it will be difficult to reverse the existing trend of resource degradation and conflict.

3. *Over-lapping jurisdictions*. It is not clear how the recently-created decentralised government institutions (e.g. rural communes) will articulate with existing customary institutions or community-based associations over decisions regarding land and resource allocation and conflict management. As it currently stands, the law does not recognise the village or pastoral camp as the lowest level of governance. Nor does it endow customary or modern village-based institutions with all the powers needed to manage their affairs and, in particular, those relating to natural resources. Formal jurisdiction over natural resources stops at the level of the rural commune which may, or may not, be sufficient to ensure that local people have genuine control over their resources.

The situation if further complicated by the dualistic nature of the tenure regimes operating at the local level. Land tenure reforms introduced by the colonial and post-independent government have failed to extinguish traditional tenure arrangements. These continue, in practice, to regulate access and use of land and other resources at the local level. As previously noted, this has led to a situation in which certain user groups are making claims to land on the basis of provisions within modern law in order to exclude others (particularly non-residents and seasonal visitors) and this is fuelling land disputes and social conflict. It remains to be seen whether the on-going reform to national land law will successfully address this problem.

4. *Confused legislative environment.* Local participation in the rural planning and management of natural resources is further hampered by the continuing trend of government

to address natural resource management in a sectoral way. Poor co-ordination and rivalry between different line ministries has resulted in a plethora of policies and laws governing natural resources which are often inconsistent, ambiguous and contradictory. The decentralisation reforms in Mali have not sufficiently addressed this issue and, in certain cases, have contributed to the problem. For example, while decentralisation legislation allows a rural commune to delegate the management of natural resources to other organisations such as a village or co-operative, it does not specify the format, content or procedures to be followed in such cases. The new Forestry Code devolves certain management responsibilities to local communities but retains final authority in the definition of the nature of forestry management practice. This provision contradicts the underlying principles of decentralisation and, as such, the actual opportunities for villages to manage 'their' resources will depend on how the local authorities interpret them.

5. *Limited local capacity*. There are two aspects to this issue: technical capacity to plan effectively and financial capacity to implement plans. Neither local communities nor the rural communes possess the appropriate skills to produce coherent, detailed land use plans that will promote sustainable and equitable land use practices. Natural resource management and local land use planning has been dominated by the GT approach which is based on the principle of entrusting local communities with the authority to analyse and plan for their priorities. But in practice, GT has often been applied through very top-down and non-participative approach. As a result, there is an urgent need to train local communities in participatory planning techniques and to address the issue of institutionalising participatory ways of working within government, NGO and donor organisations

A further problem is the extent to which a GT approach based on zoning land into distinct territories for forestry, fishing, agriculture, pastoralism, etc., is appropriate in the Sahelian context. Rural producers in Mali rely on a wide range of common property natural resources to meet their basic needs. Multiple, sequential use of these resources is a key element of rural livelihood strategies. Formal land tenure legislation in the Sahel, however, does not adequately recognise or protect concepts of multiple resource use, reciprocity and seasonal, temporary use, and it is not clear to what extent these concepts will be taken into account under decentralisation

A central feature of decentralisation is that local government will be expected to finance a substantial proportion of the costs of local development. To this end, rural communes have been given a degree of financial autonomy to set their own budgets and levels of taxation, have their own bank accounts and sign their own contracts with external donors. However, given the general levels of poverty that exist in most rural areas in the Sahel, it is likely that the majority of rural communes will continue to depend on either central government or donor funds for a significant portion of their development income. This financial dependence raises a number of important questions with regard to who sets the agenda for identifying development priorities, and how accountability to local constituents can be promoted and by what mechanisms?

The above points raise a number of key central issues or principles which need to be addressed if local groups in Mali are to be empowered to plan and manage their natural resource base in a sustainable and equitable manner:

- The need for structures and procedures to ensure participation and accountability at all levels of society;

- The need for consensus-based decision making systems that promote power-sharing;

- The need for independent monitoring that is unaffected by politically entrenched elites.

Central to all of these issues is the need to promote the effective participation of local people in the design and implementation of policy solutions and sustainable resource use. This will necessarily require the creation of new relations between government and civil society and an accompanying change in the rules and structures by which public activities are pursued. To achieve this, there exist two major challenges:

- the degree to which governments will allow and promote the effective participation of civil society in public affairs, and

- the degree to which local people have the capacity to play a more active role.

Conclusions

Mali, particularly since the early 1990s, has had some experience in participatory rural planning from which a number of lessons can be drawn.

It has become clear that participatory rural planning will remain relatively meaningless without an enabling administrative and legal environment. Democratisation, decentralisation and land tenure reform are preconditions for starting with participatory rural planning. In 1991, Mali has started a decentralisation programme and reviewed certain laws, particularly forestry laws. However, these revisions have not solved issue of overlapping jurisdiction and authority structures. The position of customary law and authority within the new decentralised framework remains unclear and vulnerable to conflict. Moreover, the decentralisation programme and tenure reform are not very well known and understood by local people. Information and education campaigns are needed to get civil society on board. Legal and administrative reform only becomes meaningful when accompanied by capacity-building and the transfer of human and financial resources. The newly established decentralised councils have no previous experience with participatory rural planning. The government provides some technical assistance but, again, capacity is limited. The financial capacity at local level for implementation is also limited.

National action plans have not directly contributed to participatory rural planning in Mali. The main contributions have been guidance in priority-setting at national level for government and donor agencies. They can play a similar role at a decentralised level. Government also has a task in mediating between conflicting objectives between decentralised units, assessing the implication of local plans at higher-scale levels and protecting the rights of minorities and other weaker groups in society.

The transition from natural resource management towards local development in the GT approach may provide some useful lessons concerning the implication of the livelihood perspective in rural planning. Local development does not focus on natural resource management only. It also addresses social and economic needs such as health, education, and infrastructure. Local development programmes in Mali have concentrated mostly on building financial structures at the supra village level and this can be used for channelling tax revenues, government subsidies and donor support towards collective investments. Communities are also trained in making contracts with private enterprises for implementation.

Priority-setting from a livelihood perspective is likely to become even more complex. The social transaction costs of sustainable natural resource management (e.g. negotiation, shared management systems, etc.) are very high and do not necessarily attract donor support. This may thus result in communities continuing to favour capital intensive investments, particularly if donor funds are easily available for the more "visible" investments. Rural planning from a livelihood perspective also requires some preconditions such as a restructuring of government ministries which tend to be organised along sectoral lines, training of government staff in rural planning and flexibility in work plans.

APPENDIX 7

SOME POSSIBLE USES OF THE '4Rs' FRAMEWORK

Analysing situations and diagnosing problems

Tables A7.1 and A7.2 illustrate the application of the 4Rs framework in Zambia to analyse situations and diagnose problems.

Table A7.1: A summary of the rights, responsibilities and revenues in Lukolongo, Zambia
Source: Makano *et al.* (1997)

Stakeholders	Responsibility	Rights	Revenues
Subsistence farmers	Custodians of land	Forest harvesting, land cultivation	Income from forest and agricultural products
Emergent farmers	Some land management	Land cultivation	As above
Charcoal producers	None	Wood harvesting	Income from forest products
Charcoal traders	None	Charcoal marketing	Income from trade
Curio-makers	None	Wood harvesting	Income from forest products
Fishermen	None	Fishing	Income from fishing
Forestry Dept.	Forest management, forest law enforcement	Collection of revenue from forest taxes	Revenue from forest taxes
ECAZ (an NGO)	Facilitator of development	To facilitate development	Indirectly, creation of employment

Table A7.2: Stakeholders' relationships in Lukolongo, Zambia
Adapted from Makano *et al.* (1997)

	Subsistence farmers	Emergent farmers	Charcoal producers	Curio-makers	Fishermen	Forestry Dept.	ECAZ
Subsistence Farmers							
Emergent farmers	Good						
Charcoal Producers	Good	Good					
Curio-makers	Good	Good	Fair				
Fishermen	Good	Good	Good	Good			
Forestry Dept.	Fairly good	Fairly good	Poor	Poor	Fair		
ECAZ	Good	Good	Good	Fair	Good	Good	

An analysis of strengths and weaknesses shows a clear imbalance between the private operators' responsibilities and their rights and benefits.

Using the '4Rs' framework in the negotiation process

This framework will probably require some adaptation when it is tested negotiation processes:

- The negotiation on stakeholders' '4Rs' cannot start directly, given the typically poor quality of relationships between government agencies and other local stakeholders. Therefore, it is advisable to first 'level the playing field' by:

    - Using this framework to address very specific issues rather than for analysing forest resources in general. Piecemeal negotiation could then lead to a gradual improvement of relationships;
    - Assessing needs first using a conventional participatory approach, in order to differentiate needs from desired '4Rs'.

- The issues related to the '4Rs' are often very sensitive, and difficult for marginalised groups to discuss in public. This may be best carried out through small social groups/individual interviews rather than assembly meetings, in order to elicit the opinion of less vocal groups.

- When using the '4Rs' to negotiate, it is important to assess formal, actual and desired situations. It is recommended to start with the desired situation as a more likely point of agreement; and subsequently discuss how the actual situation should change to reach that stage. This would suggest what the formal position should be and thus what action governments should take, if anything.

- Given that negotiations on the '4Rs' indirectly imply potential changes in local power structures, they are likely to raise higher expectations or resistance than PRA. It is therefore recommended to use this framework in negotiation only if it is likely to be followed by effective change in the '4Rs', even on a pilot basis.

The '4Rs' framework as a complement to PRA

Table A7.3 shows how the 4Rs framework can complement the use of PRA. PRA and the '4Rs' are different approaches and complement each other: the former is a *methodology* that can actually use the '4Rs' *framework* to address some key issues related to power structures. However, the '4Rs' are often difficult to assess in a fully open way (e.g. during village meetings), and small groups and/or individual interviews seem preferable.

The '4Rs' as a complement to stakeholder analysis

The 4Rs and stakeholder analysis (see section 3.4.1), as well as participatory approaches, can be used to address some of the structural factors that can cause conflicts of interest. But the 4Rs also complement stakeholder analysis (SA) in several ways:

- It does not limit analysis to stakeholders' interests, but also considers their relative power (by proxy assessment, as discussed below);

- Whilst SA assesses relationships in relation to the use of resources, the '4Rs' adds relationships between stakeholders - a key factor in collaborative resource management;

- SA is often carried out by outsiders and is designed to inform projects. Whilst project case studies have sometimes been used to assess the '4Rs', this framework can be used more broadly, i.e. whenever sharing resource assets is at stake.

Conversely, SA can complement the '4Rs' framework in identifying stakeholders.

Table A7.3: Complementarities between PRA and the '4Rs' in project cycle

Stage of project / area of work	Weaknesses of PRA regarding the '4Rs'	Potential inputs from the '4Rs' framework
Diagnosis	* Superficial analysis * Focuses on the village level (one or several)	* Can deepen the analysis (e.g. regarding benefits, power structures) * Broadens the range of stakeholders beyond village level
Planning	* Often too concise * Most often relates only to project frameworks	* Guarantees that the '4Rs' are systematically assessed * Hence, it helps in decision making
Negotiation	* Most often, it involves only projects and village-based actors (interest groups) * Lacks transparency regarding the '4Rs'	* Forces the involvement of other stakeholders (e.g. line agencies, local authorities) * Negotiation can take place at any time * Much more transparent regarding the '4Rs', and hence on stakeholders' commitments
Implementation	* There is often a risk of unplanned outcomes (e.g. enhancing existing privileges), hence of conflicts	* Reduces the risk of unplanned outcomes
Monitoring & Evaluation	* Reasons for unplanned outcomes/conflicts are often more difficult to elicit because PRA uses mainly group discussions * M & E of '4Rs' is often superficial, if existing	* Reasons for unplanned outcomes/conflicts are more easy to elicit because 4Rs: - are systematically discussed; - are based on smaller groups/individual interviews * '4Rs' can lead to the definition of performance indicators on related issues

Assessing stakeholders' relationships and power

There is little information in the literature on methods of assessing stakeholder relationships. But an interesting attempt was carried out by FAO in the Philippines to evaluate the linkages between farmers, researchers, traders and agricultural technicians (FAO, 1995). It focused on transfer of technologies and hence the service[30] between actors. The following criteria were used:

- Awareness of other actors' service;
- Relevance of other actors' service;
- Timeliness of other actors' service;
- Accessibility to other actors' service;
- Communication medium through which link is mediated;
- Linkage control.

[30] Service is only one of several factors suggested by GTZ (1996) to categorise relationships (see section 4.1.1.).

We have already discussed Vodoz's (1994) suggestion to use stakeholders' roles to indirectly assess power relationships. The '4Rs' framework - and in particular the balance of the '4Rs' within and between stakeholders' groups - can provide a proxy measurement of their power in natural resource management. It usefully complements dependency and other factors, such as education, wealth, locally recognised authority and 'whose knowledge counts'- as used by Colfer (1995) to determine stakeholders' power deficit.

APPENDIX 8

EXPERIENCES WITH LOCAL LEVEL DIALOGUE IN FRANCOPHONE WEST AFRICA

Note: Based mainly on Dubois et al. (1996)

This appendix looks at lessons arising from the functioning of two types of co-ordinating bodies in francophone West Africa: bodies embedded in national administrative frameworks (we refer to these as administrative committees) and bodies which exist in the context of donor-supported projects (referred to as project committees).

1. Administrative committees

There are two types of State-based co-ordination committees in the rural areas of francophone West Africa: those which aim to facilitate dialogue between communities and government, and those which aim to link line agencies, NGOs and donor-funded initiatives. These are considered in turn.

Dialogue forums

The types of problems encountered by such bodies are highlighted by the cases of District Conciliation Courts (Tribunaux Départementaux de Conciliation) in Burkina Faso (Box A8.1) and Land Tenure Commissions (Commissions Foncières) in Niger (Box A8.2).

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Box A8.1: District Conciliation Courts in Burkina Faso

District Conciliation Courts (DCC) have been used since 1993 to settle land disputes. They are chaired by Préfets (District Officers) and composed by four lay-assessors. Interestingly, these are neither customary chiefs, nor political militants, but rather "honourable citizens" from the community, e.g. retired school teachers, old members of the civil service and, to a lesser extent, younger high school graduates who usually play the role of secretaries. The blend of a central government representative and respected community members provides a rather good balance of State interests and community voice, hence a rather fair representation of interests.

However, the DCCs and the Préfets have been facing problems in applying rules, be them inspired by community norms or formal law. This is mainly due to the co-existence of formal regulations and customary rules at local level in West Africa - what Lekanne dit Deprez and Wiersum (1995) call a "pluriform legal situation". In practice, it has resulted in:

- A dichotomy in which DCCs and the Préfets have either total or no control at all on the outcomes of land disputes. This usually stems from either rigorous application of State regulation, or a "laissez-faire" attitude, leaving decisions to local groups, sometimes with tragic consequences;
- In some instances, use by the State of coercive means to settle conflicts over land.

In sum, the regulation of land use and, by extension, of natural resources, seems to combine the logic of State law (aiming mainly at achieving order) and the substantial, although sometimes radical, logic of local communities, thus often leading to new *"local laws"*.

Source: Lund (1996)

Box A8.2: Land Tenure Commissions in Niger

Land Tenure Commissions (LTCs) were introduced under the new Rural Code of Niger, enacted in 1993 (Edict 93-015) (Yacouba, 1996). They are chaired by the "sous-préfets" (more or less equivalent to county officers) and comprise non-elected persons: the local officer responsible for the rural code, the heads of technical services related to natural resources, representatives of community groups (farmers, herders, women, youth), and, when relevant, customary authorities, representatives of other technical services and any other person deemed necessary.

LTCs have both a consultative and decision-making role, i.e. (Yacouba, 1996):

- A consultative role on use of land, drawing up of land use management plans at municipal level, acquisition of ownership rights;

- A decision-making role regarding the recognition and establishment of land rights, the transformation of rural use rights into ownership rights, determination of levels of compensation, if relevant; and, finally, the keeping of Land Registers.

57 LTCs are planned. In a pilot phase, 3 have been operating since 1994 and 7 were due to start working in 1997 with the support from donor agencies. Several limitations of the LTCs are already apparent, including (Gado, 1996):

- LTCs have often been criticised for the over-representation of technical staff in comparison with community groups.

- Unclear definition of the LTCs role and organic links and other services. LTCs should co-operate with other administrative units, but, at the same time, maintain their independence from political, administrative and legal authorities.

- Lack of clarity about LTCs' roles and lack of independence - especially vis-à-vis political parties - has led to disappointment among the rural population: they expected LTCs to issue ownership certificates (which they cannot do); and they thought they would have the authority to issue ownership certificates and, most importantly, independently from political influences and other types of favouritism. Public dismay is exacerbated by the fact that individuals serving on LTCs also work in other official capacities, and there is already great distrust of public authorities as a result of unhappiness with past performance.

- Lack of sensitivity to cultural factors, i.e. no mention to the Koranic oath, customarily used by the traditional chiefs to settle land disputes, and the traditional logic that "if the land already belongs to us, why should we register it?", which makes formal registration obsolete in the eyes of the local people.

- The supporting regulations aimed at making the rural code operational have not been developed, which compounds confusion over the roles of LTCs.

Source: Gado (1996) and Yacouba (1996)

These examples show that inadequate representation of people's interests, and the absence of means to overcome this, are often central issues in such dialogue forums. In addition, lack of funding often prevents their effective functioning - a problem also encountered with inter-agency committees (see below).

Inter-agency committees

Due to a number of factors, these committees frequently fail to operate effectively:

Lack of support from central levels

Lack of decision-making power

Whilst these structures allow for discussions, each participant must also respect the priorities and modalities of their own organisations. The lack of decision-making power often leads to disinterest and formalisation of such meetings (i.e. meeting for the sake of meeting).

Lack of operational funds

When they exist, local government planning units too often lack financial resources to cover meeting expenses, especially per diems and other allowances (often referred to as 'sitting fees') which have become a tradition in many countries. It is also sometimes difficult to agree on the sharing of costs between the bodies involved in such committees; but sometimes solutions are found, especially in the absence of donor-funded projects.

Diversity of motivations to participate

Given their lack of decision-making power, it is unclear what motivates participants to attend these committees. There may be a number of possible reasons, e.g. intellectual, financial, professional. Participants also represent a variety of different organisations, e.g. government agencies, NGOs, donor-funded projects. These factors can mean that participants promote very different and sometimes conflicting agendas during meeting.

Lack of participation of traditional leaders

This causes problems in particular when formal and indigenous rules co-exist.

2. Project committees

Given the difficulties faced by administrative committees, in many instances, donors have often established separate coordination committees for rural development projects. These fall into two types:

Inter-village committees

Typically, such committees, dominated by village representatives, are established during the advanced stages of *gestion de terroir* projects (see Appendix 6) which encompass several villages. A key weakness is that these committees lack legitimacy outside the projects that create them.

Local government committees

These committees can be viewed as mini versions of administrative committees. They usually function because of the availability of project funds. Box A8.3. describes such committees in Mali.

Box A8.3.: An example of project committees in Mali

Under the GRN-GT Project in Mali, funded by GTZ, Local Development Committees (LDCs) involve all line agencies operating in the area and are chaired by the District Officer. The committee is assisted by a single expatriate adviser.. Using PRA techniques, the LDCs develop technical plans. These are submitted to the project's national office which, in turn, is responsible for identifying the weaknesses of field operations and for developing a policy dialogue with both the LDCs and concerned government departments at central level. Village committees have some control on the funds allocated by the project to line agencies, through the monitoring of LDCs. The project has tried different means to increase the involvement of villagers in the control of daily operations (e.g. fuel posts for project vehicles based in villages).

This type of mechanism encourages more transparency in project management, together with more involvement of both LGUs and local communities. However, this administrative structure faces some challenges:

- Participation by line agencies in LDCs is often mainly linked to financial advantages;
- Project managers are regularly confronted with requests for funds for per diems, training, study tours, etc., at the expense of other areas of management;
- Committee members have different motivations for participating and this affects their efficacy.

Source: Grosjean *et al.* (1998)

In some cases, these committees exist only on paper. For the sake of efficiency, local project leader sometimes prefer to deal separately with each agency and on a case-by-case basis. But such a strategy (under which the project leader becomes the only person who is fully aware of all that is going on) risks a reduction in communication between the different agencies involved in the project.

In popular regions where many donors are supporting projects, there are frequently (too) many project committees. This creates some confusion for the local administration. However, it is also often remarked that governments and local administrations prefer to maintain such lack of coordination amongst donors because it allows more opportunities to attract funds to a particular area.

Various suggestions have been made for improving the cost-effectiveness of co-ordination committees (Dubois *et al,* 1996):

- *Ownership by perennial structures*

Ideally, co-ordination committees should be created at the initiative of LGUs rather than being imposed by central government departments or by donor-funded projects. Following a pragmatic and stepwise approach, such bodies could start with only a few agencies, and involve more partners as needs rise and lessons on the functioning of the committee are learned. Another way for increasing ownership – and accountability – is to increase the role of line agencies in project design and implementation.

- *Different committees for different tasks*

Operations committees could meet as needs rise; and advisory committees could meet less regularly to discuss overall strategies.

- *Reduction in the number of committees*

Donors involved in supporting local development should agree on the need for a single committee, and the local District Officer would have to take the lead on ensuring its establishment.

- *Really concerted planning*

Often, local planning depends a lot on the motivation of the chairman and the local players in development. But there are some examples, such as in the Saint-Louis Region in Senegal, where a concerted planning exercise has resulted in feasible sets of activities, with roles clearly specified.

- *Flexible funding approaches*

The objective should be to gradually reduce dependency on donor-funding for co-ordinating committees. Options include:

* A contribution by the different entities represented on the committee - according to criteria decided by the committee. This seems to work better for initiatives not funded by donors;

* Support for the committee from central level, based on the legitimacy of the committee whenever possible. Such support could be linked to performance.

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