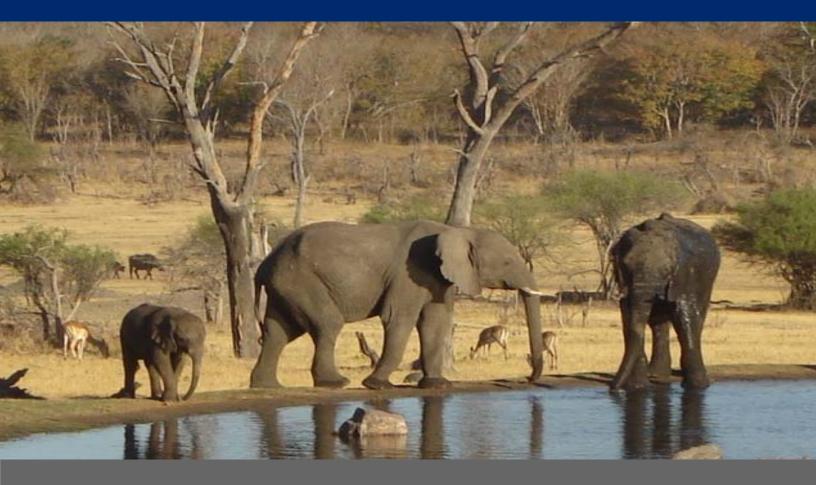


COMMUNITY BASED NATURAL RESOURCE MANAGEMENT

STOCKTAKING ASSESSMENT

ZIMBABWE PROFILE



MARCH 2010

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PREFACE

This report presents results of a CBNRM stocktaking exercise which was conducted under the facilitation of Development Alternatives, Inc. (DAI) and WWF-SAPRO and supported by USAID via the CK2C project. The exercise is part of a regional initiative under which similar stocktaking work is being done in Botswana, Malawi, Mozambique and Zambia. The objective of the process is to assist each CBNRM Country Forum to take stock of the progress and impacts that CBNRM programs have made, while concomitantly catalyzing a national level dialogue on the identification and prioritization of opportunities and challenges currently confronting CBNRM. The resulting profile will be a snapshot in time providing: (i) a summarized history of the country's CBNRM Program; (ii) the current scale of the CBNRM effort, quantified to the extent feasible; (iii) CBNRM's impacts captured to the extent possible; (iv) lesson learned; and (v) the challenges and barriers to the further advancement of CBNRM, identified and prioritized. The stocktaking exercise was, therefore, not an evaluation nor was it a fault-finding mission. It was designed to create an opportunity for CBNRM practitioners to obtain a synthesis of CBNRM activities in the country and to reflect on how these activities can be better coordinated to enhance impact and networking. The stocktaking exercise provides a foundation for conducting a comprehensive baseline survey which can furnish further direction for scaling up CBNRM activities.

STOCKTAKING METHODOLOGY

The stocktaking methodology was pre-determined by the approach agreed upon by the facilitating and funding agencies. The key aspects of the approach, which guided the terms of reference of the consultants, are as follows:

Activities	Deliverables	Dates
Review proposed terms of reference with the National CBNRM Forum	Agreement on study time- frame and methodology	11 December 2009
Hold orientation meeting with National CBNRM Forum to obtain guidance and a list of key CBNRM stakeholders to be interviewed	Minutes of orientation meeting	15 December 2009
Collect key CBNRM documents, reports, and digital images with assistance from National CBNRM Forum, DAI and WWF	Relevant literature is assembled	16-18 December 2009
Undertake desktop study of key National CBNRM documents and fill in Profile information	Draft desktop study report inclusive of a bibliography	21-28 December 2009
Review proposed CBNRM Profile questionnaire to determine whether additional questions should be added to the questionnaire	Study tools ready	29 December 2009
Administer interviews with identified national level CBNRM stakeholders to gather additional information on CBNRM and the challenges and barriers CBNRM is facing	List of interviewees, title and institution	5 – 15 January 2010
Consolidate findings of desktop study and interviews into draft CBNRM profile and submit this for review by National CBNRM Forum	First Draft CBNRM Profile	18-20 January 2010
Prepare for, and facilitate a CBNRM workshop to present the findings in the First Draft Profile and to identify and prioritize CBNRM challenges and barriers via working groups	Inputs from stakeholders	4 February 2010

STOCKTAKING PROCESS FOR PREPARING THE CBNRM COUNTRY PROFILE

Activities	Deliverables	Dates
Prepare Workshop Proceedings and submit to National CBNRM Forum	Workshop proceedings	5-7 February
Incorporate Workshop recommendations into First Draft and send Second Draft for review by key National CBNRM Forum Members	Second draft of Country Profile	9-21 February
Prepare Final Draft incorporating inputs from the National CBNRM Forum and DAI, and submit to National CBNRM Forum, DAI and WWF	Final National CBNRM Country Profile	22-28 February 2010

ACKNOWLEDGMENTS

This report is the output of a CBNRM stocktaking exercise that was funded by USAID and spanned a period of three months, from December 2009 to February 2010. It reflects the combined efforts of Zimbabwean CBNRM practitioners and stakeholders. The authors appreciate the valuable inputs of those who read and provided comments on the drafts as well as feedback provided by participants at the CBNRM consultative workshop held in early February.

We are very grateful to the following organizations for their constructive criticism and input into the first and second drafts of the Zimbabwe country profile document: WWF-SARPO, CAMPFIRE Association, SAFIRE, GEF-Small Grants Program, and DAI. Sincere gratitude is extended to WWF–SARPO for facilitating printing of the first and second drafts of the report.

Our special thanks go to Tom Erdmann for the professional advice during the stocktaking exercise and for reviewing our drafts thoroughly and to Mufaro Masuka for his GIS technical input into the production of the maps in this report. A special thank you is extended to Tariro Rupende, Melody Maunze and Jennifer Ruswa for the administrative and logistical support they provided throughout the stocktaking exercise.

MAIN INFORMATION SOURCES

Information presented and analyzed in this report was obtained from scholarly articles and other published literature, workshop reports, annual reports, and technical and evaluation reports. The main sources of the documents were the CAMPFIRE Association, WWF-SARPO, the GEF-Small Grants Program, SAFIRE, the Forestry Commission, PWMA and the NGO Action. In addition to reviewing CBNRM literature and reports, a total of 23 individuals from 18 institutions were interviewed in Harare (with the exception of two CBOs which were interviewed outside of Harare). These stakeholders included four government ministries or agencies, six local NGOs, four international NGOs, two academic institutions, and two CBOs. The GEF-Small Grants Program made available many project-specific reports and facilitated a trip to the Honde Valley Project Cluster where there is a groundswell of community projects on biodiversity management.

The CBNRM Workshop which was hosted by the National Forum to review the draft CBNRM country profile was attended by 54 participants, representing a wide range of stakeholders who provided feedback on the profile. The workshop was a success: attendance was higher than expected and there was excellent and lively discuss in plenary as well as during working group sessions. The workshop generated renewed interest in the CBNRM Forum and created greater awareness about CBNRM in Zimbabwe.

A limitation of the methodology used is that it did not include comprehensive collection and analysis of field-based data from projects and local authorities (the RDCs). However, it is important to contextualize the methodology within the approach of the entire CBNRM stocktaking initiative: (a) resources for the stocktaking work were limited; (b) a lack of field visits was compensated for by engaging national CBNRM experts; and (c) the snapshot exercise should be viewed as an initial attempt at assessing CBNRM and providing baseline, national-level information. The profile, therefore, provides a basis for future periodic updates.

ABBREVIATIONS

AA	Appropriate Authority
AGRITEX	Agricultural, Research and Technical Extension Services
CA	CAMPFIRE Association
CAMPFIRE	Communal Areas Management Program for Indigenous Resources
CASS	Center for Applied Social Sciences, University of Zimbabwe
CBE	Community-Based Enterprise
CBNRM	Community-Based Natural Resource Management
СВО	Community-Based Organization
CCG	CAMPFIRE Collaborative Group
DANIDA	Danish International Development Agency
DFID	British Department for International Development
DNPWLM	Department of National Parks and Wildlife Management
EMA	Environmental Management Agency
ESC	Environmental Sub-Committee
EU	European Union
GEF/SGP	Global Environment Facility/Small Grants Program
GoZ	Government of Zimbabwe
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
NGO	Non-Governmental Organization
NORAD	Norwegian Agency for International Development
NRM	Natural Resource Management
NRMP	Natural Resource Management Program
NTFP	Non Timber Forest Product
PWMA	Parks and Wildlife Management Authority
RDC	Rural District Council
RMC	Resource Management Committee
SAFIRE	Southern Alliance for Indigenous Resources

SFA	Specialty Foods for Africa		
TFCA	Transfrontier Conservation Area		
UNDP	United Nations Development Program		
USD	United States Dollar		
USAID	United States Agency for International Development		
WWC	Ward Wildlife Committee		
WWF-SARPO	World Wide Fund for Nature, Southern Africa Regional Program Office		
ZELA	Zimbabwe Environmental Lawyers Association		
ZimTrust	Zimbabwe Trust		
ZITF	Zimbabwe International Trade Fair		
ZWP	Zvishavane Water Project		

EXECUTIVE SUMMARY

This profile of community-based natural resource management (CBNRM) in Zimbabwe is divided into two parts. Part 1 describes the history and current status of CBNRM in Zimbabwe. Part 2 presents an analysis of enabling conditions, some best practices and challenges facing CBNRM. It also analyzes the potential contributions of CBNRM to national development and makes recommendations for the future before drawing some conclusions.

Post independence Zimbabwe has witnessed several CBNRM approaches. The Communal Areas Management Program for Indigenous Resources (CAMPFIRE), which represents the initial conceptualization of CBNRM in the country, is both a conservation and rural development approach initially targeted for the marginal communal areas. The Southern Alliance for Indigenous Resources' (SAFIRE) benefit-driven CBNRM approach entails two related strategies; that is, (a) the management of the natural resource base in order to improve its productive and environmental functions; and (b) enterprise development which focuses on the commercial utilization of selected resources by local communities for their benefit. The Forestry Commission facilitates CBNRM initiatives through collaborative arrangements with communities adjacent to gazetted state forests. The aim is to reduce conflict between the state and communities by implementing resources sharing projects which ensure conservation of forest biodiversity while at the same time meeting the livelihood needs of communities. The approach of the Global Environment Facility/Small Grants Program (GEF/SGP) supports community-driven grassroots action that addresses local and global environmental concerns and delivers global environmental benefits in the GEF focal areas of particularly biodiversity conservation, climate change mitigation and adaptation, and prevention of land degradation. This is achieved through sustainable environmental use and protection, poverty reduction and empowerment of local communities.

IMPACTS OF CBNRM PROGRAMS

Under CAMPFIRE, communities exercise their rights to decide how to prioritize the use of wildlife revenues. Communities adjacent to some forest reserves have reclaimed their rights of access to biodiversity resources through co-management arrangements which give the communities decision-making over access and exploitation of natural resources. This approach is seen as a win-win solution with the state agency incurring reduced cost for monitoring and control of illegal exploitation, while the communities have access to natural resources. Major outcomes of the SAFIRE CBNRM activities in terms of changing rights to benefits include commercialization of non timber forest products. As a result, community members have developed a sense of resource ownership and have accepted some management responsibility. The enterprise development strategy has increased benefits from natural resources providing an important incentive for investing in natural resource management.

CBNRM made significant contributions to wildlife conservation from 1989 to 2002, when CAMPFIRE developed strong and effective institutions in the wildlife producer wards. CAMPFIRE Committees were empowered to: (a) enforce wildlife management laws through Resource Monitors and Game Guards, (b) count wildlife and monitor hunting activities, (c) undertake problem animal mitigation measures, and (d) ensure reduction of wild fires. The number of wards that participated in wildlife management increased from 15 in 1989 to 112 in 1999 and to 192 in 2003. Many wildlife producing wards recorded successes in sustaining the habitats for wildlife; and the populations for buffaloes, elephants, lions and leopards

remained stable. In addition, CBNRM is contributing to management of the buffer areas of 800 258 hectares of gazetted forests. Woodland management projects are making contributions in terms of protecting watershed areas through beekeeping activities. Veld fires and over-harvesting of biodiversity has been reduced through work of community-based organizations (CBOs) and facilitating non-governmental organizations (NGOs).

The CAMPFIRE program also had a positive impact on employment creation: Rural District Council (RDC) staff employed in CAMPFIRE include managers, officers, office clerks and game scouts; community projects employ resource monitors, game scouts, millers and bookkeepers; safari operators employ managers, scouts, trackers, hunters, cooks and camp minders; and many community members are self-employed to service CAMPFIRE activities. Infrastructure development associated with all CBNRM approaches includes grinding mills, schools, clinics, offices, eco-tourism-based infrastructure, and fishing camps.

A total of 676 community-based institutions have been created as part of Zimbabwe's CBNRM initiatives. They include 192 wildlife committees, 20 community trusts, 331 forestry-related resource management committees (RMCs), 41 community-based enterprises, and 92 project committees under the GEF/SGP project. These institutions have been established in order to decentralize management, devolve environmental and economic rights, and develop and build community capacity and skills. The subsequent existence of these institutions has facilitated community empowerment and governance below the RDC level.

ENABLING CONDITIONS

The Parks and Wildlife Management Authority (PWMA) can devolve wildlife management responsibilities and benefits to legally constituted bodies at the sub-district level. The Environmental Sub-Committees Regulations of 2009 provide opportunities for further devolution of natural resources management responsibilities directly to communities. These regulations, when read together with the Environmental Management Act, constitute important enabling conditions for CBNRM in Zimbabwe because they provide a legal basis for establishing legitimate community-based organizations. The devolution, democratization, empowerment and the sense of ownership associated with these laws encourage communities to invest their indigenous knowledge, labor and time for sustainable CBNRM.

Zimbabwe is still endowed with wildlife resources within and outside its parks, timber and non-timber forest products within and outside forest reserves, and biodiversity resources within the communal, resettlement, and commercial areas. These can sustain successful CBNRM activities if appropriate strategies are taken to ensure sustainable management of the natural resources. In addition, there is an ever increasing demand for CBNRM products. This includes medicines, processed food, and crafts from plants. This also includes products from wildlife, that is, ivory, meat, hides and trophies. One important factor that fortunately has remained favorable to wildlife-based CBNRM has been the maintenance of a strong market for sport hunting.

LESSONS LEARNED

• Policies and legislation that are sensitive to the environmental and economic rights of communities have a positive impact on natural resources management.

- Incorporating incentives for natural resource management in legislation and ensuring that benefits accrue to the respective communities, is necessary to overcome "the bureaucratic impulse to retain authority."
- Experience from CBNRM in Zimbabwe shows that dedicating resources for performance monitoring is necessary and cannot be avoided.
- Monitoring approaches should be agreed with full representation of all stakeholders.
- Rural communities can live in with wildlife if they see tangible benefits from living with the wildlife.
- Benefits that are easily appreciated by communities must be tangible and monetary. It is difficult to convince communities to manage natural resources when there are low economic returns.
- Local participation is enhanced when it is built on incentives.
- Sharing responsibilities and management functions with communities at the local level empowers them to develop institutions that practice sustainable management of natural resources.
- It is important to vest ownership of natural resources in recognized groups at sub-district level. The unit of management, accountability and benefit sharing should be the same, located at a scale that enables the whole community to meet face to face.
- The unit of proprietorship should be small and have a long-standing collective identity.
- Organizations addressing issues of power in natural resource management need to consider how knowledge and skills might affect the power relationships among stakeholders.
- For CBNRM to succeed, it must benefit communities who shoulder the costs of producing the resource. Inclusion of a large, differentially affected number of individuals dilutes the benefits.
- Conditions that should prevail in order to sustain a commercial enterprise include moving away from a rural set-up to areas with market concentration.
- The process of commercializing natural products must incorporate ways of upholding some traditional harvesting techniques.
- Enterprises that are structured as community projects are difficult to manage because: (i) There are too many people with conflicting interests and ideas; (ii) The distance factor affects the operating efficiency on the enterprise.

SCALING UP

There are two main strategies for scaling up and expanding the impact of CBNRM: (a) increase the volume or magnitude of current production and returns through replication by mobilizing more producers in an area or by introducing activities in new areas, and (b) increase and diversify production through value addition and encouraging economies of scale. The keys to scaling up beekeeping, for example would include a move to mass production and local processing of raw honey in order to achieve value addition. Regarding wildlife management, community participation should go beyond involvement in problem animal control and receiving CAMPFIRE benefits such as meat and cash. There is scope in developing successful partnerships between communities and the state or the private sector in wildlife management. This would result in scaled up impact.

CHALLENGES AND BARRIERS CONFRONTING NATIONAL CBNRM PROGRAMS:

Several environmental laws and policies discourage and/or prevent community ownership of and participation in the management natural resources. For example, the 1982 amendment of the Wildlife Act of 1975 did not devolve management decisions and responsibilities to producer communities. It gave Appropriate Authority to RDCs. Similarly, the Communal Land Forest Produce Act of 1987 limits the right of local communities to exploit forest resources for subsistence use and not to commercial use. Another example is the Environmental Management Agencey Act of 2002 which empowers RDCs who may delegate responsibilities to communities.

In 2005, a report by the Parks and Wildlife Management Authority noted a "growing loss of interest by communities in the implementation of CAMPFIRE" due to the failure by RDCs to adhere to the principles of the CAMPFIRE program. Some RDCs were retaining substantial levies and most were manipulating unallocated revenue and delaying distribution of revenue to communities in order to obtain the investment income. This affected community attitudes towards wildlife, resulting in an increase in the level of snaring and poaching.

CAMPFIRE has not been able to review its operational guidelines – something which is necessary given the changed macro-economic and political environment in the country. There has not been any substantial, recent capacity building exercise for Chief Executive Officers and other key RDC staff. This is needed given the high staff turnover and loss of institutional memory in many RDCs. Similarly, there has been no orientation of new councilors; hence, the vibrancy associated with rural councilors in the 1990s has been lost and most of the new councilors are not conversant with CAMPFIRE issues. Moreover, the CAMPFIRE program does not have a monitoring unit with responsibilities to maintain a database on revenues from RDCs.

According to the Zimbabwean Climate Change Office, dry spells have become more frequent; and the number of days with meaningful rain is decreasing. Available data show that the six warmest years on record for Zimbabwe have occurred since 1987 and that four of those years were recorded after 1998. Climate change poses a serious threat to CBNRM in Zimbabwe because it affects agriculture, water resources, wildlife management, and food security. Smallholder farmers suffer from the impacts of climate change; this has implications on household livelihoods and incentives to manage biodiversity.

LINKS TO NATIONAL PRIORITIES/PROGRAMS

With regard to poverty alleviation, the specific contributions that CBNRM can and should make include some or various combinations of the following:

- Linking producers of raw materials with markets;
- Assisting producers to form local institutions with mandates to produce, process and market products;
- Initiate partnerships between community institutions and the private sector; and
- Advocate for the upgrading of rural infrastructure (e.g., roads) and services (e.g., supply of electricity) in order to facilitate the above and attract private investors to the rural areas.

CBNRM in Zimbabwe continues to make significant contributions to economic growth. For example, the community-based tourism sector has grown as a result of CAMPFIRE. The most common activities include:

- i) Community-owned and run enterprises,
- ii) Enterprises leased from communities and run by private operators who pay lease fees through the RDCs,
- iii) Enterprises run by private operators outside communal lands but linked to communal areas, and
- iv) Community owned enterprises on communal land and run by individual community members.

Currently there are nearly 40 community-based enterprises that could be classified under any one of these categories. Opportunities exist for mainstreaming crafts and community-based tourism especially in areas adjacent to protected areas such as parks and protected forests, if communities are granted user and management rights for these areas. Targeted areas should include the Transfrontier Conservation Areas, especially the region between the Gonarezhou and Kruger National Parks where plans for a tourist bridge across the Limpopo have already been endorsed by the Governments of South Africa and Zimbabwe.

All CBNRM programs in Zimbabwe should emulate the GEF/SGP program which has made biodiversity protection a nation-wide issue given that 80% of the country's population reside in rural areas and are dependent directly on primary extraction of biodiversity for their livelihoods. GEF/SGP has also recognized that there is a close link between biodiversity loss, land degradation, desertification, climate change and rural poverty. Consequently, the biodiversity focal area received major funding in comparison to the other thematic areas in all four Operational Phases of GEF/SGP. Target interventions under biodiversity management which CBNRM programs should support include:

- Community-driven approaches for the conservation of wildlife habitats and ecosystems.
- Strategic interventions to rehabilitate degraded areas in communal lands.
- Restoration of indigenous fodder species in order to enrich grazing resources.
- Promoting sustainable production and use of non-timber forest products.
- Development of environmentally sustainable ecotourism schemes with local participation.

The Government of Zimbabwe has yet to produce an integrated climate change policy and legal framework specifically to address issues of climate change mitigation and adaptation. CBNRM stakeholders should engage the government to formulate workable policies on climate change. There is also a need to scale-up ongoing activities by NGOs and CBOs aimed mitigating and adapting to climate change. These include the following:

- Increasing community access to sustainable climate friendly energy technologies.
- Growing large numbers of trees that tolerate drought for rehabilitating woodlands. This will enhance the expansion and protection of the carbon storage capacity in the country and will have a positive impact on the physical environment. The interventions will also contribute towards arresting the desertification process that is associated with climate change. This will enhance climate change mitigation.

- Improved management of biodiversity, for example reduction of veld fires and implementation of measures to over-harvest reeds, etc.; this will discourage unnecessary carbon emissions.
- Encouraging the production and use of biofuel (e.g., Jatropha oil) as an alternative to fossil fuels.

The potential for CBNRM to enhance its contribution to food and nutrition security is great. The main strategy should be to scale up current interventions or projects that involve food production. These include:

- Honey production: (i) scaling-up honey production by mobilizing producers to form associations that will facilitate handling and marketing of raw honey, and (ii) facilitating capacity building for local processing, packaging and marketing.
- Fruit: Scaling-up production, processing and marketing of fruits. Two geographical areas where both indigenous and exotic fruits go to waste each season are the Rusitu and Honde valleys. These valleys have the potential to support production and processing of pineapples, guavas, bananas and mangos.
- Cash Income from wildlife revenue should be used to source food from districts which have surplus production each year. Beitbridge District is implementing such a scheme in Tshipise Ward. This merits replication.

SYNTHESIS AND CONCLUSION

CBNRM in Zimbabwe has achieved several successes as summarized below:

- Protecting 56,000 km2 of buffer zones around national parks and forest reserves.
- Protecting biodiversity, rehabilitating degraded lands, managing wetlands, and reforesting large areas in communal lands.
- Providing alternative livelihoods for communities residing in the marginal agricultural regions of the country through wildlife-based and plant-based enterprises.
- Providing space for communities to speak with one voice and as a collective unit in their interactions with other stakeholders. An estimated total of 670 CBOs with varying legal status have been established to represent communities in matters related to natural resource management.
- Community benefits include: gaining a sense of ownership of development processes, restored rights of access to natural resources in some protected areas, regaining decision-making responsibilities regarding natural resources, enhanced skills and capacities, and increased cash incomes and the development of social and economic infrastructure.

Nonetheless, many challenges and barriers to achieving wider CBNRM success remain:

- Rural communities do not have tenure rights over natural resources. Devolution under CAMPFIRE is not complete and has become rhetoric in some areas as RDCs have not been accountable and transparent to communities regarding revenue accrual and distribution. RDCs still retain excessive control over CAMPFIRE revenue resulting in the intended beneficiaries being disadvantaged.
- Decisions over commercial exploitation of natural resources have not always been inclusive of communities with some councils awarding concessions and permits to outsiders without the approval of communities, and clandestinely benefiting from such deals. In the case of benefit-driven natural

resource management, not all members in a community participate in such initiatives, resulting in privatization of resources that would otherwise benefit everyone.

- Concerns have been raised on whether collaborative management approaches regarding natural resources adjacent to protected areas is mutually beneficial for the State and communities. It has been argued that the State has benefited more from such arrangement in terms of conservation of the genetic pool whilst communities receive minimal incentives. There is a need to examine the cost-benefit aspects of such approaches from a community perspective.
- Given the increasing levels of poverty, decline in real wages, growing unemployment associated with macro-economic challenges, and the effect of climate change, communities have resorted to over-harvesting of biodiversity and in some cases outright poaching of wildlife, especially since 2005.
- Community empowerment in natural resource management has also been affected by capacity constraints. Under some programs, rural communities have relied too much on technical backstopping from NGOs and government agencies. This is sometimes partly a result of the skewed nature in the allocation of donor funds whereby NGOs tend to enjoy the lion's share at the expense of the communities who are the intended beneficiaries of donor support.

PART 1: HISTORY AND CURRENT STATUS OF CBNRM

1. HISTORY OF CBNRM PROGRAM

Community-based natural resource management (CBNRM) refers to natural resource management that is based on common property theory, which suggests that land and natural resources should be managed by the people who live with and depend on them. It also includes the concept of collaborative management which comprises agreement between local communities and conservation authorities for negotiated access to natural resources (Jones & Murphree, 2001). CBNRM's logic is that the rights to natural resources should be transferred to local communities to re-establish economic incentives for sustainable management. From this perspective, local communities become the "producer communities" for natural resources (Hulme & Murphree, 2001). The rationale for CBNRM is also based on the premise that local communities that derive direct economic benefit from managing natural resources will protect those resources. Thus CBNRM incorporates an argument in favor of local control that is both normative and instrumental. First, producer communities should be allowed to realize benefits from the product that they produce. Second, if the communities benefit from the product, they will be more likely to continue to manage it, thus contributing towards conservation (Jones and Murphree, 2001).

According to the Worldwide Fund for Nature's Southern Africa Program Office (WWF SARPO), "CBNRM in southern Africa is an approach to conservation and development that recognizes the rights of local people to manage and benefit from the management and use of natural resources, ultimately to the conservation benefit of these resources. At the government level, this involves devolving control and management responsibility to local people through appropriate natural resource management policy and legislation. At the community level, it necessitates building the technical, organizational and institutional capacity of community-based organizations (CBOs) to enable them to assume these management responsibilities" (WWF SARPO, 2007).

1.1 PRE-1988 CBNRM STATUS

1.1.1 PRE-COLONIAL PERIOD

Communities in Zimbabwe have a long history of managing natural resources and living with wildlife. In the traditional pre-colonial era prior to 1890, "human population was small and wildlife and other natural resources were plentiful" (Dimbi, 1998); thus, communities had unlimited access to natural resources. Management of these resources occurred through community value systems (i.e., customs, beliefs, and taboos) that were passed on from one generation to another. These value systems suggest that community management of natural resources was not a haphazard practice, but was characterized by rational and systematic considerations by the communities (Mukamuri, 1995). Traditional leaders were responsible for exercising control over how land and associated resources were utilized in areas under their occupation (Mataya, et. al., 2003). Although very little of community management of natural resources during the

pre-colonial period has been documented, the available literature, the indigenous peoples' conventional wisdom, and folk tales all demonstrate that the practices were effective in protecting wildlife and woodland resources for the benefit of the communities.

1.1.2 COLONIAL PERIOD (1890 TO 1980)

Colonial policies alienated communities from their land and other natural resources, leading to the loss of community ownership, control, and rights of access to natural resources. Policies also eroded the traditional institutional capacity of communities to manage their forests and wildlife.

1.1.2.1 Wildlife

With European settlement came radical alterations of the biophysical and socio-economic nature of wildlife management (Peck, 1993; Nabane, 1997). Changes in property rights resulted in the indigenous people and their natural resources coming under State control. The European concept of wildlife protection was introduced via the creation of reserves where game was protected. All wildlife in the country was said to belong to the King of England. Certain species could only be hunted with permits issued by the native commissioners at the district level (Child, 1995). This resulted in the inequitable distribution of costs and benefits with only the settlers permitted to hunt, while the indigenous people were alienated from their wildlife. Indigenous communities were not allowed to take part in decision making processes, and were virtually ignored (Chenje et al., 1998) especially with respect to wildlife conservation.

In the 1970s, State policies changed with respect to wildlife management for the white commercial farmers. The Parks and Wildlife Act of 1975 represented a turning point as it gave commercial farmers rights over wildlife on their land. The Act allowed farmers to commercialize some wildlife products resulting in farmers no longer viewing wildlife as a vermin, but as an asset since there were some returns on the cost of preserving it. However, for the communal people, any utilization of wildlife was considered illegal and individuals could be fined or jailed for shooting or trapping wildlife. Notwithstanding the provisions of the Act that prohibited communal land residents from utilizing wildlife, the Department of National Parks and Wildlife Management (DNPWLM) found it difficult to enforce the law due to manpower shortages and the remoteness and vast size of the wildlife and communal areas (Cumming, 1990a).

1.1.2.2 Management of Tress and other Woodland Resources

Woodland resources play a key role in rural economies and household production in Zimbabwe (Nhira et al., 1998). Woodland products (e.g., food, timber) and services (e.g., catchment area protection, grazing land for livestock, and sacred groves) are critical for the livelihood of rural households. Prior to the 1960s there was very little forestry extension work in the then Native Areas as there was no clear separation between forestry and agricultural issues (Mukamuri, 1995). However, for the communities in these areas, woodlands were very important because they provided resources that were critical in satisfying a great variety of community needs (Virtanen, 1991). Communities followed traditional practices of managing forests and other woodland areas through what Virtanen (1991) describes as a "mechanism of social and religious constructs" or taboos. Cults have a direct influence on ecological processes and in the protection of natural resources" (Mukamuri, 1991). Mukamuri (1995) cites the following example of rules and practices which communities in south-central Zimbabwe have always used since pre-colonial times to protect the jiri forests that normally include indigenous mazhanje trees (Upaca kirkiana):

"Jiri has probably more taboos than most forests. Its trees are not to be cut. Only the right hand may be used for picking fruit, and the fruits must be picked one by one, not in bunches. In addition, only fruits lying on the ground may be collected. Jiri formed the natural rambatemwa" (1995, p.85). [Rambatemwa means cutting of trees is forbidden].

1.1.3 POST INDEPENDENCE DEVELOPMENTS

The post independence era witnessed a number of developments that had several implications for community management of natural resources. The early 1980s were characterized by the new government's attempts to redress the land imbalances inherited from the colonial era through land redistribution and resettlement programs. There were also significant changes in the institutions that were given the responsibility to manage natural resources (Mataya et al., 2003).

In 1982, the government amended the 1975 Parks and Wildlife Act to enable Rural District Councils to obtain 'appropriate authority' (AA) to utilize wildlife for commercial gain. Apart from removing discriminatory provisions in the Act, the proposed changes were aimed at finding alternative forms of land use to subsistence agriculture on marginal lands. At that time there was no particular model as to how this could happen without threatening the resource base. The Department of National Parks and Wildlife Management (DNPWLM) began to explore options within the framework of an integrated land-use plan for the communal lands bordering national parks and safari areas. This Act provided an opportunity to extend to communities in the communal lands the benefits that the private landowners of European origin enjoyed as a result of the 1975 Parks and Wild Life Act. This eventually led to the birth of Zimbabwe's Communal Areas Management Program for Indigenous Resources (CAMPFIRE), which, as will be shown later, had far reaching impacts on wildlife productivity as well as the socio-economic well being of CAMPFIRE communities.

The situation was, however, different for the forestry and woodland management sector. Legislation that affected use and management of forests and woodlands (Communal Lands Forest Produce Act of 1987) inherited the provisions of the Colonial Native Reserve Forest Produce Act of 1928. Under the new Act, state enforcement and regulations persisted (Nhira et al., 1998) ignoring the needs, priorities and knowledge of the communities. The 1987 Act restricted use of forest products in the communal lands to "own use"; restricted movement of produce from one communal area to another; prohibited use of forest products from protected forest areas and tree species; and prohibited removal of trees from within 100 meters of river banks. The Rural Afforestation Project which was established during the 1980s had all elements of a bureaucratic top-down decision-making development model. It prescribed the development of central nurseries, demonstration woodlots, and block plantations. Initiatives based on indigenous knowledge were not taken seriously.

A positive development during the late 1980s through the 1990s was the emergence of developmentoriented non-governmental organizations (NGOs) that were involved in promoting social forestry. These NGOs had a strong field presence and focused on developing and promoting models of good practice for afforestation, woodland management, and rehabilitation of degraded lands. The NGOs included the Southern Alliance for Indigenous Resources (SAFIRE), ENDA-Zimbabwe, Biomass Users Network, COOPIBO and Silveira House. SAFIRE, ENDA-Zimbabwe, Biomass Unsers Network, and ZERO formed the Working Group for Woodland Management which pushed for policy recognition of woodlands and associated livelihoods of rural communities at the national level. Another development that has had a direct and positive effect on CBNRM is the involvement of United Nations Development Program's (UNDP) Global Environment Facility/Small Grants Program (GEF/SGP) in advocating for a paradigm shift in donor funding. The GEF/SGP program insisted that the control of resources and operations is vested in the communities. The program was first implemented in Zimbabwe as a pilot from 1993 to 1995 and was expanded in the first and second operational phases covering the period 1996 to 2005. During these phases, program



Children from the Masoka Primary School – construction of the school made possible from revenue generated by CBNRM.

efforts focused on strengthening community-based activities and approaches aimed at alleviating major environmental concerns with respect to biodiversity, climate change, international waters, and the prevention of land degradation, deforestation and desertification. The program placed a lot of emphasis on decentralized decision-making which led to greater community responsibility and empowerment to confront environmental problems of global concern in their own areas. The program is currently in the final year of its 4th Operational Phase which ends in June 2010.

1.2 MAJOR CBNRM PROGRAM MILESTONES

1.2.1 THE CAMPFIRE PROGRAM

The CAMPFIRE program was conceptually designed to focus on wildlife, woodlands, water, grazing resources, and grasslands. In practice focused on managing wildlife because of the direct monetary benefits which this resource offered to producer communities. The CAMPFIRE concept (see Murphree, 1993; Jones and Murphree, 2001) was developed in response to the realization that unless communities living adjacent to national parks can obtain direct value from wildlife, they will not protect the wildlife. These communities would also need to have a much greater say in how those benefits would be derived and utilized.

While the 1982 amendment of the 1975 Parks and Wildlife Act permitted devolution of authority over wildlife to Rural District Councils (RDCs) the DNPWLM had meager resources to render the program operational (Jones and Murphree, 2001). The DNPWLM turned to the agencies that had participated in the conceptual development of the program for assistance. These agencies included: the Center for Applied Social Sciences (CASS) at the University of Zimbabwe, which was assigned a socio-economic research and evaluation role; the WWF Multispecies Animal Production System Project in Zimbabwe; and the Zimbabwe Trust—an NGO focusing on rural development. These agencies had different but complementary objectives and together with the DNPWLM they formed the original CAMPFIRE Collaborative Group (CCG).

From 1986 to 1988, DNPWLM and its CCG partners engaged in discussions with selected communities and RDCs to identify locations for the inception of the program. The discussions focused on two main criteria, namely: (a) voluntary interest in participation by communities and district councils, and (b) the presence of wildlife populations capable of producing sustainable and economically significant revenues. The CCG work during this period also involved securing political support for the program, and attending to the demands of institutional and administrative detail associated with the conferment of Appropriate Authority (AA) by DNPWLM to RDCs, including the guidelines for awarding revenues and other benefits to communities. The agreed but non-binding guidelines stated that not less than 50% of the revenues was to be paid to the communities (as wards), not more than 35% was to be allocated to wildlife management (habitat management, fire control, monitoring, hiring of game scouts, etc.), and that 15% could be retained by the District Councils as an administrative levy.

Following are key achievements in the development of CAMPFIRE:

- Guruve and Nyaminyami, the first RDCs to be granted AA status, received their first hunting revenues in 1988. This had a dramatic effect in that many districts that are rich in wildlife applied for AA status and by the end of 1991 eleven additional districts had been granted AA status (Jones and Murphree, 2001).
- ii) By the end of 1991, the 13 districts participating in the program collectively grossed United States Dollar (USD) \$1.1 million in revenue for that year.
- iii) By 1995 there were 23 districts participating in the program.
- iv) The CAMPFIRE Association (CA), the secretariat for all districts with CAMPFIRE activities, was formed in 1992. Its primary objectives were to promote the wildlife interests of RDCs and to serve as an association of producer communities. The association played an important role in securing full government support for wildlife management in communal lands so that CAMPFIRE became a recognized conservation program.
- v) Between 1995 and 2000 CAMPFIRE not only witnessed growth in terms of attracting more districts, but also in building the capacity of the RDCs, and in diversifying their activities to include other natural resources. The number of RDCs that were awarded AA status to manage wildlife increased from 2 in 1988 to 27 in 1996. Institutional capacity building grants via United States Agency for International Development (USAID) funding were secured for 24 districts from 1996 to 1999.
- vi) Between 1989 and 2001, CAMPFIRE revenues amounted to almost USD \$ 20.3 million, 97% of which originated in the original 13 districts. Of this, 49% was disbursed to communities (118 wards with over 121,500 households), 20% used for wildlife management, just over 12% retained by the District Councils as a levy, 3% used for other expenses (including the 1.5% levy to the CAMPFIRE Association), and about 15% was retained by the RDCs pending allocation (Khumalo, 2003). Almost 90% of this income came from safari trophy hunting.
- vii) The period from 2001 to 2003 witnessed two significant developments in CAMPFIRE:
 - (a) formation and registration of community trusts as a strategy for devolving decision making and control over resources from the RDCs to community groups, and (b) a concerted drive to diversify CAMPFIRE. Twenty-eight non-wildlife-based community projects received financial support through CAMPFIRE compared to only five wildlife-based community projects.

viii) At its peak in 2002, CAMPFIRE encompassed 53 districts with AA, though only 23 of these really functioned as intended, while only 12 received regular income from wildlife.

1.2.2 WOODLAND RESOURCES MANAGEMENT

Many stakeholders have been involved in the management of woodland resources. NGOs, RDCs and government institutions play different roles in facilitating and encouraging community efforts. While it is conceded that a lot of community-based projects have been supported by different stakeholders, this section focuses primarily on community-based rural afforestation and woodland management activities that have been facilitated by the Forestry Commission's Conservation and Extension Division since 1986.

Key achievements that have helped to foster community ownership of afforestation and woodland management over the past 10 years are:

- Formation of 331 local Resource Management Committees (RMCs) which have assumed responsibility in managing forest resources especially around Forest Reserves and in community woodland management projects. These committees make decisions on how best to manage remaining trees within the communities, and how to utilize non-timber forest produce in Forest Reserves.
- Individual farmers, community groups and schools have produced and planted millions of multipurpose tree seedlings; most of these seedlings are planted during the early stages of the rainy season.
- Establishment of woodland management projects in the communal and resettlement areas: about 815 such projects, which are managed by community members, have been established, covering 17,270 hectares. These projects have encouraged bee-keeping activities, with 1,569 bee-keeping projects developed as part and parcel of woodland management.
- A total of 1,288 agroforestry projects have been established in communal and resettlement areas.
- The program has also facilitated adoption and use of wood-saving stoves in order to reduce pressure on woodland resources. A total of 1,853 tsotso stoves were constructed.

1.2.3 GEF SMALL GRANTS PROGRAM

The overall goal of the GEF Small Grants Program (GEF/SGP), implemented by UNDP, is to secure global environmental benefits through sustainable environmental use, natural resource protection, poverty reduction, and local empowerment of communities. The GEF/SGP has selected the geographic ecosystem approach as well as the thematic approach with five focal areas: biodiversity management, climate change mitigation and adaptation, prevention of land degradation, protecting international waters, and eradicating persistent organic pollutants.

Since 1993, the program has employed a variety of bottom-up approaches in order to realize its specific priorities. It builds community responsibility and capacity for local environmental protection and use, and instills confidence in local abilities to address natural resource management problems. Funding is channeled directly to CBOs and NGOs to support the efforts of local people to conserve and restore the environment, while generating global benefits and sustainable livelihoods.

A total of 130 community-driven projects have been funded and supported from 1993 to 2009; levels up to USD \$50,000 have been devoted to each project. Table 1 shows the different operational phases. Out of the 130 projects implemented, 91 fell under the biodiversity focal area, 14 under climate change, 9 under

international waters, 6 under land degradation, 3 under persistent organic pollutants, and 7 covering all focal areas.

Operational Phase	Period
Pilot and Operational Phase 1	1993 to February 1999
Operational Phase 2	March 1999 to February 2005
Operational Phase 3	March 2005 to June 2007
Operational Phase 4	July 2007 to June 1010

TABLE 1: GEF/SGP OPERATIONAL PHASES

1.2.4 SAFIRE PROGRAM

The Southern Alliance for Indigenous Resources (SAFIRE) is a non-governmental organization that was established in 1994 to assist rural communities to diversify and enhance their livelihood options through sustainable management and utilization of natural resources. SAFIRE has been promoting benefit driven CBNRM programs that seek to enhance economic development in rural areas through provision of innovative natural resources based livelihood options. The organization's focus is primarily on woodlands and trees. The approach adopted by the organization can be divided into two related strategies. These are management of the natural resource base for improving productivity and environmental functions and enterprise development which focuses on the commercial utilization of selected resources by local communities for their benefit. The fundamental assumption is that there exists an opportunity to significantly enhance rural incomes through the development of natural resource-based enterprises, which would in turn increase incentives to invest in sustainable natural resources management of by rural communities. The basic premise of this approach is that commercial utilization of forest products and services increases the value of the forest to the people living in and around the forest; this then becomes an incentive to manage the natural resources sustainably.

CBNRM has been SAFIRE's core business since inception. The SAFIRE approach to CBNRM has evolved over time from species enrichment and supporting ordinary and traditional non-timber forest products such as crafts and thatch grass to the development and promotion of high value products as well as supporting complex business models with private sector linkages (SAFIRE, 2008). The goal of SAFIRE's CBNRM program is "to promote the economic, social and environmental development of communal areas based on the sustainable, productive use and management of natural resources" (SAFIRE, 2008). Its strategies are:

- Resource enhancement through sustainable management and monitoring;
- Appropriate harvesting and management techniques;
- Enterprise development and institutional development; and
- Incentives for management and benefit sharing mechanisms.

Key initiatives with respect to SAFIRE's CBNRM program in Zimbabwe have been:

- Managing our Indigenous Tree Inheritance (MITI) (1997-2001) funded by the Danish International Development Agency (DANIDA) and the Royal Netherlands Embassy.
- Facilitating sustainable use of traditional medicinal plants (2003-2008), funded by GEF/SGP.

- Promoting the commercialization of natural resources (2005-2007), funded by the Ford Foundation.
- Enhancing and diversifying livelihood options in semi-arid areas (2005-2009), funded by Hivos.
- Livelihood Promotion and Protection implemented in separate partnerships with CARE Zimbabwe and CAFORD PRP II; funded by the British Department for International Development (DFID) (2008-2011).
- Southern Africa Pesticidal Plants Project, funded by the Southern African Development Community and the European Union (EU).

1.3 NATIONAL CBNRM FORUM

BACKGROUND TO THE FORMATION OF THE NATIONAL CBNRM FORUM

Prior to 2005 there was no shared vision among CBNRM practitioners in Zimbabwe. The formation of the National Forum was a response to several fundamental challenges. First, neither CAMPFIRE nor the other programs described above constituted a national umbrella organization for CBNRM practitioners. Second, the CAMPFIRE program was biased towards the wildlife sector and focused in communal areas and therefore did not cover other key zones such as resettlement and commercial farming areas. Third, there lacked a clear long-term mechanism for coordination as the CCG had become moribund and the services formerly provided by its members had ended in 2003 following the conclusion of USAID support. Fourth, CAMPFIRE membership was exclusive, there being no room for associate membership, promoters and well wishers. Finally, membership of "producer communities" was not visible in the CAMPFIRE program, because communities were (are still) "represented" by RDCs. These challenges necessitated the formation of a national institution with a mandate for developing a holistic framework for the coordination of all natural resource sectors, all zones or areas within Zimbabwe, and all CBNRM stakeholders. The opportunity to form the Forum was offered by the WWF-SARPO Regional CBNRM Project, which is focused on mainstreaming CBNRM as a development strategy in southern Africa. One of the outputs of the regional project is to assist countries to form national CBNRM fora, which would then constitute the entry points for the regional project in promoting the integration of CBNRM activities into national development agendas.

The formation of the National CBNRM Forum in Zimbabwe was done through two national workshops organized in 2004 and 2005 by the WWF-SARPO Regional CBNRM project in partnership with the CAMPFIRE Association. The key tasks for the Forum were to: (a) facilitate dialogue and sharing of lessons among CBNRM stakeholders; (b) harmonize roles and responsibilities of CBNRM stakeholders; (c) respond to and support new development, especially the land reform program, which has significant implications for natural resources management; (d) review and monitor CBNRM activities countrywide; (e) revive work on CBNRM governance, especially devolution to sub-district levels; (f) facilitate regional exchanges and collaboration; and (g) promote policy advocacy and capacity building of communities.

The objectives of the Forum are:

- To identify and address strategic CBNRM issues in Zimbabwe.
- To support and harmonize the different activities undertaken by CBNRM stakeholders.
- To help define the focus and direction for the CBNRM movement in the country.

- To facilitate the provision of effective and efficient support services.
- To develop linkages with relevant regional initiatives.
- To leverage funds for CBNRM programs.
- To encourage community-private sector partnerships and explore mechanisms for partnerships.

These original objectives were subsequently modified by the Steering Committee (CA, 2008), resulting in the following objectives guiding the operations of the Forum.

- To facilitate knowledge exchange between policy makers and practitioners, and reduce gaps between policy and practice.
- To strengthen the capacities of community-based enterprises (CBEs) and CBOs in value addition and marketing of natural resource products.
- To improve rural communities' access to natural resources and equitable benefit sharing.
- To mainstream HIV and AIDS and gender in all CBO/CAMPFIRE/Community projects.
- To strengthen CBNRM performance and monitoring systems at local and national levels.

1.4 NAMES OF KEY CBNRM INSTITUTIONS AND PROGRAMS

Membership in the National CNRM Forum is open to all organizations and individuals concerned with and involved in various aspects of the management of natural resources at the community level. Members are drawn from all sectors of natural resources such as water, fisheries, forestry, wildlife, land, and all types of organizations, e.g., government agencies, NGOs, CBOs, the private sector, welfare organizations, and academic institutions. An interested organization or individual can apply for membership to the steering committee or is co-opted into the Forum. Current membership comprises: 15 CBOs, 11 local NGOs, 8 international NGOs, 3 government agencies, 4 academic institutions and 1 commodity broker. During the desktop study it was noted that, to date, the forum has 48 members as listed in Annex 1. However, no comprehensive database is available on the Forum Members.

1.5 ROLES OF KEY CBNRM INSTITUTIONS

The work of the Forum is directed by a steering committee whose members are CASS, ACTION, Zimbabwe Environmental Lawyers Association (ZELA), CA, WWF, SAFIRE, the Parks and Wildlife Management Authority (PWMA), Environmental Management Agency (EMA), Matobo RDC and Mutoko Beekeepers Association. The current Steering Committee is chaired by CASS and meets at least once every quarter. Activities of the Forum are presented to members at an Annual General Meeting. The Forum's day to day activities are carried out by the CAMPFIRE Association which serves as the secretariat as well as the host institution for the secretariat. Annex II presents the Terms of Reference of the two management bodies.

The Forum's efforts are spearheaded by seven working groups: (i) Policy, (ii) Management Oriented Monitoring Systems, (iii) Performance Monitoring, (iv) Enterprise Development, (v) CBO Organizational Development, (vi) HIV and AIDS and Gender, (vii) and Training. However, only five out of the seven working groups are active, namely: Policy, Management Oriented Monitoring Systems (MOMs), Community-Based Enterprise Development, CBO Development and Training (CA, 2009). These

Working Groups consist of expert national representatives in respective thematic areas, nominated through the National CBNRM Forum, with a lead facilitator coordinating the activities of each working group, as shown in Annex II. Annex III shows the achievements of the National CBNRM Forum's working groups.

1.6 KEY SOURCES OF FUNDING

Taylor (2006) notes that the DNPWLM started CAMPFIRE through initial government funding from the Public Sector Investment Program. Technical and other support was provided by the CCG and later the Ministry of Local Government, Rural and Urban Development. This support was further enhanced by USAID through grants to CASS and Zimbabwe Trust (ZimTrust) under the first phase of the Natural Resource Management Program (NRMP I) and much larger USAID funding to the CAMPFIRE program under NRMP II. Support for WWF activities came through an independent project funded by the Norwegian Agency for International Development (NORAD). The Government of Zimbabwe provided support for forest conservation and extension services through the Forestry Commission. Other donors such as GTZ and DANIDA supported co-management practices in state forests as well as afforestation work by the Forestry Commission and communities. SAFIRE's projects have been implemented through assistance from the EU, CAFOD, DFID, GEF/SGP, and HIVOS. The UNDP's GEF/SGP is supporting more than 130 CBNRM activities countrywide.

1.7 APPROXIMATE LEVELS OF FUNDING

SUPPORT TO THE CAMPFIRE PROGRAM (USAID)

NRMP I (1989-1994) was fully financed by USAID through an agreement with the Government of Zimbabwe (GoZ) and provided sub-grants to CASS and ZimTrust (Taylor, 2006). The project was "designed as a pilot initiative to test the CAMPFIRE hypothesis on a limited scale before committing substantial USAID resources." The total grant was USD \$7.6 million over five years in four districts, namely, Binga, Bulilima-Mangwe, Hwange, and Tsholotsho. Support for the project included infrastructure development, capital equipment, and activities related to wildlife management, as well as institutional and community development. USAID expanded its support to CAMPFIRE through NRMP II (1994-2003) which supported CAMPFIRE in its totality. It also supported CAMPFIRE in diversifying natural resource management (NRM) beyond wildlife utilization to include non-consumptive eco-tourism ventures, timber and bamboo harvesting, honey and fruit production, fisheries, amacimbi harvesting, and the sale of non-renewable resources (such as river sand) for construction purposes. The USAID contribution to NRMP II was USD \$20.5 million, \$16 million of which was funding from USAID/Zimbabwe and \$4.5 million from USAID regional funds. A 25% GoZ contribution in kind was estimated at USD \$9.4 million (Child et al 2003). Table 2 presents details of the funding for the CAMPFIRE Program from 1989 to 2003.

SUPPORT TO WWF AND CAMPFIRE (NORAD)

Initially directly and subsequently through WWF-Norway, the Norwegian Agency for International Development (NORAD) provided funding to WWF to support CAMPFIRE in two phases between 1994 and 2002. WWF's support to CAMPFIRE was demand-driven (requests from both the CA and DNPWLM). Specifically, NORAD supported local-level natural resource management techniques and capacity building. Phase I (1994-1998) included the development of natural resource management

methodologies, using the concept and practice of participatory technology development (Taylor & Bond, 1999). The funding provided for this phase amounted to 8,666,000 Norwegian kroner, equivalent to USD \$1.25 million. Phase II (1999-2002) focused on the delivery of training at the national and local level, using the training materials developed in Phase I. Approximately USD \$936,000 was made available for this work. Overall, 16,443,764 Norwegian kroner or USD \$2.2 million was provided to WWF for its CAMPFIRE work over a nine-year period.

OTHER FUNDING SOURCES

Funding was also provided by the US Fish and Wildlife Service (USFWS) through Safari Club International to PWMA and ZimTrust for a specific component of WWF's CAMPFIRE work which entailed the development of wildlife quota-setting methodologies. Additional details on CBNRM funding can be found in Tables 3 and 4 below.

Sector	Agency	Funding 1989-2003 (US Dollars)	% of Total Funding	
Wildlife Conservation	WWF	4,550,912	17.2	
Community Development	CA & ZimTrust	8,641,354	32.6	
Regional Communication & Training	ART	899,295	3.4	
Institutional Capacity Building	RDCs	2,000,000	7.5	
CAMPFIRE Development Fund (community)	CA	2,000,000	7.5	
Planning & Applied Research	CASS & Action	2,492,950	9.4	
Enterprise Development	SAFIRE	153,028	0.6	
Fund Management	Development Associates	5,351,148	20.2	
Audit & Evaluation	n/a	61,281	0.4	
Contingency	n/a	100,000	0.9	
Other	n/a	239,705	0.2	
TOTAL		26,489,673		

TABLE 2: USAID FUNDING LEVELS FOR THE CAMPFIRE PROGRAM, 1989–2003

(Source: Child et al., 2003)

TABLE 3: ADDITIONAL FUNDING ASSOCIATED WITH THE CAMPFIRE PROGRAM

Period	Recipient	Program/s	Source	USD
1989 – 2003	PWMA	NRMP I & II	GoZ (in kind)	9,400,000
1994 – 1998	WWF	CAMPFIRE	NORAD	1,200,000
1999 – 2002	WWF	CAMPFIRE	NORAD	936,500
Total				11,536,000

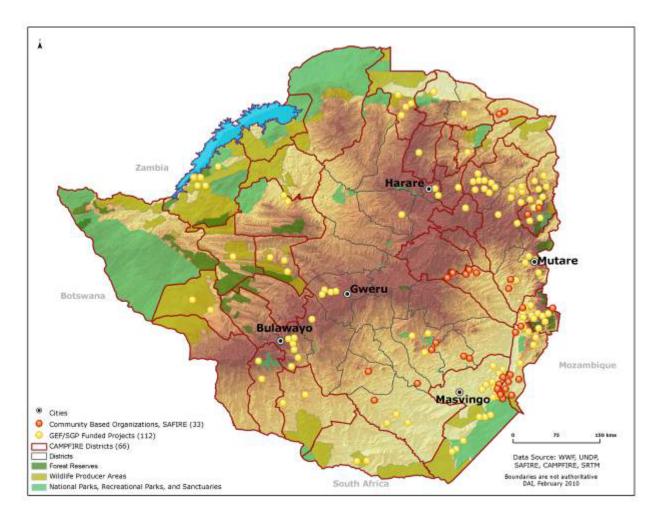
Organization/Program	Period	Source	USD
National CBNRM Forum – Regional CBNRM Capacity building Program	2003 – 2009	WWF Norway	193,600
CAMPFIRE Association – Secretariat to CBNRM Forum	2003 – 2009	WWF Norway	67,709
Forestry Conservation & Extension	1998 – 2007	GoZ, GTZ, Danida	27,596,642
SAFIRE (activities supporting CBNRM)	1997– 2001	Danida/Royal Netherlands Embassy	4,000,000
	2000 - 2004	IFAD	4,000,000
	2006 – 2008	Ford Foundation	400,000
	2007 – 2009	GEF/UNDP	500,000
GEF/ SGP	1993 – 2009		2,868,407
Total			39,626,358

TABLE 4: FUNDING FOR OTHER CBNRM PROGRAMS

2. SCALE OF CBNRM PROGRAM

2.1 GEOGRAPHIC EXTENT

Map 1 below provides an overall view of the three major CBNRM programs in Zimbabwe: the CAMPFIRE program (participating Districts and wildlife producer areas), the GEF/SGP program, and SAFIRE's activities in support of CBNRM. Further details on the area covered by these programs as well as other geographic information can be found in the text, tables and maps that follow.

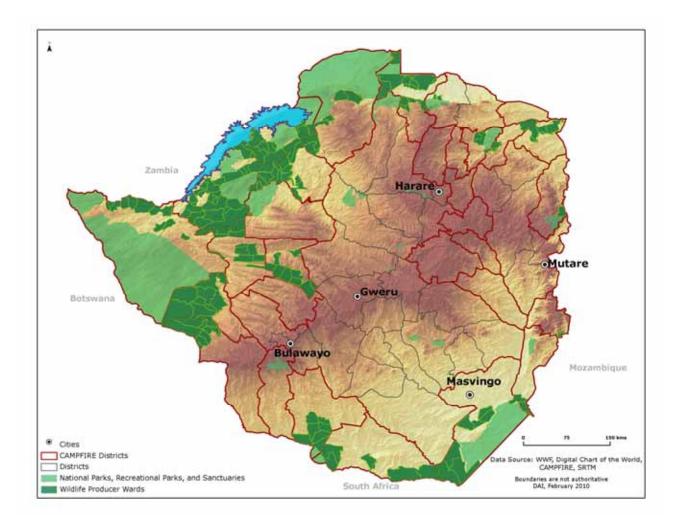


MAP 1: EXTENT OF ZIMBABWE'S THREE MAJOR CBNRM PROGRAMS

Map 2 below depicts the distribution of CAMPFIRE wards within the 13 major wildlife districts in 2002; these wards are categorized as wildlife producer communities. The map also shows the distribution of these wards in relation to national parks, recreational parks (safari areas), and sanctuaries. Table 5 shows the distribution of the wards and the number of households in these wards in 2002. It should be noted that, in addition to these, there are an additional 46 CAMPFIRE wards in various districts that have non-wildlife activities and projects.

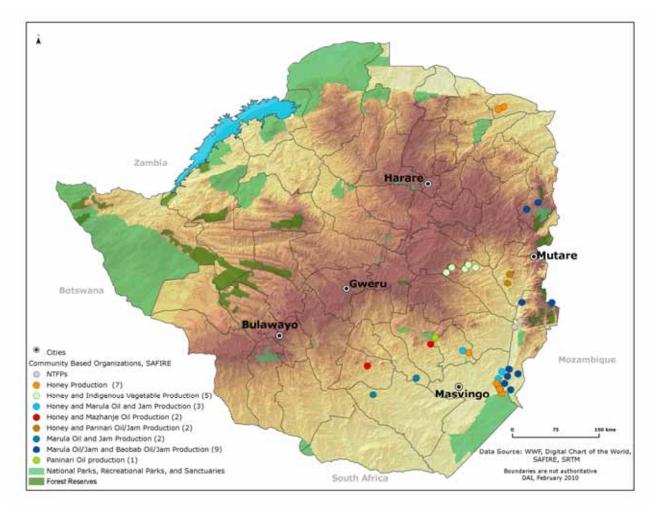
District	# of Wards	# of Households
Beitbridge	7	5 388
Binga	21	19 669
Bulilima-Mangwe	9	7 877
Chipinge	2	2 430
Chiredzi	11	9 176
Gokwe North	14	13 515
Gokwe South	10	10 211
Guruve	11	12 475
Hurungwe	10	12 148
Hwange	16	10 838
Muzarabani	14	8 554
Nyaminyami	12	5 720
Tsholotsho	9	5 601
Total	146	123 602

TABLE 5: DISTRIBUTION OF WILDLIFE PRODUCER COMMUNITIES IN 2002



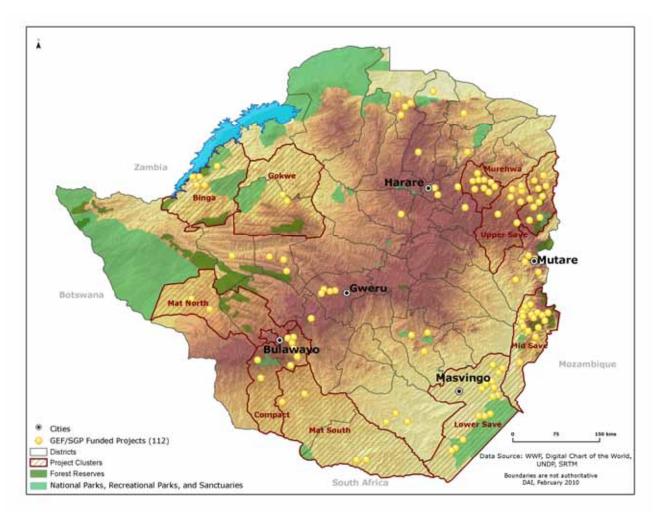
MAP 2: DISTRIBUTION OF WILDLIFE PRODUCER WARDS IN RELATION TO PARKS, 2002

Map 3 depicts the distribution of CBNRM activities which are supported by SAFIRE. Generally, these are located in the populated rural areas most of which are not situated in the traditional wildlife districts (with the exception of Chipinge and Guruve districts).



MAP 3: SAFIRE CBNRM ACTIVITIES

Map 4 shows the distribution of projects supported by GEF/SGP. These projects are grouped in clusters whereby the projects are influenced by similar geographical characteristics and developmental challenges; hence some of them embrace wards in different administrative districts and provinces. The grouping of projects into clusters helps communities to network and share experiences and strategies for dealing with common problems.



MAP 4: GEF/SGP PROJECTS

2.2 AREA UNDER CBNRM MANAGEMENT

At its peak in 2002, the CAMPFIRE Association had a membership of 53 out of the 56 Rural District Councils in the country. At present (2010), none of the 53 districts has renounced membership in the association, however, only 39 districts have active CAMPFIRE projects. CAMPFIRE districts covered over 244,000 km2 and supported approximately 777,000 households. Yet only 13 of these districts had a consistently marketable quota of wildlife for hunting (Khumalo, 2003). Within these districts, the actual wildlife production areas are restricted to about 146 wards covering approximately 43,000 km2 and supporting approximately 123,602 households. The area under non-wildlife CAMPFIRE activities is 4,949 km2 (see Annex IV). This brings the total area under the 192 CAMPFIRE wards to 47,949 km2.

The area covered by 14 out of the 130 projects supported by GEF/SGP is 3,548 km2 (see Annex IV). The area covered by the other projects has not been computed because of inconsistencies in the numbering and naming of wards and lack of an adequate database on the projects; that is, the names of wards where some of the projects are situated is not provided. Similarly, there is lack of comprehensive data on the location of some of the projects supported by SAFIRE; consequently the area covered by only 23 of the projects is known, which is 3,713 km2 (see Annex IV). Therefore, the known area under CBNRM management is 55,208 km2. This translates to 5,520,800 hectares of protected land under community management, compared to a total of 6,205,758 hectares which is protected State land (Forest Reserves, National Parks, Recreational Parks, and Wildlife Sanctuaries). CBNRM therefore accounts for 47.1% of known protected land, excluding private farms.

2.3 GEO-REFERENCED LOCATIONS OF CBNRM UNITS

Annex IV provides a detailed list of CBOs and CBEs, and their location.

2.4 GEO-REFERENCED LOCATIONS OF PROTECTED AREAS

The major categories of protected areas are the Forest Reserves (also known as Gazetted Forests) and National Parks. National Parks, Recreational Parks or Safari Areas, Wildlife Sanctuaries and Botanical Reserves are gazetted under the PWMA which reports to the Ministry of Environment and Natural Resource Management. These areas are important for the conservation of flora and fauna. Parks such as Hwange and Gonarezhou offer the best examples of in-situ conservation of vegetation and wildlife in the country.

Forest Reserves are managed by the Forestry Commission, a parastatal within the Ministry of Environment and Natural Resource Management. The forests were established for the purpose of sustainable extraction of timber, to act as reservoirs of wildlife and water catchment areas, and for the conservation of biodiversity. Most of the forests are located on Kalahari Sands in the mid-western part of the country. Tables 6 and 7 and Maps 4 and 5 provide details and show the location of the protected areas.

Protected Area	Area (ha)	District	Province
National Parks Areas			
Chimanimani	17 100	Chimanimani	Manicaland
Chizarira	191 000	Binga	Matebeleland North
Gonarezhou	505 300	Chiredzi	Masvingo
Hwange	1 465 100	Hwange	Matebeleland North
Kazuma Pan	31 300	Hwange	Matebeleland North
Mana Pools	219 600	Hurungwe	Mashonaland West
Matopos	42 400	Matobo	Matebeleland South
Matusadona	140 700	Nyaminyami	Mashonaland West
Nyanga	33 000	Nyanga	Manicaland
Victoria Falls	2 300	Hwange	Matebeleland North
Zambezi	56 000	Hwange	Matebeleland North
Sub-total for National Parks	2 703 800		
Safari Areas	2 367 000		
Recreational Parks	308 600		

Protected Area	Area (ha)	District	Province
Botanical Reserves & Gardens	7 500		
Wildlife Sanctuaries	18 600		
Sub-total	2 701 700		
Grand Total	5 405 500		

(Source: Ministry of Environment and Natural Resources Management, 1998)

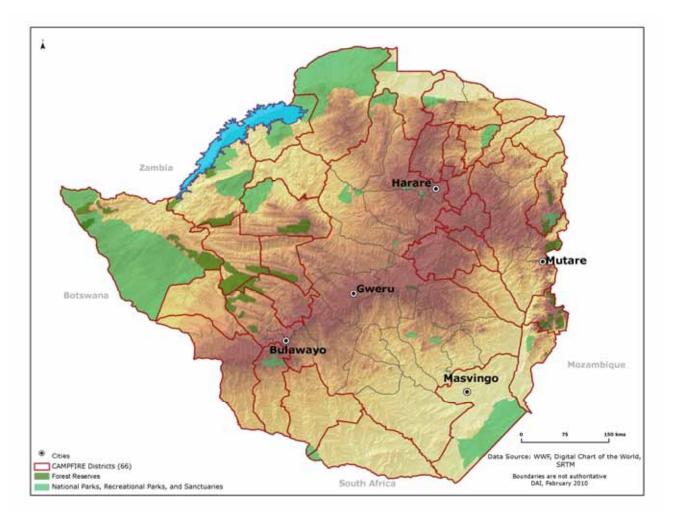
TABLE 7: FOREST RESERVES

Name of Forest	Area (ha)	District	Province
Chesa	14 250	Umguza	Matebeleland North
Inseze	8 400	Umguza	Matebeleland North
Umguza	32 200	Umguza	Matebeleland North
Gwaai	144 230	Lupane	Matebeleland North
Ngamo	102 900	Hwange	Matebeleland North
Nyamandhlovhu	7 400	Hwange	Matebeleland North
Mbembezi	55 100	Bubi	Matebeleland North
Lake Alice	39 000	Lupane	Matebeleland North
Gwampa	47 000	Nkayi	Matebeleland North
Mzola	67 200	Binga	Matebeleland North
Sukumi	54 400	Hwange	Matebeleland North
Kazuma	24 000	Hwange	Matebeleland North
Fuller	23 300	Hwange	Matebeleland North
Panda-Masui	35 500	Hwange	Matebeleland North
Kavira	28 200	Binga	Matebeleland North
Sijarira	25 600	Binga	Matebeleland North
Molo	2 900	Bubi	Matebeleland North
Umzibane	2 471	Umguza	Matebeleland North
M∨utu	2 100	Hwange	Matebeleland North
Mafungautsi	82 100	Gokwe South	Midlands
Ungwe	567	Gokwe North	Midlands
Mudzongwe	1 420	Gokwe North	Midlands
TOTAL (22 Forests)	800 258		

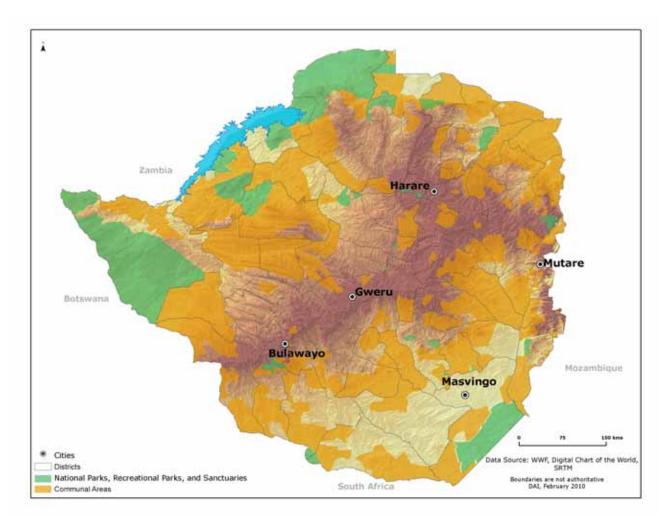
(Source: Ministry of Environment and Natural Resources Management, 1998)

2.5 NATIONAL LEVEL MAPS OF PROTECTED AREAS

Map 5 shows the distribution of National Parks, Safari Areas, Wildlife Sanctuaries, Botanical Reserves, and Forest Reserves in relation to CAMPFIRE districts while Map 6 shows the distribution of the protected areas in relation to the communal lands.



MAP 5: DISTRIBUTION OF PROTECTED AREAS AND FOREST RESERVES



MAP 6: PROTECTED AREAS IN RELATION TO COMMUNAL AREAS

2.6 BRIEF WRITTEN DESCRIPTION OF TYPES OF CBNRM ACTIVITIES SUPPORTED

2.6.1 WILDLIFE

Wildlife is a fugitive resource which, within traditional community structures, cannot be owned or managed by one individual. Wildlife species, which are part of CBNRM activities, range from rabbits and bucks to large herbivores (e.g., elephants). They also include a whole range of predators (wild dogs, leopards and lions) and reptiles, especially crocodiles. The costs that producer communities incur under CAMPFIRE comprise an interdiction on hunting wildlife and a situation whereby they must live with or tolerate wildlife that destroy crops, livestock and even human life. Such losses are very common for wildlife producer communities.

Under CAMPFIRE CBNRM activities, communities are rewarded for living with wildlife by:

- Making collective decisions to protect people, livestock and crops without harming the wildlife unless it is necessary to do so to save human life,
- Participating in decisions regarding trophy hunting quota setting and how to benefit from safari operations,
- Making community decisions on how to use financial resources earned through wildlife hunting,
- Sharing benefits (e.g., meat) when an animal is killed in the ward as part of trophy hunting or as part of problem animal control, and
- Employing local community members in any wildlife-related activities in the ward conducted by the Ward Wildlife Committee (WWC), the Safari Operator and the RDC.

Another type of wildlife-related CBNRM activity is an arrangement whereby the community receives assistance to establish a wildlife ranch for photographic tourism and trophy hunting. A good example is Gonono Ward 4 in Mbire district. The community was assisted by CIRAD to develop the Chivaraidze Game Ranch which is managed by Karunga Community Development Trust, a local, legally registered CBO. The Game Ranch offers trophy hunts to international clients, as well as meat and other game products to local people.

2.6.2 TOURISM

Community-based tourism has the potential to play a key role in the economic development of rural communities in Zimbabwe. Some of these areas have attractive and diverse ecosystems as well as very rich and diverse cultures. Communities are aware of the potential economic benefits that can be derived from eco-tourism, hence the large numbers of projects that received support from USAID through the CAMPFIRE Development Fund from 2000 to 2003 (see Table 8). This Table also presents the different products that are offered by the ecotourism projects.

Only a small proportion of the projects listed in Table 8 are functional for various reasons. First, a large number of the projects could not be completed after USAID funding ended in 2003. In addition, some of the physical structures that had been constructed through USAID funding require rehabilitation. Second, the macro-economic and political environment in Zimbabwe after 2003 discouraged external tourists from visiting the country. The same factors discouraged potential local and external investors who would have partnered with local communities. CBOs and community groups who owned the eco-tourism projects were not able to obtain basic materials which are critical in operating accommodation or camping facilities because of the effects of economic sanctions. Third, most projects suffered from a lack of skills and expertise to manage the projects, especially from late 2007 to the end of 2008 period when facilitating NGOs suspended operations because of the political environment in the country.

Notwithstanding these constraints, there are some success stories among the eco-tourism ventures listed in Table 8. One such case is the Mahenye Eco-tourism Project whose development and achievements have been discussed and analyzed by several authors. Another example is the Kaerezi Eco-tourism project in Nyanga district, which the CAMPFIRE Program singled out as a "best practice" case in 2007. The key attractions for the Kaerezi project are "white water rafting" and trout-fishing as a sport. Family accommodation is provided in two four-bedroom family chalets and camping facilities. A strategic decision made by the Mahenye as well as the Kaerezi communities was to enter into partnership with the

private sector, whereby an entrepreneur entered into a contract with the community and brought into the partnership capital and managerial skills which were not available locally. The success of the Mahenye and Kaerezi eco-tourism projects has been attributed to this factor.

Projects	District	Year	Eco-tourism Products Offered
Vimba Eco-Tourism Project	Chimanimani	2000	Mountain climbing, bird and butterfly watching
Kaerezi Eco-Tourism Project	Nyanga	2001	Water rafting, recreational trout fishing
Mahenye Chilo Lodges	Chipinge		Water and wildlife-based photographic safaris, scenery, accommodation
Banje Eco-Tourism Project	Mazowe	2000	Mountain climbing and camping
Gonono Eco-tourism Camp	Mbire	2001	Camping and accommodation
Masoka Eco-tourism Camp	Mbire	2001	Camping and accommodation
Mukurupahari Project	Pfura	2001	Camping sites, mountain climbing, community hospitality
Mavuradonha Wilderness Development Project	Muzarabani	2001	Scenery, camping, photographic safaris, mountain climbing, biodiversity
Paradise Pools Project	Bindura	2001	Camping, accommodation, fisheries
Ngomakurira Project	Goromonzi	2001	Mountain climbing, accommodation, conference facilities
Mayambara Project	Manyame	2002	Conference facilities,
Mtshabezi Eco-Tourism Project	Umzingwane	2001	Waterfalls, scenery, crafts
Ntunjambili Camping and Information Center	Matobo	2001	Scenery, mountain climbing, camping, information center
CHIEHA Earth Healing Project	Chiredzi		Biodiversity, hospitality, information center
Lumene Falls Road	Umzingwane	2000	Waterfalls, scenery
Maramani Craft Center	Beitbridge	2001	Crafts and community hospitality
Gandavaroyi Falls Campsite	Gokwe North	2001	Camping, photographic safaris
Ziva Ruins Project	Nyanga	2001	Ruins, scenery and information center
Game Watering	Nkayi	2001	Photographic game safaris
Cultural Village	Binga	2001	Lobengula's grave
Craft Center	Umzingwane	2001	Crafts and community hospitality
Muda Rhino Conservancy	UMP	2001	Wildlife-based photographic safaris
Cecil John Rhodes Village	Matobo	2001	Rhodes' grave
Mutandare Eco-tourism project	Buhera	2002	Cultural eco-tourism

TABLE 8: ECO-TOURISM PROJECTS SUPPORTED BY THE CAMPFIRE PROGRAM

2.6.3 NATURAL PLANT PRODUCTS

SAFIRE has played a pivotal role in promoting non timber forest products (NTFPs) within CBNRM, with a focus on adding value to these products in order to bring significant benefits to producers. SAFIRE works with communities in six of the ten provinces in the country and has facilitated the development of a wide range of processed and semi-processed natural products ranging from cosmetics and herbal products and medicines to natural foods and beverages. Raw material from more than 20 indigenous tree species is harvested from the wild and processed into different value-added products, some of which are listed in Table 9. Phyto-Trade Africa, Specialty Foods for Africa (SFA), and the Indigenous Tea Company of Zimbabwe are the main partners working with SAFIRE to secure external markets for natural products.

NTFP	Location (districts)	Products	Markets	# of CBEs	
Masawu Mbire, Muzarabani 🔍		Jams, Masau strips	SFA, agricultural shows, expositions	2	
Baobab	Chipinge, Rushinga Binga	Pulp, seed oil, Baobab tea infusion, flavored yoghurt	SFA, agric. shows, Zimbabwe International Trade Fair (ZITF), Natravista	3	
Nyii	Maunganidze	Berchemia jam and drink	Agric. shows, ZITF	1	
Mazhanje	Masvingo wards 13 &14, Zaka	Mazhanje jam, mazhanje juice	Agric. shows, SFA, ZITF, expositions	1	
Marula	Muzarabani, Rushinga, Mwenezi	Marula oil, jelly, and butter	SFA, agric. shows, ZITF, expositions	4	
Jatropha	Mutare, Gwanda	Jatropha soap and oil	Agric. shows, ZITF	2	
Parinari	Masvingo ward 14	Parinari oil	Agric. shows, ZITF	1	
Macimbi	Matopo, Gwanda Mwenezi	Dried macimbi	SFA, local shops	4	
Indigenous vegetables	Mberengwa, Binga, Mutare, Chiweshe	Dried mufushwa	Agric. shows, ZITF, individuals	5	
Makoni tea	Nyanga	Makoni tea	SFA	1	
Medicinal plants	Matobo, Bulilima, Mangwe, Chimanimani	Traditional remedies for various ailments	ZITF, individuals, agric. shows	4	
Honey	Mutare, Masvingo, Zaka	Honey	ZITF, individuals, agric. shows	3	
Pesticidal plants	Nyanga, Muzarabani	Natural pesticides	Individuals	2	

TABLE 9: NTFP SPECIES, PRODUCTS, MARKETS AND AREAS OF OPERATION

(Source: SAFIRE, 2007 and 2008)

2.6.4 FORESTS AND WOODLAND MANAGEMENT

Some communities in Matebeleland North and Midlands provinces have access to resources in Forest Reserves (see Table 7) where the State and the communities have agreed to co-manage the forests. Villagers from wards that are located along the boundaries of these forests can access the forests to graze their livestock and collect dead wood and a wide range of non-timber forest products (e.g., mushrooms, thatch and broom grass) (Guveya and Sukume, 2003). They can also establish beekeeping projects in the forests as long as the traditional method of harvesting honey using open flame smoke to "drowse" the bees is not used. Another benefit enjoyed by communities adjacent to Mafungautsi Forest in Gokwe South district is that they can cut thatching grass for sale to local and regional markets in neighboring districts. However, the communities are not allowed to cut down trees or to hunt for game. The Forestry Commission and the communities have agreed to share responsibilities for managing the forests, whereby each ward adjacent to the forest is expected to establish a RMC to ensure that community members abide by agreed management arrangements. The Commission recruits resource monitors from within the communities who work hand in hand with the Commission's patrol units to monitor the harvesting and utilization of forest products. Although resource sharing does not give communities full control of the forest areas, there are significant gains which the communities have enjoyed, with respect to improved household livelihoods.

The most common form of CBNRM in woodland management outside Forest Reserves involves the protection and utilization of open-access wooded areas in communal lands. Community members

organize themselves and agree on actions to take to enhance sustainable management of the resources. Common activities include:

- Fencing the area in order to reduce the negative impact of livestock and to protect wetlands, natural springs or other sources of water;
- Infill planting with indigenous or exotic trees;
- Rehabilitating degraded areas by planting trees and grass;
- Introducing beekeeping ventures in order to add value to the area; and
- Adopting by-laws that encourage the protection of the area against veld or wild fires and overharvesting.

2.6.5 FISH

The potential contribution of fisheries to the diet of communities in Zimbabwe's communal lands is constrained by three major factors:

- More than 60% of the country's small dams where artisanal fishing takes place are located in commercial farming areas (Chenje et. al., 1998) which are privately owned;
- There is a lack of user rights and tenure security for dams in communal lands; and
- Most of the small dams dry out completely during the dry season and during droughts, especially in the semi-arid and arid regions where the majority of the rural population resides in communal lands.

Given these constraints, there have been concerted efforts aimed at supporting fisheries under various community-focused programs. The efforts can be divided into three types:

- (i) Pond-based subsistence aquaculture whereby a household may have one or two fish ponds providing a protein source for domestic consumption;
- (ii) Community reservoirs or dams constructed to store water for community use (irrigation and watering livestock) are stocked with fish which are subsequently harvested as common pool resources; and
- (iii) Support for fishing enterprises in large reservoirs, especially Lake Kariba.

Pond-based subsistence aquaculture is very common in projects promoted by NGOs and the Agricultural, Research and Techical Extension Services (AGRITEX). For example, the Africa 2000 network trained 46 farmers in the Shagashe small-scale commercial farming area to integrate pond-based subsistence aquaculture into their household livelihood strategies. By the end of the second year of the project, six farmers had established T-dams on their plots, while another seven had sites already identified for dam construction. The farmers provided all the materials and labor required to construct the T-dams while the NGO and AGRITEX provided technical advice.

Under the second program type, communities receive technical advice as well as material inputs to start fishing enterprises in reservoirs which they control or are under the jurisdiction of RDCs. A number of projects that received support from the CAMPFIRE Program fall under this category. They include the Manyuchi, Mwenje, and Paradise Pools fisheries situated in Mwenezi, Mazowe, and Bindura districts, respectively. The Manyuchi fisheries project encompasses Wards 4, 6, 9 and 10 in Mwenezi district. The

primary objective of the project was to derive income from catching and selling fish. Beneficiary households from the four wards organized themselves into four ward-based CAMPFIRE committees under an umbrella Trust (the Manyuchi Fisheries Project Trust). Under the leadership of the Trust, the beneficiaries received USAID funding to establish four fishing camps, purchase boats, nets, refrigerators and other materials for processing the fish. The beneficiaries' contribution included: formulating their constitution to guide the operations of the Trust and its committees, molding bricks for building the required infrastructure, labor for construction activities, and labor for the fishing work. Processing and marketing of the fish was the responsibility of the Trust (Mazambani, 2002).

The third type of program is similar to the second, the main difference being that:

- (a) Fishing is done on large water bodies, that is, Lake Kariba (Siamuloba Fisheries) and the Zambezi River (Mhakwe Fisheries); therefore, fishing is more demanding in terms of the skills and equipment;
- (b) Fishing is done on international waters; therefore, the permit system requires the involvement of PWMA and the relevant RDCs; and
- (c) Commercial fishing includes large quantities of fish.

2.6.6 WATER RESOURCES MANAGEMENT

The majority of Zimbabwe's communal lands are situated in agro-ecological regions IV and V which receive rainfall below 600 mm per annum. Communities here depend mostly on rainfed subsistence farming for their sustenance. The availability and sound management of water resources are very important not only for daily household use, but also for crop production, livestock management, reforestation, and fisheries. Water is, therefore, a resource that has attracted large investments and drawn on the efforts of CBNRM stakeholders, especially the communities.

Direct and indirect investment in water under CBNRM encompasses: construction of small dams, harvesting of water from natural springs, mountains and rivers, harvesting water from roof tops, drilling boreholes, and the establishment of small irrigation schemes close to dam sites. Projects of this nature have been facilitated by many government agencies, NGOs and CBOs countrywide, but for the purpose of clarity a few examples are drawn from the work facilitated by Zvishavane Water Project (ZWP).

Dams

ZWP is an NGO which is working with many community groups in the semi-arid parts of Chivi, Zvishavane, Mberengwa and Mwenezi districts. It has facilitated the construction of eight dams whose capacities range from 15,000 to 60,000 m3. The catchment areas for the dams range from 1 km2 to 4.6 km2. Although the actual technical design of the dams was done by engineers and AGRITEX officers, the beneficiary communities were actively involved in the planning of the projects; in some cases, several sites were investigated before the final choice was made in consultation with the beneficiaries (Mazambani & te Velde, 2005). The construction of the dam walls, including the earth embankments, was the responsibility of the communities whose main tools were wheelbarrows, shovels and hoes. Although onsite supervision for the technical aspects was done by ZWP and AGRITEX, mobilization of community inputs in the form of labor and materials was the responsibility of the project committees and their traditional leadership. The eight dams have an irrigation component under which water will be gravitated to the gardens; in addition, the dams also provide water for livestock. An important aspect of the dam projects is the active management of the catchment areas through the construction of erosion control features including planting of Vetiver grass and trees.

Harvesting water from rivers

Collecting water from riverbeds and wells and subsequently carrying buckets full of water over distances of several hundred meters to group gardens is tedious and backbreaking. Therefore, several methods have been designed to harvest water from rivers. Motorized pumps are used in rare cases when communities can afford the energy cost (diesel or electricity if it is available). Hand pumps are also used in some cases where they provided the answer to reducing the women's burden of carrying water in buckets. The Rower and Joma hand pumps have been used successfully in projects facilitated by ZWP. Elsewhere, in Nyanga North and Chikwizo communal lands (Mudzi district), the Fombe and Nyandoro communities have embarked on two separate projects (funded by GEF/SGP) which intend to pump water from the Kaerezi and Rwenya Rivers using solar power. Feasibility studies have already been completed under the facilitation of Edit Trust, a local NGO.

2.6.7 RELATED AGRICULTURAL ACTIVITIES

The location and concentration of smallholder communal farmers in the low rainfall areas which have infertile soils reduce the potential of agricultural diversification in these areas. This has necessitated implementation of CBRNM initiatives which encourage production systems that enhance biodiversity on smallholder farms in the communal lands and in resettlement areas. There are several CBO and NGO interventions that are playing an important role in facilitating the maintenance, protection and improvement of agro-biodiversity on individual and group-managed land. In addition to enhancing food production, these interventions are also aimed at reducing pressure on the 'wild biodiversity'.

The GEF/SGP program is supporting much work on sustainable use of land resources in the Save River Catchment area. Funding is provided for technical support to CBOs that are working with farmers on how to improve the land, soil and water resources on their farms without applying chemical fertilizers which pollute the land, soils and water. Hands-on farm-level training is provided to strengthen the capacity of farmers to understand and manage land productivity, soil nutrient status, soil moisture content, soil temperature and the quality of the air. All this is linked to organic farming practices or conservation agricultural practices. Farmers are now practicing rainwater harvesting from roof tops, agroforestry using indigenous and exotic trees, and careful selection of crops in order to adapt to the soil and climatic conditions in their areas.

The Organic Farming Network also facilitates environmental awareness and sharing of experiences among CBOs and farmers, emphasizing the fact that communities are the custodians and users of the nation's biological heritage. Although considerable progress has been achieved in this regard, much still needs to be done if the current natural resources are to be passed on to future generations in a reasonable state.

Harvesting rainwater from rooftops and directing it to fields has been engendered successfully among smallholder peasant farms by the Africa 2000 Network in Chipinge and Chimanimani districts. Conservation farming focuses on water harvesting and the production of drought resistant small grains. Despite the erratic rainfall patterns associated with the southern part of Chipinge and the western parts of Chimanimani district, community-based sustainable agriculture practices, particularly the production of

small grains, have had positive impacts on the lives of communities in semi-arid regions of Zimbabwe. The farmers in this drought prone area are now food self-sufficient (Africa 2000 Network, 2009).

Elsewhere, the Africa 2000 Network, in partnership with Shagashe Farmers Association, a CBO which is working with small-scale commercial farmers in the Shagashe area (40 kilometers north of Masvingo town), successfully empowered farmers to manage water and soil moisture. Prior to 2000, the Shagashe farmers experienced devastating, poor harvests because of severe water supply problems due to inadequate precipitation. As a result, most of the farmers and their families were impoverished and lost hope and motivation to continue with agriculture. From 2001 to 2002 the farmers association, with technical support from the Africa 2000 Network, reversed the negative tendencies by launching on-farm trials and demonstrations on conserving soil fertility and moisture. Some of the on-farm trials focused on wetland utilization, water harvesting and storage, soil conservation through agroforestry techniques, tillage techniques, and fodder production. The soil fertility and moisture conservation features included: contour ridges, infiltration pits next to contour ridges, urea treatment pits, manure pits, compost pits, and silage pits. Some farmers also constructed small T-dams. The impacts of this intervention were:

- Water harvesting techniques made it possible to maintain and utilize soil moisture throughout the year. This resulted in the development of "green belts" in the Shagashe area as crop production was no longer confined to the summer season. Instead, farmers were able to produce maize, wheat and rice from a given piece of land on a rotational basis during one calendar year.
- Diversified cropping and farm production promoted the intensification of farm output. This enhanced food security, diversified the income base for the farmers, and reduced poverty.
- Farmers acquired multiple skills for managing their land.

2.6.8 CRAFTS

The manufacturing of crafts accounts for a substantial part of the use of plant resources. Production and marketing outlets are widespread involving both women and men. The crafts industry plays an important role in employment generation in rural areas even though individual outlets can be very small. The industry is also important in promoting cultural tourism since there is always an external demand (i.e., outside the community) for some of the products. This explains why crafts constitute some of the ecotourism products offered by the projects supported by the CAMPFIRE program (see Table 8).

Products from the crafts industry vary depending on the plant species found in an area. Some of the most common are: sleeping mats and door mats from reeds and baobab fiber; table mats, hats, baskets, brooms, chairs, tables and wall hangings from ilala; and various types and sizes of wooden handles, stools, mortars, pestles, wooden sculptures, wooden bowels and candle stick holders from timber. The production of crafts is dependent on local skills, taste and tradition, and the availability of local raw materials. CBO and NGO interventions are critical in providing advice on pricing of the goods, formulation of association or cooperative by-laws to guide the operations of the industry, the need to avoid overharvesting of natural resources, and how to add value to products before marketing. NGOs play an important role in sourcing support for the construction of craft centers and in identifying and securing markets for the products.

3. IMPACTS OF CBNRM PROGRAMS TO DATE

3.1 CHANGES IN RIGHTS TO BENEFIT FROM NATURAL RESOURCES

Household livelihoods and economies in the communal lands and resettlement areas are predominantly based on the utilization of natural resources. Therefore, community and household access to natural resources is very important both for the welfare of rural households and for engendering community ownership and stewardship over natural resources. It is within this context that the issue of "access rights" to natural resources is very important to communities. Communities as natural resources management

units (producer communities) and as individual households should be accorded economic rights to utilize the natural resources in their areas (villages and wards) for both subsistence and commercial purposes. According to Mtisi (2009), access rights essentially include the right to participate in decision making processes regarding the use of resources and access to information on the resources. These rights are defined or denied through poor legislative frameworks or through undemocratic practices. Mtisi (2009) argues that in addition to access rights, it is also important for communities to be consulted about any



Top bar hive production (full of honey). Mutoko Beekeepers Association (Mutoko District, Mashonaland East).

environmental initiative or change that affects their livelihoods.

As already noted in Chapter 1, colonial administrations alienated communities from land and other natural resources through exclusion and expropriation policies which denied them rights and responsibilities over natural resources. Unfortunately and tragically, most post independence policies and legislation related to natural resources perpetuated colonial policies. In general, pieces of legislation which govern access to and ownership of natural resources do not promote community rights of access to natural resources to the optimum. For example:

• The Wildlife Act (1982) precludes ownership of wildlife by communities in communal lands. Although this is the act on which CAMPFIRE is based, and in that it represents a significant step forward in

generating positive CBNRM results, the Act allowed the state to devolve rights and responsibilities over wildlife to RDCs and not to the communities. In practice, no RDC has allowed communities to have ownership rights over wildlife; instead RDCs have facilitated community participation in wildlife monitoring, anti-poaching activities and in discussing hunting quotas.

- According to the Mines and Minerals Act, all minerals are state property.
- The Communal Lands Forest Produce Act prohibits commercialization of forestry products by communities, thus denying the communities the economic rights they should derive from use of natural resources.
- The EMA Act and the Wildlife Act, empower RDCs by bestowing the authority to devolve natural resources management responsibilities to environmental sub-committees.

3.1.1 WILDLIFE RESOURCES

Whilst the transfer of ownership rights, together with accompanying financial incentives, was highly successful on commercial farmland, replication in communal lands faced and continues to face numerous legal and institutional impediments. What is required is a communal property regime that behaves as a proprietorship unit over land and other natural resources (Jones and Murphree 2001). The absence of legal persona or status below the RDC level obliged PWMA to decentralize administrative authority and legal rights to wildlife to RDCs, but on condition that rights to benefits were to be further devolved to producer communities.

Under CAMPFIRE, communities are consulted during the decision making process during the setting of wildlife quotas. This is done through quota-setting workshops attended by RDC and National Parks officers. Producer communities are represented at these workshops by the elected WWCs, traditional leaders, and natural resource monitors and/or game scouts. Communities also exercise their rights to decide how to prioritize the use of wildlife revenues. This is done through resolutions at village and ward meetings. The WWCs implement the resolutions. However, producer communities have not been accorded their full rights to wildlife resources in that:

- They are not empowered to participate in the determination of the commercial value of wildlife. This is a right which their counterparts in the commercial sector enjoy.
- It is the prerogative of RDCs to engage the services of safari operators and to sign the contracts.
- Although CAMPFIRE revenue guidelines stipulate that communities must be consulted, most communities are not consulted when safari hunting contracts are reviewed by RDCs. This has led to increasing levels of conflict between communities and their elected local government structures in most CAMPFIRE areas (PWMA, 2005).
- There is no transparency in the quota approval process. PWMA always reduces the quota suggested by communities without explanation. In some situations, PWMA allocates part of the quota for district and national functions without consulting the producer communities.

3.1.2 RESOURCE SHARING IN FOREST RESERVES (GAZETTED FORESTS)

The Forestry Commission facilitates CBNRM initiatives in the western part of the country (see Table 7 and Map 5) for the protection of selected tree species, such as Teak and Mahogany, and woodland

management through collaborative arrangements with communities. The Forestry Commision has adopted the shared forest management program in State forest areas in a bid to reduce conflict between forest officials and neighboring communities. This approach allows for the sustainable use of forest products by the communities residing around the borders of the forests.

Local-level institutions known as Resource Management Committees (RMCs) supervise the implementation of agreed resource sharing arrangements. The RMCs work together with traditional leaders to engage resource monitors who ensure that community members are well informed about zones of the forest areas (e.g., buffer zones) where biodiversity resources can be harvested, and those zones (e.g., watershed areas) where communities cannot harvest natural resources. Institutional support from the Forest Extension Department includes the formation and strengthening of RMCs at the local level though training on leadership and community mobilization, resource management and harvesting, formulation of by-laws on conservation and sustainable use of natural resources and processing of products.

Communities adjacent to some Forest Reserves have reclaimed their rights of access to biodiversity resources through such co-management arrangements which offer an opportunity for communities to make decisions over access and exploitation of natural resources. This approach is seen as a win-win solution with the State agency, incurring reduced cost for monitoring and control of illegal exploitation, while the communities gain access to products that are essential primarily for their subsistence needs, e.g., thatching grass, grazing resources, natural medicines, indigenous fruit, and honey.

The communities around Mafungautsi Forest in Gokwe South, for example, have the following rights:

- Grazing livestock in the forest;
- Controlled harvesting of thatch grass and broom grass for own use or for selling (groups of women cut broom grass in designated areas and sell the grass to buyers who come from as far as Bulawayo);
- Beekeeping in the buffer areas, provided the beekeepers do not ring-bark trees to make the traditional hives, and provided open fires are not used during the harvesting of the honey;
- Harvesting of dry firewood;
- · Collecting mushrooms and edible fruits; and
- Setting up ecotourism projects, e.g., at Lutope Camp in the forest.

The Mafungautsi project provided a range of social and economic resources for improving the livelihoods of communities as well as some revenue through selling a variety of NTFPs. Communities also assumed responsibilities for protecting the forest against fires and urban-based commercial poachers.

Challenges associated with the resource sharing approach include: (i) the need to effectively devolve management to communities (yet the RMCs have no legal status); (ii) the need for community priority setting rather than imposition of what is acceptable to the State agency; and (iii) the need to raise financial returns from the natural resources so as to provide adequate incentives for communities to conserve the resources.

3.1.3 OTHER NATURAL RESOURCES

Community Trusts (see section 3.3.2 below for more information), formed as part of, as well as outside the CAMPFIRE program, constitute one of the avenues which communities have used to reclaim their

rights of access to natural resources. Within the CAMPFIRE program, the formation of community trusts became popular from the late 1990s to 2002. There were two reasons for this development.

The first reason was the drive to diversify CAMPFIRE from the dominance of wildlife to include other natural resources. Non-wildlife RDCs did not see any immediate financial incentive for their involvement in community projects. Therefore, they encouraged community members who wished to form and register trusts to do so. The main incentive for the formation of trusts is that they are legal entities with full rights to realize commercial gains based on utilizing whatever resources are part of the project managed by the trust. Unlike the CAMPFIRE committees, trusts have proprietorship over the resources that are referenced in their registration documents and they can behave like the private sector. The State or RDCs cannot interfere with the lawful operations of a trust, including the decision by some trusts to form partnerships with the private sector (e.g., the Gairezi Trust).

The second reason was that the CAMPFIRE Development Fund had a large grant from USAID which facilitated and encouraged direct support for community income generating projects. Natural resources which communities were able to access and control through the trusts varied and depended on the resource endowment in a given area. They include macimbi (mopane worms), fisheries, a range of non-timber forest products, and water resources.

3.1.4 COMMERCIALIZATION OF NON TIMBER FOREST PRODUCTS

The Communal Lands Forest Produce Act of 1987 vests control over natural woodlands in communal areas at the RDC level. It restricts use of woodland resources by local communities to subsistence purposes. Both the Communal Lands Act and Communal Lands Forest Produce Act, however, allow RDCs to grant permits to local communities for commercial use of natural resources. SAFIRE and other NGOs such as Practical Action have used this "window" to facilitate commercialization of non timber forest products (NTFPs) so that communities can enjoy economic rights and benefits based on the utilization of their natural resources.

The commercialization of natural products has provided alternative means of income to rural communities and has the potential to reduce poverty. This has resulted in natural beverages, jam and vegetables competing at the level of national and international markets (Gondo, 2006). Commercialization programs have increased the level of incentives for conservation of natural resources by adding a market value to natural products. In addition, community business and entrepreneurship skills have been improved thereby expanding the livelihood base in targeted rural areas of Zimbabwe.

In most communal areas the most prevalent local institutions are the traditional institutions and the elected structures of village and ward committees. However, because management of natural resources management under commercialization is relatively new, these institutions need strengthening. This has often been done through the establishment of a technical village resource management committee that is supervised and works directly with the traditional leadership. The management institutions are responsible for quota setting for enterprises, securing user rights to manage and commercialize the resources, manage conflicts that may arise between subsistence and commercial users, and facilitate the adaptive management system.

In addition to establishing and strengthening the lead resource management institutions, strategies have been adopted by the communities to develop viable institutional arrangements, such as the formulation of by-laws (rules and regulations) and mechanisms for managing behavior (control of access and harvesting). These are built on traditional norms and values with care being taken to ensure that they can cope with the new demands of commercial harvesting. A lot of resources are also devoted to capacity building activities comprising leadership training, training for transformation, and conflict management among others. A major focus of the capacity building activities is training in actual resource management strategies and techniques. This is based on documentation of indigenous knowledge and traditional practices as well as scientific knowledge of the biology and ecology of the resources. This capacity is particularly critical for long-term ecological sustainability and biodiversity conservation. The community level institutional development activities avail opportunities for consensus building and conflict management through provision of a social forum for debate and deliberations.

The perceived low value of natural resources has led communities to disregard their potential as economic drivers, hence the tendency to over exploit. This perception has been changed, and through training and skills development, communities in selected areas are processing and marketing natural resource products such as jam and juices (from indigenous fruits), beverages, natural oils and soap. Through these initiatives, communities are realizing economic benefits and hence see the need for sustainable management of these natural resources (Gondo, 2006).

Major outcomes of the SAFIRE CBNRM activities in terms of changing rights to benefit from natural resources include:

- Community members have developed a sense of resource ownership and accepted some management responsibility. Most of these communities now have a shared purpose linked to the use and conservation of natural resources.
- Commercialization of NTFPs is contributing to household income. Although the revenue from these activities is not large, they have proved to be reliable and constitute a significant share of up to 20% of the household income basket (Gondo, 2006).
- The enterprise development strategy has increased benefits from natural resources, providing an important incentive for investing in NRM. Besides being a reliable gap filling strategy, income from NTFPs has diversified livelihood options for many households (SAFIRE, 2007).

3.2 CHANGES TO NATURAL RESOURCE BASE: STATUS AND TRENDS

3.2.1 WILDLIFE POPULATIONS

CBNRM made significant contributions to wildlife conservation, particularly during the period from 1989 to 2002. During this period the CAMPFIRE program developed strong and effective institutions in the wildlife producer wards. The ward CAMPFIRE committees were empowered to: (a) enforce wildlife management laws through resource monitors and game guards, (b) count wildlife and monitor hunting activities, (c) undertake problem animal mitigation measures, and (d) ensure reduction of wild fires. This empowerment of producer communities had the positive effect of protecting wildlife outside of the parks: poaching was minimized and communities were committed to live with wildlife. The community resolve to manage wildlife was strengthened by the increase in monetary and other tangible benefits which they enjoyed. These benefits encouraged communities to appreciate the economic value of wildlife. By 2005 some CAMPFIRE areas were experiencing wildlife overpopulation. The number of wards that participated in wildlife management increased from 15 in 1989 to 112 in 1999, and to 146 in 2007

(CAMPFIRE Association, 2007). Tables 10 and 11 show the wildlife population trends and the hunting quota figures for selected species in the principal 13 CAMPFIRE districts.

Year	Elephant Numbers	Elephant Densities (per km ²)	Buffalo Numbers	Buffalo Densities (per km ²)
1988	4,250	0.45	18,177	1.75
1989	4,181	0.34	15,752	1.28
1991	5,261	0.43	8,758	1.04
1992	4,824	0.30	7,695	0.63
1993	6,127	0.31	11,475	0.92
1994	No Survey (NS)	NS	NS	NS
1995	10,791	0.61	15,824	0.96
1996	7,270	0.32	5,366	0.45
1997	6,306	0.31	14,033	1.13
1998	6,981	0.38	8,779	0.70
1999	10,659	0.68	12,262	1.0
2000	12,707	0.77	14,343	1.21

TABLE 10: WILDLIFE POPULATION TRENDS FOR SELECTED SPECIES

(Source, Taylor, 2006)

TABLE 11: HUNTING QUOTAS FOR SELECTED KEY SPECIES IN COMMUNAL LANDS, 1991-2001

Year	Male Elephants	Male Buffalo	Male Lions	Male Leopards
1991	58	328	37	81
1992	81	318	46	89
1993	115	622	69	114
1994	137	404	59	112
1995	153	415	58	130
1996	151	395	46	125
1997	132	306	41	113
1998	154	315	52	131
1999	145	295	50	126
2000	134	263	51	115
2001	154	290	53	118

(Source, Taylor, 2006)

Table 10 shows an overall increase in elephant numbers and densities from 1988 to 2000. The numbers and densities for buffalo show significant fluctuations over the same period. Some districts, notably Binga and Hurungwe, recorded higher buffalo estimates and densities than the long-term average. For others such as Gokwe, Nyaminyami and Guruve, estimates were below the long-term average (Taylor, 2006). Taylor attributes the decline in numbers of buffalo to loss of wildlife habitats as a result of poaching and climate variability. He notes that the densities were about half of those experienced in National Parks, but they are consistent with the maintenance of woodlands and healthy habitats for other wildlife populations.

Table 11 demonstrates the availability of "huntable" wildlife throughout the period. Taylor (2006) believes that the numbers over the period do not show dramatic increases because quota setting was influenced by the desire to maintain sustainable trophy quality. Key trends observed for CAMPFIRE areas are:

- Trophy hunting and monitoring systems were effective;
- Value of big game trophies was maintained up to 2001;
- Trophy quality for elephants and buffalo declined;
- Trophy quality for lions and leopards increased; and
- In some cases (e.g., buffalo) there were reductions of quotas due to emphasis on more sustainable trophy quality.

3.2.2 CHANGES IN WILDLIFE HABITAT

The quality of wildlife habitat is one good measure of sustainable wildlife management. Taylor's (2006) analysis of wild lands and wildlife habitat in the 13 core wildlife districts from 1989 to 1997 reveals that three had wild land in excess of 90% of the district area, six had 50 to 70%, while three had less than 35%. For these districts, wild land had been maintained in an intact state. In these districts, wildlife wards covered 39,580 km2. The amount of wild land varied from 500 to 5,000 km2, with an average of 3,300 km2.

In the Zambezi Valley, for the districts of Mbire, Guruve, and Muzarabani, the loss of wildlife habitat from 1989 to 1997 amounted to no more than 2% of a total of 1,650 km2. Table 12 presents data from sample areas indicating that the loss of wild lands and wildlife habitats from 1989 to 1997 was very minimal. Table 13 also suggests that changes in habitat quality in three selected key wildlife districts were very minimal.

Cite	Wildlife Area 1989		Settled Area1989		Settled Area 1997		Wildlife Area Loss	
Site	Km ²	%	Km ²	%	Km ²	%	Km ²	%
Kanyurira, Mbire RDC	457	96	18	4	26	5	8	2
Wildlife Corridor in Gokwe North	540	100	NIL	NIL	3	1	3	1
Negande in Nyaminyami	654	91	60	9	72	11	12	2

TABLE 12: WILDLIFE HABITAT CHANGES IN SELECTED CAMPFIRE AREAS: 1989-1997 (REFLECTED BY CHANGES IN SIZE OF WARD WILDLIFE AREA)

(Source: Taylor, 2006)

Habitat Defined		Ν	Nyaminyami		Binga			Gokwe North		
Quality	As	1981	1993	1999	1981	1993	1999	1981	1993	1999
Habitat destroyed	Settlement or cultivation	5	18	16	16	23	23	27	57	57
Poor quality habitat	Natural vegetation inside 2 km buffer zone around settlement and cultivation	30	42	27	42	44	55	43	34	40
Poor quality habitat	Natural vegetation patch outside buffer zone but <57 km	1	2	<1	0	<1	2	<1	<1	1
Good quality habitat	Natural vegetation	63	38	57	43	33	21	30	8	2

TABLE 13: PERCENTAGE CHANGES IN HABITAT QUALITY IN 3 CAMPFIRE DISTRICTS

3.2.3 FORESTS, WOODLANDS AND TREES

CBNRM, community livelihoods and biodiversity management are intertwined; as a result, efforts aimed at meeting community livelihoods from the use of woodland resources have contributed to conservation of biodiversity in the woodlands. Some of the key impacts are summarized in Box 1.

SAFIRE is promoting measures that ensure that the use of natural resources does not exceed their regenerative capacity. As such, it has built the capacity of communities via strategies that promote sustainable management of production areas of some natural resources that are utilized as commercial products. For example, the establishment of additional forage woodlots has been adopted to boost honey production. A total of 40,000 hectares of forest area established as forage are being managed sustainably country wide. In Chivamba Ward 28 of Zaka district, a forage woodlot measuring 3,200 square meters was established in an area where a beekeeping project was dependent on remnant miombo woodland species. The forage woodlot comprises 144 indigenous and exotic tree species that include oranges, nartjees, snot apple (mutohwe), guavas, jacarandas, leucaena, and mubvee (sausage tree). Overall, woodland management projects play a pivotal role in poverty alleviation, and stabilizing food and nutrition security for vulnerable households.

Generally, the incidents of over harvesting have been reduced by more than half, as most communities are now using agreed sustainable harvesting methods. Most wards where the "Conservation and Sustainable Use of Traditional Medicinal

Box 1: Summary of CBNRM Impacts on forests, woodlands and trees

- Contributed to the management of buffer areas of 800,258 hectares of Forest Reserves.
- Timber & non-timber forest products in Forest Reserves are protected through the work of Resource Management Committees and community resource monitors.
- 57,270 hectares have been managed outside of the Forest Reserve network.
- 49,000,000 tree seedlings were planted over the past 10 years.
- Woodlands in watershed areas are protected through beekeeping activities and the enforcement of community bylaws.
- Over-harvesting has been reduced through the work of CBOs.
- There has been a significant reduction in wild fires due to awareness campaigns by the Forestry Commission, NGOs, traditional leaders and initiatives linked to the EMA.

Plants" project is being implemented are showing little sign of over harvesting. As a result, more than 107 herbalists and traditional healers are now able to secure 67% of their medicines form the project's catchment villages. Woodland management activities outside of Forest Reserves account for an additional 17,270 hectares.

3.3 CHANGES IN GOVERNANCE, RURAL REPRESENTATION AND ADVOCACY

3.3.1 NUMBER OF PEOPLE SUPPORTED THROUGH CBNRM

Under the CAMPFIRE Program, Ward level producer communities emerged through the establishment of Ward Wildlife Management Committees (WWMCs) or Ward Wildlife Committees (WWCs). There are 192 CAMPFIRE wards with a total of 1,270,306 people that have benefited from CAMPFIRE (CA, 2007). In addition, a number of people have been employed in various CAMPFIRE projects in selected districts in the form of drivers, camp managers, lodge attendants, game scouts, security guards, resource monitors, tour guides, timber measurers, professional hunters, trackers, revenue collectors, bookkeepers, millers and preschool teachers. In Zimbabwe, the small-scale, forest-based enterprises employed 237,000 people as compared to 16,000 in the conventional forest industries by 1991.

Table 14 shows the number of households and people that benefited under the CAMPFIRE Program in 2007 while Table 15 shows the number of households that benefited from other CBNRM activities.

District	Wards in the district	CAMPFIRE Wards	Households in the district	Households in CAMPFIRE wards	Population in district	Population in CAMPFIRE Wards
Beitbridge	14	14	17,157	17,157	81,825	81,825
Binga	21	21	24,828	24,828	118,824	118,824
Chimanimani	23	2	26,425	3,061	250,115	10,000
Chipinge	30	2	62,070	3,070	283,671	15,969
Chiredzi	24	10	53,687	7,000	232,616	35,000
Gokwe North	30	14	40,148	20,849	214,652	98,009
Gokwe South	32	8	56,797	8,705	294,627	57,630
Goromonzi	25	2	38,287	2,965	156,189	14,261
Gwanda	23	20	25,136	21,857	119,744	104,925
Hurungwe	17	6	64,375	31,627	308,019	129,421
Hwange	19	17	14,075	59,230	65,785	278,240
Insiza	18	7	17,471	9,800	86,307	49,000
Kusile	26	23	29,500	15,980	164,469	87,936
Marondera	22	4	25,312	4,602	102,869	18,868
Mbire	11	7	70,377	8,146	94,937	39,264
Muzarabani	16	14	22,115	17,116	107,718	38,200
Nyaminyami	12	11	7,476	7,078	43,654	33,342
Tsholotsho	20	10	22,075	11,030	119,221	59,602
TOTAL	383	192	617,311	274,101	2,701,377	1,270,306

TABLE 14: CAMPFIRE BENEFICIARIES IN SELECTED DISTRICTS, 2007

(source: CA, 2007)

Project	No of Households
Conservation & sustainable use of traditional medicinal plants	3,107
Commercialization of NRs	8,988
Enhancing and diversifying livelihoods in dry areas	1,952
Protracted relief project	3,759
Non timber forest products (NTFPs)	62
Zaka bee project	364
Total	18,232

TABLE 15: NUMBER OF HOUSEHOLDS BENEFITING FROM OTHER CBNRM PROJECTS

(source: SAFIRE, 2007)

3.3.2 NUMBER OF CBOS FORMED / OPERATIONAL

Annex IV presents the various CBOs and CBEs whose formation was facilitated by the CAMPFIRE, SAFIRE, and GEF/SGP programs countrywide. The different types of community institutions involved in CBNRM fall into the following five categories; the number of each type of institution is also indicated:

- 146 Ward Wildlife Committees (WWCs) under the CAMPFIRE program;
- 20 Community Trusts whose registration was facilitated by the CAMPFIRE program as part of its diversification process;
- 331 Resource Management Committees (RMCs) facilitated by the Forestry Commission;
- 41 Community Based Enterprises (CBEs), including registered companies, facilitated by SAFIRE; and
- 92 legally constituted Project Committees supported by the GEF/SGP program.

It was not possible to ascertain how many of these CBOs and CBEs are functional because of the study methodology. However, it should be noted that some of the organizations interviewed have not been able to visit or interact with these CBOs since 2007 because of the political instability in 2008 and 2009 and the resultant economic difficulties.

These institutions developed under different circumstances, but basically the rationale for their formation can be attributed to one or more of the following explanations:

- Part of the process of decentralization of the management of natural resources (e.g., RMCs);
- Part of the process of devolution of environmental and economic rights (e.g., CBEs, WWCs);
- · Part of community capacity building and skills development; and
- Due to community empowerment and governance initiatives below the RDC level.

The existence of CBOs and CBEs has facilitated significant CBNRM impacts in the rural areas. Some of these impacts are presented in Box 2.

A key role of such institutions is to organize and facilitate community platforms for internal dialogue and debate, and for setting community natural resources management objectives that take into account the multiple uses and demands placed on the natural resources by community members.

3.3.3 GENDER AND MARGINALIZED PEOPLE

CAMPFIRE activities have had varying impacts on women and men. At the household level, proceeds derived from CAMPFIRE mostly accrued to men as household heads (Nabane, 1997). The advent of CAMPFIRE, however, created opportunities for women as some were elected to wildlife management committees. This has gone a long way to change perceptions of women's potential as exemplified by Kanyurira where the Vice-Chairperson of the Ward Wildlife Committee is a woman. Trustees of Masoka Community Trust include women and men who are elected from among the community. The Trustees have the responsibility to make decisions on income generating projects and to manage the revenue on behalf of the community. Therefore, in addition to the provision of paid and voluntary work, women also actively participate in decision-making.

There has been a conscious effort to include women in leadership positions in many community-based institutions that have been formed under CBNRM. Under the SAFIRE model, most of the CBEs have a high number of women members. This has helped women to develop their entrepreneurial skills and be better able to fend for their families through the marketing value added products.

Some CBOs have developed gender policies to ensure the inclusion of women in leadership positions. For example, the Mutoko Beekeepers Association is an association of 45 active groups with a total of 2000 people of which 1400 are men and 600 are women. There is an active gender policy where each group that is part of the association should have at least three women as members of its seven member committee. If a group does not have at least three women in its committee, it is not accepted as a member of the association. Traditionally, hives were placed high-up in tree branches and men used to climb the trees in order to harvest

Box 2: Impacts of Community Institutions

- Strengthening community cohesion to protect common interests with respect to natural resources, especially in situations where the resources were alienated from the communities through the establishment of parks, wildlife sanctuaries, and State forests.
- Democratizing collective community vision-setting and decision-making which was previously the prerogative of traditional leadership.
- Improving the legitimacy of the community voice via democratically elected representatives.
- Facilitating coordinated linkages with NGOs, State institutions, and the private sector.
- Enhancing community ownership and stewardship over natural resources.
- Minimizing conflicts between communities and the State, especially where communities were contesting policies and practices that excluded them from participating in resource utilization.
- Setting up and managing business enterprises, and coordinating training in enterprise development and business management.
- Facilitating equitable benefit sharing.
- Overseeing development, implementation, and enforcement of rules and management plans.
- Facilitating monitoring of natural resources management outcomes and impacts to inform management strategies and future decisions.

the honey. The association has adopted the Kenyan top bar hives which can be placed in user friendly places within the reach of children and women so that all family members can actively participate in beekeeping activities.

Though there have been efforts to ensure that women are included in leadership positions, some work still needs to be done since, in most instances, the highest position is still occupied by a male. For example, in the Mayambara Community Development Trust in Manyame all the trustees were females with only the Chairperson being male.

Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) remains a serious challenge in Zimbabwe and there exists potential for using CBNRM CBOs as useful vehicles for promoting awareness on HIV/AIDS through the appointment and training of peer educators, distribution of condoms, and mainstreaming HIV/AIDS issues during meetings and training workshops. At the community level, there already exists, through indigenous knowledge systems, information on medicinal plant resources which can be beneficial in efforts to mainstream medicine.

SAFIRE is implementing a project on the conservation and sustainable use of traditional medicinal plants in Zimbabwe where communities were trained in sustainable harvesting of these plants as well as inventory methods for threatened species. A number of ailments are being treated using the traditional medicines among which immune boosting herbs are administered. Ten pilot projects were established under this initiative in five CAMPFIRE districts: Bulilima, Mangwe, Chipinge, Matobo, and Chimanimani.

Mataure (2008) notes that SAFIRE mainstreams the gender equity concept in all its



Bull elephant trophy ready for the taxidermist: trophy hunting has been a lucrative activity for many local communities participating in the CAMPFIRE program.

programs; this is reflected in their work plans and reports. At the workplace, an HIV/AIDS policy is in place and has been revised in line with trends in the changing HIV and AIDS epidemic. HIV/AIDS and gender are mainstreamed into the following CBNRM programs:

- 1. Conservation and sustainable use of traditional medicinal plants,
- 2. Commercialization of natural resources,
- 3. Enhancing and diversifying livelihood options in dry areas,
- 4. Protracted relief and recovery, and
- 5. Use of pesticidal plants.

3.4 CHANGES IN BENEFITS

CBNRM hinges on management of resources by communities who should have adequate economic incentives to manage the resources.

THE CAMPFIRE MODEL

Taylor (2006) notes that sport hunting and ecotourism provide the primary economic and financial basis for implementation of the CAMPFIRE program. The revenue earned is distributed to RDCs and communities according to CAMPRIRE guidelines originally developed in 1991 and later revised in 2002.

The guidelines seek to ensure that producer communities are the primary beneficiaries of the revenue earned. According to the 2002 guidelines, natural resource producer communities must receive not less than 55% of gross revenue; RDCs receive a maximum of 26% of gross revenue for management activities and a maximum of 15% of gross revenue as a levy. The CAMPFIRE Association receives 4% of gross revenue as a levy. Bond (2001) observes that some 14% (USD \$3 million) remained unallocated over a 13-year period, and generally is assumed to have been committed to activities not related to wildlife or CAMPFIRE.

3.4.1 COLLECTIVE INCOME TO CBOS

Information presented below is mainly from CAMPFIRE activities, where detailed information was available for the period 1989 – 2006. It should be noted that monetary information is based on income amounts recorded in Zimbabwe dollars which were then converted into United States dollars using official exchange rates from the Reserve Bank of Zimbabwe (see Annex V for the exact rates). It should also be noted that there are major methodological problems associated with using income as a measure of diversification of natural resource management activities. This is because some resources do not have high market value, for example thatching grass (CA, 2007).

Overall, sport or trophy hunting contributed more than 90% of the revenue for the CAMPFIRE districts. A total of USD \$2.1 million was obtained from sport hunting in 2000. In 1999, CAMPFIRE districts earned a total of USD \$2.7 million of which USD \$1.3 million was disbursed to producer communities. Khumalo (2003) notes that the marked increase was due to the once off ivory auction held in 1999 which boosted districts revenues significantly. Of the 13 districts reporting on CAMPFIRE revenue, nine disbursed 50% or more of the total revenue earned as dividends to communities with an average of 48% being allocated by all districts (Khumalo, 2003). The gross amount allocated to communities as dividends from 1989 to 2000 was USD \$9.2 million. This represents 56% of the total revenue earned.

During 2000, RDCs invested approximately 15% of total revenue into wildlife management and retained 23% of gross revenue in the form of levies and 6% in other related activities. Khumalo (2003) observes that approximately 7% of total gross income was recorded as "not allocated." This supports the hypothesis that RDCs are opportunistically using and allocating wildlife revenue in the absence of a defined and enforceable policy framework.

In 2003, the annual rate of inflation opened at just over 200% and deteriorated to over 60,000% by December 2007. The Reserve Bank of Zimbabwe devalued the currency in August 2006 and then again in August 2007, initially slashing 3 zeroes in the first case, and then 10 zeroes in the second instance. The full impact of these measures on CAMPFIRE benefits has not been fully analyzed.

The total revenue realized from wildlife hunting under the CAMPFIRE program for the period 1989 – 2006 was USD \$41.4 million of which USD \$20.8 million (50.2%) was allocated to communities as dividends. Table 16 shows the allocation of revenue from wildlife for the period 1989 – 2006.

 TABLE 16: CAMPFIRE PROGRAM, ALLOCATION OF REVENUE FROM WILDLIFE, 1989

 2006

Year	Exchange Rate (Zim. Dollars to US Dollars)	Disbursed to communities (USD)	Wildlife Management (USD)	Council Levy (USD)	Not Allocated (USD)	Other (USD)	Total (USD)
1989	2.13	\$186,268	\$81,458	\$28,404	\$41,651	\$12,032	\$349,813
1990	2.47	\$206,308	\$121,485	\$52,530	\$153,609	\$22,501	\$556,433
1991	3.75	\$320,894	\$219,526	\$120,444	\$56,884	\$56,930	\$774,678
1992	5.11	\$601,385	\$207,291	\$115,398	\$274,767	\$17,837	\$1,216,678
1993	6.53	\$851,732	\$357,055	\$251,082	(\$14,216)	\$32,172	\$1,477,825
1994	8.21	\$949,138	\$314,572	\$148,517	\$187,889	\$42,514	\$1,642,630
1995	8.72	\$946,777	\$353,772	\$193,080	\$71,723	\$26,214	\$1,591,566
1996	10.07	\$833,025	\$405,755	\$301,091	\$191,792	\$7,796	\$1,739,459
1997	12.44	\$858,357	\$29,661	\$26,746	\$915,884	\$12,415	\$1,843,063
1998	24.37	\$910,200	\$521,373	\$70,666	\$306,589	\$82,939	\$1,891,767
1999	38.34	\$1,341,853	\$608,678	\$253,252	\$520,698	\$29,477	\$2,753,958
2000	44.62	\$1,025,586	\$320,973	\$491,411	\$139,958	\$127,276	\$2,105,204
2001	55.07	\$858,869	\$538,596	\$454,265	\$278,156	\$210,388	\$2,340,274
2002	55.20	\$970,270	\$156,909	\$374,786	\$3,091,675	\$19,564	\$4,613,204
2003	578.77	\$7,912,506	\$176,301	\$2,461,117	\$1,548,665	\$48,445	\$12,147,034
2004	4,500.43	\$480,985	\$65,601	\$175,570	\$583,382	\$14,735	\$1,320,273
2005	21,531.00	\$418,043	\$9,853	\$57,993	\$286,445	\$14,393	\$786,727
2006	161,909.00	\$1,184,006	\$45,156	\$294,291	\$709,309	\$43,176	\$2,275,938
Total (1989- 2006)		\$20,856,202	\$4,534,015	\$5,870,643	\$9,344,860	\$820,804	\$41,426,524
Percentage		50.3%	10.9%	14.20%	22.6%	2.0%	100%

(Source: CAMPFIRE Association, 2009)

3.4.2 CASH INCOME TO INDIVIDUAL HOUSEHOLDS

Table 17 presents summaries of household and ward level income in 13 selected CAMPFIRE districts. <u>Annex VI</u> presents more detailed data for revenues realized at the ward level for the wards in the same 13 districts for the period 1989 - 2002. The average ward dividend was USD \$9,563. The ward dividends ranged from USD \$71 (Mukota ward) to USD \$101,787 (Kanyurira ward) both in Guruve RDC. In 2000, the total number of households resident in the beneficiary wards was approximately 88,000. The mean benefit per household was USD \$18.82 (Khumalo, 2003). Khumalo (2003) noted that RDCs as a group have consistently failed to meet the 1991 CAMPFIRE guidelines, and have not allocated at least 50% of wildlife revenue to sub-district levels.

The financial benefit per household (ward dividend divided by the number of households) between 1989 and 2001 is low (Bond, 2001). In real terms, the median benefit per household declined from USD \$19.60 in 1989 to USD \$3.87 in 2001. In part this has been due to the decreasing wildlife production potential in the growing number of districts joining the program (Taylor, 2006). It should be noted that the blanket distribution of wildlife revenue to everyone in a village or ward tends to lower the benefits per household. This is not the case with other natural resources: honey revenues accrue directly to beekeepers, while traditional medicine revenues accrue to herbalists.

Districts	# of CAMPFIRE Wards	# of Households	Total Income (USD)	Income (USD/ Ward)	Income USD/ Household
Beitbridge	7	5,388	263,143	37,592	48.8
Binga	21	19,669	1,192,349	56,778	60.6
Bulilimamangwe	9	7,877	189,395	21,044	24.0
Chipinge	2	2,430	295,736	147,868	121.7
Chiredzi	11	9,176	840,159	76,378	91.6
Gokwe North	14	13,515	430,889	30,778	31.9
Gokwe South	10	10,211	38,059	3,806	3.7
Guruve	11	12,475	2,111,292	191,936	169.3
Hurungwe	10	12,148	734,154	73,415	60.4
Hwange	16	10,838	406,709	25,419	37.5
Muzarabani	14	8,554	78,833	5,631	9.2
Nyaminyami	12	5,720	2,055,279	171,273	359.3
Tsholotsho	9	5,601	592,092	65,788	105.7
Total or Average	146	123,602	9,228,089	63,206	74.7

TABLE 17: AVERAGE ANNUAL HOUSEHOLD AND WARD LEVEL INCOME IN 13 CAMPFIRE DISTRICTS, 1989-2002

3.4.3 IN KIND BENEFITS FROM CBNRM

The CAMPFIRE program has three primary benefits:

- It improves the livelihoods of rural people,
- It teaches rural communities to manage and organize themselves, imparting the sense of selfconfidence and self-dependence that has long been denied to them and, at the same time, removing this burden from government, and
- It provides an incentive for rural communities to conserve wildlife, a valuable resource that would otherwise disappear.

The greatest strength of the program has been its ability to generate revenue from natural resources management including safari or trophy hunting, and using the revenue for the benefit of local communities, thereby reducing human and wildlife conflict and the wanton destruction of natural resources. The Ward Wildlife Committees are reluctant to devolve money to households and usually prefer to allocate the funds to community projects. However, Child (1993) noted: "Individuals must be given the choice as to whether to allocate their money to cash or to a community project; this is their fundamental right because it is their money." On the other hand, provincial administrators consider that all the money should be invested in infrastructure, e.g., health clinics, schools, play centers, and community centers which have long term benefits (Frost & Bond, 2006).

The revenue disbursed to the wards is often used to invest in agricultural processing and other agricultural investments. Even in Guruve where wildlife makes an effective contribution to household income, most of the projects developed are either those which would enhance agriculture or those that deliver social infrastructure normally provided by government. In Masoka the community used their dividends from CAMPFIRE to provide: funding for construction of a health clinic; a primary and a secondary school; a grinding mill, co-funding for sinking a borehole; 30 km of seasonal road; co-funding for 20 km of electric

fence; two tractors; and drought relief food in times of famine. The community also benefited from employment and meat from problem animal control (Taylor and Murphree, 2007).

Most of the communities opted to use their aggregate funds to build or extend schools, construct clinics, drill boreholes, or purchase grinding mills or irrigation pumps. In so doing, there has been collective pressure on individual households to accept some limitations on the use of land so as to safeguard revenue generation. Yet Bond (2001) observes that, in most communities, the small value of the payments at a household level are unlikely to be sufficient incentive to forego other more immediate and individually rewarding land-use practices, even if the aggregate amounts at ward and district level are somewhat more compelling.

Meat Benefits

The Nyaminyami Nyama Project is an example of how meat has been a major CAMPFIRE benefit to some communities. Impala cropping was started in 1989 by the Nyaminyami Wildlife Management Trust (NWT) with the following objectives: (i) to provide meat to the people of the district at a controlled but subsidized price; (ii) to generate employment and develop skills and knowledge on handling meat; and (iii) to provide training to ensure financial and economic viability. The project was implemented in three phases from 1989 to 2001.

During the first phase (1989-1993), the cropping was capital intensive with two safari operators carrying out the cropping, recovery, skinning, and field dressing of the carcasses. The operators provided skills, expertise and equipment while the NWT was responsible for distribution of meat to community beneficiaries and sale of fresh and dried meat as well as the overall administration of the project. Cropping was undertaken three times per year with about 500 impala being shot on each occasion.

The cropping quota of 1,500 per year was maintained during the second phase (1994-1996). The cropping was now done at greater frequencies, i.e., weekly over a nine month period. The technical aspects of the operation were in the hands of the Nyama Project Advisor (seconded by CIRAD) and the district's Nyama Team who were trained by the International Foundation for the Conservation of Wildlife and were responsible for cropping, dressing, distribution and sale of the fresh meat via a mobile abattoir. Part of the money to purchase the required equipment such as the mobile abattoir and vehicles came from a grant through CIRAD.

During the third phase (1997-2001), the Nyaminyami RDC managed the project. In 1997, the cropping quota was reduced to 500 due to concerns which had been raised regarding the decrease in the animal population. This was again increased to 1,500 in 1998 after a count done by PWMA which estimated the impala population at 22,000. The cropping quota of 1,500 was maintained until 2001 when it was reduced to 1,100. The cropping was done frequently: three nights per week, three weeks per month for six months of the year. Cropping of larger mammals such as the elephant, buffalo and hippo also commenced in 1999 as part of the Nyama Project.

Several challenges were noted with regard to the project. First, the distribution of meat to the wards was not equitable as shown in Table 18. Second, the price of meat increased 10 times from 1994 to 2001. This raised the question of affordability by the majority of the population in the district. Third, there were major discrepancies between meat distributions and prices between Siakobvu and other centers. Concern was also raised that some of the distribution camps in certain wards were difficult to access; hence people in wards such as Kanyati travelled long distances to buy meat at their ward distribution centers.

Point of sale	Total Meat Sold (kg)	Persons	Quantity per Person (kg)	
Siakobvu	1,948	500	3.80	
Gatche Gatche	839	1,342	0.63	
Musampakaruma B	497	648	0.77	
Negande A	456	2,380	0.19	
Nebiri B	384	7,636	0.05	
Mola B	358	4,904	0.07	
Mola A	351	7,500	0.05	
Nebiri A	323	10,200	0.32	
Kanyati A/B	286	5,691	0.05	
Musampakaruma A	177	3,056	0.06	
Negande B	173	2,144	0.08	
Total	5,793	34,677	0.20	

TABLE 18: QUANTITY OF MEAT PER DISTRIBUTION POINT IN 2001

(Source: Nyaminyami RDC, 2002)

Diversifying Livelihoods

The number of beekeeping projects supported by the Forestry Commission alone totals 1,569. Beekeeping, facilitated by many agencies (GEF/SGP, SAFIRE and other NGOs), has not only increased access to food (i.e. honey) but also other products such as wax which is further processed into candles and floor polish. As a result, beekeeping has became a very popular livelihood enhancement activity, e.g., in Honde Valley of Mutasa district (Wards 7 and 8), Mutoko Beekeepers Association of Mutoko district, and Chivamba Ward 28 of Zaka district. In Zaka district's Ward 28, beekeeping has attracted 364 bee farmers. Development there has included manufacturing of 230 Kenyan top bar hives, establishment of a honey press, a candle molding enterprise and purchasing of seven harvesting kits. Honey is being used for income generation and to achieve food and nutrition security (SAFIRE, 2007). Incomes realized from some of the projects supported by SAFIRE are presented in Section 3.5.2.

3.5 CONTRIBUTIONS TO NATIONAL PRIORITIES AND PROGRAMS

3.5.1 POVERTY ALLEVIATION, FOOD SECURITY AND THE MILLENNIUM DEVELOPMENT GOALS

Zimbabwe is an agricultural-based economy, with about 70% of its population residing in rural areas and earning a living largely from subsistence agriculture. Production of the staple grains has been erratic since 1990, mainly due to recurring droughts and floods, as well as the initial impact of the land reform program. The result of these and other factors has been food shortages and growing malnutrition. Current trends indicate that poverty is on the increase in both rural and urban areas. Poverty is more common in female-headed households (72%) than in male-headed households (58%) (Government of Zimbabwe, 2004). National targets under the Millennium Development Goals are to:

- Halve, between 2000 and 2015, the proportion of people in human poverty, and
- Halve, between 2002 and 2015, the proportion of people who suffer from hunger.

CBNRM projects are contributing to the achievement of the goal of eradicating extreme poverty and hunger by: facilitating the creation of an enabling environment for pro-poor economic growth; creating employment opportunities; reducing dependence on rainfed agriculture and increasing agricultural productivity; and developing projects that enhance food and nutrition security. A good example is SAFIRE's project which promotes sustainable livelihoods. The project is aimed at improving livelihood security and reducing poverty levels in the communal lands of 12 districts, namely: Guruve, Muzarabani, Rushinga, Chiredzi, Mwenezi, Masvingo, Nyanga, Chipinge, Beitbridge, Gwanda, Matobo and Bulilima districts. This is achieved by improving the incomes and nutritional status of rural communities through adoption of enhanced and diversified livelihood options with special emphasis on the disadvantaged, including women, children, HIV and AIDS orphans, and the aged. The project is promoting interventions in agricultural production and marketing, natural resource-based product development and marketing, natural resources management, and institutional capacity building.

In some of the districts noted above, the projects provide input support to farmers and train them in appropriate agronomic practices as well as link them to markets for their agricultural products. The input support scheme is in the form of open pollinated varieties of maize, sorghum-macia, cow peas, and sunflower. A total of 258 households were supported in 2006 and the hectares under drought tolerant crops increased. Another 342 households with 1,808 members adopted new agronomic techniques. 582 households were supported through facilitation of market linkages for four commodity associations (tomatoes, honey, paprika, and sugar beans). A total of 1,250 households benefited from natural resource-based product development involving processing of baobab into oils and pulp (Chipinge), honey (Nyanga), masawu (Muzarabani), marula (Mwenezi), and Jatropha soap and amacimbi (Gwanda and Bulilima) (SAFIRE, 2006).

Enhancing food security is achieved through several of SAFIRE's projects, as summarized in Table 19 below.

Activities and Achievements
Activities were implemented in 11 small-scale irrigation schemes. Five high value crops – green mealies, okra, tomatoes, sugar beans and onions – were promoted successfully.
Eleven herbal/nutritional gardens were established using organic farming techniques such as using manure and mulching.
Ten commodity associations were formed to drive production and marketing in all the irrigation schemes.
A total of 1,280 canals were repaired and two pumps were installed resulting in irrigation of 20 hectares of land planted with maize to address short term food requirements
700 community members including 88 home-based care givers are now engaged in 9 income generating activities which include: drying, packaging and marketing of vegetables, Jatropha soap making, processing and marketing baobab pulp and oil, and processing and marketing sunflower.
Diversification of food sources was promoted through the production and consumption of natural foods, e.g., Parinari oil, honey, and indigenous vegetables; 714 households benefited.
Promoting drought tolerant crops and varieties and conservation farming: e.g., mulching, minimum tillage, water harvesting, holing and micro-dosing. 3,000 households received seed inputs for the 2007/8 season; 690 hectares

TABLE 19: EXAMPLES OF SAFIRE'S POVERTY ALLEVIATION AND FOOD SECURITY PROJECTS

Project	Activities and Achievements		
and increasing food security)	were planted in drought tolerant crops in 8 districts; conservation agriculture was effectively applied on 345 hectares.		

3.5.2 ECONOMIC GROWTH

The various CBNRM activities implemented by different stakeholders have collectively made significant contributions to economic growth, even though the individual project contributions are of a smaller scale.

The SAFIRE CBNRM program has made significant contributions to economic growth through commercialization (processing and marketing) of forest products. There is now the realization that these products can bring real incomes to rural communities in the face of continued droughts which are making reliance on agriculture more and more difficult.

About 21 small-scale rural enterprises were established and supported by SAFIRE including development of skills related to business and marketing and mobilization of raw materials. In terms of income generation, some enterprises made significant profits, for example, the Indigenous Tea Company of Zimbabwe realized USD \$943 as net profit and the Amacimbi Development Association recorded a return on investment of 116%. A new product that was released on to the market is the baobab tea infusion. The richly flavored baobab tea, which was jointly developed by SAFIRE and Specialty Foods of Africa is already proving to be popular and is now being widely marketed. Other new products that were developed and market tested include a marula flavoring ingredient from fresh marula skins, berchemia drink and jam, and baobab-flavored yoghurt.

In addition, three new processing technologies were developed: an electric grinder for processing traditional medicines into granules and powders; a simple and cheap honey press which can handle small quantities and is affordable to small-scale producers; and solar driers which prevent loss of nutrients (e.g., vitamin C) which are susceptible to oxidative degradation. A large number of community-based artisans received training in how to make simple solar driers to facilitate easy access by rural households.

In 2007 there was a significant rise in sales and profits with average income per enterprise reaching USD \$525, while some enterprises earned as much as USD \$10,000. The best performing enterprises were baobab and marula oil enterprises as they enjoyed growing local and export markets. Other NTFP-based enterprises that are performing well include Muzarabani Masau enterprise, Makoni Tea, Sindawonye soap making, and Amacimbi Development Association in Gwanda. These enterprises managed to generate a total of USD \$2,054 in 2008. Table 20 shows some of the activities and incomes realized by beneficiaries in 2007.

Enterprise Group (CBE)	District	Beneficiaries	Products	Income (USD)
Buwerimwe Enterprise	Mutare		Honey	384
Twalipenda Enterprise	Binga	184 households	Baobab pulp	166
Magamba Enterprise	Mberengwa	201 households	Marula oil (211 liters)	475

TABLE 20: EXAMPLES OF CBE INCOMES, DECEMBER 2007

Within the CAMPFIRE Program, international trophy hunting accounts for most of the revenue. The CAMPFIRE Program has worked closely with safari operators to ensure that the market for trophy hunting is secured. Economic beneficiaries of CAMPFIRE revenue include RDCs, the CAMPFIRE Association and the communities. For some of the RDCs, the gross CAMPFIRE revenues (before payments to communities and CA) account for about 60% of the RDCs' revenue; this underscores the importance of CAMPFIRE revenue to economic growth in some districts in the country. Economic benefits enjoyed by the districts include:

- *Employment creation:* CAMPFIRE projects offer a variety of job opportunities to community members where these projects are being implemented. These include drivers, camp managers, lodge attendants, game scouts, security guards, resource monitors, tour guides, timber measurers, professional hunters, trackers, revenue collectors, bookkeepers, millers, and pre-school teachers (CA, 2007). Besides direct employment, there are many people who are indirectly employed by being engaged in various livelihood activities that involve utilization of natural resources. Such activities include ilala processing, beekeeping, carving, and downstream industries such as leather tanning, taxidermy, food production and tourism services. CAMPFIRE Association's estimates suggest that in 2007, there were 701 people employed in CAMPFIRE projects in only 10 districts.
- *Other economic benefits:* These include the establishment of community-owned grinding mills in most CAMPFIRE districts, community-private sector partnerships in ecotourism ventures, e.g., in Mahenye Ward of Chipinge district, fishing enterprises in Binga and Nyaminyami districts, and many others.

The CAMPFIRE program is distinguished from other development and conservation programs in that economic benefits and resultant growth are enjoyed by many stakeholders, i.e., RDCs, communities, the CA, and safari operators. In 2006, the total revenue reported as earned from wildlife under CAMPFIRE

was USD \$2,250,000 – a significant increase from USD \$786,719 in 2005 (CA, 2007). Of the USD \$2.25 million, approximately USD \$1.16 million (52%) was disbursed to communities either as cash payments to households or for use in community projects. Box 3 shows the revenue figures disbursed to communities and the economic contribution of the CAMPFIRE program to other key stakeholders in the program, during the period 1989 to 2006.

Box 3: Gross Revenue (USD) Realized by Key Stakeholders in the CAMPFIRE Program, 1989-2006					
Stakeholders USD %					
Producer Communities	20.8 million	23.4			
Rural District Councils	17.6 million	19.8			
CAMPFIRE Association	1.6 million	1.8			
Safari Operators48.9 million55.0					
TOTAL 88.9 million 100.0					

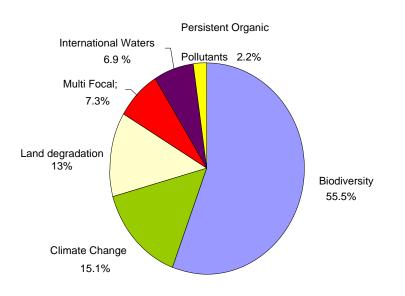
3.5.3 COMBATING DESERTIFICATION

Zimbabwe's National environmental policy goal is: "To avoid irreversible environmental damage, maintain essential environmental processes, and preserve the broad spectrum of biological diversity so as to sustain the long term ability of natural resources to meet the basic needs of people, enhance food security, reduce poverty and improve the general standard of living of Zimbabweans" (Ministry of Environment & Natural Resource Management, 2009). CBNRM activities are linked to several specific strategic directions and guiding principles that have been articulated in the National environmental policy and strategies. Two of the national priorities under the GEF/SGP program that address desertification are:

- Conservation of biodiversity and maintenance of the natural resource base and basic environmental processes to enhance environmental sustainability; and
- Conservation and restoration of arid and semi-arid areas, promotion of efficient stoves and biogas to reduce forest loss and promote integrated watershed management, soil conservation, afforestation, prevention of forest fires, and promotion of organic farming to address policy and other barriers to mitigating land degradation.

Biodiversity management is one of the Focal Areas for GEF/SGP and, as shown in Figure 1 below, a significant proportion of projects funded under the program address desertification. In addition, the Forestry Commission's conservation and extension activities address desertification through promotion of afforestation and improved woodland management.

FIGURE 1: DISTRIBUTION OF GEF/SGP FUNDED PROJECTS BY FOCAL AREAS FOR ALL OPERATIONAL PHASES



3.5.4 CLIMATE CHANGE ADAPTATION AND MITIGATION

Zimbabwe is a signatory to the Kyoto Protocol (1997) and has lobbied for increasing technical and financial support for climate change mitigation and adaptation. The government has established the Climate Change Office in the Ministry of Environment and Natural Resource Management to coordinate its Climate Change Awareness Program. The program is a countrywide awareness campaign on climate change, bringing together business and political leaders to raise awareness about the threat posed by global warming. The program also encourages leaders to play a role in creating national awareness on climate change. The GEF/SGP program has prioritized climate change by making it one of the program's focal areas whereby support is provided to communities and NGOs for climate change adaptation and mitigation projects. GEF/SGP funded projects that address climate change adaptation and mitigation focus on production and use of energy saving wood stoves, promoting production and use of biofuels from Jatropha, promoting the use of solar and wind energy, planting of multi-purpose trees, and management of wetland areas.

PART 2: ANALYSIS AND FUTURE ORIENTATIONS

4. ENABLING CONDITIONS FOR THE DEVELOPMENT OF CBNRM

4.1 OVERARCHING CONDITIONS: POLICY AND LEGISLATION

WILDLIFE POLICY

The Zimbabwe Wildlife Act of 1975 as amended in 1982 confers Appropriate Authority to private landholders and RDCs, giving them rights to decide how to use the wildlife resources and benefit from generated revenue. Land use plans and resource monitoring (censuses and hunting returns) are required by this policy. This has been the legal basis for CAMPFIRE activities since 1988. Today, PWMA can, in principle, devolve wildlife management responsibilities and benefits to legally constituted bodies at the sub-district level (Mtsambiwa, Jan. 2010, personal communication). Therefore, the establishment of environmental sub-committees below the district level provides an opportunity for further devolution of wildlife management responsibilities directly to communities.

EMA ACT OF 2002 AND THE ENVIRONMENTAL SUB-COMMITTEES REGULATIONS OF 2009

Since 2002, management of all natural resources is governed by the overarching Environmental Management Act (EMA) of 2002 which has clear provisions for community empowerment in natural resource conservation and management. The EMA was intended to harmonize and streamline environmental legislation in the country. The Act repealed the conservation committees under RDCs and reconstituted these as environmental committees at the level of the Council. The key departure from the former system is that EMA provides for the formation of environmental sub-committees (ESCs) at sub-district levels; the ESCs have legally delegated powers and rights over natural resources management. The effect of this is to devolve natural resources management powers and responsibilities from RDCs to the community level. This strengthens decision making and participation at the local level.

To effect the formation of, and operationalize the ESCs, the Minister of Local Government, Urban and Rural Development, with the consent of the Minister of Environment and Natural Resource Management, promulgated the Rural District Councils Regulations of 2009 which included ESCs. The regulations empower RDCs to appoint ESCs at the sub-district level (section 61(6) of the Rural District Council Act, chapter 29:13). An environmental sub-committee that is constituted in terms of these regulations may consist of a village, ward or more than one ward depending on the nature and size of the natural resource management activities for a given area (Statutory Instrument 38 of 2009).

The regulations allow binding decisions at the local level on specific matters pertaining to the management of natural resources. However, this is done on behalf of the local authority, and increases the oversight role of RDCs with respect to these lower-level structures. These regulations, when read together with the EMA Act, provide important enabling conditions for CBNRM in Zimbabwe because they provide a legal basis for establishing legitimate CBOs to mobilize and represent community groups around the conservation and use of natural resources. RDCs can devolve natural resource management authority and responsibilities to communities at ward and even village levels. This is a significant development for CBNRM in Zimbabwe, provided that RDCs are fully conversant of the new policies, and have the capacity and political will to implement them.

GOVERNMENT SUPPORT

Government of Zimbabwe has already promulgated the regulations referred to above; and all RDCs have transformed their conservation committees into environmental committees. Manuals on roles and responsibilities of these committees were prepared in local languages by the Environmental Management Agency. The Government allocated grants to RDCs to support the transformation process. What is required now is concerted capacity building for RDCs and their environmental committees in order to enhance effective decision making. The CBNRM Forum should provide such support to the EMA and the RDCs.

4.2 NATURAL RESOURCES

NATURAL RESOURCES ENDOWMENT

Nearly 40 percent of Zimbabwe's economic activities are derived directly or indirectly from natural resources. Moreover, about 75 percent of the nation's population living in communal and resettlement areas depend on natural resources for economic, medicinal, food, and nutritional security. The country's future depends, to a very large extent, on its ability to maintain a healthy natural resource base, especially in its communal and resettlement areas.

Although it is evident that natural resources are now under threat as a result of growing human population and unsustainable consumption of natural resources (Chenje et al., 1998), these resources still remain one of the main sources of hope for the future. Zimbabwe is still endowed with wildlife resources within and outside its parks and timber and non-timber forest products within Forest Reserves, communal lands, and resettlement areas. These can sustain successful CBNRM activities if appropriate strategies are adopted to ensure sustainable management of these natural resources.

DEMAND FOR NATURAL PRODUCTS

There is an ever increasing demand for natural resource products. This includes medicines, processed food (honey, tea, drinks, and edible oil), and crafts from plants. This also includes products from wildlife, such as ivory, meat, hides and trophies. One important factor that has remained favorable to wildlife-based CBNRM has been the maintenance of a strong market for sport or trophy hunting. Whilst most forms of tourism that are dependent on a strong foreign clientele have collapsed, sport hunting has not.

4.3 TRANSFRONTIER CONSERVATION AREAS

A Transfrontier Conservation Area (TFCA) is an area or the component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas, as well as multiple resource uses. The Southern African Development Community region has 22 TFCAs at different stages of development; six of these include parts of Zimbabwe. They are: Great Limpopo TFCA; Chimanimani TFCA; Greater Mapungubwe TFCA; Kavango-Zambezi TFCA; Lower Zambezi – Mana Pools TFCA; and the Zimbabwe-Mozambique-Zambia TFCA.

One of the objectives of the TFCA initiative which is important for CBNRM is to develop frameworks and strategies whereby local communities can participate in, and tangibly benefit from, the management and sustainable use of natural and cultural resources that occur within the TFCA. Consequently, TFCA initiatives have received strong support from governments, conservationists and the tourism sector because their development presents opportunities for reducing human encroachment on conservation and wilderness areas, as well as providing opportunities to local communities to survive the climate change onslaught and the associated threats on food security. Some of the advantages that TFCAs present to CBNRM in Zimbabwe include increasing economic opportunities through:

- Attracting direct investment through collective lobbying by neighboring states, as well as by neighboring land users within the country (e.g., conservancies and commercial farmers).
- Developing joint ventures and other forms of partnerships in ecotourism development and marketing between communities and the private sector.
- Sustainable utilization of the diverse biodiversity found in the TFCAs.
- Developing joint programs and projects involving the state and communities for mitigating humanwildlife conflicts.

The establishment of the Sengwe-Tshipise Wildlife Corridor in the Great Limpopo TFCA presents an example where the Government of Zimbabwe and the Sengwe-Tshipise communities have agreed to facilitate movement of wildlife and tourists between Gonarezhou and Kruger National Parks. This development will lure private sector investment for the benefit of communities, the State and regional tourism. There are many other opportunities for community development in the other TFCAs which the CBNRM movement should exploit.

4.4 ECONOMIC AND LIVELIHOOD BENEFITS

Rural communities in Zimbabwe are still largely dependent on agriculture for their livelihoods. However, due to frequent cropping failures as a result of recurrent droughts, growing pressure on the land, declining soil fertility, and unfavorable terms of agricultural trade, there has been a growing realization of the need for an integrated approach to livelihood diversification to reduce the vulnerability of rural households (SAFIRE, 2007 and 2008). Benefit–driven natural resource management which is being spearheaded by SAFIRE provides one such excellent opportunity. One of the enabling conditions that facilitated SAFIRE's program to commercialize natural resources is the Rural District Councils Act of 1988 which allows the RDCs to issue licenses for commercial extraction and use of timber and non-timber forest products. These licenses can only be issued to registered enterprises that want to extract resources in the communal lands. On the basis of these provisions, SAFIRE facilitated the registration of CBEs who then apply for commercial licenses.

The basic premise of this approach is that commercialization of natural products and services increases the value to the people owning or managing the resources; this, in turn, provides adequate economic incentives for them to manage the resources sustainably. The approach also focuses on the management

of the natural resource base to improve productive and service functions as well as the establishment of CBEs to commercialize and utilize selected products and services for the benefit of local communities.

The main categories of enterprises which SAFIRE and other agencies are promoting, based on the innovative and sustainable use and commercialization of natural resources,

include:



CBNRM offers ecotourism potential: Gorges Lodge in Chisumo Ward, Hwange District (overlooking the gorge in background).

• Ecotourism-based

enterprises which include providing accommodation and conference facilities, fish angling, and mountain climbing.

- Manufacturing of crafts (the crafts are varied and include tables, floor mats, baskets, hats, handbags and wall hangings).
- Commercialization of natural products such as natural honey, juice and jam from indigenous fruit (e.g., masawu, mazhanje, marula), baobab seed oil, marula oil, soap from Jatropha oil, and a whole range of medicines.

4.5 BUILDING ON EXISTING COMMUNITY INSTITUTIONS

As noted already in Section 3.3.2 above, several community trusts were formed and registered to champion the rights and interests of producer communities, and to provide leadership in managing specific natural resources. They were registered as common law trusts with the facilitation of the CAMPFIRE Association and financial support from USAID through the Campfire Development Fund. The trusts remain legally valid; however, when the development fund was terminated in 2002, the groups faced a multiplicity of problems ranging from financial, institutional and technical difficulties (ZELA, 2009). There is a need for thorough capacity building for all the CBOs, mainly in project conceptualization, management, and implementation as well as in financial management. Similarly, there are many RMCs which were formed to facilitate the participation of communities in managing Forest Reserves as well as numerous CBEs and CBOs whose formation for invigorating a community-focused CBNRM movement in Zimbabwe.

4.6 PARTNERSHIPS WITH THE PRIVATE SECTOR

Strategic alliances between communities and the private sector have been crucial in facilitating marketing of CBNRM products and in providing the needed capital and managerial skills. This has enhanced the success of ecotourism ventures and the commercialization of NTFPs. Prime examples are SAFIRE's success in processing and packaging honey and indigenous fruits and the ecotourism venture involving the Mahenye community and ZIMSUN. These projects and many others provide good lessons for CBNRM.

5. LESSONS LEARNED

5.1 POLICY AND PRINCIPLES

- Environmental and natural resource management laws in Zimbabwe do not provide for the devolution of full rights (i.e., ownership) to natural resources to community groups; instead they empower the local authorities to devolve just the decision making responsibilities and access to benefits. This has given Rural District Councils a lot of power while communities can only exercise responsibilities which RDCs decide to delegate to them.
- The development of livelihood-oriented and people-centered laws, policies and approaches is critical for CBNRM success. Policies and legislation that are sensitive to the environmental and economic rights of communities have a positive impact on natural resource management.
- Incentives for management need to be incorporated in legislation to ensure that benefits accrue to the respective communities. This is necessary to overcome "the bureaucratic impulse to retain authority" (Murphree, 1993).

5.2 SUPPORT FOR CBNRM PROGRAMS AND PROJECTS

- CBNRM initiatives should invest more in building the capacity of communities and their institutions than in intermediary organizations such as NGOs, RDCs, and government agencies. NGOs come and go, and government and RDC policy makers and staff also come and go. Communities are permanent.
- While donor support is sometimes needed, it is not wise for CBNRM programs and projects to rely solely on donor funding. Community contributions are very critical for project sustainability and for instilling a sense of community ownership of development processes.

5.3 CBNRM MONITORING

- Performance monitoring works best when matched with dedicated resources. Monitoring is a management activity that is sometimes conducted within the framework of other activities. Sometimes it is even thought of as an activity that can be done on a voluntary basis, without any need of resources. Experience from CBNRM in Zimbabwe shows that dedicating resources for monitoring is necessary and cannot be avoided.
- Performance monitoring works best when it is based on specialization. The experience of the CAMPFIRE program shows that performance monitoring works best where a division of labor exists (between stakeholders) and where such division of labor is based on expertise. Good monitoring works best when it is done by specialists.
- Monitoring approaches and indicators need to be agreed through full participation and consideration of the perspectives of different stakeholders.

5.4 COMMUNITY-BASED NATURAL RESOURCES MANAGEMENT

- CBNRM thrives on a stable political and economic environment.
- Rural communities can live in harmony with wildlife if they see tangible benefits from living with the wildlife.
- Benefits that are easily appreciated by communities must be tangible and monetary. Intangible benefits such as reduced soil erosion and carbon sequestration are not easily appreciated. Therefore, it is difficult to convince communities to manage natural resources when there are low economic returns.
- The success of the CBNRM approach to CBEs entails using economic incentives for sustainable resource management. The rural setting in communal areas constitutes limited market access and market growth opportunities. As such, it imperative to develop market linkages outside the communal areas.
- Stakeholder partnerships (e.g., public-community-private) are useful instruments for achieving CBNRM goals.
- The empowerment of rural natural resource managers is a process that requires organizations and donors to commit funding and resources for periods that exceed the conventional duration of a project.

5.6 GOVERNANCE

- There is often an assumption that RDCs work in the interest of communities. What is emerging from experiences in the CAMPFIRE program is that RDCs who are CAMPFIRE members consistently flouted key principles on devolution, retained large proportions of revenue, and did not devolve key decision-making responsibilities to communities.
- Capacity building is a key for the success of community-based institutional development structures and processes.
- Local participation is enhanced when it is built on incentives. Community attitudes towards natural resources change when they derive revenue from the resources. They look at these resources not as a cost but as a resource to be conserved.
- Sharing responsibilities and management functions with communities at the local level empowers them to develop institutions that practice sustainable management of natural resources.
- The more the benefits that communities enjoy, the greater the quality of institutions that they develop in order to ensure sustainable use of natural resources.
- Local ownership of CBNRM processes, including retention of information at the community level, generates an important level of empowerment which complements the legal devolution of rights.
- It is important to vest proprietorship of natural resources in recognized groups below the district level. The unit of management, accountability and benefit sharing should be the same, located at a subdistrict level (e.g., the ward or village producer communities) and at a scale that enables the whole community to meet face to face.
- The unit of proprietorship should be small and have a long-standing collective identity.

5.7 BENEFIT GENERATION AND MANAGEMENT

- Fiscal devolution leads to improved rural democratization, good governance and incentives for natural resource management.
- For CBNRM to succeed, it must benefit the communities who shoulder the costs of producing the resource. Inclusion of a large, differentially affected number of individuals dilutes the benefits. Also, if the costs of natural resource management are higher than the benefits, the communities will not sustain the program (Madzudzo, 1995).
- A demand-led draw on government or NGO support for resource management is vital when local skills are not available.
- Multi-sectoral agency involvement and participation is useful and should be promoted. However, programs and projects should not be dogged by inconsistent collaboration between development agencies and other parties vested with responsibilities for natural resource management.

5.8 COMMERCIALIZATION

- CBNRM initiatives can offer opportunities for viable businesses which communities can engage in for social and economic transformation; such initiatives should not continue to be viewed as subsistence enterprises.
- Commercialization requires strong local institutional arrangements.
- The enterprise development strategy can increase benefits from natural resources and can diversify community livelihood options.
- Commercialization of natural resources requires a high level of capitalization to match value addition capacities.
- Commercial companies and CBEs prefer tried and tested raw materials.
- Enterprises that are structured as sole traders and as community projects are difficult to manage because: (i) there are too many people with conflicting interests; (ii) members who reside furthest from the business may not be able to fulfill their contractual obligation in the enterprise; and (iii) not all community members are born entrepreneurs.

6. BEST PRACTICES

The following two case studies of successful CBNRM initiatives offer elements of best CBNRM practice in Zimbabwe.

6.1 MASOKA WARD IN MBIRE DISTRICT

A case for Best Practice

Masoka, Ward 11 of Mbire District (formerly Guruve North), is a wildlife-rich area in the western mid-Zambezi valley. Taylor and Murphree (2007) argue that Masoka is a good example of best practice in CBNRM in Zimbabwe for the following reasons.

- It presents a 22-year history of CBNRM with a rich longitudinal dimension which is lacking in many case studies. Masoka's CAMPFIRE time-span covers periods when Zimbabwe's macro-economic status was flourishing (the early 1990's) and when it plunged to record depths in 2008.
- Masoka has managed its wildlife and vegetation sustainably.
- Masoka's CAMPFIRE program has survived despite changes in traditional as well as elected leadership and a six-fold growth in the ward's human population.
- Masoka has consistently remained as one of the leading wildlife producing wards in the country and it has a record of self-funded infrastructural development which cannot be matched elsewhere in Zimbabwe's communal lands.
- Throughout its involvement in the CAMPFIRE program, the Masoka community successfully defended its interests and rights when dealing with DNPWLM, the RDC, and the safari operator, actors whom Taylor and Murphree (2007) characterizes as "potentially or actually predatory."

SUCCESS IN MANAGING WILDLIFE

Masoka supports a diverse and extensive population of large mammals. The average number and density of elephant and buffalo over the period 1988-2001 was 0.34 elephant per square km and 0.93 buffalo per square km. Elephant quotas and off-takes have remained fairly consistent at around 10 animals per year. Buffalo quotas and off-takes have remained constant at around 40 animals annually. The extensive woodlands and grasslands provide building poles, fuel wood, edible fruits, tubers, and thatching grass as well as being good habitat for wildlife. The community conserves wildlife by observing traditional rules and community by-laws which forbid wildlife poaching and wanton cutting of trees.

In 1990 Masoka produced a detailed land use plan with the technical assistance of NGOs. The plan allocated 457 km2 to wildlife management while only 18 km2 was allocated for residential and arable holdings of the 60 households. There were also plans for ecotourism ventures based on the provision of facilities for photographic safaris.

INSTITUTIONAL DEVELOPMENT

The Ward Wildlife Committee has learned basic organizational and record keeping skills. They maintain their own bank account, hold regular, recorded meetings, and elect new leadership every two years as per their constitution. Women representation is evident in the committee (in 2009 the Vice Chair of the WWC was a woman); thus, women participate actively in decision-making in addition to providing paid and voluntary labor.

The Masoka Community Development Trust, whose membership embraces all households in the ward, was established and registered in 2002. The Trustees include men and women elected from among the community. The Trust is responsible for non-consumptive uses of resources, and manages the Nyazvirombo and Mkanga Bridge ecotourism camps, which were developed as part of the CAMPFIRE program. The Trustees have the responsibility to negotiate contracts with the private sector, and to collect and manage revenue on behalf of the community. The ecotourism venture in the ward has not been very successful because of several factors, including: (i) the macro-economic and political environment in the country especially from 2002 to 2008; (ii) the remoteness of the ward, served by roads that are seasonally inaccessible; (iii) the lack of funds needed to renovate and upgrade the camps; and (iv) limited managerial capacity of the trustees who are struggling to manage the camps.

CAMPFIRE BENEFITS

Wildlife revenue earned by the Masoka program steadily increased from USD \$31,620 in 1990 to nearly USD \$109,000 in 2000 before dipping sharply, notably during the three years 2003-2005, to an all time low of USD \$11,437 in 2004. This was followed by a dramatic increase to USD \$132,522 in 2006. In addition, the program offers employment to 58 community members as CAMPFIRE security guards, clerks, game scouts in the anti-poaching unit, drivers, cooks, and caretakers at the Masoka Camp. All these employees are paid from the community's wildlife account. The anti-poaching unit complements the RDC's Problem Animal Control Team.

The WWC invested a major part of its CAMPFIRE income on upgrading the road and causeway across the Urungu River in 1998. More recently, over the past two years, substantial concrete causeways have been constructed across four rivers, with CAMPFIRE funding. Transport, however, remains a problem. In 2007 Masoka purchased a T35 lorry, which now serves as the bus for the community in the following ways:

- Providing general transport since there is no other form of public transport servicing the ward.
- Transporting commercial goods from Kanyemba, Mushumbi Pools, Guruve, Mvurwi, and Harare to the local shops.
- Transporting all materials required at the primary and secondary schools including the teachers' requirements. This has been a big incentive for teachers to stay and work in Masoka.
- Ferrying A-level students and others (who attend boarding schools) from Masoka to Mahuwe where they are able to connect with the public transport system.
- Serving as the local ambulance that ferries the ill and the injured to the nearest hospital in Guruve town which is about 120 kilometers away. It is also used to transport the deceased back home.

The T35 lorry has been a very critical asset for linking residents of Masoka with the outside world.

From 2000 to 2006, the safari operator's annual quota of the larger animals yielded an average of 31 tons of fresh meat. This meat is delivered to Masoka during the hunting season (April to October) for household distribution following the completion of a hunt where, in particular, large game have been killed, e.g., elephant, buffalo, and impala. This provides the meat equivalent of 90 kg per household per annum or 0.25 kg per household per day.

Infrastructural development was minimal prior to 1988: only a borehole, a grinding mill, and a retail store existed. There was no school or clinic. Today, much of the infrastructure in Masoka is associated with CAMPFIRE which sponsored the following developments:

- One health clinic with 2 wards, a delivery room, a treatment room, an ablution block, office, and storerooms;
- Three furnished nurses' houses;
- A 4-block primary school with 8 classrooms and 4 teachers' houses;
- A 2-block secondary school with 6 classrooms and 3 teachers' houses;
- 1 grinding mill, including a building and machinery;
- 1 school office for joint primary/secondary use;
- 1 small, 3-roomed administrators' block for wildlife;
- 2 functioning, hand-pump boreholes;
- 1 safari camp with 4 chalets, kitchen, and storage facilities;
- Water pipes, toilets, water storage; and
- 2 tractors (one under repair), including a trailer and implements.

GOVERNANCE RESULTS

Taylor and Murphree (2007) define good governance as "an organizational system which is institutionally legitimate for its constituency, efficient in carrying out its purposes and resilient in dealing with challenge and change". They make the following observations about Masoka.

- Governance of natural resources through the WWC is inextricably bound up in the Ward's development processes. The WWC is the lead agency in the Ward.
- Rules and regulations exist, including a constitution.
- Membership in the WWC is deliberately limited in duration (2 years), with many leaders being shifted from time-to time in a type of rotational leadership.
- Membership in the WWC is deliberately balanced between young and old; and between the educated and uneducated.
- Project management by the community is generally efficient.
- There is limited dependency on external support.

6.2 MUTOKO BEEKEEPERS ASSOCIATION

BACKGROUND

The Mutoko Beekeepers Association was established in December 1998 by 268 farmers from various parts of the district. One of its mandates was to address the challenges which the small-scale honey producers face. The Association received funding from the CAMPFIRE Development Fund from 2001 to 2003, through the Mutoko Rural District Council. The funds were used for capacity building and training for members of the association as well as for procurement of bee suits, materials for the manufacture of bee hives, and the establishment of woodlots.

WHY MUTOKO BEEKEEPERS ASSOCIATION IS A BEST PRACTICE CASE

- The association's work builds on indigenous beekeeping practices that have existed over many decades. Indigenous beekeeping in Mutoko and elsewhere among rural communities in Zimbabwe has been an important component of household livelihoods and safety nets for generations.
- This initiative is essentially scaling up what farmers were already doing individually into a program of action by the association. The scaling up is achieved by: developing a network of the honey producers; enhancing the skills of the farmers; improving and increasing production of honey; and facilitating marketing of honey and other related products so that honey producers can earn more from beekeeping.
- With a current membership of 2,000 small-scale beekeepers (1,400 males and 600 females) the association has enabled small-scale producers in the district to earn income to diversify their livelihoods. Beekeeping is no longer a preserve for men who are able to climb tall trees to trap bees.
- While the association has grown stronger through the production of marketable honey (at least 60 tons per year), the revenue realized is, however, very low because the honey is sold in its raw state.
- The work of the association is promoting CBNRM beyond honey production. The association has been able to protect the environment by encouraging sustainable management of water, vegetation and other biodiversity. Producers are encouraged to prevent veld or wild fires.
- Beekeeping by members of the association is more than just a project, rather it entails enhancing food and nutrition security, building on livelihoods and promoting integrated rural development.
- Members did not need any persuasion or incentives to participate because (for most of them) beekeeping has always been a part of their livelihood.

GOVERNANCE ISSUES

The institutional arrangements regarding the management of Mutoko Beekeepers Association involve key stakeholders and membership. The structure is as follows:

- The association has 2,000 individual members;
- The members belong to 45 groups;
- The constitution of the association stipulates that the executive committee of any group that wants to join the association must have at least three women out of the seven committee members;

- The chairpersons of the groups come together at the district level to constitute the District Executive Council; and
- Members of the District Executive Council elect, from among themselves, a management board made up of seven members to fill the posts of Chairperson, Vice Chairperson, Secretary, Vice Secretary, Treasurer, and two Board Members.

POSITIVE PROGRAM IMPACTS

- Biodiversity and bee habitats are protected because beekeeping no longer involves destructive activities that were associated with traditional methods of harvesting honey from the wild. New practices have positive impacts because:
 - Trees are no longer cut down or ring-barked in order to make hives.
 - Beekeepers no longer dig holes in the ground in search of honey when a bee colony nests underground by the side of small anthills. Instead the bees are attracted into hives.
 - Naked flames are no longer used to produce smoke when harvesting the honey. In the past, the use of flames resulted in the death of many workers. Colonies were frequently reduced from 40,000 to 20,000 in the process (Kanotangudza, 2008). Also most of the bees that survived left the hive.
 - Use of naked flames also resulted in veld or wild fires in the past because the traditional beekeepers harvested honey at night and had no time to put out the fires started in the process of harvesting honey.
 - Sustainable harvesting of the honey is now practiced which encourages the beekeepers to leave some honey in the hive for the bees.
- Introduction of new technologies which include:
 - Use of modern hives such as the Kenyan top bar hives and other types which suit all weather conditions.
 - The inside top of the hive is waxed, making it easy for the bees to build the combs.
 - The inside wall around the entrance to the hive is smeared with propolis, which is an attraction for the bees.
 - Beekeepers use white or yellow uniforms which help to reduce the aggressiveness of the bees.
- Benefits from the use of the new technologies include:
 - The hive is placed about one meter from the ground which makes it easy and safe for monitoring and harvesting.
 - It is easier to harvest honey from modern hives compared to the traditional ones
 - The bees are no longer exposed to rain and other weather elements when honey is being harvested because they do not need to seek refuge anywhere.

- An average colony is large (ranging from 60 000 to 70 000 bees) because there are no mortalities associated with the use of open flames.
- Modern harvesting is done in such a way that some honey is left behind for the bees.
- Yields from hives are high (almost 30 kg per hive) because of the conducive environment created in the modern hives. Very little honey is wasted during the harvesting process as neither the beekeeper nor the bees are under duress



Zebra in the wildlife-rich zone of southwestern Zimbabwe – home to many CAMPFIRE wildlife producer wards.

the bees are under duress when honey is harvested.

- It is no longer necessary to place hives in tall trees. This removes the danger of falling and getting hurt when bees become violent.

OTHER BENEFITS

- On average, producers realize about 20 to 25 kg per harvest from a hive and there are normally two harvests from a hive per year. The average selling price is USD \$3 per kilogram of processed honey. Revenues realized are used to meet household requirements.
- There is growing awareness amongst the communities in Mutoko district that honey is a natural remedy for chest problems. It treats up to 50 diseases including colds, coughs and arthritis. It has a high content of iron, phosphorous and protein, and it keeps the body fit because it is a known immune booster.
- Honey is useful for sweetening tea instead of using sugar and can be used as a spread on bread instead of using jam or butter.

7. SCALING UP

7.1 EXPANDING THE IMPACT AND SCOPE OF CBNRM

Scaling up can be viewed from two perspectives: (a) increasing the volume or magnitude of current production and returns through replication – replication is achieved by mobilizing more producers in an area or by introducing activities in new areas; and (b) expanding, increasing, and diversifying activities and production through value addition and encouraging the development of economies of scale.

The advantages of scaling up include:

- Increasing the number of beneficiaries of CBNRM in the country,
- Increasing, on a sustainable basis, the benefits to the producer communities or individual members of the communities,
- Increasing the capacity to produce benefits (through the development of skills or introduction of new technologies),
- Improving the quality and increasing the magnitude of benefits enjoyed by producer communities, and
- Diversifying the types of benefits.

Following are three examples of CBNRM initiatives that offer excellent opportunities for scaling up.

7.1.1 SCALING UP BEEKEEPING

Beekeeping is a common livelihood activity in the rural areas of Zimbabwe, because it has always been an important source of food and medicine and thus part of a critical safety net for households. Scaling up beekeeping involves the following:

- Mobilizing communities in order to increase the membership of producers. This implies a move from small to mass production.
- Adopting modern production technologies: which means use of larger and better hives so that more honey is produced and harvested; better positioning of the hives closer to water and flowers and in a place where the hive is protected from adverse weather conditions; a shift from the use of open fires when harvesting the honey so that the loss of bees is minimized; use of uniforms; harvesting during the day; and ensuring that some honey is left behind for the bees.
- Local processing of raw honey in order to achieve value addition.
- Diversifying products for sale, e.g., candles, skin moisturizers, shoe and floor polish, cattle cake, bees wax, medicines, cosmetics, and bath soap.
- Ensuring that the producers are involved in marketing.

The advantages that may be enjoyed from scaling up beekeeping are many. Some of these advantages are: (a) better prices per production unit of honey, (b) creating employment directly and indirectly, and (c)

development of economies of scale including manufacturing of beehives and suits, candles, medicines soap.

An important consideration in scaling up is the involvement of, or partnership with, the private sector especially during processing and marketing activities. SAFIRE has successfully demonstrated scaling up in beekeeping, for example in Zaka district of Masvingo province. The GEF/SGP program has supported numerous beekeeping initiatives countrywide, notably in the Honde Valley where beekeeping has become an integral part of community-based biodiversity management. Another good example is the Mutoko Beekeepers Association where scaling up has gone beyond mobilization and adoption of new technologies. The Association is now seeking assistance and/or partnership with respect to processing.

7.1.2 SCALING UP COMMUNITY-BASED WILDLIFE MANAGEMENT

Community participation in wildlife management should go beyond involvement in problem animal control and receiving CAMPFIRE benefits such as meat and cash. There is scope for developing successful partnerships between communities and the State or the private sector in wildlife management. Areas where such partnerships are needed include:

- TFCAs where communal areas lie adjacent to parks; for example in the Great Limpopo TFCA. Here, the Sengwe-Tshipise communities have already made a unique gesture of ceding part of communal land (the Sengwe-Tshipise Corridor) to the Great Limpopo Transfrontier Park. The State could reciprocate by developing community-based wildlife conservancies to benefit communities. This would be conducive to conservation and photographic safaris.
- Partnerships between the private sector and communities provide viable options for wildlife management where newly settled communities (A1 or A2) are neighbors to large conservancies. The scope for such partnership has already been tested in the northern part of the Great Limpopo TFCA.

7.1.3 SCALING UP COMMUNITY-BASED ECOTOURISM PROJECTS

The CAMPFIRE program supported the development of many community-based ecotourism ventures from 2000 to 2002. A few of these projects are functional, while others folded because of the harsh economic environment in the country over the past five years. Both categories of these projects require resuscitating and scaling up because the potential advantages remain. Again, this is an area where partnerships are required between communities and the private sector. For some of the projects, registered Community Trusts exist, constituting the legal and legitimate representation of the producer communities.

7.2 GEOGRAPHIC AREAS TO TARGET

Areas within Zimbabwe that offer excellent potential for CBNRM expansion are summarized in the following table.

TABLE 21: GEOGRAPHIC AREAS FOR SCALING UP CBNRM

Scaling up activity	TFCA	Commercial Areas & Adjacent Small- Scale Farming Areas	Communal Areas	Resettlement Areas
Partnerships in wildlife management	Great Limpopo Mapungubwe Zimbabwe- Mozambiqaue- Zambia	Save Conservancy Ranches in Mapungubwe TFCA	Maramani, Masoka & other CAMPFIRE wards	
Eco-tourism development	\checkmark		✓	
Beekeeping	\checkmark		✓	✓
Processing of plant products (baobab, masawu, marula, mazhanje)	~		~	✓
Community-Private Sector partnerships in safari operations	✓		√	✓

8. CHALLENGES AND BARRIERS CONFRONTING CBNRM PROGRAMS

8.1 POLICY CONSTRAINTS

Zimbabwe has several environmental laws and policies that impinge on community participation in natural resource management. Some of the laws and policies have been pro-community, while others do not promote community interests at an optimum level.

Although the 1982 amendment of the Wildlife Act of 1975 liberalized the management of wildlife in the country, it did not devolve management decisions and responsibilities to producer communities. Instead, Appropriate Authority was devolved from Central Government (PWMA) to Rural District Councils. This creates problems for CBNRM. First, producer communities in CAMPFIRE districts do not negotiate with safari operators; this is the responsibility of RDCs. Consequently communities are not privy to the signing of contracts between safari operators and RDCs. Also, most producer communities do not know why the sharing of revenue from the wildlife industry is such that the safari operator retains 55% of the revenue from hunting while RDCs, the communities and the CAMPFIRE Association share the other 45%. Similarity, there has been no explanation to communities why safari operators retain 75% of the revenue from photographic safaris while the other stakeholders share only 25%.

Second, some communities have not enjoyed their full entitlement to financial benefits. Although the direct payment method is intended to ensure that communities receive their payments directly from the safari operators, this payment method has not been adopted by all RDCs. Some operators still remit the community share through the RDCs. What is worse still is that there are some RDCs that never disbursed payments to the communities in 2007 and 2008, at the peak of the economic crisis in the country. This was revealed by community representatives at the CBNRM Stakeholder Workshop attended by stakeholders from Beitbridge, Chipinge and Chiredzi districts (held in Chiredzi town on 20 and 21 October 2009).

The Communal Land Forest Produce Act of 1987 (chapter 19; 04) limits the right of local communities to exploit forest resources to subsistence use (no commercial use). It restricts the movement of non-timber forest products by communities from one communal area to the other. According to Section 20 of the Act, the proceeds from the sale of forest produce (by a licensed entrepreneur) from communal lands shall be used by the Minister of Environment to pay the local authority or, in the absence of a local authority, the money is paid to the District Development Fund. Local communities are not listed as potential beneficiaries from such funds.

The Water Act (chapter 20; 24) decentralizes management responsibilities to catchment and subcatchment councils. Use of water for primary purposes, that is, for domestic use, supporting livestock, and making bricks for own use does not require a permit. The weakness of this Act lies in the fact that: (i) the persons who are catchment or sub-catchment managers are appointed by Central Government and do not necessarily represent the interests of local communities; (ii) the procedures that have been laid down for community interests to be addressed are very cumbersome; (iii) many communities in communal lands are not even aware of the procedures they should follow to have their concerns addressed; and (iv) most of the sub-catchment areas are very big, encompassing many administrative units (wards).

8.2 RDC RESISTANCE TO DEVOLUTION

In 2005, a review of the CAMPFIRE program by PWMA indicated that there was a "growing loss of interest by communities in the implementation of CAMPFIRE" (PWMA, 2005). The reasons for this development were the failure by RDCs to adhere to the principles of the CAMPFIRE program and the fact that some RDCs were failing to accept that communities could manage CAMPFIRE revenue. In addition to retaining substantial levies, most RDCs were manipulating unallocated revenue (see Table 16) and delaying distribution in order to obtain the investment income. This affected community attitudes towards wildlife, resulting in an increase in the level of snaring and poaching, particularly around water points. Box 4 summarizes specific reasons cited for loss of confidence by the communities.

Apparently, the RDCs' indifference to CAMPFIRE principles has persisted to this day, and within the Councils, the main culprits are the senior officials who are responsible for the day to day management of council business and are also resisting implementation of the environmental subcommittees regulations of 2009. Most of the senior officials no longer have a passion for CAMPFIRE, hence the delays and sometimes non-payment of revenue to communities.

8.3 CAMPFIRE'S WEAKNESSES, POST 2003

The CAMPFIRE program has developed the following weaknesses after the departure of its major donors, post 2003. First, there has not been any review of the CAMPFIRE operational guidelines. This is necessary given the changed macro-economic and political environment in the country. Second, there has not been any substantial capacity building exercise for RDC CEOs and other key staff. This again is needed given the high staff turn-over and loss of institutional memory in many RDCs. Third, there has been no orientation of new councilors; hence, the vibrancy associated with rural councilors in the 1990s has been lost and most of the new councilors are not conversant with CAMPFIRE issues. Fourth, the CAMPFIRE program does not have a monitoring unit with responsibilities to maintain a database on revenues from RDCs.

Box 4: Reasons for Community Loss of Interest in CAMPFIRE

- Delayed, non-disbursement or underpayment of communities' dividends, leading to negative impressions about the program.
- Periods of safari operator contracts are too long operators are hired or their contracts are rolled-over without community consultation.
- No monitoring mechanisms have been put in place for use by RDCs in the event of violation of contracts or under performance by safari operators.
- Contracts are not structured to reflect macro-economic changes, e.g., exchange rate factors.
- Concession fees and trophy fees have been set for the length of the contracts without any provision for review, and in some cases, concession fees are not charged at all.
- Quota utilization has not been uniform with some species being preferred to others.
- The value of wildlife differs from place to place, even for the same species within the same district.
- The process of selecting operators lacks transparency at both the council and community levels.

(Source: PWMA's CAMPFIRE Review Report, April 2005)

8.4 INSTITUTIONAL CONSTRAINTS OF THE NATIONAL CBNRM FORUM

The National CBNRM Forum is suffering from design problems. It is a loose network with no shared vision, no holistic approach, and no serious actions on the part of the membership. Since its formation, no effort has been made to raise funds, apart from current funding from WWF SARPO for the Regional CBNRM Project. Thus, the forum will most likely collapse if the current donor pulls out. The operations of the secretariat are dependent on the commitment by the CAMPFIRE Association which absorbs the running expenses.

Some of the obvious weaknesses of the National Forum include the following. First, it does not have adequate information on existing CBNRM initiatives in the country and there is no database on many CBOs. As a result, it is difficult even to identify success stories or best practice projects. Second, the Forum does not have a sound strategic plan even after almost five years of existence. Third, some of the Forum members are not keen to build the capacity of CBOs and CBEs because of fear of competition for donor funding. Fourth, there is no genuine desire to involve the private sector. Fifth, monitoring and follow-up work on the delivery and quality of agreed tasks by working groups, are poor. Finally, the Forum did not consider the following as priorities in its work plan:

- Supporting at least some existing CBOs and CBEs.
- Developing a comprehensive database for registered members of the Forum.
- Implementing a countrywide membership drive through RDCs, NGOs and relevant government agencies.
- Transforming the Forum from a transitional loose network into a registered organization.

8.5 LAND REFORM

The Land Reform Program is a national program intended to address serious imbalances and inequities in access to land and other natural resources arising from colonial racist policies. Implementation of the program requires huge financial resources for infrastructure development, capacity building and policy orientation of the new land users. Unfortunately, the government of Zimbabwe and other stakeholders have not been able to secure these resources over the past decade. This has had serious, negative impacts on the management of natural resources by the newly settled land users, especially the smallholder farmers. Some of the developments that have had adverse effects on natural resource management include:

- Clearing of trees in order to expand arable land, to produce timber, and to use the wood as fuel for curing tobacco. In some areas, newly settled tobacco farmers are not planting trees to replace those that they cut to obtain fuelwood.
- Clearing of trees leads to destruction of habitats for a wide range of fauna and it also disturbs ecological balances in wetlands and water catchment areas leading to rapid drying of natural springs and wetland areas.
- Some former commercial farms and conservancies are experiencing loss of wildlife as a result of:

- subsistence poaching by their new neighbors;

- commercial poaching that is funded externally, with ready markets outside of the country; and
- loss of wildlife habitat either because of uncontrolled fires or because the new settlers occupy areas that are the natural corridors for the movement of wildlife.

8.6 ECONOMIC ENVIRONMENT IN ZIMBABWE

Economic sanctions have destroyed most of the economic enablers. The government, local authorities and indigenous NGOs and CBOs experienced serious financial constraints, especially in the post 2005 period when NGO and government extension support declined. The current economic climate still results in major obstacles with respect to the government's capability to provide assistance to rural communities and to implement a sustainable land reform program. Extension agencies that work with rural communities in the communal and resettlement areas have also cut their activities to a bare minimum.

8.7 CLIMATE CHANGE—A MAJOR THREAT

Predictions for southern Africa suggest that the region is likely to experience a temperature rise ranging from 2oC to 4oC as a result of doubling atmospheric carbon dioxide in the next century. Precipitation is expected to decrease by 10% to 15% in some areas and increase by similar percentages in others. The frequency and duration of dry spells is likely to increase. During the last decade, there have been significant changes in weather patterns in Zimbabwe and southern Africa in general: "we are now experiencing shorter wet spells and longer dry spells across the southern Africa region" (IPS News, November, 2009). Available data show that the six warmest years on record for Zimbabwe have occurred since 1987 and that four of those years were recorded after 1998 (Tsiko, 2008). According to the Climate Change Office, "these dry spells have become more frequent; the days with meaningful rain are becoming less and less, and it appears the situation is gradually worsening" (Zhakata quoted by IPS News, November 2009).

This pattern of climate change poses a serious threat to CBNRM in Zimbabwe because its impact is felt across several sectors, such as agriculture, water resources, wildlife management, health, and energy. Rural communities suffer from the impacts of climate change that are locally specific and hard to predict. These include erratic rainfall and frequent droughts which cause increased dependence on natural resources and erosion of biodiversity. Climate change induced droughts and hunger divert attention and investment in natural resource management as households and communities focus their attention on immediate livelihood demands, while donors and the government invest more in food aid than CBNRM.

Direct impacts of climate change on CBNRM activities include the following:

- Drying of wetlands and riparian habitats for wildlife as temperatures rise and rainfall declines.
- The viability of rural reforestation initiatives is reduced as water that is needed to sustain tree nurseries becomes scarce, and woodlot and orchard plantations are negatively affected.
- Land degradation is common in areas affected by heavy storms and subsequent droughts.
- Many watering points for wildlife dry up and some habitats decline in quality.
- In some areas, the diversity of flora declines because of droughts; this has a negative impact on livestock and the general livelihoods of communities.

• Over-exploitation of biodiversity takes place as community members resort to natural resources as the ultimate safety net. This may further degrade sources of materials for crafts.

8.8 POTENTIAL SOURCES OF INSTITUTIONAL CONFUSION AND CONFLICTS AT THE COMMUNITY LEVEL

At present, there are many community-level committees and other institutions arising out of legislative provisions and the work of NGOs and government agencies, as shown in Table 22. While there may be good justification for the formation and existence of these institutions, the chances are high that there are conflicts and confusion among some communities. There is a need for clear separation of the roles and functions of community-based institutions so that potential conflicts are reduced.

Basis for the Existence of the Committees/Institutions	Community Level (Ward and Village) Institutions	
Rural District Councils Act	Ward Committees, Village Committees	
EMA Act, 2002	Environmental Sub-committees	
Environment Sub-committees Regulations of 2009	Environmental Sub-committees	
Traditional Leaders Act	Ward Assemblies, Village Assemblies,	
CAMPFIRE Program	Ward CAMPFIRE Committees, Village CAMPFIRE Committees (and registered Community Trusts in some districts)	
Water Act	Sub-Catchment Committees	
NGO Facilitated Projects	Project Committees, Registered CBOs and CBEs	

TABLE 22: AREAS OF POTENTIAL INSTITUTIONAL CONFUSION

Some of the institutions are formed as part of short-term projects that are developed in response to donor funding. Usually such projects and the associated institutions are not sustainable and they do not have clearly defined exit plans. They raise a lot of unfulfilled expectations among the communities who naturally expect the NGOs and other organizations that assisted their formation to continue providing assistance in the long term. Communities that have gone through such experiences become skeptical even when genuine CBNRM initiatives are introduced in their areas. In such situations, many have learned to embrace projects for short-term gains and not for long-term development benefits.

8.9 EXPERTS AND THE "WE KNOW IT" SYNDROME

There is a general tendency among development agencies to believe that they are experts in everything, that local communities cannot do it, and that we have to do it for them. Such attitudes have adverse effects on the delivery of services to communities. Once they have identified their niche some NGOs do not want to partner with government agencies, RDCs, and even the private sector; consequently, they fail to draw on the strengths of other stakeholders in order to deliver a holistic package to communities. In addition, some facilitating agencies are not prepared to learn from the communities and even from other NGOs who are better informed about their environment and other factors that influence its management. Participants at the CBNRM stocktaking feedback workshop noted the lack of a coordinated approach to natural resource management by various institutions (NGOs, government, CBOs, and private sector organizations).

8.10 CHALLENGES RELATED TO COMMERCIALIZATION

There is a need to balance exploitation with conservation or sustainable use on CBNRM projects that include commercialization of natural products. Experience has shown a tendency toward over-exploitation aimed at deriving maximum benefits. Cases of communities being shortchanged by corporate business who hold the market licenses have also been reported. There is a need for a management institution or organization to oversee the implementation of these projects and monitor resource utilization. In particular, commercialization of natural resources is heavily dependent on the existence of strong institutions that can govern the use of the resources to prevent:

- Over-exploitation,
- Lack of an integrated approach to natural resource management by implementing agencies,
- Privatization of communal resources by commercial user groups,
- Disruption of other livelihood strategies,
- · Management focusing only on valuable species, and
- Inequitable benefit sharing.

9. LINKS TO NATIONAL PRIORITIES AND PROGRAMS

CBNRM offers a holistic package for development in the new millennium. The package potentially consists of biodiversity conservation, rural economic growth, poverty reduction, enhancement of rural livelihoods, community empowerment and democratization, climate change mitigation and adaptation, and combating desertification. All of these are components of Zimbabwe's national development priorities; therefore, there are opportunities for CBNRM to make significant contributions to national development. Section 3.5 describes how various CBNRM activities have contributed to national development. This chapter identifies the opportunities for future contributions to these priority areas.

9.1 CBNRM, POVERTY ALLEVIATION AND ENHANCEMENT OF RURAL LIVELIHOODS

Forests and other woodlands contribute towards meeting the basic and other needs of rural communities and therefore contribute towards reducing poverty. The key areas of contribution can be categorized into subsistence support, supplementary income support, industrial activities, and environmental services. Forest products and other natural resources provide rural communities with supplementary cash income from the sale of some timber and non-timber forest products during parts of the year. The most common practice is the sale of wild fruits when they are in season. Indigenous fruits are normally and commonly marketed without any further processing. The trade is undertaken by all households but the rural elite tend to trade the biggest share. Other non-timber forest products that are traded include caterpillars (amacimbi), medicinal plants, thatch grass, and mushrooms.

In many rural areas, community-based micro-enterprises are dominated by furniture making, woodcraft production, and basketry, providing income and employment to a significant number of people. Forest-based micro-enterprises employ up to 12% of the local people in some areas. In the Chibuwe area of Chipinge district, income from basketry ranked 2nd to agricultural income and contributed as much as 40% of the total household income (Gondo, 2006). In Nyandoro village of Chikwizo communal land in Mudzi district, up to 70% of the households depend on processing and selling products (e.g., mats and baskets) from the ilala palm (Edit Trust, unpublished baseline survey, 2007). In addition, much of the raw materials are transported by bus to markets in Harare.

As noted earlier in this report, SAFIRE is now investing in product and market development of NTFPs in a bid to improve the value of the forests and benefits that accrue to local communities. New products that have been developed and are now being marketed in both the domestic and export markets include baobab seed oil and pulp, marula oil, masau, marula, and mazhanje jams, masau candy sticks, makoni herbal tea, and Kigelia africana (sausage tree) fruit extract. These products garner significant revenue and have potential to transform the status of the poor through increases in household income. For example, a community enterprise in Rushinga district produced more than 3,000 liters of baobab oil (in six months) which has an export value of USD \$30,000. The enterprise purchased the raw materials at a value of USD \$5,000 from 200 primary producers. In addition, the enterprise employed seven people. The proceeds from the enterprise have been used to improve the physical assets of the business owners and employees

and have also helped diversify income sources of the primary producers. Two of the employees bought a cow each whilst all the employees reported that they were able to pay school fees for their children (SAFIRE, 2003). It is clear that with proper business management support and market security, these enterprises have the potential to reduce poverty amongst rural communities. The communities where the raw materials were purchased have now come up with by-laws intended to protect the specific trees and forest areas which are the sources of the indigenous fruits.

A number of thriving community-based micro-enterprises are now operational, producing products individually or in partnership with the private sector. Whilst there are no specific details on how much each individual household in the operational areas has earned to date, and how much this contributes to overall household income, there are already some useful pointers. Indications are that, for the entrepreneurs, these enterprises are now the main source of household income whilst, for the producer communities that supply raw materials to the enterprises, income from such activities now contributes between 25 and 50% of household income.

The specific contributions that CBNRM can make to rural livelihoods and poverty alleviation should include some or various combinations of the following activities:

- Linking producers of raw materials with markets;
- Assisting producers to form local institutions with a mandate related to the production, processing, and marketing of products;
- Building the capacity of local communities to formulate and adopt rules, laws and strategies for the sustainable management of natural resources;
- Building the capacity for local processing of natural resources and linking the local industries with markets for these processed goods;
- Initiating partnerships between local institutions and the private sector; and
- Advocating for the upgrading of rural infrastructure (e.g., roads) and services (e.g., electricity) in order to facilitate commercialization initiatives and attract private investors to the rural areas.

9.2 ECONOMIC GROWTH

COMMUNITY-BASED TOURISM

Tourism in Zimbabwe experienced rapid growth between 1980 and 1999. Between 1989 and 1999 tourist arrivals increased at an average annual rate of 17.8% while receipts grew by 18% to over USD \$200 million. In 1999, tourism accounted for 12.4% of gross domestic product and was the third highest foreign currency earner after mining and agriculture. The tourism industry is based primarily on wildlife and other natural resources. While the industry is dominated by major attractions such as Victoria Falls, Hwange National Park, Great Zimbabwe Ruins, Lake Kariba, and other attractions run by the mainstream industry, there is a growing community–based tourism sector that is closely associated with the introduction of the CAMPFIRE program. Different forms of community based tourism have emerged since appropriate authority to manage and utilize wildlife was devolved to the RDCs. The most common forms include:

i. Community-owned and community-run enterprises,

- ii. Enterprises leased from communities and run by private operators who pay lease fees to the RDCs,
- iii. Enterprises run by private operators outside communal lands but linked to communal areas, and
- iv. Community-owned enterprises on communal land and run by individual members.

Currently there are nearly forty community-based enterprises that could be classified under any one of these categories. These generate supplementary income for those involved and provide income to several community members. Some of the CAMPFIRE districts that have significant wildlife populations have

earned large sums of money which has been used to build schools clinics and roads. For example, Nyaminyami and Guruve districts have realized annual incomes linked to tourism in excess of USD \$2 million in the last five years.

CRAFT INDUSTRY

The wood-based crafts sector is mainly targets the tourism industry and it grew significantly during the decade prior to 2005. Studies showed that the industry

employed more than 3,000 people and that 90% of the craft marketing centers along the main



Water storage tank under construction in Nyatondo Village. Water will be piped from a reservoir uphill to be stored in the tank. Four committee members stand in front of the tank.

tourist routes had emerged after 1990. Studies conducted by the Forestry Commission (1992) showed that the crafts consumed about 700 m3 of wood annually along the Bulawayo-Victoria Falls road compared to 5,000 m3 used by the furniture industry in the same area. Unfortunately tourism has declined sharply due to the economic downturn and the negative publicity the country has received since 2001. Craft-based enterprises were among the first to experience the impact of the economic decline which the country has experienced since 2003.

Opportunities exist for mainstreaming crafts and community-based tourism into livelihood strategies, especially in areas adjacent to protected areas such as parks and protected forests, provided that communities are granted user and management rights for these areas. Targeted areas should also include TFCAs, especially the region between Gonarezhou and Kruger National Parks where plans for a tourist bridge across the Limpopo have already been endorsed by the Governments of South Africa and Zimbabwe.

Private sector involvement in natural resource management is evident in the CAMPFIRE program and in TFCAs. Private land holders in areas rich in wildlife forged partnershps with communities and PWLMA, for example in ecotourism enterprises where communities provide labor at private lodges and in manufacturing craftware. Private land holders are also involved in the establishment of private conservancies through consolidation of individual holdings to take advantage of economies of scale as well as expanded habitats for wildlife. In a few cases, the private sector has stepped in to establish lodges

in CAMPFIRE areas, e.g., in Mahenye. In this case, clear revenue-sharing mechanisms were established and implemented.

9.3 BIODIVERSITY CONSERVATION AND COMBATING DESERTIFICATION

Zimbabwe's biodiversity is conserved in-situ in Forest Reserves, National Parks, Safari Areas, Sanctuaries, Botanical Reserves, and Recreational Parks; it also exists in non-protected areas such as communal lands, resettlement areas, and conservancies. The key challenge affecting biodiversity conservation and management relates to the loss of biodiversity particularly in the communal and resettlement areas. Loss of both plants (flora) and animals (fauna) is attributed to several factors, some of which are linked to climatic and macro-economic conditions.

Target interventions under biodiversity management which CBNRM programs should support include:

- Community-driven approaches for the conservation of natural habitats and ecosystems in and around conservation areas.
- Strategic interventions to rehabilitate degraded areas in communal lands.
- Restoration of indigenous fodder species in order to enrich grazing resources.
- Capacity-building to promote the preservation and application of indigenous knowledge and practices that are relevant to the conservation and sustainable use of the wild and agro-biodiversity.
- Community-led inventories of forest biodiversity and indigenous sustainable knowledge and the use of those resources.
- Promotion of sustainable production and use of non-timber forest products.
- Development of environmentally sustainable ecotourism schemes with local participation.
- Improved management of land, water, and wetlands areas.
- Improved management of degraded areas for environmental and livelihood benefits.
- Awareness raising initiatives with regard to biodiversity and appropriate management techniques.

9.4 CLIMATE CHANGE ADAPTATION AND MITIGATION

Since 2001, there have been significant changes in weather patterns in Zimbabwe. The country is now experiencing shorter wet spells and longer dry spells. Climate change has had devastating effects on fragile ecological environments associated with the country's agro-ecological regions IV and V. The Government of Zimbabwe has yet to produce an integrated climate change policy and legal framework specifically to address issues of climate change mitigation and adaptation. What CBNRM stakeholders need to do is, firstly, to engage and support government to formulate and adopt workable policies on climate change. Secondly, there is need to scale-up ongoing activities by NGOs and CBOs aimed at mitigating and adapting to climate change. These include the following:

• Increase community access to sustainable, climate-friendly energy technologies through the removal of cultural, institutional, technical and economic barriers.

- Develop new and replicate existing projects that promote community-focused training, awareness raising, and capacity building for climate change mitigation and adaptation in communal and resettlement areas.
- Improve the capacity of communities and CBOs in the communal lands and resettlement areas to operate, manage and maintain renewable energy technologies including efficient stoves, biogas technologies, solar powered technologies, and biofuels from Jatropha oil.
- Grow large varieties of trees that tolerate droughts (e.g., Jatropha) for rehabilitating woodlands and wetlands. Some of the ongoing activities include: wetland protection and management, establishment of community woodlots and orchards, and managing existing indigenous forests and woodlands. This will enhance the expansion and protection of the carbon storage capacity of wooded areas in the country and will have a positive impact on the physical environment. The interventions will also contribute towards arresting the desertification process that is associated with climate change. Ultimately this will enhance climate change mitigation.
- Improve management of biodiversity (e.g., by reducing veld or wild fires and implementing by-laws to prevent over-harvesting of reeds, ilala, etc.); this will discourage unnecessary carbon emissions.

9.5 FOOD AND NUTRITION SECURITY

Under its Millennium Development Goals, the Government of Zimbabwe's goal to eradicate hunger has two targets. The first target is to halve the proportion of people who suffer from hunger between 2002 and 2015. The second target is to reduce by two thirds, between 2002 and 2015, the proportion of children under five who are malnourished. The main challenge the country is facing is that, although its economy is based on agriculture, the viability of its rainfed agriculture is being undermined by recurrent droughts and lack of capital to finance agriculture in the resettlement sector.

The potential for CBNRM to enhance its contribution to food and nutrition security is great. The main strategy should be to scale up current interventions or projects that involve food production. These include:

- Honey production: scaling-up honey production by mobilizing producers to form associations that will facilitate handling and marketing of raw honey. Facilitating capacity building for local processing, packaging and marketing.
- Fruit: scaling-up production, processing and marketing of fruits. Two geographical areas where both indigenous and exotic fruits go to waste each season are the Rusitu and Honde Valleys. These Valleys have the potential to support production of pineapple, guava and mango juice.
- Meat: commercializing and marketing game meat. Many RDCs that have wildlife producing wards should be assisted to replicate the Nyaminyami RDC's Nyama project (see Section 3.4.3). The EU-funded Parcel Project in Chiredzi district is another example. However, instead of confining the meat source to impala, the project could also include meat from buffalo and elephant. Cash Income from wildlife revenue should be used to source food from districts which have surplus production each year. Beitbridge District has pioneered such a scheme which merits replication.

10. RECOMMENDATIONS

MOBILIZE MEMBERSHIP OF CBOS AND CBES

The National Forum should orchestrate an aggressive campaign to mobilize CBOs and CBEs. This task should include among other things:

- Creating awareness of the existence of the Forum, including its goal, objectives and activities;
- Reaching out to all existing community institutions under different programs in order to ascertain how many CBOs and CBEs are functional and what they are doing; and
- Providing legal assistance to Community Trusts and other CBOs and CBEs to ensure that they have sound institutional and administrative operations.

LEGAL STATUS OF THE CBNRM NATIONAL FORUM

Once there is a large membership of CBOs and CBEs, the National Forum should be registered as an Association or Network of legally constituted community institutions. Membership of NGOs, Government agencies, RDCs and the private sector should be encouraged as facilitators or service providers who can form partnerships with CBOs and CBEs. Donor agencies should be welcome as well wishers.

RESULTS OF THE NATIONAL FORUM TO DATE

The present National CBNRM Forum should demonstrate the results of what it has done with respect to its mandate during the past 5 years. This will show CBNRM stakeholders and well wishers the value of having such a CBNRM umbrella organization.

RDC ENVIRONMENTAL COMMITTEES AND ENVIRONMENTAL SUB-COMMITTEES

The RDCs, the Ministry of Local Government and those responsible for implementing the EMA should urgently attend to, and prioritize the establishment and training of the RDC environmental committees. These stakeholders should also:

- Launch community awareness campaigns highlighting the opportunities associated with the establishment of environmental sub-committees;
- Facilitate capacity building of the environmental sub-committees through training; and
- Lobby for increased government funding for the establishment of environmental committees at the district level as well as sub-committees at the sub-district level.

COMMUNITY EMPOWERMENT

CBNRM stakeholders should advocate for constitutional safeguards for the environmental and economic rights of communities who depend on natural resources for their sustenance. All stakeholders should demand that the new constitution provide for justifiable environmental rights, under the Bill of Rights whose content should include the following provisions:

- Every person shall have the right to obtain equitable economic, social, and cultural benefits from natural resources found in their area.
- Every citizen should have the right to an environment that is not harmful to health or wellbeing.
- Every person shall have access to environmental information, to participate in and/or be represented lawfully in environmentally related decision-making processes.

In addition, as stated above, there should be an aggressive community awareness raising program with respect to the provisions associated with the environmental sub-committees.

MAINSTREAMING CBNRM IN LOCAL AUTHORITY PLANS

CBNRM stakeholders should facilitate inclusion of CBNRM activities in the plans and programs of RDCs. Local authorities and NGOs should then be involved in monitoring CBNRM initiatives in order to establish whether or not people are benefiting, and to ensure that communities are not being short-changed. Monitoring by local authorities should be facilitated through progress reports by the environmental committees and sub-committees.

SCALING UP

A comprehensive baseline analysis of existing CBNRM efforts should be conducted to provide information needed for scaling up CBNRM. The analysis should:

- Examine current support for CBNRM efforts;
- Quantify the achievements realized to date;
- Provide training on project conceptualization, management, and implementation; and
- Facilitate scaling up of projects depending on specific opportunities and circumstances.

CBNRM AND CLIMATE CHANGE

There are numerous fora in Zimbabwe on climate change and many organizations claim to be climate change experts. NGOs should engage the Climate Change Office in the Ministry of Environment and Natural Resource Management so that climate change issues, messages, and strategies are shared with CBOs, and communities are adequately informed of options and opportunities for climate change adaptation and mitigation.

TFCAS

TFCAs are prime areas for intensive and diversified natural resource management by communities; they also have outstanding attractions for community-based eco-tourism. PWMA should give top priority to the demarcation TFCAs. This should be followed by awareness raising (among communities) of the advantages associated with investment in the TFCAs.

POLICIES AND LEGISLATION

CBNRM stakeholders should lobby policy makers and legislators to bring about amendments to the following pieces of legislation so as to ensure that the laws recognize the rights of local communities to benefit economically from forest and other natural resources:

- Communal Land Forestry Produce Act, 1987,
- Forestry Act, 1982,
- Water Act [Chapter 20:24] of 1998, and
- Mineral and Mining Act [Chapter 2105] of 1996.

WILDLIFE-BASED LAND REFORM

CBNRM stakeholders should promote and advocate for co-management approaches to wildlife management through a wildlife-based land reform perspective. This will encourage communities in areas adjacent to National Parks and Conservancies to form partnerships with PWMA and the conservancies. This, in turn, will enhance sustainable use of wildlife in resettlement areas.

11. SYNTHESIS AND CONCLUSION

CBNRM OBJECTIVES

Barrow & Murphree (1999) argue that the objectives of CBNRM should be to: (i) create an enabling legal and policy context for local people to manage their own resources sustainably; (ii) establish institutions for the effective local management of natural resources; (iii) encourage the development of natural resource-based enterprises; and (iv) ensure that benefits accrue on a sustainable and equitable basis.

CBNRM APPROACHES IN ZIMBABWE

Post independence Zimbabwe has witnessed several CBNRM approaches. CAMPFIRE, which represents the initial conceptualization of CBNRM in the country, is both a conservation and a rural development approach, initially targeting marginal communal areas. The aim was to provide communities with space, systems, and mechanisms to manage and directly benefit from wildlife resources through an enabling legislative and institutional framework. Socially, CAMPFIRE was premised on restoring ownership of natural resources to communities as well as building the capacity of community institutions to facilitate collective management of natural resources.

SAFIRE has been promoting a benefit-driven CBNRM approach that seeks to enhance economic development in rural areas through provision of innovative natural resource-based livelihood options. The focus is primarily on NTFPs. The approach entails two related strategies, that is, management of the natural resource base in order to improve its productive and environmental functions, and enterprise development which focuses on the commercial utilization of selected resources by local communities for their benefit.

The Forestry Commission has facilitated CBNRM initiatives through collaborative arrangements with communities adjacent to State Forest Reserves in the Midlands and Matebeleland North provinces. The aim is to reduce conflict between State forest officials and neighboring communities by implementing resource-sharing projects which ensure conservation of forest biodiversity while at the same time contribute to the livelihood requirements of communities.

The approach of the GEF/SGP program promotes and supports community-driven, grassroots action that addresses local and global environmental concerns. The program aims to deliver global environmental benefits in the GEF focal areas of biodiversity conservation, climate change mitigation and adaptation, protection of international waters, prevention of land degradation (primarily deforestation and desertification), and elimination of persistent organic pollutants, through community-based approaches. This is achieved via sustainable environmental use and protection, poverty reduction, and the empowerment of local communities.

EFFECTIVENESS OF CBNRM APPROACHES AND EMERGING ISSUES

CBNRM in Zimbabwe has resulted in several successes as summarized below:

• Approximately 56,000 km2 of buffer zones around protected National Parks and Forest Reserves have been protected.

- Significant achievements in terms of protecting biodiversity, rehabilitating degraded lands, managing wetland areas, and reforesting communal lands;
- CBNRM has also provided for alternative livelihoods for communities residing in the marginal agricultural regions of the country through wildlife-based and plant-based enterprises.
- CBNRM has provided some space for communities to speak with one voice and as collective units in their interactions with various actors from the State, NGOs, and the private sector. An estimated total of 670 CBOs with varying legal status have been established to represent communities in natural resource related matters.
- Community benefits vary depending on approaches and programs; but they include:
 - gaining a sense of ownership of development processes, and knowledge that the welfare of the community and the status of the environment are intertwined,
 - restoring rights of access to natural resources in protected areas,
 - regaining decision making responsibilities regarding natural resources,
 - enhancing skills and capacities of local community groups,
 - increasing cash incomes and other material benefits, and
 - developing social and economic infrastructure.

OUTSTANDING ISSUES

Despite the successes realized, CBNRM programs need to be adaptive as they are shaped by factors that are external to the communities. The effectiveness and impact of CBNRM is dependent on how far the policy, legal and institutional environment has genuinely empowered communities. In addition, management of natural resources is complex not only because of the complex nature of ecosystems, but also because of other factors such as climate change and the macro economy.

• The overriding policy for effective CAMPFIRE CBNRM is decentralization and devolution. The legal framework for natural resource management has moved a step forward in recognizing that communities should be active managers of natural resources and should derive benefits from the exploitation of such resources. However, a major constraint still relates to tenure rights and devolution of authority. Rural communities do not have tenure rights over natural resources. These are legally State property, with traditional leaders having custodial rights. Cognizant of this legal gap, the government devolved authority of ownership of natural resources to RDCs which could enter into contractual agreements including investment in natural resources. The PWMA proceeded to confer appropriate authority status upon application to districts who have significant wildlife resources. In practice, devolution under CAMPFIRE has been found wanting and has become rhetoric as RDCs have not been accountable and transparent to communities regarding revenue accrual and distribution. RDCs still retain excessive control especially revenue retention resulting in the intended beneficiaries being disadvantaged. Given the limited revenue base of Councils, they are holding onto these funds in order to meet administrative and operational costs. In the early 2000s the Ministry of Local Government and some RDCs vigorously opposed the establishment of community trusts.

- Decisions over commercial exploitation of natural resources have not been transparent, with some councils awarding concessions and permits to outsiders without the approval of communities, and clandestinely benefiting from such deals. In the case of benefit-driven natural resource management, not all members in a community participate in such initiatives, resulting in privatization of resources that would otherwise benefit everyone. This realization is forcing CBNRM practitioners to review other ways of integrating alternative livelihood approaches in CBNRM.
- Concerns have been raised regarding whether collaborative management approaches over natural resources adjacent to protected areas is mutually beneficial for the State and communities. It has been argued that the State has benefited more from such arrangement in terms of conservation of the genetic pool while communities receive low-level incentives. There is a need to interrogate the cost-benefit aspects of such approaches from a community perspective.
- The pursuit of individual interests in terms of livelihoods is compromising the success of CBNRM programs. Given the increasing levels of poverty and the slow and low financial returns from CBNRM, communities are suffering from a crisis of expectation. This problem is being exacerbated by macro-economic factors, especially the impacts of economic sanctions which have led to the decline of the country's economic performance. Growing unemployment and reduced real wages place increasing pressure on land and other natural resources. This, compounded by climate change, has led to overharvesting of biodiversity, an increase in poaching, and destruction of wildlife habitat especially after 2003. In 2005, the PWMA noted with concern "the growing loss of interest by communities in the implementation of CAMPFIRE... [noting that] this has serious implications on the survival and sustainable utilization of wildlife resources" (PWMA, 2005).
- Community empowerment for natural resource management is affected by capacity constraints. Under some programs, rural communities have relied too much on technical backstopping from NGOs and government agencies and have not internalized skills and expertise needed to self-manage CBNRM of programs. This is partly a result of the skewed nature of the allocation of donor funds. In the CAMPFIRE Program, for example, direct funding for community projects represented less than 15% of USAID funding. The other 85% went to capacity building for RDCs and NGOs, some of whom abandoned the communities after the closure of USAID support in 2003. This gap requires intervention in terms of fostering participatory learning and improved targeting of financial aid as well as built-in sustainability strategies.

THE WAY FORWARD

There is consensus among CBNRM stakeholders in Zimbabwe about three issues:

- 1) The momentum of the CBNRM movement and collective efforts should be maintained through multistakeholder participation.
- 2) Communities and people should be at the heart of environmental management and conservation processes.
- 3) There is a need to intensify and scale-up CBNRM activities in order to make a more meaningful contribution to national development.

On the first issue, with regard to "collective efforts," it is instructive to revisit the original tasks or responsibilities given to the CBNRM National Forum upon its formation in 2005 (see Section 1.3). These

are still pertinent and will help CBNRM stakeholders to achieve a shared vision and to work in a united and complementary fashion.

The second issue is "placing people at the heart of conservation efforts"—this is imperative because the bulk of biodiversity is in the communal lands where the majority of rural inhabitants, who depend directly on biodiversity resources on a daily basis, reside. There is a need to have empowered communities carrying out conservation efforts. It is also important to allow rural people to take control of factors that are critical to their livelihoods. In this regard, CBNRM stakeholders should replicate the GEF/SGP approach in terms of achieving community empowerment.

The third issue concerns "making a meaningful contribution to national development." This can only be realized by making CBNRM an integral component of national development strategies. CBNRM stakeholders should be instrumental in moving this issue forward. It is within this context that the National CBNRM Forum should be visible, focused, and able to deliver tangible results. The Forum should be involved in strategic places of intervention, especially in the process of developing the new constitution, where it should lobby for the inclusion of the environmental rights of communities, as well as their rights to enjoy economic benefits based on the utilization of natural resources found in their areas

BIBLIOGRAPHY

Africa 2000 Network (2009). Annual Report, 2009. Africa 2000 Network, Harare.

Barrow, E., and M. Murphree (1999). *Community Conservation from Concept to Practice: A Practical Framework*. Institute for Development Policy and Management. University of Manchester, Manchester, UK.

Bond, I. (2001). CAMPFIRE and the Incentives for Institutional Change. In: *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation*. (Eds. D. Hulme and M. Murphree). James Currey, Oxford.

CAMPFIRE Association (2007). Annual Report 2006-2007. CAMPFIRE Association, Harare.

CAMPFIRE Association (2008). Annual CBNRM Progress Report for 2008. CAMPFIRE Association, Harare.

CAMPFIRE Association (2009). Annual Technical Report of the National CBNRM Forum. CAMPFIRE Association, Harare.

CAMPFIRE Association and WWF SARPO (2003). *CAMPFIRE Revenue Manual*. WWF SARPO, Harare.

Chenje, M., L. Sola and D. Paleczny (Eds.) (1998). *The State of Zimbabwe's Environment 1998*. Government of the Republic of Zimbabwe, Ministry of Mines, Environment and Tourism, Harare.

Child, B. (1993). Zimbabwe's CAMPFIRE Programme: Using the High Value of Wildlife Recreation to Revolutionalise Natural Resources Management in Communal Areas, *Commonwealth Forestry Review*, 72(4): 284-296

Child, G.F.T. (1995). Wildlife and People: The Zimbabwean Success. Wisdom Foundation, New York.

Child, B., B. Jones, D. Mazambani, A. Mlalazi and H. Moinuddin (2003). Final evaluation report: Zimbabwe Natural Resource Management Program-USAID/Zimbabwe Strategic Objective No. 1. CAMPFIRE Communal Areas Management for Indigenous Resources. Unpublished Report, USAID, Harare.

Cumming, D. H. M. (1990). Development in Game Ranching and Wildlife Utilization in East and Southern Africa. WWF Project Paper No. 13, Typescript, 21 pp. Paper presented at the 2nd International Wildlife Ranching Symposium, Edmonton, Canada, 4-8th June.

Dimbi, L.R (1998). The Role of Leadership in the Structure and Functioning of Community Based Natural Resource Management Organizations: A Zimbabwean Case Study. M.Sc. thesis, University of Natal, Pietermaritzburg.

Forestry Commission (1992). Annual Report. Forestry Commission, Harare. 1999 to 2007

Frost, P., and I. Bond (2006). CAMPFIRE and Payments for Environmental Services.

Gondo, P. (2006). Benefit Driven Natural Resources Management in Zimbabwe: A case study of decentralized natural resources management at community level. SAFIRE, Harare.

Government of Zimbabwe (2004). Zimbabwe Millennium Development Goals, 2004 Progress Report: A report of the Government of Zimbabwe to the United Nations. Government of Zimbabwe, Harare.

Guveya, E., and C. Sukume (2003). A goal programming model for planning management of miombo woodlands: A case study of Chivi and Gokwe communal areas, Zimbabwe. In: *Policies and Governance Structures in Woodlands of Southern Africa* (Eds. G. Kowero, B. M. Campbell and U. R. Sumalia). CIFOR, SMK Grafika Desa Putera, Indonesia.

Hulme, D., and M. Murphree (eds.) (2001). African Wildlife and Livelihoods: The Promise and Performance of Community Conservation. James Currey, Oxford.

Jones, B. and M. Murphree (2001). The Evolution of Policy on Community Conservation in Namibia and Zimbabwe. In: *African wildlife and livelihoods: The promise and performance of community conservation*. (Eds. D. Hulme and M. Murphree). James Currey, Oxford.

Kanotangudza, V. (2008). The Sweet Smell of Honey: My testimony for four years as a heroine. In: *CAMPFIRE News: The Newsletter of the Community Areas Management Programme for Indigenous Resources*, December 2008. CAMPFIRE Association, Harare.

Khumalo, A. (2003). CAMPFIRE Monitoring and Evaluation Data, 2001. WWF SARPO, Harare.

Madzudzo, E. (1995). A General Overview of CAMPFIRE: Success and Constraints. In. *Successful Natural Resource Management in Southern Africa*. Center for Development Cooperation Services, Vrije Universiteit, Amsterdam.

Mataure, P. (2008). Study on mainstreaming HIV/AIDS and gender into CBNRM in Southern Africa. Unpublished report prepared for the Zimbabwe National CBNRM Forum.

Mataya, C., P. Gondo and G. Kowero (2003). Evolution of Land Policies and Legislation in Malawi and Zimbabwe: Implications for Forestry Development. In: *Policies and Governance Structures in Woodlands of Southern Africa*. (Eds. G. Kowero, B. M. Campbell and U. R. Sumalia). CIFOR, SMK Grafika Desa Putera, Indonesia.

Mazambani, D. (2002). Formation and Registration of the Manyuchi Fisheries Project Trust. CAMPFIRE Program, Harare.

Mazambani, D. and P. te Velde (2005). End of Program Evaluation for the Water for Development and Livelihood Improvement Programs. Zvishavane Water Project, Zvishavane.

Ministry of Environment and Natural Resources Management (MENRM) (2009). Climate Change in Zimbabwe: A Government Position Paper. MENRM, Harare.

Mtisi, S. (2009). Setting the Pace: The struggle for Promoting Community Participation in Environmental and Natural Resources Governance. In: *The Legal and Policy Framework for Community Participation in Transboundary Natural Resources Management Initiatives* (Eds. M. Dhliwayo, G. Gapu and M. Makonese). Zimbabwe Environmental Law Association (ZELA), No. 6., London.

Mukamuri, B. B. (1991) Ecological Religion: Local Politics and Conservation in South Central Zimbabwe. In: *Management of Natural Resources in Zimbabwe*. (Eds. Virtanen, P., K. Bottas, S.

Jormanainen, A. Klemola, S. Koskela, B. B. Mukamuri, and M. Perahuhta). Report of the Research and Training Program on Energy, Environment and Development, University of Tampere. Tampereen Yliopisto, Finland.

Mukamuri, B. B. (1995). Making Sense of Social Forestry: A Political and Contextual Study of Forestry Practices in South Central Zimbabwe. Academic Dissertation, University of Tampere, Tampere.

Murphree, M. (1993). Decentralizing the Proprietorship of Wildlife Resource in Zimbabwe's Communal Lands. In D. Lewis and N. Carter (Eds.) *Voices from Africa: Local Perspectives on Conservation*. WWF, Washington DC.

Murphree, M. (2001). Community, Council and Client. In: *African wildlife and livelihoods: The promise and performance of community conservation*. (Eds. D. Hulme and M. Murphree). James Currey, Oxford.

Nabane, N. (1997). Gender Dimensions in the Communal Areas Management Program for Indigenous Resources: A Zambezi Valley Community Case Study. M. Phil. thesis, University of Zimbabwe.

Nhira, C., S. Baker, P. Gondo, J. J. Mangono and C. Marunda (1998). *Contesting Inequality in Access to Forests. Policy that works for forests and people series, number 5*. Center for Applied Social Sciences and Forestry Commission, Harare and International Institute for Environment and Development, London.

Parks and Wildlife Management Authority, Government of Zimbabwe (2005). Proceedings of a Workshop to Review the CAMPFIRE Program, 26 April 2005. PWMA, Harare.

Peck, J. E. (1993). From royal game to popular heritage - wildlife policy and resource tenure under colonial and independent rule in Zimbabwe. Paper presented at the 36th Annual Meeting of the African Studies Association, Boston, USA.

SAFIRE, (2003). Annual Report. SAFIRE, Harare.

SAFIRE (2007). Annual Report. SAFIRE, Harare.

SAFIRE (2008). Annual Report. SAFIRE, Harare.

Taylor, R.D. (2006). Case study: CAMPFIRE (Communal Areas Management Program for Indigenous Resources), Zimbabwe. USAID-FRAME Paper. USAID, Washington, DC.

Taylor, R. D., I. Bond (1999). Participatory technology development for community based wildlife management in Zimbabwe: The WWF Support to CAMPFIRE Project. In: *Personal, Societal and Ecological Values of Wilderness*. Proceedings 6th World Wilderness Congress, Bangalore.

Taylor, R.D. and M.W. Murphree (2007). Case studies of successful Southern African NRM initiatives and their impacts on poverty and governance. Zimbabwe: Masoka and Kaerezi. USAID, Washington, DC.

Tsiko, S. (2008). Zimbabwe: Country at Risk of Climate Change Effects. In The Herald newspaper, 22 May 2008 edition.

Virtanen, P. (1991). Natural Resources Management in Zimbabwe: The Role of NGOs. In: *Management of Natural Resources in Zimbabwe* (Eds. Virtanen, P., K. Bottas, S. Jormanainen, A. Klemola, S. Koskela, B. B. Mukamuri and M. Perahuhta). Report of the Research and Training Program on Energy, Environment and Development, University of Tampere; Tampereen Yliopisto.

WWF SARPO (2007). Regional CBNRM Program. Fact Sheets 1-21. WWF SARPO, Harare.

Zimbabwe Environmental Lawyers Association (2009). Review of the Operations and Legal Status of Trusts Established Through the Campfire Development Fund. Unpublished Report Prepared for the Zimbabwe CBNRM National Forum.

OTHER DOCUMENTS CONSULTED

Bond, I. (1999). CAMPFIRE as a Vehicle for Sustainable Rural Development in the Semi-Arid Communal Lands of Zimbabwe: Incentives for institutional change. D. Phil. Thesis. University of Zimbabwe, Harare.

Bond, I., A. Davis, C. Nott, K. Nott and G. Stuart-Hill (2006). *Community-Based Natural Resources Management Manual*. WWF Wildlife Management Series, WWF SARPO, Harare.

CAMPFIRE Association (2005). Annual Report 2004-2005. CAMPFIRE Association, Harare.

CAMPFIRE Association (2007). Minutes of the Zimbabwe National CBNRM Forum's Annual General Meeting, held on 9 August 2007 at St Lucia Park, Harare. CAMPFIRE Association, Harare.

CAMPFIRE Association (2007). Annual CBNRM Progress Report for 2007. CAMPFIRE Association, Harare.

CAMPFIRE Association (2007). Financial Report for 2007. CAMPFIRE Association, Harare.

CAMPFIRE Association (2008). Annual Work Plan for the Zimbabwe National CBNRM Forum. CAMPFIRE Association, Harare.

CAMPFIRE Association (2008). Financial Report for 2008. CAMPFIRE Association, Harare.

CAMPFIRE Association (2008): First Report of the Zimbabwe National Community-Based Natural Resource Management Forum. CAMPFIRE Association, Harare.

Child, B. (1996). The Practice and Principles of Community-Based Wildlife Management in Zimbabwe: The CAMPFIRE Program. *Biodiversity and Conservation* 5 (3): 369-398.

Child, B., S. Ward, and T. Tavengwa (1997). *Zimbabwe's CAMPFIRE Program: Natural Resource Management by the People*. IUCN-ROSA Environmental Issues Series No. 2. IUCN-ROSA, Harare, Zimbabwe.

Dzingirai, V. (2003). CAMPFIRE Is Not for Ndebele Migrants': The Impact of Excluding Outsiders from CAMPFIRE in the Zambezi Valley, Zimbabwe. *Journal of Southern African Studies* 29(2):445-459.

Forestry Commission (1999-2007). Annual Reports. Forestry Commission, Harare.

Goredema, L, R.D. Taylor, I. Bond, and S. Vermeulen (2005). Empowering rural communities to manage wildlife: Lessons Learned from WWF's Support to CAMPFIRE Project 1993-2002. Power Tools Series. IIED, London.

Goredema, L., I. Bond, and R. D. Taylor (2006). Building capacity for local-level management through participatory technology development. In: *Practical tools for community conservation in Southern Africa*. IIED Participatory Learning and Action, Series No. 55. London

Mazambani, D. (2002). ABC + Water Shagashe Project: Report of the Progress Assessment and Impact Evaluation. Africa 2000 Network, Harare.

Mazambani, D. (2004). National CBNRM Forum for Zimbabwe: Report on the Proceedings of the First Meeting on the Formation of A National CBNRM Forum in Zimbabwe. WWF-SARPO and CAMPFIRE Association, Harare.

Mazambani, D. (2005). National CBRNM Forum for Zimbabwe: Report on the Proceedings of the Second Meeting on the Formation of the National CBNRM Forum in Zimbabwe. WWF-SARPO and CAMPFIRE Association, Harare.

Mazambani, D. (2009). "Benefit Sharing" Under the CAMPFIRE Program: The Case of Masoka in Mbire District." Unpublished report prepared for the CAMPFIRE Association, Harare.

Metcalfe, S. (1994). The Zimbabwe Communal Areas Management Program for Indigenous Resources (CAMPFIRE). In D. Western, and R. M. Wright, editors. *Natural Connections: Perspectives in Community-Based Conservation*. Island Press, Washington, DC.

Muchapondwa, E. (2003). *The Economics of Community-Based Wildlife Conservation in Zimbabwe*. Ph. D. Dissertation, Göteborg University.

Muir-Leresche, K., I. Bond, W. Chambati, and A. Khumalo (2003). An Analysis of CAMPFIRE Revenue Generation and Distribution: The First Decade (1989-2000). WWF SARPO, Harare.

Murphree, M. (2004). Communal Approaches to Natural Resource Management in Africa: From Whence and to Where? *Journal of International Wildlife Law and Policy* 7(3-4):203-216.

Murphree, M. W. and D. Mazambani (2002). *Policy Implications of Common Property Resource Knowledge in India, Tanzania and Zimbabwe*. Background Country Paper for Zimbabwe for the CPR Project Workshop, Cambridge, UK.

Murombedzi, J. (2001). Committees, Rights, Costs and Benefits: Natural Resource Stewardship and Community Benefits in Zimbabwe's CAMPFIRE Program. In: *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation* (Eds. D. Hulme and M. Murphree). James Currey, Oxford.

SAFIRE (2006). Annual Report. SAFIRE, Harare.

SAFIRE (2008). CBNRM Report. SAFIRE, Harare.

Taylor, R. D. (1989). Socio-Economic Aspects of Meat Production from Impala Harvested In a Zimbabwean Communal Land. WWF Multispecies Project, Causeway, Harare.

Taylor, R. D. (2001). Participatory natural resource monitoring and management: implications for conservation. In: *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation*. (Eds. D. Hulme and M. Murphree). James Currey, Oxford.

United Nations Development Program Global Environment Facility – Small Grants Program (2007). Building Bridges for Sustainable Environment Protection and Use: Zimbabwe Program and Activities. GEF/SGP Zimbabwe, Harare.

United Nations Development Program Zimbabwe (2004). Zimbabwe Millennium Development Goals: Progress Report of the Government of Zimbabwe to the United Nations. Government of Zimbabwe, Harare.

ANNEX I: MEMBERSHIP OF THE ZIMBABWE NATIONAL CBNRM FORUM

Organization	Program or Sector Focus	Address	Telephone Numbers
CAMPFIRE	Advocacy for RDCs with AA to manage wildlife	Mukuvisi Woodlands, P.O Box 661, Harare.	Harare 747422, 747429/30
Association	Secretariat for National CBNRM Forum		0912 233 315
WWF – SARPO	Training to monitor and protect wildlife	WWF SARPO, P.O. Box CY1409,	+263 4
	Regional CBNRM Capacity Building Project	Causeway, Harare, Zimbabwe	252532/252533
ZIMTRUST	Capacity building	3 Allan Wilson Road, Belgravia	730543, [F. Manyarara
ACTION	Capacity building and awareness raising in CBNRM	Mukuvisi Woodlands P.O Box GT1274,	263-4-747 213/
	CBO Organizational Development;	Graniteside, Harare	0912 422952 [Mr. Chari]
SAFIRE	Commercialization of natural resource based products	SAFIRE, 10 Lawson Avenue, Milton Park.,	+263 4 794 333
	CBO Organizational Development	Harare P.O Box 398	0912 233 454 [Mr. Gondo]
Matobo RDC	Wildlife/NRM management	Matobo RDC, P.B Maphisa	011538189 Mrs. Hlatswayo
Mutoko Beekeepers Association	Community Based Enterprise - bee keeping	P.O Box 165, Mutoko	0912696165; Mr. Kanotangudza
African Wildlife	Wildlife management	Box 319, Kariba	061-2475, 2506, 2507
Foundation	CBO Organizational Development		
Sengwe/Tshipise Authority	Zoning animal corridor for the GLTP	Chiredzi RDC	
Environment Africa	Community Based Enterprise (CBE) Development	Environment Africa Box A639, Avondale, Harare	492143/47/48
PhytoTrade Africa	Community Based Enterprise Development through value addition to NRs and marketing		
Karunga Trust	Community Based Enterprise (CBE) Development through	P O Box 539, Guruve	N/A
Nyaminyami RDC	Wildlife management	P.A Siakobvu, Karoi	061-2572
Beitbridge RDC	Wildlife management ; Eco-tourism	Beitbridge RDC, P.O Box 32 Beitbridge	011 631 408, 0286-23364, 22404
Chiredzi RDC	Wildlife management, veld fire management	Chiredzi RDC P.O Box 128, Chiredzi	031-2847 or 011 613 899,
Agritex	Capacity building and awareness raising	Block 2, Room 86, Makombe ,Harare	04-707311, 794601/7

Organization	Program or Sector Focus	Address	Telephone Numbers
Forestry Commission	Forestry conservation and extension	1 Orange Grove Drive, P.O Box HG 139, Harare	498436-9 498078[Mr Zingwena]
Mbire RDC	Wildlife management – CAMPFIRE	Guruve RDC P.O Box 110, Guruve	058-2583, 011956882
EMA	Govt. Dept.; Promotion & extension of CBNRM; Performance Monitoring and Evaluation	P.O Box CY 385, Causeway, Harare <u>Head Office:</u>	705671-4; 011 220 577 [Mr. Maturure]
PWMA	Wildlife management; Performance Monitoring and Evaluation; Problem Animal Control training	PWMA, Box CY140, Causeway, Harare, Zimbabwe	04-707625 or 705344 0912 217 405 [Dr. Mutsambiwa]
CASS	Policy research and capacity building of communities Performance Monitoring and Evaluation,	CASS, P.O. Box MP167, Mt. Pleasant, Harare	+263 4 778 067 or 303306
ZELA	Policy formulation and advocacy	ZELA, No. 6 London Derry Road, Eastlea, Harare	mutusod@zela.org 0912 424164[Mr. Dhliwayo]
Ministry of Local Government	Policy formulation and implementation	Room 511, 5 th Floor, Makombe Complex, Harare	796756, 0912971397 [Ms.Thabete]
Chimanimani RDC	Tourism Based Enterprise Development	P.O Box 65, Chimanimani	026-2272, 2227, 2273 Fax: 026-2403
BIO-HUB	Capacity building	city building c/o CIRAD 37 Arcturus Rd, Highlands	
Birdlife	Capacity building and awareness raising on bird management	No. 35 Clyde Rd, Hillside, Harare Box CY161 Causeway	481496 [Dr. Chirara] birds@zol.co.zw
NAC	HIV and AIDS and Gender awareness	100 Central Ave, Harare	04-791170, 791171/2 secretariat@nac.org.zw
SAfAIDS	HIV and AIDS and Gender awareness	17 Beveridge Rd, Avondale	04-336193/5, 335005
Marondera RDC	Partnership in wildlife production	Box 108, Marondera	0279-23250, 0279-20734
IUCN	Conservation	6 Lanark Road, Belgravia, Harare	091-235670; 728267
Jekesa Pfungwa		No. 44 Logan Rd, Hatfield	570846
Gairezi Ecotourism	Fisheries		861172, [Mr. Chaipa]
Malilangwe Trust	Wildlife management	P O Bag 7085, Chiredzi	031-4078/9, 4094, 5126
Insiza Wood Saving	Reforestation	P O Box 53, Filabusi	017-294, 240, 237
ZAMBEZI Society	Wildlife conservation	Mukuvisi Woodlands	04-747002/5 [Mr. Pitman]

Organization	ation Program or Sector Focus Address		Telephone Numbers
Tropical Resources Ecology –UZ	Education; Capacity building	University of Zimbabwe, P.Bag MP 167, Mount Pleasant	
Matonjeni Development Trust,	Natural resources management	Matopo Primary School, P.B.T 5391, Byo.	
Institute of Environmental Studies	Education; Policy Research	University of Zimbabwe, MP 167, Mount Pleasant	332039 (Prof. Feresu]
Plan International	Capacity building	3 & 7 Lezard Ave, Milton Park, Hre	04 - 791601-4, 707902
MS-Zimbabwe	Capacity building	122 Kwame Nkruma Ave, Hre	04- 253145-8; mszim@mszim.co.zw
World Vision	Humanitarian assistance	59b Nursery Rd, Mt. Pleasant	04-301248, 301330, 736232
Institute of Development studies	Education; Policy formulation capacity building	University of Zimbabwe, P.Bag MP 167, Mount Pleasant	
Community Tech Dev Trust	food security; sustainable use of agro- participatory research and development	P.O. Box 7232 Harare, 286 Northway Road, Prospect, Harare	<u>Tel:</u> 263 4 576091 263 4 576108
LGDA	Capacity building	P O Box 165, Guruve	058-2477, 2456, 2456
Tsholotsho RDC	Governance	P O Box 40, Tsholotsho	0878-324, 79, 325, 449
Bulilima RDC	Governance	P O Bag 5809 Plumtree	019-2384, 2385

ANNEX II: TERMS OF REFERENCE OF THE CBNRM NATIONAL FORUM AND THEMATIC AREAS

TERMS OF REFERENCE OF STEERING COMMITTEE AND SECRETARIAT

Steering Committee	Secretariat
Coordination of Forum activities	To manage the day to day activities of the Forum
Fund raising	To manage the accounts of the Forum (accounting and book keeping).
Foster linkages between the Forum and other CBNRM stakeholders	To prepare financial, annual and other technical reports for presentation at the annual planning meeting.
To liaise with the Secretariat in recruiting members to the Forum	Recruit new members to the Forum in liaison with the Steering Committee
To liaise with the Secretariat in drawing up annual work plans and budgets for the Forum	To prepare for the annual planning meeting each year

THEMATIC AREAS AND MEMBERSHIP	OF WORKING GROUPS
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Thematic Areas	Lead Agency	Members	Terms of Reference
1. Land, policy, EMA/Policy devolution	CASS V. Dzingirai	CASS, CA, ZELA, PWMA, Local Gvt. Chimanimani RDC	 Facilitate knowledge exchange between policy makers & practitioners, & reduce gaps between policy & practice Move CBNRM forward by supporting further devolution Promote extension of CBNRM to other sectors e.g. forestry, mining, fisheries, sustainable agriculture Undertake a study to identify policy gaps Assess the impact of CBNRM policies for four selected sectors Engage policy makers, civic society and environmental managers for purposes of awareness raising and lobbying for viable CBNRM policy implementation.
2. CBE Development	SAFIRE G. Kundhlande	Karunga Trust, E- Africa, AWF Phytotrade, Mutoko Beekeepers Ass, Matobo RDC	 To strengthen the capacity of selected CBEs and CBOs in value addition and marketing of natural resource products. Support and facilitate the generation, compilation and dissemination of value chain information on natural resource based enterprise opportunities. Support and facilitate the development of CBEs.
3. CBO Development	CAMPFIRE Association C. Machena	Matobo RDC, Safire, Action, Mutoko Bkeepers Ass,	 To improve rural communities access to natural resources and equitable benefit sharing To document and apply capacity building best practices.
4. MOMs	WWF-SARPO	EMA, Agritex, FC, B/Bridge, Guruve, Chiredzi RDCs.	• To design, develop and facilitate the implementation of a monitoring approach and materials that are appropriate to the country.
5. Training	ACTION P. Chari	WWF, ACTION, CASS PWMA, CIRAD, Birdlife	 To facilitate and support delivery of formal and informal training to strengthen CBNRM capacity through curricula and materials development and availability of locally skilled trainers.
6. Performance Monitoring	EMA A. Nenguke	WWF- SARPO, CA, EMA, PWMA, CASS	 To strengthen CBNRM performance and monitoring systems at local and national levels To support and facilitate the development and implementation of CBNRM performance measurement/monitoring systems To harmonize/consolidate performance measurement approaches in the country Define performance standards protocols which include: Methodologies and approaches, data gathering tools and processes with consideration for on going regional processes Facilitate the institutionalization/integration of performance measurements into operating processes
7. Gender and HIV/AIDS	WWF-SARPO L. Goredema	SAFIRE, NAC, Action SafAIDS, Marondera	To mainstream HIV and AIDS and gender in all CBO/CAMPFIRE/Community projects.

ANNEX III: ACHIEVEMENTS OF THE NATIONAL CBNRM FORUM

Thematic Area	Terms of Reference	Achievements	Output
1. Land, policy, EMA/Policy devolution <u>Members</u> CASS, CA, PWMA, Local Gvt, ZELA, Chimanimani RDC	 To facilitate knowledge exchange between policy makers and practitioners, and reduce gaps between policy and practice To move CBNRM forward by supporting further devolution Engage policy makers, civic society and environmental managers for purposes of awareness creation and lobbying for viable CBNRM policy implementation in Zimbabwe 	 Reviews of (a) the Forest Act and the Communal Lands Forest Produce Act, (b) the Water Act, and (c) Mines and Minerals Act Development of guidelines to assist devolution Ongoing dialogue with the Environment and Natural Resources Committee of Parliament 	 Output Report Policy briefs for Parliamentarians being finalized by ZELA Gazetted Rural District Council (Environmental Sub Committee) Regulations, 2009
2. Training <u>Members</u> WWF - SARPO, ACTION, PWMA, CIRAD, , Bio-Hub CASS, Birdlife Zimbabwe	 To facilitate and support delivery of formal and informal training to strengthen CBNRM capacity through curricula and materials development and availability of locally skilled trainers. 	 Conducted study on identifying and documenting gaps in CBNRM training Carried out Audit of CBNRM inclusion in Primary, Secondary and Tertiary education in Zimbabwe Facilitating the incorporation of CBNRM in Tertiary institutions curriculum 	ReportReportReport
3. CBO Development <u>Members</u> Matobo RDC, Mutoko Beekeepers Ass, AWF, Sengwe/Chipise Combination Authority ACTION, SAFIRE	 To improve rural communities access to natural resources and equitable benefit sharing Document and apply capacity building best practices 	 A database of organizations involved in CBNRM in Zimbabwe is being compiled. A review of the operations and legal documents as well as the assessment of training needs of 10 CBOs was carried out. A workshop was held to outline roles and responsibilities of key players in the GLTP TFCA. Training manuals on roles and responsibilities of players involved in Transfrontier Conservation Areas (TFCAs) is being developed. 	 Report still to be finalized by ZELA Workshop report produced
4. Community Based Enterprise Development <u>Members</u> Karunga Trust, E- Africa, Phytotrade, , AWF, Mutoko Beekeepers Asso, Matobo RDC	 To strengthen the capacity of selected CBEs and CBOs in value addition and marketing of natural resource products. Support and facilitate the generation, compilation and dissemination of value chain information about natural resource based enterprise opportunities. 	 Review of current CBE models SAFIRE prepared regional guidelines to set up a Community Based Enterprise. Prepared national CBE guidelines on baobab processing; bee keeping, harvesting of muhacha and the feasibility of CBEs and market assessments. 	 Report Regional guidelines on CBE National guidelines on CBE

Thematic Area	Terms of Reference	Achievements	Output
	 Support and facilitate the development of resulting enterprises. 	 The CBE Working Group facilitated the participation of 5 community groups at the Zimbabwe International Trade Fair held from 28 April to 2nd May 2009 in Bulawayo. 	
5. Management Oriented Monitoring Systems (MOMS) <u>Members</u> EMA, Nyaminyami RDC, B/Bridge RDC, Chiredzi RDC, Guruve RDC, Forestry Commission, Agritex	 To design, develop and facilitate the implementation of a monitoring approach and materials that are appropriate for the country. 	 The monitoring team was trained by a Consultant. The MOMs Training Team identified Masoka as the pilot area for the introduction of the Management Oriented Monitoring System (MOMS) in the country. Training of 13 community representatives from Masoka was carried out in Mushumbi Pools, Mbire RDC. The Event Book adapted to the Zimbabwean situation is scheduled to be tested in the field before the end of this current project phase. This will then be finalised following the field testing. 	 Training report Training report Event Book draft
6.Performance Monitoring <u>Members</u> WWF- SARPO, CA, EMA, PWMA, CASS	 To strengthen CBNRM performance and monitoring systems at local and national levels To support and facilitate the development and implementation of CBNRM performance measurement/monitoring systems Facilitate the institutionalization/ integration of performance measurements into operating processes 	 Carried out a desk Study: "Analyse existing performance and monitoring indicators and develop a national performance indicator list". The National Performance indicators were to be subsequently tested in the field under this activity but no results were produced by the working group 	 Indicators not yet tested Group has collapsed
7. Gender and HIV/AIDS <u>Members</u> SAFIRE. NAC, SafAIDS, ondera RDC, IUCN, ACTION	 To mainstream HIV and AIDS and gender in all CBO/CAMPFIRE/Community projects. 		 Group was never functional ACTION has been assigned to carry out the tasks

[Source: CAMPFIRE Association, 2009]

ANNEX IV: LOCATION OF CBO & CBE UNITS, 2009

Name of CBOs and CBEs	Km ²	Wards	Districts	Provinces
CBOs Facilitated by CAMPFIRE				
Vimba Eco-Tourism Development Trust		Vhimba Ward	Chimanimani	Manicaland
Kaerezi Eco-Tourism Development Trust	122.16	Ward 17	Nyanga	Manicaland
Mahenye Community CAMPFIRE Trust	88.05	Mahenye	Chipinge	Manicaland
Banje Eco-Tourism Trust	33.81	Chipiri,	Mazowe	Mashonaland Central
	80.73	Nyadzonya		
	71.63	Makombwe		
Karunga Development Trust	83.56	Chiriwo Ward 4	Mbire	Mashonaland Central
Masoka Development Trust	25.71	Masoka Ward 11	Mbire	Mashonaland Central
Mukurupahari Natural Resources Development Trust	45.35	Nohwedza Ward	Mt Darwin	Mashonaland Central
Mavuradonha Wilderness Development Trust	120.79	Hwata,	Muzarabani	Mashonaland Central
	76.71	Gutsa,		
	136.48	Utete,		
	100.47	Chiwashira,		
	96.60	Machaya		
Paradise Pools Community Fisheries Trust	29.57	Gudza, Muonwe, Chireka	Bindura	Mashonaland Central
	39.79			
	17.07			
Nyatana Joint Management Trust		Nyatana Wilderness	Rushinga;	Mashonaland Central
			Mudzi & UMP	Mashonaland East
Ngomakurira Community Trust	20.96	Shumba,	Goromonzi	Mashonaland East
	40.20	Mawanga		
Mayambara Community Development Trust		Mayambara	Manyame	Mashonaland East
Mutoko Bee-Keepers Association			Mutoko	Mashonaland East

Name of CBOs and CBEs	Km ²	Wards	Districts	Provinces
Thuthukani Mangwe Trust	133.69	Wards 1,	Mangwe	Matebeleland South
	129.44	3,		
	150.78	4,		
	324.86	7,		
Mtshabezi Valley Eco-Tourism Trust	48.33	Mtshabezi	Umzingwane	Matebeleland South
Doddieburn-Manyole Trust		Doddieburn, Manyole	Gwanda	Matebeleland South
Ntunjambili Community Development Trust	49.14	Mkhokha Ward	Matobo	Matebeleland South
Manyuchi Community Fisheries Trust	161.97	Wards 4,	Mwenezi	Masvingo
	136.42	6,		
	264.38			
	295.89			
Mhakwe Community Fisheries Trust		Mhakwe	Hwange	Matebeleland North
TOTAL AREA COVERED	4 948.14			
CBOs Supported by GEF/SGP				
Nyandoro Development Committee	145.53	Chikwizo Ward A	Mudzi	Mashonaland East
Nyamapanda Development Trust	18.61	Goronga Ward A,	Mudzi	Mashonaland East
Fombe Ward Development Committee	374.99	Ward 1	Nyanga	Manicaland
Avila Ward Development Committee	244.81	Ward 2	Nyanga	Manicaland
Nyatondo Biodiversity and Wetland Management	65.39	Nyatondo, Ward 19	Nyanga	Manicaland
Bonde Biodiversity and Wetlands Management		Bonde , Ward 19	Nyanga	Manicaland
Sedze Wetlands and Woodlands Management Project		Sedze, Ward 19	Nyanga	Manicaland
Mambemba Wetlands and Woodlands Biodiversity Management		Mambemba, Ward 19	Nyanga	Manicaland
Zamchiya Community Development Trust	158.20	Zamchiya, Ward 22	Chipinge	Manicaland
Organic Farming Network	211.09	Ward 12	Makoni West	Manicaland
Makoni Organic Farmers Association	376.53	Chirimutsitu, Ward 17	Makoni East	Manicaland
Bio-Technology Trust Zimbabwe		Gunda	Makoni West	Manicaland
Kubatira Pamwe Development Committee			Hauna, Mutasa	Manicaland
Mutasa Biodiversity Association			Hauna, Mutasa	Manicaland
Musani Irrigation Scheme; Farmer	70.03	Musani	Chipinge	Manicaland
CHIEHA Earth Healing Community Trust		Gudo, Ward 1	Chiredzi	Masvingo
Zvirodzo Project Committee		Zvirodzo	Chiredzi	Masvingo
Kushinga Project Committee		Kushinga	Chiredzi	Masvingo

Name of CBOs and CBEs	Km ²	Wards	Districts	Provinces
Sangwe Community Development Committee	303.75	Sangwe	Chiredzi	Masvingo
Mazivandagara Development Committee		Mazivandagara	Chiredzi	Masvingo
CHIEHA Earth Healing Community Trust	688.45	Save Valley	Chiredzi	Masvingo
Sengwe Project Committee	369.86	Xini and Sengwe	Chiredzi	Masvingo
SHDF			Lupane	Matebeleland North
Gariya Project Committee		Gariya	Tsholotsho	Matebeleland North
Nkayi Development Foundation		Nkayi district	Nkayi	Matebeleland North
Maqhina Community Project Committee		Kezi	Matobo	Matebeleland South
Tongwe Project Committee		Tongwe	Beitbridge	Matebeleland South
Sogwala/Madigane Project Committee		Sogwala and Madigane	Lower Gweru	Midlands
Saba Hot Springs Project	356.36	Lower Gweru	Gweru	Midlands
Dufuya Project Committee		Dufuya – Lower Gweru	Gweru	Midlands
Zhombe Project Committee		Zhombe	Gokwe	Midlands
DAPP			Shamva	Mashonaland Central
Center for Total Transformation		Chiweshe Communal Land	Mazowe	Mashonaland Central
Zambezi Society			Muzarabani	Mashonaland Central
DAPP	163.85	Shamva Resettlement	Shamva	Mashonaland Central
TOTAL AREA COVERED	3 547.45			
CBEs supported by SAFIRE				
Amacimbi Development Association Mopane group	381.89	Ward 17	Gwanda	Matebeleland South
Bambanani Peanut Butter	139.32	Domborefu	Bulilima	Matebeleland South
Baobab oil and pulp		Goko	Chipinge	Manicaland
Batanai Jathropha Soap		Chapinduka	Rushinga	Mashonaland Central
C&K Baobab Enterprise		Chimhanda	Rushinga	Mashonaland Central
Chadereka Baobab		Chadereka19	Rushinga	Mashonaland Central
Chikarudzo Parinari Oil	136.38	Ward 13	Masvingo	Masvingo
Chingoma Marula Oil	38.91	Ward 27	Masvingo	Masvingo
Chitsanza Jatropha Soap	65.39	Ward 19	Nyanga	Manicaland

Name of CBOs and CBEs	Km ²	Wards	Districts	Provinces
Chitsanza Peanut Butter		Ward 19	Nyanga	Manicaland
Creative oil investments baobab			Rushinga	Mashonaland Central
Dayligy		Manetsera	Rushinga	Mashonaland Central
Fusira Marula Oil marula	92.23	Ward 17	Masvingo	Masvingo
Gwezha Mopane worms	352.86	Ward 14	Gwanda	Matebeleland South
Herbal clinic			Chimanimani	Manicaland
Jatropha soap		Nyamajura	Mutare	Manicaland
Kambeu Masau Strips		Sone	Muzarabani	Mashonaland Central
Kuronga Marula Oil		Kasenze	Rushinga	Mashonaland Central
Kuwirirana Jathropha Soap	32.10	Rusambo	Rushinga	Mashonaland Central
Makhulela Hebal Clinic	128.34	Makhulela	Bulilima	Matebeleland South
Makoni Tea Producers Association (ITCZ - Indigenous Tea Company of Zimbabwe)	537.53	Ward 23	Nyanga	Manicaland
Matobo Honey	60.40	Vulindlela	Matopo	Matebeleland South
Musagarira Maoko mazhanje pulp enterprise	136.38	Ward 13	Masvingo	Masvingo
Muzarabani Masau Enterprise			Muzarabani	Mashonaland Central
Ncedani Indigenous vegetables	32.47	Izimnyama	Mangwe	Matebeleland South
Ndebele Cultural Village	60.40	Vulindlela	Matopo	Matebeleland South
Neshangwe Baobab Enterprise	143.73	Neshangwe	Mbire	Mashonaland Central
Neshangwe Masau Strips		Neshangwe	Mbire	Mashonaland Central
Nyachityu Busy Bee Honey		Nyachityu	Mutare	Manicaland
Nyagadza furniture			Chipinge	Manicaland
Nyamajura Nherera Dzaguta Sunflower Oil		Nyamazura	Mutare	Manicaland
Nyuni marula	486.54	Ward 14	Mwenezi	Masvingo
Silozhwe Honey Enterprise	158.74	Ward 16	Matopo	Matebeleland South
Simukai Madzimai Mopane worms	486.54	Ward 14	Mwenezi	Masvingo
Sindawonye Jatropha group	381.89	Ward 17	Gwanda	Matebeleland South
Sone Marula Oil	272.27	Sone/Chaderekaa	Muzarabani	Mashonaland Central
Sweet Success Honey	74.94	Ward 28	Zaka	Masvingo
Sweet Valley Peanut Butter		Maringazuva	Muzarabani	Mashonaland Central
Tongoedza Marula Oil	104.17	Ward 26	Masvingo	Masvingo
Twalipedia Baobab Enterprise oil and pulp	337.64	Ward 3	Binga	Matebeleland North
Water bottling			Nyanga	Manicaland
TOTAL AREA COVERED	3 712.23			

ANNEX V: EXCHANGE RATES FOR 1989–2001

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
January	1.9865	2.2994	2.6631	5.0903	6.0354	8.4943	8.3829	9.4509	10.9637	18.2348	39.2465	38.1388	55.066
February	1.9739	2.3186	2.7503	5.0575	6.4294	8.1403	8.4366	9.4589	11.1731	16.2258	38.5059	38.1097	55.066
March	2.0101	2.4021	2.9455	5.0452	6.4619	8.0640	8.4430	9.6515	11.2739	16.1394	38.1533	38.1679	55.066
April	2.0272	2.4402	2.9994	5.0639	6.3037	8.0894	8.4631	9.8183	11.3250	17.0561	38.1533	38.1533	55.066
Мау	2.0725	2.4558	3.0731	5.0766	6.3039	8.0266	8.4918	9.8318	11.2956	18.0147	38.1679	38.1242	55.066
June	2.1413	2.4802	3.2175	4.9583	6.5405	8.1302	8.5462	9.8745	11.3908	18.0115	38.965	38.197	55.066
July	2.1209	2.4631	3.4435	4.9313	6.6738	8.0821	8.6258	9.9611	11.6090	19.135	38.1825	38.197	55.066
August	2.2065	2.4820	3.8941	4.8521	6.5745	8.1373	8.6572	10.2532	11.8891	25.7864	38.197	50.2008	55.066
September	2.2114	2.5465	4.9736	5.0790	6.5048	8.3208	8.8004	10.3401	12.6823	33.4784	38.1097	53.0222	55.066
October	2.2212	2.5615	4.9501	5.2674	6.7161	8.3250	9.2687	10.5954	12.6406	35.727	38.1388	54.9752	55.066
November	2.2691	2.5800	5.0512	5.4419	6.8675	8.3493	9.2644	10.7642	14.4717	37.3134	1 38.0952	55.0357	55.066
December	2.2701	2.6364	5.0511	5.4815	6.9350	8.3871	9.3109	10.8389	18.6081	37.3692	38.1388	55.066	55.066
Mean Annual Rate	2.126	2.472	3.751	5.112	6.529	8.212	8.724	10.070	12.444	24.374	38.338	44.616	55.066

Source: Reserve Bank of Zimbabwe

NB: The official exchange rate for the Zimbabwe dollar was fixed at 55:1 to the US dollar throughout 2001

ANNEX VI: REVENUE REALIZED FROM 13 CAMPFIRE DISTRICTS: 1989–2002

District	CAMPFIRE	No. of Households	Income US\$	Income US \$
	Ward		for Ward	per h/hold
	Chipise	775.00	105,125.00	135.64
	Diti II	1,134.00	19,528.00	17.22
	Mtetengwe	1,658.00	65,960.00	39.78
Beitbridge	Maramani	721.00	43,340.00	60.11
	Masera	387.00	4,006.00	10.35
	Machuchuta	713.00	23,849.00	33.45
	Dendele		1,335.00	0.00
Total		5,388.00	263,143.00	
	Lubu	772.00	48,982.00	62.87
	Machesu	664.00	63,258.00	94.58
	Kariangwe	857.00	56,972.00	66.12
	Chinonge	1,002.00	62,287.00	61.77
	Kabuba	995.00	61,787.00	61.75
	Sinansengwe	547.00	109,559.00	198.39
	Sinakoma	717.00	69,849.00	96.50
	Sikalenge	1,054.00	90,031.00	85.01
	Tyunga	902.00	113,323.00	94.60
	Nabusenga	1,577.00	88,584.00	57.21
Binga	Nagangala	1,044.00	111,196.00	105.75
	Sianzyundu	1,236.00	44,866.00	36.15
	Simatele	552.00	27,109.00	33.95
	Siachilaba	899.00	20,956.00	23.18
	Sinamagonde	1,380.00	29,742.00	21.66
	Lubimbi	806.00	29,742.00	36.72
	Dobola	1,234.00	42,452.00	34.22
	Pashu	816.00	29,247.00	35.64
	Tinde	811.00	18,508.00	22.72
	Saba-Lubanda	931.00	25,216.00	26.97
	Manjolo	873.00	48,683.00	55.64
Total		19,669.00	1,192,349.00	
	Gala	800.00	27,152.00	33.94
	Huwana	967.00	27,152.00	27.02
Bulilimamangwe	Ndolwane	918.00	27,152.00	28.52
-	Mukulela	1,022.00	27,152.00	30.62
	Madlambudzi	808.00	27,152.00	33.60
	Hingwe	823.00	26,039.00	29.24

District	CAMPFIRE	No. of Households	Income US\$	Income US \$
	Bambadzi	840.00	27,152.00	36.37
	Sangulube	714.00	222.00	0.31
	Makorokoro	985.00	222.00	0.23
Total		7,877.00	189,395.00	
Chipinge	Mahenye	849.00	266,104.00	313.43
	Mutandahwe	1,581.00	29,632.00	18.74
Total		2,430.00	295,736.00	
Chiredzi	Xibhavahlengwe	1,059.00	184,853.00	174.55
	Sengwe	784.00	115,459.00	147.27
	Maose-Xini	1,591.00	106,691.00	67.06
	Batanai	1,312.00	79,577.00	60.65
	Twamanani	714.00	79,577.00	111.45
	Chibwedziva	1,103.00	201,704.00	182.87
	Dzinzela	961.00	2,874.00	2.99
	Chitsa	762.00	57,009.00	74.82
	Mupinga	890.00	7,838.00	8.81
	Chichingwe		1,334.00	0.00
	Chikombedzi		3,243.00	0.00
Total		9,176.00	840,159.00	
	Simchembo 1	1,491.00	78,224.00	52.46
	Simchembo 2		10,879.00	0.00
	Nenyunka A	1,551.00	96,796.00	62.41
	Nenyunka B		5,428.00	0.00
	Madzivazvido 1	1,945.00	104,567.00	53.76
	Madzivazvido 2	,	17,387.00	0.00
Gokwe North	Chireya 1	3,709.00	35,038.00	9.45
	Chireya 5	704.00	28,349.00	40.27
	Chireya 6		8,647.00	0.00
	Gumunyu 2	979.00	8,201.00	8.38
	Gumunyu 3	763.00	8,455.00	11.08
	Gumunyu 4	979.00	8,201.00	8.38
	Nechinyika	704.00	10,884.00	15.46
	Nyaurungwe	690.00	9,833.00	14.25
Total	Tyddidiigwo	13,515.00	430,889.00	11.20
lota	Masuka	1,064.00	8,072.00	7.59
	Jahana	916.00	5,838.00	6.37
Gokwe South	Nemangwe V	1,650.00	2,161.00	1.31
	Sai/Mangidi	1,946.00	7,690.00	3.95
	Sai 2	1,340.00	729.00	0.00
	Sai 2 Sai 3		191.00	0.00
	Sai 3		137.00	0.00
	Sai/Sengwa	1,784.00	7,401.00	4.15
	Jiri	2,324.00	664.00	0.29
	Huchu	527.00	5,176.00	9.82
Total	писни			9.82
Total		10,211.00	38,059.00	

District	CAMPFIRE	No. of Households	Income US\$	Income US \$
	Chapoto	309.00	358,875.00	1,161.41
	Chisunga	529.00	651,360.00	1,231.30
	Neshangwe	1,702.00	48,693.00	28.61
	Chiriwo	441.00	147,855.00	335.27
C	Matsiwo A	983.00	5,329.00	5.42
Guruve	Chitungo	1,972.00	68,956.00	34.97
	Matsiwo B	1,257.00	4,493.00	3.57
	Neshangwe 9	851.00	21,806.00	25.62
	Kanyurira	350.00	801,042.00	4,870.97
	Mutota	1,457.00	1,891.00	1.30
	Mukwena	2,624.00	992.00	0.38
Total		12,475.00	2,111,292.00	
	Chundu	1,731.00	174,831.00	101.00
	Karuru	886.00	24,382.00	27.52
	Kazangarare	3,000.00	82,801.00	27.60
	Chidamoyo	1,923.00	28,585.00	14.87
Hurungwe	Rengwe	1,542.00	62,510.00	40.54
-	Dandahwa	2,422.00	17,054.00	7.04
	Nyaodza		58,183.00	0.00
	Nyamakate	644.00	197,316.00	306.39
	Ward 8		59,673.00	0.00
	Ward 9		28,819.00	0.00
Total		12,148.00	734,154.00	
	Chidobe	667.00	34,480.00	41.60
	Sidinda	646.00	58,671.00	134.51
	Jambezi	427.00	19,390.00	37.69
	Kachecheti	623.00	21,107.00	29.06
	Nemananga	594.00	19,677.00	28.89
	Simangani	913.00	39,634.00	51.77
	Mabale	1,235.00	29,215.00	33.16
Hwange	Nekatambe	916.00	25,599.00	33.38
Ū	Mbizha	633.00	15,696.00	19.77
	Silewu	920.00	35,326.00	29.52
	Nekabandama I	713.00	16,815.00	33.65
	Nekabandama II	746.00	18,132.00	34.87
	Lupote	131.00	22,608.00	89.51
	Makwandara	690.00	15,696.00	22.75
	Chikandakubi	600.00	16,123.00	25.03
	Dete	384.00	18,540.00	48.28
Total		10,838.00	406,709.00	
	Kapembere	913.00	8,177.00	8.96
	Chadereka	851.00	2,814.00	3.31
Muzarabani	Ноуа	1,075.00	2,327.00	2.16
	Machaya	1,382.00	5,271.00	3.81
	Muzarabani	1,078.00	10,165.00	9.43
		.,	,	0.10

District	CAMPFIRE	No. of Households	Income US\$	Income US \$ 10.41	
	Hwatsa	1,024.00	10,661.00		
	Chawarura	1,024.00	3,015.00	2.94	
	Chiweshe	905.00	3,515.00	3.88	
	Maringazuva		5,753.00	0.00	
	Utete		1,890.00	0.00	
	Dambakurima		273.00	0.00	
	Mutemakungu		215.00	0.00	
	Sone		215.00	0.00	
Total		8,554.00	78,833.00		
	Gatshe Gatshe	316.00	129,148.00	375.83	
	Kanyati B	545.00	37,357.00	70.98	
	Kanyati A	340.00	226,911.00	569.14	
	Musambakuruma A	469.00	161,010.00	459.63	
	Musambakuruma B	217.00	57,137.00	240.94	
Nyaminyami	Nebiri A	245.00	208,774.00	913.14	
Nyaminyami	Nebiri B	737.00	229,749.00	379.36	
	Negande A	267.00	110,124.00	329.58	
	Negande B	724.00	103,741.00	263.76	
	Mola A	684.00	426,799.00	547.20	
	Mola B	757.00	324,857.00	434.27	
	Chalala	419.00	39,672.00	0.00	
Total		5,720.00	2,055,279.00		
	Ward 1	658.00	137,623.00	209.15	
	Ward 2	950.00	47,591.00	50.10	
	Ward 3	895.00	153,197.00	171.17	
Tsholotsho	Ward 4	593.00	44,938.00	75.78	
	Ward 6		6,966.00	0.00	
	Ward 7	978.00	127,086.00	129.95	
	Ward 8	1,527.00	50,383.00	32.99	
	Ward 9		17,154.00	0.00	
	Ward 10		7,154.00	0.00	
Total		5,601.00	592,092.00		
GRAND TOTAL		123,602.00	9,228,089.00		

[Source: Annex A: Statement of Work: Child et al., 2003]