iied
International
Institute for
Environment and
Development

GATEKEEPER SERIES
133

# KEEPING CAMPFIRE GOING: POLITICAL UNCERTAINTY AND NATURAL RESOURCE MANAGEMENT IN ZIMBABWE

Everisto Mapedza

2007

## EXECUTIVE SUMMARY

The increasingly dictatorial nature of Zimbabwe's current government has had a negative impact on many aspects of life. The country's formerly vibrant community-based natural resource management sector has not escaped the upheavals. There has been an increase in the role of party politics in local environmental governance, settlement on state land, high inflation, withdrawal of bilateral donor funds and an acceptance of a culture of impunity which has compromised the rule of law. All these developments have greatly undermined relatively successful natural resource management initiatives like CAMPFIRE, which use devolved management institutions and clearly demarcated financial benefits to facilitate sustainable wildlife management by local people.

This report uses two case studies of community-based natural resource management (CAMPFIRE and forest co-management) to examine the impact of the political situation on resource management institutions and the resources on which they depend. It finds that wildlife habitat and populations are declining in both quality and extent, largely due to a breakdown in the policing power and incentive structure of local institutions. Poaching for commercial rather than subsistence needs has increased, as has encroachment on protected areas by farmers and livestock herders. The funds received by local communities from resource management and harvesting are also declining, further decreasing incentives for local protection of the sometimes dangerous wildlife with which local people have to co-exist. Financial management and accountability, always a challenge to these initiatives, is considerably worse, leaving the resource management institutions prone to undue political influence and the capture of benefits by the politically powerful.

However, local level institutions seem to still be resilient, despite their effectiveness being seriously undermined, and this is cause for some hope. The author makes some recommendations for improving the situation, both for people and the natural resource base:

- Increase the direct incentives flowing from sustainable resource management to local communities
- Give local communities greater powers to deal with problem animals
- Conduct more rigourous cost-benefit assessments to help strike a reasonable balance between agricultural activities and conservation
- Create mechanisms to add value to both wildlife and forestry resources
- Increase donor support to the areas of local community representation and accountability.

**THE GATEKEEPER SERIES** *of the Natural Resources Group at IIED is produced by the Sustainable Agriculture, Biodiversity and Livelihoods Programme. The Series aims to highlight key topics in the field of sustainable natural resource management. Each paper reviews a selected issue of contemporary importance and draws preliminary conclusions for development that are particularly relevant for policymakers, researchers and planners. References are provided to important sources and background material. The Series is published three times a year and is supported by the Swedish International Development Cooperation Agency (Sida), the Swiss Agency for Development and Cooperation (SDC) and the Rockefeller Foundation. The views expressed in this paper are those of the author(s), and do not necessarily represent those of the International Institute for Environment and Development (IIED), Sida, SDC, the Rockefeller Foundation, or any of their partners.*

**EVERISTO MAPEDZA** is a social and institutional researcher at the International Water Management Institute (IWMI) in Pretoria, South Africa. The research for this report was carried out whilst he was an ALCOA Research Fellow at the London School of Economics's Centre for Environmental Policy and Governance. Everisto previously worked at the Centre for Applied Social Sciences (CASS—University of Zimbabwe) where he researched Community Based Natural Resource Management in rural areas of Zimbabwe. His main interest is in environmental governance arrangements and their impact on poverty reduction in the developing world. His contact details are: International Water Management Institute, 141 Cresswell Street, Private Bag X813, Silverton 0127, Pretoria, South Africa. Phone: +27-12- 845 9100; Fax: +27-12-845 9110; E-mail: e.mapedza@CGIAR.ORG or mapedza@yahoo.co.uk

# KEEPING CAMPFIRE GOING: POLITICAL UNCERTAINTY AND NATURAL RESOURCE MANAGEMENT IN ZIMBABWE

Everisto Mapedza

## INTRODUCTION

For many years Zimbabwe was one of the leading countries in Africa for its innovative community-based natural resource management initiatives, CAMPFIRE (the Communal Areas Management Programme for Indigenous Resources) being one of the most well-known. But the growing political upheavals in the country have changed many aspects of life dramatically. This paper assesses the social, institutional and ecological impacts of this political uncertainty on community-level natural resource management programmes.

### Political background

Zimbabwe became independent from Britain in 1980; land access and distribution were key motivations in the struggle for independence. The early 1980s were characterised by economic growth and the delivery of social services and infrastructure to the previously disadvantaged sectors of society (Hammar, *et al*., 2003). Significantly, many communal land[1] farmers seized these opportunities and shifted from subsistence to commercial production in what has been dubbed Zimbabwe's agricultural revolution (Rukuni and Eicher, 1994). By the late 1980s economic growth faltered largely due to the over-regulation and price controls inherited from the previous regime. An Economic Structural Adjustment Programme (ESAP) supported by the World Bank and International Monetary Fund (IMF) aimed to liberalise the economy and bolster economic growth. ESAP had many positive impacts across the economy; however, these were largely confined to the private sector middle and upper income earners. A critical weakness of ESAP was the failure to provide safety nets to cushion those who lost out (Raftopoulos, 2001).

ESAP triggered a number of processes in the mid to late 1990s. These included corruption, a decline in the economy and an increase in the rate of inflation.

**1.** Communal areas are where most black Zimbabweans live.

Economic liberalisation also resulted in greater political aspirations and the emergence of the first credible opposition to the ruling Zimbabwe African National Union-Patriotic Front (ZANU-PF) party.

In 2000, the government lost the February referendum for a new national constitution: the first time that ZANU-PF had been defeated in 20 years. The opposition Movement for Democratic Change (MDC) and the National Constitutional Assembly (NCA) had campaigned against the government's proposed constitution which made provision for large-scale appropriation of white-owned farmland. Immediately, the government backed invasions of commercial farms as an alternative approach to redressing the land issue, as retribution against those who were perceived to have supported the opposition and to divert attention away from the declining economic situation. The farm invasions significantly cut agricultural output and exports, worsening the fiscal pressures on the government. As importantly, they also resulted in the loss of foreign capital, skills and inward investment. The World Bank and the IMF withdrew their support to the government. The cumulative effect was that Zimbabwe entered a period of sustained hyper-inflation and economic contraction (Bond and Manyanya, 2002).

The declining national economy has resulted in a gatekeeper state, with Zimbabwean politicians acting as middlemen rather than regulators for local and (limited) foreign capital (Logan, 2005). It is easier for authoritarian regimes to "maintain the loyalty of the core group during economic crisis than it is for democracies. With fewer favours, they can achieve far greater loyalty among the reduced number of actors that support them" (Corrales, 2004).[2] This gatekeeper role is playing across all sectors of the economy, including forestry and wildlife management. Law enforcement is selectively applied to reward government supporters and punish their opponents.

## Community-based natural resource management in Zimbabwe

This research looked at two well-known and well-established community-based natural resource management (CBNRM) approaches in Zimbabwe: state-forest co-management and CAMPFIRE initiatives. The philosophy of both initiatives is that local communities need to realise commercial benefits in order for them to sustainably manage local natural resources such as forestry and wildlife. This philosophy attempts to link costs of managing the resource with benefits from the natural resource.

**2.** Whilst Corrales (2004) was analysing the Cuban crisis and how the Castro regime seemed to have weathered the economic crisis, this explanation has resonance with what is happening in Zimbabwe.

## Co-management

Co-management, in theory, seeks to devolve forest management powers to local communities living next to state protected (gazetted) forests in order to prevent resource use conflicts. It involves the creation of environmental or resource regimes featuring partnerships between local communities or resource users and agencies of (sub) national governments. These state agencies, the Forestry Commission for example, normally possess the legal mandate for environmental protection. In Zimbabwe, co-management began in 1993 in villages surrounding the Mafungautsi Forest Reserve. These villages formed 15 Resource Management Committees (RMCs) which were institutions through which benefits such as harvesting broom grass, thatching grass, reeds and firewood permit systems were to be administered. Previously this role was performed by the Forestry Commission's district office. The proceeds from these minor forest products were then supposed to be used for community development projects such as schools, or to form a revolving fund to be lent to projects such as beekeeping. In the Mafungautsi area co-management received funding from the Canadian International Development Agency (CIDA). Initially, it performed well as CIDA and other stakeholders such as the Centre for International Forestry Research (CIFOR) and the Centre for Applied Social Sciences (CASS) played a mediating role between the community and the Forestry Commission.

The Resource Management Committees (RMCs) were formed as sub-committees of the village. Their main role is to issue non-timber resource exploitation permits and help enforce the forest protection rules.

## CAMPFIRE

CAMPFIRE has been operating in Zimbabwe since 1989, mainly in buffer zones adjacent to national parks. CAMPFIRE is a government initiative that devolves the management of and benefits from wildlife resources to local communities in the communal areas (Murphree, 1991). Previously, only private (and mostly white) farmers were able to manage and benefit from wildlife on their land. Most rural district councils have entered into contractual arrangements with safari operators who bring hunting clients into the CAMPFIRE areas. The safari operator pays the hunting fees to the RDCs, and the RDC then passes on a portion of the revenue to the communities in the CAMPFIRE wards.

Authority for the management of wildlife has been devolved to district councils (Murphree, 1991) who, in turn, devolve the responsibility for wildlife management and financial benefits to the ward, administered by the Ward Wildlife Management

Committee (WWMC). The WWMC is chaired by an elected councillor who represents the ward at rural district level. The rural district council then links with the national government via the provincial government.

The development of CAMPFIRE and its implementation were guided by a loose consortium of governmental and non-governmental organisations and university departments known as the CAMPFIRE Collaborative Group (CCG).[3] The programme was funded by numerous international donors. The United States Agency for International Development (USAID) was the largest single donor, providing approximately US$20 million between 1989 and 2003 (Child *et al.*, 2003). Prior to 2000, the programme was largely hailed as a successful example of communities deriving benefits from wildlife resources.

## THE IMPACTS OF POLITICAL UNCERTAINTY ON COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT

### Research methods

This report is a result of longitudinal research studies which were largely conducted by the Centre for Applied Social Sciences (CASS) (in Mafungautsi) and the Worldwide Fund for Nature (in Nenyunga). The research period stretched from the early 1990s to 2004. Field interviews were carried out with members of local communities, current and former committee members of Resource Management Committees (in the co-management case study) and Ward Wildlife Management Committees (WWMC) (CAMPFIRE case study). Key informant interviews were conducted with the Forestry Commission of Zimbabwe (FCZ), the Gokwe Rural District Councils (RDCs) (both North and South), Worldwide Fund for Nature (WWF), Centre for Applied Social Sciences (CASS) and Zimbabwe Trust (ZimTrust). Interviews with the CAMPFIRE Association (CA) were conducted later, in March 2005. Some former CAMPFIRE Collaborative Group employees and researchers also carried out key informant discussions. Literature review was another important tool for data collection.

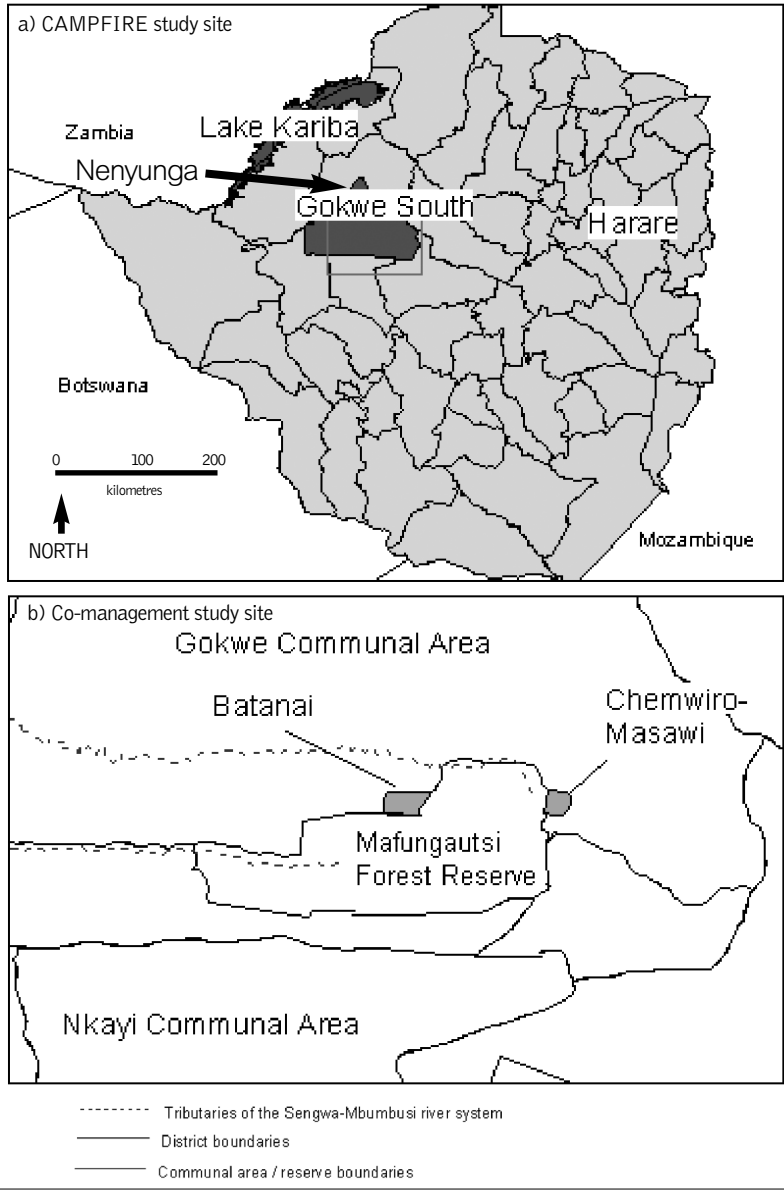
### Case study sites

CAMPFIRE research was conducted in the Nenyunga ward of Gokwe North District (Figure 1a). The Ward Wildlife Management Committee (WWMC) in the research area was composed of three villages. The co-management case study

**3.** The CCG members included the CAMPFIRE Association (CA), Worldwide Fund for Nature (WWF), Centre for Applied Social Sciences (CASS), Zimbabwe Trust (ZimTrust), Forestry Commission and the Department of National Parks and Wildlife Management (DNPWM).

focused on Mafungautsi Forest Reserve and on two RMCs, Batanai and Chemwiro-Maswi, as shown in Figure 1b.

**Figure 1: Location of the Co-management and Campfire case study sites in Zimbabwe**



Both research areas are in the same agro-ecological region, which means that their biophysical environments are fairly similar. Both areas are largely communal areas with no large-scale commercial farming. Nenyunga is one of the genuine CAMPFIRE wards as its habitat can support a resident wildlife population rather than being an area through which wildlife passes en route to more suitable habitats. Both areas also have a similar social political and economic history. This is a frontier region with a number of residents having migrated from other parts of Zimbabwe in search of land. The Gokwe area was seriously affected by political turmoil in the post-2000 era.

### Measuring the impact

I chose a number of key aspects to assess the impact of the February 2000 watershed on the two initiatives and to compare the pre- and post-2000 periods:

- resource management
- integrity of resource area
- non-quota use[4]
- financial management and benefits
- financial accountability.

## MAJOR FINDINGS

### Resource management

#### Co-management case study

*Pre-2000:* Other studies have noted that there was generally more forestry cover in the pre-2000 period in Mafungautsi than the post-2000 period (see below). Vermeulen (1996) found that although the trees of the Mafungautsi Forest Reserve were generally larger and of greater biomass, and the woodlands denser, than the woodlands of the surrounding communal area, communal areas tended to have a greater variety of vegetation types. In the pre-2000 period, the Forestry Protection Unit (FPU) had more resources, including two forestry officers, and they made constant patrols using FCZ vehicles. Some RMCs helped in these patrols.

*Post-2000:* Forest cover in Mafungautsi is generally declining as demonstrated in aerial photo studies (*cf*. Mapedza, Wright and Fawcett, 2003). This is more pronounced in the communal areas neighbouring the Mafungautsi Forest Reserve than in the forest reserve itself. Although no figures were available, the general

**4**. Illegal resource use. Legal hunting is based on annual quotas which are calculated on the basis of annual wildlife population levels.

impression of both the FCZ and RMCs is that poaching has significantly increased because people are now living within the forest area. Fires are used to drive wild animals to some parts of the forest to make hunting easier. The FCZ has also been blaming the RMCs for not playing an effective role in resource monitoring. The second forestry officer has been transferred to another district.

### CAMPFIRE case study

*Pre-2000*: There were more resources for managing both forestry and wildlife in the area pre-2000. For example, since the 1990s many low cost electric fences had been constructed to separate people and their crops from areas of wildlife habitat.[5] Soon after the formation of the game corridor,[6] a "problem animal reporting system" was established in Nenyunga with the support of WWF. Its aim was to develop an effective response to serious incidents of human-wildlife conflict and to generate data that would support further measures. Under the system, farmers were to report problems, the scale of the problem or damage was then assessed and action taken accordingly, usually scaring away the offending animals. This was the job of the Gokwe North RDC Wildlife Unit.

*Post-2000*: The measures taken to reduce the human–wildlife conflict in Nenyunga Ward have largely been discontinued. Gokwe North RDC no longer has a functional CAMPFIRE vehicle and is therefore unable to support the rapid deployment of the wildlife unit to incidents involving wildlife. At the ward level the Problem Animal Reporters have not been working for over a year because they have not received their allowances. In addition, the District Board of Management (DBM) has been unable to buy ammunition for the shotguns that were used to scare elephants out of the fields. The electric fence on the northern border of the game corridor has been completely vandalised.

## Integrity of resource area

### Co-management case study

*Pre-2000*: One of the main management challenges facing gazetted areas in Zimbabwe has always been illegal forest fires, which in most instances are blamed on disgruntled neighbouring village residents. Before the June 2000 parliamentary elections, forest fires were relatively well-controlled—although fires have been a major issue dating back to the colonial period. The science of fire burning within the

**5.** Funded by the Rio-Tinto Foundation, which was developing the Sengwa Coalfield in the adjacent Simchembu Ward.
**6.** This is land set aside to allow free movement of wildlife. It usually connects two ecological zones.

semi-arid savannas has always been controversial, with some researchers arguing that controlled burning is beneficial to the ecosystem (Mapaure, 2002).

*Post-2000*: Since 2000 forest fires have increased, according to both RMC officials and the Forestry Commission officer in Gokwe, for a number of reasons. After June 2000 there were fewer resources for fire fighting and a culture of acting with impunity was quickly developing amongst the villagers. About 180 households have invaded the reserved forest, where they use fires to open up fields for cultivation. Due to the political clout surrounding land invasions in Zimbabwe, both the Forestry Protection Unit (FPU) and the RMCs were powerless to stop them. In the neighbouring RMC in the Bomba area, people opened up fields within the forest. In the forest adjacent to Lutope FPU Camp, people went as far as to build huts within the forest. To safeguard themselves against eviction they have already formed cells and branches of the ruling party. The practice has spread to a number of villagers, who are assuming that the regulations have been relaxed and that they too can use the name of the ruling party to make them immune from prosecution. Some RMC members, in areas such as Chemusonde, have also moved into the Mafungautsi Forest.[7] Due to the invasion of the forest reserve most of the RMCs are no longer active.[8]

## CAMPFIRE case study

*Pre-2000:* The wildlife corridor was established in Gokwe within the context of very high levels of immigration, settlement and conversion of land from wildlife habitat to agro-pastoral uses. There was a significant influx of settlers from all over Zimbabwe after the eradication of tsetse fly and the construction of a new tarred road following independence in 1980. It is estimated that wildlife habitat lost to new settlements in the Gokwe North area increased from 27% to 57% of the total district land area between 1985 and 1999 (Dunham *et al*., 2003). Initially, the main challenge to the integrity of the wildlife corridor was from cattle owners looking for grazing for their animals. Many of the residents of Nenyunga Ward B, on the southern boundary of the corridor, were agro-pastoralists who perceived little or no benefit from the maintenance of wildlife areas.

*Post-2000*: The integrity of the wildlife area was further undermined after 2000 due to ruling party supporters' ability to act with impunity. Aerial surveys carried out in 2001 indicated that there was an expansion in agricultural activities in the Nenyunga

**7.** Note that this is the third wave of invasions into Mafungautsi. The first wave was around 1979/80, the second in 1984/5 and the current one began in 2000 alongside the "fast track land reform".
**8.** Interview with the Forestry Commission of Zimbabwe, Gokwe, 17 June 2004.

area and the broader Sebungwe region. When the land invasions began in 2000 people also increased livestock grazing within the wildlife corridor. In 2004, the RDC once again resorted to using the police to clear the corridor of cattle. Whilst there were no human settlements within the corridor, expansion of agricultural activities and cattle grazing has often been argued to reduce wildlife habitat. Home ranges for elephants in CAMPFIRE wards had been compressed due to the expansion of agricultural activities (*cf*. Hoare cited in Dunham *et al*., 2003). A former Member of Parliament for the area argued that local residents wanted to see rural development in the form of agricultural expansion—not the wildlife model of development, which offers fewer individual financial incentives.[9] These arguments are also supported by Chief Nenyunga who pointed out that some people who were evicted from the corridor area in 1991 when CAMPFIRE was about to begin still nurse grievances against the programme. To the evictees, the fence had symbolised the CAMPFIRE programme and had to be destroyed.

While there has been some habitat conversion on the edges of the corridor, it is not as extensive as the clearing taking place on many large-scale commercial farms. This suggests that the wildlife corridor has at least some degree of acceptance among adjacent communities.

## Non-quota use

### Co-management case study

*Pre-2000*: Since the introduction of co-management there has been no commercial logging inside Mafungautsi. Commercial logging did take place in 1999 in villages surrounding the gazetted forest. In this instance, the FCZ made it clear that co-management was mainly based on non-timber forest products (NTFPs) with the exception of dead wood, whose collection was strictly regulated. There were a few cases of illegal harvesting of poles and small animals. With funding from the Canadian International Development Agency (CIDA) the Forest Protection Unit managed to patrol the forest and reduce illegal resource harvesting.

*Post-2000*: During this period, salvage logging, the logging of remnant timber in a recently-logged area, was being carried out by Mockdale Company in the villages surrounding Mafungautsi. This seems to be a desperate move by the Gokwe South RDC to get some revenue. The local community contested this through their traditional leader. The logging company was owned by a former employee of the Presi-

**9.** The people of Zhomba feel that cattle and crops are more important than wildlife (Former Fence Supervisor interviewed on 2 September 2004).

dent's office and he was said to be underreporting his timber harvests. Illegal poaching has increased due to a reduction in the number of FPU staff, as well as because of CIDA's decision to stop funding co-management in 2000.

### CAMPFIRE case study

Pre-2000: The Tonga people, the original residents of the Zambezi Valley, have a long history of hunting, fishing and use of non-timber forest products. Hunting by local people, generally for subsistence protein needs, has always been a major problem in both Mafungautsi and Nenyunga. It has been estimated that in some of the "wildlife rich" wards locally hunted wildlife accounted for 40% of the protein in the residents' diets (Murindagomo, 1997). The loss of wildlife habitat, however, has always been considered a more serious threat to wildlife in the communal lands. Aerial surveys show that settlement in the Sebungwe Region dramatically changed the distribution of large mammals before 2000. Studies from within Gokwe and the neighbouring Nyaminyami District showed that cow herds of elephant are reluctant to venture within 2km of human settlement (Hoare, 2002).

Despite the fragmentation of habitat and the compression of their range, it was estimated that there were over 900[10] elephants in 1999 within Gokwe North District, most of which were either resident or else using the habitat created by the corridor (Khumalo, 2003). Between 1991, when the corridor was established, and 2000, there was some illegal hunting within its boundaries but never at levels serious enough to affect the commercial hunting quotas. These remained relatively stable over the period.

*Post-2000*: The general trend within the corridor seems to be one of increasing illegal use of wildlife. Commercial poaching for ivory was not a major feature before 2000. After 2000, it appears to have developed and may involve representatives from the military and senior politicians (interview in Nenyunga on 4 September 2004).[11] Informants estimated that between January and August 2004, at least 14 elephants were illegally killed in the wildlife game area. Informants claim that elephants are now being killed for their ivory and not their meat—suggesting that illegal hunting has moved from subsistence to commercial levels. The safari operator also noticed an increase in the use of licensed and unlicensed weapons in the area. Within the Nenyunga community there were unconfirmed sightings of poachers in army uniforms. Other poachers with strong political connections were not being arrested. In 2001 it was estimated that

**10.** Precise estimates of wildlife populations are extremely difficult, if not impossible to obtain. Aerial surveys rely on a sample technique from which the total population is estimated within given confidence intervals.
**11.** Recently two Chinese nationals were arrested in Harare with 74 elephant tusks (See *The Daily Mirror* on www.dailymirror.co.zw accessed on 6 July 2005).

the resident population of elephant in Gokwe North had declined to just under 800, from 900 animals in 1999. More importantly the proportion of elephant in the communal lands of the Sebungwe had fallen from 37% to 29%;[12] an indication of the loss of habitat through settlement (Dunham and Mackie, 2002). Further the 2001 national aerial survey showed that the carcass ratio (the ratio of dead to live elephants) within Gokwe had increased from 3.9% in 1999 to 5.8% in 2001 (Mackie, 2002).

## Financial management and benefits

### Co-management case study

*Pre-2000:* Funds generated by co-management have always been limited, as shown in Table 1. Financial management at the RMC level has always been contested, with the misuse of funds occurring in some RMCs. There were even attempts to bring some of those who had misappropriated RMC funds before traditional leaders in the Batanai RMC. Despite the misappropriation there was an attempt to keep up to date financial records in the pre-2000 period.

*Post-2000:* The general trend in both resource regimes over the period 1991 to 2004 has been a decline in real incentives for local communities to manage their natural resources. Table 1 summarises the total amounts that the two RMCs have generated

**Table 1. RMC Permit Revenue from Batanai and Chemwiro-Masawi RMCs (%)[13]**

| Year | Batanai RMC | | Chemwiro-Masawi RMC | |
|---|---|---|---|---|
| | Z$ | US$[14] | Z$ | US$ |
| 1996 | | | 3,059 | 306 |
| 1997 | 3,693 | 295 | 9,711 | 777 |
| 1998 | 6,543 | 263 | 3,531 | 142 |
| 1999 | 12,912 | 340 | 7,094 | 187 |
| 2000 | 4,000 | 89 | 6,641 | 149 |
| 2001 | 7,210 | 131 | 10,848 | 197 |
| 2002 | 8,776 | 159 | 3,430 | 971 |
| 2003 | 54,765 | 10 | 74,890 | 13 |
| 2004 | 356,000 | 57 | | |

**12.** The Sebungwe communal area comprises Gokwe North and Nyaminyami Rural District Councils. The logic behind a combined survey is to establish if wildlife has not just re-located within the same broader agro-ecological region.
**13.** These are real figures that have not been adjusted for inflation.
**14.** All conversions are carried out using the official exchange rate. Parallel market rates may be up to 5 times the official exchange rate.

since their inception, mainly through selling permits for firewood, mat reeds, brooms and thatching grass.

The revenue generated by RMCs is not very high. One of the reasons given by the RMC members for the low revenue collected is the low permit fee for broom grass collection. The daily permit fee at the time of the fieldwork was Z$500 (about US$0.08). In 2004 the RMCs asked for all payments to be made in cash rather than in kind, which increased revenues. Timber can generate significant amounts of revenue but RMCs had no access to timber revenue because the Forest Act of 1996 says such revenue has to accrue to the Rural District Council as the land authority. The Forestry Commission gets a small commission for making the forestry inventory and helping verify the quantities logged by the concessionaire.

### CAMPFIRE case study

*Pre-2000:* Gokwe RDC allocated revenue to wards on a producer/ward principle. Nenyunga Ward, with the highest proportion of land in the corridor, received substantial dividends between 1991 and 1999. The highest disbursement was US$19,488 in 1996. It is important to point out that whilst the situation was not ideal pre-2000, information was available on the proportion devolved to the rural communities at ward level. In Gokwe North RDC, 53% of the CAMPFIRE revenue was disbursed to communities in 1991, a figure which had fallen to 18% in 1999 (Khumalo, 2003).

*Post-2000*: the financial incentives received by Nenyunga Ward A have dramatically fallen over the years due to high levels of inflation and withdrawal of external donor support. Ninety-five percent of the total revenue received from 1991 to the present (US$86,165) was received between 1991 and 1999 (average ward dividend was US$9,117). Between 2000 and 2005 the ward received a total of just US$4,134, an average of US$827 per annum. The worst year was 2003. Although the Nenyunga community theoretically was entitled to US$117 that year, the councillor took the cheque and failed to cash it. He then kept it until it expired. There were some rumours that the councillor had in fact successfully cashed the cheque.

## Financial accountability

### Co-management case study

*Pre-2000:* Financial accountability was a major challenge even in the pre-2000 period, but whilst the accountability mechanisms were not effective, there were at least attempts to improve them, including incorporating educated people into the RMCs who could carry out internal audits. CIDA supported some basic record

keeping courses. In Batanai some of the RMC members were arraigned before the traditional leaders. In both Chemwiro-Masawi and Batanai RMCs the FCZ helped by auditing RMC accounts, and named and shamed those who had misappropriated RMC funds. In a number of instances, however, those named still did not refund the community funds.

*Post-2000:* The post-2000 financial uncertainty resulted in some RMCs introducing an informal loan system for the RMC members without the approval of the community. Any committee member who had financial hardships could borrow money from the RMC fund. When the FCZ discovered that RMCs could not account for all their income, the RMC members argued that they had decided to loan out the money to needy RMC members. Since there were no records of these transactions it was difficult to assess how much had been diverted in this manner. RMC members argued that they were not losing out as they were asking for an interest of 25% per annum on any sum of money borrowed. In most instances the loans were never paid back. This was mainly as a result of the RMCs not being downwardly accountable to their constituency.

### CAMPFIRE case study

*Pre-2000:* In the early days of CAMPFIRE financial management and accountability by Nenyunga WWMC suffered from the absence of financial systems, its distance from banks and the lack of skills. Although accountability in the pre-2000 period was not perfect there were genuine attempts by the WWMC to be transparent and accountable. Support from a variety of organisations, particularly MS (Zimbabwe) and WWF assisted in developing financial management systems and skills. Financial records were presented at all WWMC meetings and annual general meetings allowed interested residents to critique allocations and spending. Another technique used by the WWMC was to display financial statements in public places such as shops and community centres. In Nenyunga those who misused CAMPFIRE funds were removed from the WWMC, including the incumbent councillor.

*Post-2000:* In the CAMPFIRE area the RDC still maintains some oversight of the WWMC's financial affairs and countersigns all the financial transactions carried out by the WWMC. However, resource constraints mean that there is limited effort to monitor the role of the WWMC. More importantly, the WWMC is no longer perceived as being accountable to the residents of the ward. Financial statements are no longer made public. A longstanding Problem Animal Reporter (PAR) pointed out that if you ask for a detailed explanation of CAMPFIRE funds you would end

up in hot soup.[15] This has provided a good opportunity for elite capture and the CAMPFIRE programme in Nenyunga has been hijacked for personal benefit by some committee members, councillors and traditional leaders, who use political arguments to exclude and disempower the villagers and even threaten RDC officials (*cf*. Mapedza and Bond, 2006).

## POLICY RECOMMENDATIONS

The post-2000 period has brought uncertainty politically, economically and socially, all of which has affected the management of natural resources in the Gokwe area. High inflation has seriously eroded the benefits that most resource managers derive from the communal areas (the annual inflation rate recently reached 1,730%). Within the forestry sector, proceeds from NTFPs, which have always been low, have been further eroded, making them even less significant for community development projects. One of the main weaknesses of co-management as practised in Mafungautsi is the exclusion of proceeds from timber, leaving the RMCs access only to low value forestry resources.

In Nenyunga, revenue has also been eroded by inflation and the withdrawal of support in the form of transport, Problem Animal Reporters and bullets, all of which now have to be paid for from the diminishing CAMPFIRE dividends. Financial difficulties have also led the RDC to reduce the proportion of revenue it can plough back into the wards. The weakened WWMC has become subject to the whims of a councillor who was more interested in advancing his interests in the name of the ruling party, at the expense of the initial intended beneficiaries of CAMPFIRE. The previously growing local resource management capacity and knowledge are now being eroded. The withdrawal of external support to both initiatives by CIDA and USAID, largely viewed by the Zimbabwean government as punishment for its controversial land reform programme, has also had a detrimental effect. There is an increasing reversal of most of the pre-2000 achievements, despite their shortcomings.

However, the fact that the institutions for resource management in both co-management and CAMPFIRE still exist is some cause for hope. But these have to be viewed in the context of the increasingly dictatatorial policies in Zimbabwe. These local level institutons need to be accompanied by a more democratic dispensation and long-term solutions are needed which can be resilient in the face of continued and significant political uncertainty.

**15.** Interview WWMC member on 4 September 2004.

The following policy recommendations have two goals: 1) to promote more sustainable livelihoods for people who rely on the two resource regimes; and 2) to sustainably manage the resource base (forests, wildlife) in order to keep on providing a livelihood for the resource dependent communities. These recommendations are directed at policy makers and funders within the environmental sector.

- **Increase the direct incentives flowing from sustainable resource management to local communities**. In the CAMPFIRE case this implies decentralising the relationship between the safari operator and the local community. A direct link between these two actors will help the local communities to derive benefits directly, rather than indirectly through the local authority as is the case at present. This more direct arrangement will increase incentives to local communities for managing their natural resources and will promote local accountability. In the Nenyunga case study, revenue was no longer being passed to the WWMC on time and the proportion received continues to fall as central government reduces spending on service provision. This means that local institutions are being deprived of the necessary resources to monitor the environment. In the co-management area, there is a need to change legislation to allow RMCs to access proceeds from commercial timber concessionnaires.

- **Give local communities greater powers to deal with problem animals**. The effective management of problem animals could increase the incentives to local communities for living adjacent to wildlife. Effective PAC depends on a quick response. With local government facing transport constraints, local communities are better placed to carry out this activity and their involvement would reduce human-wildlife conflicts. The state should devolve this role and the requisite resources to the local communities, with the state maintaining an oversight role. PAC can be effectively handled by the Ward Wildlife Committee with the support of the locally recruited Animal Reporters and former Fence Minders. Support would be needed to further train them in order to meet the minimum hunting licensing requirements in order to effectively deal with problem animals.

- **Re-assess the balance between livestock and wildlife** in light of the difficulties of maintaining wildlife corridors and also in view of the need for tsetse control. Some of the Nenyunga community members felt that agricultural production and livestock rearing would bring more benefits than wildlife. In the forestry area grazing and agricultural activities were also perceived as bringing more benefits to the local communities than protected forests. More rigourous cost-benefit assessments

need to be carried out within the two case study ecological contexts to help strike a reasonable balance between agricultural activities and conservation.

- **Create mechanisms to add value to both wildlife and forestry resources**. Such initiatives might include eco-tourism, which has the potential to generate more income and offer employment opportunities.

- **Increase donor support to the areas of local community representation and accountability.** Institutional support for the Resource Management Committees and Ward Wildlife Management Committees will enhance capacity not only to manage wildlife and forestry, but also to manage other natural resources. This would be similar to the support previously provided by USAID, WWF, Zimbabwe Trust and other Campfire Collaborative Group (CCG) members. In the co-management area CIDA provided resources for building the capacity of RMCs.

These policy recommendations have to be assessed in the context of the current unstable political context in Zimbabwe, which makes it difficult to devolve power to local levels. With increased threats to the state, there is now an increased tendency to centralise power and undermine moves towards democratic decentralisation, which is largely perceived as providing a forum for local level dissent. However, even within such an oppressive context there are indications that increasingly undemocratic practices will not be sustainable for a long period of time and international condemnation should eventually bring more democratic governance to Zimbabwe.

## ACKNOWLEDGEMENTS

IIED's Forestry and Land Use Programme funded this study under the Sharpening Policy Tools for Marginalized Managers of Natural Resources project. I would like to thank Sonja Vermeulen for the funding and research advice. Ivan Bond also made some useful comments. The following institutions provided invaluable information: CAMPFIRE Association, Centre for Applied Social Sciences, Zimbabwe Forestry Commission, Gokwe North and South RDCs, WWF and Zimbabwe Trust (ZimTrust). Field Research Assistants, namely Bernard Mapfumo, Nesto Augustino and Onias Mpofu, were important research partners. I would also like to acknowledge the hospitality of the Mafungautsi and Nenyunga communities.

## REFERENCES


Bond, P. and Manyanya, M. 2002. *Zimbabwe's Plunge: Exhausted nationalism, neoliberalism and the struggle for social justice.* Weaver Press, Harare.

Child, B. Moinuddin, H., Jones, B., Mlalazi, A. & Mazambani, D. 2003. *Communal Areas Management Programme for Indigenous Resources. Final Evaluation Report: Zimbabwe Natural Resources Management Program—USAID/Zimbabwe Strategic* Objective No. 1. Harare: USAID.

Corrales, J. 2004. The gatekeeper state: limited economic reforms and regime survival in Cuba, 1989-2002. *Latin American Research Review,* 39(2): 36-65.

Dunham, K. M., Davies, C. and Muhwandagara, K. 2003. *Area and Quality of Wildlife Habitat in selected CAMPFIRE Districts*. A Report prepared for WWF-SARPO, January. WWF, Harare.

Dunham, KM and Mackie, CS. 2002. *National Summary of Aerial Census Results for Elephant in Zimbabwe: 2001.* WWF-SARPO, Harare.

Hammar, A., Raftopoulos, B. and Jensen, S. 2003. *Zimbabwe's Unfinished Business: Rethinking Land, State and Nation in the Context of Crisis,* Weaver Press, Harare.

Jones, B. and Murphree, M. 2001. The evolution of policy on community conservation in Namibia and Zimbabwe. In: D. Hulme and M. Murphree (eds). *African Wildlife and Livelihoods*. Oxford: James Currey.

Khumalo, M.A. 2003. *CAMPFIRE Monitoring and Evaluation Data 2001.* WWF SARPO, Harare.

Logan, O. 2005. *The Age of Consent: A manifesto for a new world order.* Electronic version. http://72.14.207.104/search?q=cache:VyWXpnj8yxwJ:www.redflag.org.uk/frontline/17/17monbiot.html+gatekeeper+state&hl=en&gl=uk&ct=clnk&cd=10 (accessed 8 January 2006).

Mackie, C. S. 2002. *Aerial Census of Elephants and other Large Herbivores in the Sebungwe Region, Zimbabwe: 2001.* WWF-SARPO, Harare.

Mapaure, I. 2001. *The Influence of Elephants and Fire on the Structure and Dynamics of Miombo Woodland in Sengwa Wildlife Research Area, Zimbabwe*. D.Phil., Tropical Resource Ecology Programme, University of Zimbabwe.

Mapedza, E. and Bond, I. 2006. Political deadlock and devolved wildlife management in Zimbabwe: the case of Nenyunga Ward. *Journal of Environment and Development,* 15: 407-427.

Mapedza, E., Wright, J. and Fawcett, R. 2003. An investigation of land cover change in Mafungautsi Forest, Zimbabwe, using GIS and participatory mapping. *Journal of Applied Geography,* 23: 1-21.

Martin, RB. 1986. *Communal Area Management Programme for Indigenous Resources* (CAMPFIRE). Harare: Branch of Terrestrial Ecology, Department of National Parks.

Murindagomo, F. 1997. *Wildlife, Cattle and Comparative Advantage in Semi-Arid Communal Lands and Implications for Agropastoral Options and government policy: A case study in the Sebungwe Region, Zimbabwe.* Unpublished Mphil Thesis, University of Zimbabwe.

Murphree, M. W. 1991. *Communities as Institutions for Resource Management.* University of Zimbabwe: CASS.

Raftopoulos, B. 2001. The labour movement and the emergence of opposition politics in Zimbabwe. In: B. Raftopoulos and L. Sachikonye (eds.), *Striking Back: The labour movement and the post-colonial state in Zimbabwe 1980-2000.* Weaver Press, Harare.

Rukuni, M. and Eicher, CK. 1994. *Zimbabwe's Agricultural Revolution.* University of Zimbabwe, Harare.

Vermeulen, SJ. 1996. *Cutting of trees by local residents in a communal area and an adjacent state forest in Zimbabwe. Forest Ecology and Management* 81: 101-111.

# SUBSCRIBING TO THE GATEKEEPER SERIES

To receive the Gatekeeper Series regularly, individuals and organisations can take out a subscription. Subscribers receive nine Gatekeeper papers a year. Subscriptions are free. For more details or to subscribe contact: IIED, 3 Endsleigh Street, London, WC1H 0DD, UK. Email gatekeeper@iied.org Tel: +44 020 7388 2117; Fax +44 020 7388 2826, or complete the online order form at http://www.iied.org/

## OTHER IIED PUBLICATIONS

For information about IIED's other publications, contact: EarthPrint Limited, Orders Department, P.O. Box 119, Stevenage, Hertfordshire SG1 4TP, UK
Fax: +44 1438 748844
mail to:
orders@earthprint.co.uk
There is a searchable IIED bookshop database on:
http://www.iied.org/bookshop/index.html

1. **Pesticide Hazards in the Third World: New Evidence from the Philippines.** 1987. J.A. McCracken and G.R. Conway.
2. **Cash Crops, Food Crops and Agricultural Sustainability.** 1987. E.B. Barbier.
3. **Trees as Savings and Security for the Rural Poor.** 1992. Robert Chambers, Czech Conroy and Melissa Leach. (1st edition, 1988)

**4-12 Out of Print**

13. **Crop-Livestock Interactions for Sustainable Agriculture.** 1989. Wolfgang Bayer and Ann Waters-Bayer.
14. **Perspectives in Soil Erosion in Africa: Whose Problem?** 1989. M. Fones-Sondell.

**15-16. Out of Print**

17. **Development Assistance and the Environment: Translating Intentions into Practice.** 1989. Marianne Wenning.
18. **Energy for Livelihoods: Putting People Back into Africa's Woodfuel Crisis.** 1989. Robin Mearns and Gerald Leach.
19. **Crop Variety Mixtures in Marginal Environments.** 1990. Janice Jiggins.
20. **Displaced Pastoralists and Transferred Wheat Technology in Tanzania.** 1990. Charles Lane and Jules N. Pretty.
21. **Teaching Threatens Sustainable Agriculture.** 1990. Raymond I. Ison.
22. **Microenvironments Unobserved.** 1990. Robert Chambers.
23. **Low Input Soil Restoration in Honduras: the Cantarranas Farmer-to-Farmer Extension Programme.** 1990. Roland Bunch.
24. **Rural Common Property Resources: A Growing Crisis.** 1991. N.S. Jodha.
25. **Participatory Education and Grassroots Development: The Case of Rural Appalachia.** 1991. John Gaventa and Helen Lewis.
26. **Farmer Organisations in Ecuador: Contributions to Farmer First Research and Development.** 1991. A. Bebbington.
27. **Indigenous Soil and Water Conservation in Africa.** 1991. Reij. C.
28. **Tree Products in Agroecosystems: Economic and Policy Issues.** 1991. J.E.M. Arnold.
29. **Designing Integrated Pest Management for Sustainable and Productive Futures.** 1991. Michel P. Pimbert.
30. **Plants, Genes and People: Improving the Relevance of Plant Breeding.** 1991. Angelique Haugerud and Michael P. Collinson.
31. **Local Institutions and Participation for Sustainable Development.** 1992. Norman Uphoff.
32. **The Information Drain: Obstacles to Research in Africa.** 1992. Mamman Aminu Ibrahim.
33. **Local Agro-Processing with Sustainable Technology: Sunflowerseed Oil in Tanzania.** 1992. Eric Hyman.
34. **Indigenous Soil and Water Conservation in India's Semi-Arid Tropics.** 1992. John Kerr and N.K. Sanghi.
35. **Prioritizing Institutional Development: A New Role for NGO Centres for Study and Development.** 1992. Alan Fowler.
36. **Out of Print**
37. **Livestock, Nutrient Cycling and Sustainable Agriculture in the West African Sahel.** 1993. J.M. Powell and T.O. Williams.
38. **O.K., The Data's Lousy, But It's All We've Got (Being a Critique of Conventional Methods.** 1993. G. Gill.
39. **Homegarden Systems: Agricultural Characteristics and Challenges.** 1993. Inge D. Hoogerbrugge and Louise O. Fresco.
40. **Opportunities for Expanding Water Harvesting in Sub-Saharan Africa: The Case of the Teras of Kassala.** 1993. Johan A. Van Dijk and Mohamed Hassan Ahmed.

41 **Out of Print**

42. **Community First: Landcare in Australia.** 1994. Andrew Campbell.

43. **From Research to Innovation: Getting the Most from Interaction with NGOs in Farming Systems Research and Extension.** 1994. John Farrington and Anthony Bebbington.

44. **Will Farmer Participatory Research Survive in the International Agricultural Research Centres?** 1994. Sam Fujisaka.

45. **Population Growth and Environmental Recovery: Policy Lessons from Kenya.** 1994. Mary Tiffen, Michael Mortimore and Francis Gichuki.

46. **Two Steps Back, One Step Forward: Cuba's National Policy for Alternative Agriculture.** 1994. Peter Rosset and Medea Benjamin.

47. **The Role of Mobility Within the Risk Management Strategies of Pastoralists and Agro-Pastoralists.** 1994. Brent Swallow.

48. **Participatory Agricultural Extension: Experiences from West Africa.** 1995. Tom Osborn.

49. **Women and Water Resources: Continued Marginalisation and New Policies.** 1995. Francis Cleaver and Diane Elson.

50. **New Horizons: The Economic, Social and Environmental Impacts of Participatory Watershed Development.** 1995. Fiona Hinchcliffe, Irene Guijt, Jules N. Pretty and Parmesh Shah.

51. **Participatory Selection of Beans in Rwanda: Results, Methods and Institutional Issues.** 1995. Louise Sperling and Urs Scheidegger.

52. **Trees and Trade-offs: A Stakeholder Approach to Natural Resource Management.** 1995. Robin Grimble, Man-Kwun Chan, Julia Aglionby and Julian Quan.

53. **A Role for Common Property Institutions in Land Redistribution Programmes in South Africa.** 1995. Ben Cousins.

54. **Linking Women to the Main Canal: Gender and Irrigation Management.** 1995. Margreet Zwarteveen.

55. **Soil Recuperation in Central America: Sustaining Innovation After Intervention.** 1995. Roland Bunch and Gabinò López.

56. **Through the Roadblocks: IPM and Central American Smallholders.** 1996. Jeffery Bentley and Keith Andrews.

57. **The Conditions for Collective Action: Land Tenure and Farmers' Groups in the Rajasthan Canal Project.** 1996. Saurabh Sinha.

58. **Networking for Sustainable Agriculture: Lessons from Animal Traction Development.** 1996. Paul Starkey.

59. **Intensification of Agriculture in Semi-Arid Areas: Lessons from the Kano Close-Settled Zone, Nigeria.** 1996. Frances Harris.

60. **Sustainable Agriculture: Impacts on Food Production and Food Security.** 1996. Jules Pretty, John Thompson and Fiona Hinchcliffe.

61. **Subsidies in Watershed Development Projects in India: Distortions and Opportunities.** 1996. John M. Kerr, N.K. Sanghi and G. Sriramappa.

62. **Multi-level Participatory Planning for Water Resources Development in Sri Lanka.** 1996. K. Jinapala, Jeffrey D. Brewer, R. Sakthivadivel.

63. **Hitting a Moving Target: Endogenous Development in Marginal European Areas.** 1996. Gaston G.A. Remmers.

64. **Poverty, Pluralism and Extension Practice.** 1996. Ian Christoplos.

65. **Conserving India's Agro-Biodiversity: Prospects and Policy Implications.** 1997. Ashish Kothari.

66. **Understanding Farmers' Communication Networks: Combining PRA With Agricultural Knowledge Systems Analysis.** 1997. Ricardo Ramirez.

67. **Markets and Modernisation: New Directions for Latin American Peasant Agriculture.** 1997. Julio A. Berdegué and Germán Escobar.

68. **Challenging 'Community' Definitions in Sustainable Management: The case of wild mushroom harvesting in the USA.** 1997. Rebecca McLain and Eric Jones.

69. **Process, Property and Patrons: Land Reform In Upland Thai Catchments.** 1997. Roger Attwater.

70. **Building Linkages for Livelihood Security in Chivi, Zimbabwe.** 1997. Simon Croxton and Kudakwashe Murwira.

71. **Propelling Change from the Bottom-Up: Institutional Reform in Zimbabwe.** 1997. J. Hagmann, E. Chuma, M. Connolly and K. Murwira.

72. **Gender is not a Sensitive Issue: Institutionalising a Gender-Oriented Participatory Approach in Siavonga, Zambia.** 1997. Christiane Frischmuth.

73. **A Hidden Threat to Food Production: Air Pollution and Agriculture in the Developing World.** 1997. F. Marshall, Mike Ashmore and Fiona Hinchcliffe.
74. **Policy Research and the Policy Process: Do the Twain ever Meet?** 1998. James L. Garrett and Yassir Islam.
75. **Lessons for the Large-Scale Application of Process Approaches from Sri Lanka.** 1998. Richard Bond.
76. **Malthus Revisited: People, Population and the Village Commons in Colombia.** 1998. Juan Camilo Cardenas.
77. **Bridging the Divide: Rural-Urban Interactions and Livelihood Strategies.** 1998. Cecilia Tacoli.
78. **Beyond the Farmer Field School: IPM and Empowerment in Indonesia.** 1998. Peter A. C. Ooi.
79. **The Rocky Road Towards Sustainable Livelihoods: Land Reform in Free State, South Africa.** 1998. James Carnegie, Mathilda Roos, Mncedisi Madolo, Challa Moahloli and Joanne Abbot.
80. **Community-based Conservation: Experiences from Zanzibar.** 1998. Andrew Williams, Thabit S. Masoud and Wahira J. Othman.
81. **Participatory Watershed Research and Management: Where the Shadow Falls.** 1998. Robert E. Rhoades.
82. **Thirty Cabbages: Greening the Agricultural 'Life Science' Industry.** 1998. William T. Vorley.
83. **Dimensions of Participation in Evaluation: Experiences from Zimbabwe and the Sudan.** 1999. Joanne Harnmeijer, Ann Waters-Bayer and Wolfgang Bayer.
84. **Mad Cows and Bad Berries.** 1999. David Waltner-Toews.
85. **Sharing the Last Drop: Water Scarcity, Irrigation and Gendered Poverty Eradication.** 1999. Barbara van Koppen.
86. **IPM and the Citrus Industry in South Africa.** 1999. Penny Urquhart.
87. **Making Water Management Everybody's Business: Water Harvesting and Rural Development in India.** 1999. Anil Agarwal and Sunita Narain.
88. **Sustaining the Multiple Functions of Agricultural Biodiversity.** 1999. Michel Pimbert.
89. **Demystifying Facilitation in Participatory Development.** 2000. Annemarie Groot and Marleen Maarleveld.
90. **Woodlots, Woodfuel and Wildlife: Lessons from Queen Elizabeth National Park, Uganda.** 2000. Tom Blomley.
91. **Borders, Rules and Governance: Mapping to catalyse changes in policy and management.** 2000. Janis B. Alcorn.
92. **Women's Participation in Watershed Development in India.** 2000. Janet Seeley, Meenakshi Batra and Madhu Sarin.
93. **A Study of Biopesticides and Biofertilisers in Haryana, India.** 2000. Ghayur Alam.
94. **Poverty and Systems Research in the Drylands.** 2000. Michael Mortimore, Bill Adams and Frances Harris.
95. **Forest Management and Democracy in East and Southern Africa: Lessons From Tanzania.** 2001. Liz Alden Wily.
96. **Farmer Learning and the International Research Centres: Lessons from IRRI.** 2001. Stephen Morin, Florencia Palis, Karen McAllister, Aida Papag, and Melina Magsumbol.
97. **Who Benefits From Participatory Watershed Development? Lessons From Gujarat, India.** 2001. Amita Shah.
98. **Learning Our Way Ahead: Navigating Institutional Change and Agricultural Decentralisation.** 2001. Clive Lightfoot, Ricardo Ramírez, Annemarie Groot, Reg Noble, Carine Alders, Francis Shao, Dan Kisauzi and Isaac Bekalo.
99. **Social Forestry versus Social Reality: Patronage and community-based forestry in Bangladesh.** 2001. Niaz Ahmed Khan.
100. **Global Restructuring, Agri-Food Systems and Livelihoods.** 2001. Michel P. Pimbert, John Thompson and William T. Vorley with Tom Fox, Nazneen Kanji and Cecilia Tacoli.
101. **Social Networks and the Dynamics of Soil and Water Conservation in the Sahel.** 2001. Valentina Mazzucato, David Niemeijer, Leo Stroosnijder and Niels Röling.
102. **Measuring Farmers' Agroecological Resistance to Hurricane Mitch in Central America.** 2001. Eric Holt-Giménez.
103. **Beyond Safe Use: Challenging the International Pesticide Industry's Hazard Reduction Strategy.** 2001. Douglas L. Murray and Peter L. Taylor.
104. **Marketing Forest Environmental Services—Who Benefits?** 2002. Natasha Landell-Mills.

105. **Food Security in the Context of Crisis and Conflict: Beyond Continuum Thinking.** 2002. Benedikt Korf and Eberhard Bauer.
106. **Should Africa Protect Its Farmers to Revitalise Its Economy?** 2002. Niek Koning.
107. **Creating Markets with the Poor: Selling Treadle Pumps in India** 2003. Frank van Steenbergen.
108. **Collaborative Forest Management in Kyrgyzstan: Moving from top-down to bottom-up decision-making.** 2003. Jane Carter, Brieke Steenhof, Esther Haldimann and Nurlan Akenshaev.
109. **The Contradictions of Clean: Supermarket Ethical Trade and African Horticulture.** 2003. Susanne Freidberg.
110. **Risking Change: Experimenting with Local Forest Management Committees in Jamaica.** 2003. Tighe Geoghegan & Noel Bennett.
111. **Contract Farming in India: Impacts on women and child workers.** 2003. Sukhpal Singh.
112. **The Major Importance of 'Minor' Resources: Women and Plant Biodiversity.** 2003. Patricia Howard.
113. **Water For All: Improving Water Resource Governance in Southern Africa.** 2004. Emmanuel Manzungu.
114. **Food Industrialisation and Food Power: Implications for food governance.** 2004. Tim Lang.
115. **Biodiversity planning: Why and how should local opinions matter?** 2004. Sonja Vermeulen.
116. **Laws, lore and log-jams: Critical issues in Indian forest conservation** 2005. Madhu Sarin.
117. **Adapting to Climate Change in East Africa: A strategic approach** 2005. Victor A. Orindi and Laurel A. Murray.
118. **Facing up to Climate Change in South Asia.** 2005. Mozaharul Alam and Laurel A. Murray.
119. **State Policies and Land Use in the Chittagong Hill Tracts of Bangladesh.** 2006. Golam Rasul.
120. **Organic Cotton: A New Development Path for African Smallholders?** 2006. Simon Ferrigno, Saro G. Ratter, Peter Ton, Davo Simplice Vodouhê, Stephanie Williamson and John Wilson.
121. **The Market for Voluntary Carbon Offsets: A new tool for sustainable development?** 2005. Nadaa Taiyab.
122. **Getting the Message Across: Promoting ecological agriculture in Bangladesh.** 2006. Dipankar Datta and Kamal Kar.
123. **Climate Change and Development Links.** 2006. Saleemul Huq, Hannah Reid and Laurel A. Murray.
124. **Mysteries and Myths: De Soto, property and poverty in South Africa.** 2006. Rosalie Kingwill, Ben Cousins, Tessa Cousins, Donna Hornby, Lauren Royston and Warren Smit.
125. **Working Together: Forest-linked small and medium enterprise associations and collective action** 2006. Duncan Macqueen, Sharmistha Bose, Septi Bukula, Cornelius Kazoora, Sharon Ousman, Noemi Porro and Horst Weyerhaeuser.
126. **Seed diversity in the drylands: Women and farming in South India.** 2006. Carine Pionetti.
127. **State-farmer partnerships for seed diversity in Mali.** 2006. Didier Bazile.
128. **Mainstreaming participatory forestry within the local government reform process in Tanzania.** 2006. Tom Blomley.
129. **Banishing the Biopirates: A new approach to protecting traditional knowledge.** 2006. Krystyna Swiderska.
130. **A People's Plan for Biodiversity Conservation: Creative strategies that work (and some that don't).** 2006. Tejaswini Apte.
131. **Legislators and Livestock: Pastoralist parliamentary groups in Ethiopia, Kenya and Uganda.** 2007. John Morton, John K. Livingstone and Mohammed Mussa.
132. **Who benefits from land titling? Lessons from Bolivia and Laos.** 2007. Susana Lastarria-Cornhiel.
133. **Keeping CAMPFIRE Going: Political uncertainty and natural resource management in Zimbabwe.** 2007. Everisto Mapedza.

## SUBMITTING PAPERS TO THE GATEKEEPER SERIES

We welcome contributions to the *Gatekeeper* Series from researchers and practitioners alike. The Series addresses issues of interest to policy makers relating to the broad area of sustainable agriculture and resource management. *Gatekeepers* aim to provide an informed briefing on key policy issues in a readable, digestible form for an institutional and individual readership largely comprising policy and decision-makers within aid agencies, national governments, NGOs and research institutes throughout the world. In addition to this primary audience, *Gatekeepers* are increasingly requested by educators in tertiary education institutions, particularly in the South, for use as course or seminar discussion material.

Submitted material must be of interest to a wide audience and may combine an examination of broad policy questions with the presentation of specific case studies. The paper should conclude with a discussion of the policy implications of the work presented.

### Style

*Gatekeepers* must be short, easy to read and make simple, concise points.

- Use short sentences and paragraphs.
- Keep language simple.
- Use the active voice.
- Use a variety of presentation approaches (text, tables, boxes, figures/illustrations, bullet points).
- Length: maximum 5,000 words

### Abstract

Authors should also include a brief summary of their paper—no longer than 450 words.

### Editorial process

Please send two hard copies or an electronic version of your paper. Papers are reviewed by the editorial committee and comments sent back to authors. Authors may be requested to make changes to papers accepted for publication. Any subsequent editorial amendments will be undertaken in consultation with the author. Assistance with editing and language can be provided where appropriate. All illustrations and graphs, etc. should be supplied separately in their original format (e.g. as jpeg files) as well as being embedded within documents. This will allow us to modify the images where necessary and ensure good reproduction of the illustrations in print.

**Papers or correspondence should be addressed to:**
**Gatekeeper Editor**
**Sustainable Agriculture, Biodiversity and Livelihoods Programme**
**IIED, 3 Endsleigh Street,**
**London WC1H 0DD,**
**UK**
**Tel:(+44 020) 7388 2117;**
**Fax: (+44 020) 7388 2826;**
**e-mail: gatekeeper@iied.org**

The **Sustainable Agriculture, Biodiversity and Livelihoods (SABL) Programme** coordinates the editorial process for the Gatekeeper Series. The Programme seeks to enhance and promote understanding of environmental sustainability and equity in agri-food systems and the use of biodiversity. It emphasises close collaboration and consultation with a wide range of organisations and takes a multidisciplinary approach. Collaborative research projects are aimed at identifying the constraints and potentials of the livelihood strategies of marginalized groups who are affected by ecological, economic and social change. These initiatives focus on the development and application of participatory approaches to research and development; resource conserving technologies and practices; collective approaches to resource management; the values of wild foods and biodiversity; rural-urban interactions; strengthening citizen voice and agency in policy processes, and policies and institutions that work for sustainable agriculture and biodiversity-based livelihoods.

SABL is part of the **Natural Resources Group** (NR Group) at IIED, which encompasses two other programmes: Drylands and Forestry and Land Use. The NR Group and its partners work to enable greater participation of marginalized groups and to promote more sustainable and equitable patterns of land and natural resource use. We build partnerships, capacity and wise decision-making for fair and sustainable use of natural resources. Our priority is the control and management of natural resources and other ecosystem services by the people who rely on them, and on the necessary changes needed at international and national level to make this happen.

**ISSN 1357-9258**

DEZA
DDC
DSC
SDC
COSUDE

Sida

iied
International Institute for Environment and Development

Design: Smith+Bell (andymss@aol.com)
Print: TARA, an enterprise of Development Alternatives Group
100% recycled paper handcrafted by tribal women in India

tara

International Institute for Environment and Development
3 Endsleigh Street, London WC1H 0DD
Tel: (+44 020) 7388 2117
Fax: (+44 020) 7388 2826
E-mail: sustag@iied.org
Website: http://www.iied.org/