

**Mbomipa Project Idodi and Pawaga
Divisions Iringa Region, Tanzania and
Selous Conservation Program Songea and
Morogoro Districts Ruvuma and
Morogoro Regions Tanzania**

**Appendix 1 of the EPIQ Assessment of
Lessons Learned from Community Based
Conservation in Tanzania**

August 2000

**Mbomipa Project Idodi and Pawaga Divisions
Iringa Region, Tanzania and Selous Conservation
Program Songea and Morogoro Districts
Ruvuma and Morogoro Regions Tanzania**

**Appendix 1 of the EPIQ Assessment of Lessons
Learned from Community Based Conservation in
Tanzania**

Prepared by:

International Resources Group, Ltd.
1211 Connecticut Avenue, NW Suite 700
Washington, DC 20036 USA
Tel: (202) 289-0100 Fax: (202) 289-7601

Prepared for:

USAID/Tanzania

August 2000

Environmental Policy and Institutional Strengthening Indefinite Quantity Contract (EPIQ)

Partners: International Resources Group, Winrock International, and Harvard Institute for International Development

Subcontractors: PADCO; Management Systems International; and Development Alternatives, Inc.

Collaborating Institutions: Center for Naval Analysis Corporation; Conservation International; KNB Engineering and Applied Sciences, Inc.; Keller-Bliesner Engineering; Resource Management International, Inc.; Tellus Institute; Urban Institute; and World Resources Institute.

Table of Contents

Acronyms and Abbreviations	iv
Interpretation of Key Terms	vi
Tanzania Country Bio-Data Sheet	viii
Preface	ix
1. Scope of the Report	ix
2. Field Techniques, Data and Analysis	ix
1. Mbomipa And Selous Conservation Program–An Overview	11
1.1 MBOMIPA	11
1.2 Selous Conservation Project (SCP)	13
2. Socio-Economic Issues	21
2.1 Population Demographics	21
2.1.1 MBOMIPA	21
2.1.2 Selous Conservation Program	21
2.2 Status of Social Services	22
2.2.1 MBOMIPA	22
2.2.2 Selous Conservation Program	22
2.3 Main Economic Activities	23
2.3.1 MBOMIPA	23
2.3.2 Selous Conservation Program	25
2.4 Local Institutions and Level of Local Participation in Decision-Making	26
3. Analysis of the Main Findings	28
3.1 Management	28
3.1.1 Consensus and the Planning process	28
3.1.2 MBOMIPA	28
3.1.3 Selous Conservation Program	30
3.1.4 Linkages with other Programs	31
3.2 Activities and Linkages with Private Sector, Government and NGO’s	32
3.2.1 MBOMIPA	33
3.2.2 Selous Conservation Program	35

3.2.3	<u>Activities Related to Marketing or Increasing Access to Markets and Value-Added Processing</u>	35
3.2.4	<u>Collaboration of different CBC Initiatives</u>	36
3.3	<u>Institutional and Legal Aspects</u>	36
3.3.1	<u>Issues of Land Tenure</u>	36
3.3.2	<u>MBOMIPA</u>	38
3.3.3	<u>Selous Conservation Program</u>	39
3.4	<u>Management and Institutions Established</u>	42
3.4.1	<u>MBOMIPA</u>	42
3.4.2	<u>Selous Conservation Program</u>	42
3.5	<u>Locus of Decision-making: Composition and Mandates of Management Team and Linkages with Village and District Council</u>	43
3.5.1	<u>MBOMIPA</u>	43
3.5.2	<u>Selous Conservation Program</u>	46
3.5.3	<u>Regulations and By-laws for Natural Resource Use</u>	48
3.5.4	<u>Rights and Responsibilities of Communities, Village Government, District and Central Government</u>	48
3.5.5	<u>Binding Legal and Policy issues</u>	49
3.5.6	<u>Mechanisms for Conflict Resolution</u>	51
3.6	<u>Facilitation</u>	52
3.6.1	<u>Sources of Funds</u>	52
3.7	<u>Capacity Building and Monitoring Process</u>	54
3.7.1	<u>MBOMIPA</u>	54
3.7.2	<u>Selous Conservation Program</u>	55
3.8	<u>Economic and Environmental Impact – Benefit sharing</u>	56
3.8.1	<u>Categories, Type and Value of Benefits</u>	56
3.8.2	<u>Financial Benefit</u>	57
3.9	<u>Environmental Benefits</u>	58
3.9.1	<u>MBOMIPA</u>	59
3.9.2	<u>Selous Conservation Program</u>	60
3.10	<u>Mechanisms to Share Benefits</u>	63

<u>3.10.1 MBOMIPA</u>	63
<u>3.10.2 Selous Conservation Program</u>	64
<u>3.10.3 Mechanisms to Address Age, Gender and Equity issues</u>	64
<u>4. Constraints and Opportunities</u>	67
<u>5. Practical Lessons Learned</u>	69
<u>5.1 Building Trust Among Stakeholders – A Crucial First Step</u>	69
<u>5.2 Definition of “Community”</u>	69
<u>5.3 Considering Gender in Community Involvement in Natural</u> <u>Resource Management</u>	70
<u>5.4 Security of Tenure – Devolution of Proprietorship Rights and</u> <u>Management Authority Over Local Natural Resources to Local Communities</u>	71
<u>5.5 The Centrality of the Political Process to Long-term CBC Success</u>	71
<u>5.6 Intra- and Inter-sectoral Coordination</u>	71
<u>5.7 Process for Community-based Involvement in NRM Should Be Simple</u>	72
<u>5.8 Promote Community Institutional Mechanisms and Capabilities for</u> <u>Knowledge Sharing and Resource Control</u>	72
<u>5.9 Economic Potential: Diversification of Wildlife Use</u>	72
<u>5.10 Monitoring and Evaluation: Biological Sustainability</u>	73
<u>5.11 Element of Risk</u>	73
<u>5.12 Conclusion</u>	73
<u>References</u>	76
<u>Appendix I. SCP CBC Wildlife Utilization Data/Hunting Results – 1990 – 2000</u>	79
<u>Appendix II. Supply Of Game Meat For Villages From 1991-2000</u>	81
<u>Appendix III. Income Generation From Wildlife Management</u>	88
<u>Appendix IV. Utilization Of Money Generated From Wildlife Management</u>	95
<u>Appendix IV. Activities In SDC Performed By Other Players</u>	101
<u>Appendix V. Projects Supported By SENAPA/CCS IN SDC</u>	103
<u>References</u>	105

Acronyms and Abbreviations

CBNRM	Community Based Natural Resource Management
CBC	Community Based Conservation
CBO	Community Based Organization
CCS	Community Conservation Service
CWMO	Community Wildlife Management Officer
DAS	District Administrative Secretary
DC	District Council
DED	District Executive Director
DDC	District Development Committee
DFID	Department for International Development (U.K.)
EPIQ	Environmental Policy and Institutional Strengthening (IQC)
GOT	Government of Tanzania
GTZ	Deutsche Gesellschaft Fuer Technische Zusammenarbeit
HIMA	Hifadhi Mazingira (Conservation of Environment)
HIMWA	Gospel service and Pastoral Development
JUKUMU	Jumuiya ya Kuhifadhi Mazingira Ukutu
LMGCA	Lunda-Mkwambi Game Controlled Area
LOP	Life of Project
MEMA	Matumizi Endelevu ya Misitu ya Asili (Sustainable Utilization of Indigenous Forests)
MBOMIPA	Matumizi Bora ya Malihai Idodi na Pawaga
MP	Member of Parliament
NGO	NonGovernment Organization
NR	Natural Resource
PA	Protected Area
PAC	Problem Animal Control
RAS	Regional Administrative Secretary
RC	Regional Commissioner
REWMP	Ruaha Ecosystem Wildlife Management Project
RNP	Ruaha National Park
SCP	Selous Conservation Program
SGR	Selous Game Reserve
TANAPA	Tanzania National Parks
VA	Village Assembly
VC	Village Council
VNRC	Village Natural Resource Committee

WD	Wildlife Division
WMAs	Wildlife Management Areas
WPT	Wildlife Policy of Tanzania

Interpretation of Key Terms

Buffer zone	Physically delineated areas, either within or adjacent to protected area, where land use is partially restricted. It may or may not have legal and restricted-use status. An area where the interests of different stakeholder groups overlap and intersect.
Conservation	The wise and planned use of resources.
Direct Use Value	Are the resources and services provided by directly harvesting and exploiting wildlife and natural areas.
Joint Venture	Business activity undertaken by one or more partners for their mutual benefit. Partners in a community joint venture will be rural people, who have user rights to the natural resources occurring in a WMA, and established private sector companies that recognize an area's potential for business development.
Local communities	(Refer to local government Act 1982) means people living in rural areas.
Indirect Use Value	Comprise mainly of environmental functions of natural areas – ecological, protection and waste assimilation functions.
Option Values	Relate to the amount that individuals would be willing to pay to conserve wildlife and wild lands, or at least some of their direct and indirect applications, for future use.
National Park	The National Parks Ordinance of 1959 provides for the creation, management and control of national parks. A national park is the highest form of protection that a wildlife area can attain.

TANAPA	A parastatal responsible for administering the National parks. It is responsible to the Minister for Natural Resources and Tourism, through a Board of Trustees.
Wildlife Division	One of the four major divisions in the Ministry of Natural Resources and Tourism. Its principle responsibilities is that of managing and administering the game reserves and game controlled areas that have been declared national projects.
Wildlife	(Refer to the WPT) means those species of wild and indigenous animals and plants, and their constituent habitats and ecosystems; to be found in Tanzania, as well those exotic species that have been introduced to Tanzania, and that are temporarily maintained in captivity or have become established in the wild.
Wildlife Management Areas	(Refer to the WPT) means an area declared by the Minister to be so and set aside by village government for the purpose of biological natural resource conservation.

Tanzania Country Bio-Data Sheet

Land Area (Ha)	88,359,000
Demographic Profile	29,700,000 (1995) 86.7 percent rural population 51 percent women
Population Density/km²	33.6
Population Increase per Annum	3.66
GNP 1996	130
Annual Growth of GNP (1986-96)	1.2 percent
Multi-lateral debt (\$) (1994)	2.64 billion
Bilateral debt (\$) (1994)	3.2 billion
Life Expectancy at Birth (1995)	51
Agriculture as percent of GNP	57 percent (75 percent of forex)
Potential Agricultural land	55 percent
Number of Livestock supported by Range lands	13 million cattle, 10 million sheep & goats
Government Revenue as percent of GDP (1997/98)	13 percent
Government Expenditure as percent of GDP (1997/98)	18 percent
Household Income (1993)	
Education	Adult Literacy rate (percent of population Female: 56.8 Male: 79.4
Access to Safe Water (1990-95)	percent of population, rural: 46 Urban: 67
Access to Health Facilities (1985-95)	percent of population rural: 73 Urban: 94
Total Area of all 12 National Parks	4,110,000 million ha
Total Area of all 22 Game Reserves	10,400,000 million ha
Total Area of all 44 Game Controlled Areas	9,080,000 million ha
PA network as percent of country	25 percent

Source: World bank, 1997; World Bank, 1996; UNDP, 1996; Barrow, E. et. al: Draft, 1999; and Danida Environmental Profile of Tanzania, 1988

Preface

As Tanzanian policy-makers begin to espouse a more decentralized, communally oriented approach to wildlife conservation, a number of projects have arisen in Tanzania attempting to implement these new attitudes. This sub-report presents the findings of assessments of two such projects, community-based natural resource management in Idodi and Pawaga Divisions under the MBOMIPA project and the Selous Conservation Programme (SCP). The objective of this report is to both provide an overview of the projects, and to focus upon pertinent issues such as the socio-economic, political and institutional framework within which Community-based management of wildlife as a resource for sustainable development has occurred.

1. Scope of the Report

The report is organized based on a template that was developed by the Community-Based Conservation Regime Working Group of USAID/Tanzania Environment and Natural Resource program. It is designed to be straightforward and the information is presented according to project.

Section 1 presents an overview of the MBOMIPA and SCP. In section 2, the report reviews the socio-economic issues in the project areas. It describes the population demographics, state of the social services, the main economic activities of the project areas and the institutional set-up of the projects.

Section 3 presents an analysis of the reports main findings. It is divided into 4 sub-sections which discuss the basic characteristics of the management structures that have been established, the institutional and legal aspects governing CBC, and the principles and characteristics of facilitation and the impacts of the projects. In section 4 the report examines the constraints and opportunities that face community-based conservation of wildlife in Tanzania. Section 5 concludes the assessment of MBOMIPA and SCP. It highlights the pertinent lessons learned that create the optimal environment for community involvement in wildlife management.

2. Field Techniques, Data and Analysis

The author was part of a team¹ that conducted a study tour to MBOMIPA and SCP in July 1999.

The report was prepared based on consultations with stakeholders, including the development agencies, wildlife authorities, district government, village government, communities

¹ Africare/Tanzania, one of USAID/Tanzania's SO2 Partners, organized a two-week study tour to MBOMIPA and SCP in Songea.

(Tunamalenga, Idodi, Malinzanga and Itunundu in MBOMIPA and Likuyuseka and Mchomoro in SCP Songea), and perspectives of different published and unpublished literature concerning the projects. Documentary sources included project progress and evaluation reports, donor publications and technical papers in workshop proceedings. The author wishes to acknowledge the contributions of Mr. K. Ngomelo (Project Manager) and Mr. J. Mutabiilwa (Community Conservation Officer) of MBOMIPA and Mr. Mahundi (Principal of Likuyu Seka Maganga CBC Training Center), Mr. Madatta (SCP Community Wildlife Management Officer-Songea), Dr. L. Zeige, Mr. R. Hahn and Mr. D. Kaggi (GTZ SCP – Dar Es Salaam), and Dr. R. Baldus (CBC Unit – Wildlife Division).

A major set back to the study was the brevity of each stay in MBOMIPA and SCP (8-days) which did not permit extensive field trips to interview community members and project staff. As a result the information contained is not all encompassing.

1. Mbomipa And Selous Conservation Program–An Overview

Through MBOMIPA and SCP, the Government of Tanzania (GOT), through the Ministry of Natural Resources and Tourism, is demonstrating the potential benefits of involving local communities in the natural resource management. The projects have won widespread acclaim for their management of natural resources, and wildlife in particular, and have made the protected areas (PA) more relevant to their human neighbors, recasting them as catalysts for regional development, with benefits accruing to both humans and to conservation efforts. Focusing initially on the sustainable use of wildlife, important lessons learned are now being applied to the management of a broader range of natural resources. It is too early to call MBOMIPA and SCP “successes” as they continue to evolve, however, they represent positive efforts at devolving proprietorship of wildlife to communities and linking wildlife conservation to benefits for these communities.

1.1 MBOMIPA

MBOMIPA is a four-year project that developed out of the Ruaha Ecosystem Wildlife Management Project (REWMP). Its target area is Idodi and Pawaga Divisions, particularly in sixteen villages inside the Lunda-Mkwambi Game Controlled Area (LM GCA). The boundary with LM GCA represents the largest section of effective unprotected boundary of the Ruaha National Park (RNP). The LMGCA was gazzetted in 1985 but continued to function as a de facto open area. It comprises about 6,000km² adjacent to the southeastern boundary of the RNP in Iringa District, Central Tanzania [Figure 1].

Administratively, LMGCA is divided into LMGCA South and LMGCA North. Both divisions, and all 16-project villages, are located in the south, which is bigger than the north. The project has established temporary hunting blocks within LMGCA South. However, the only portion of LMGCA which contains wildlife is that bordering the RNP/buffer zone. As a result only 9 of the 16-villages have hunting blocks (shared among 2-3 villages). Seven, namely Makifu, Mahaninga, Tungamalenga, Idodi, Mapogoro and Malinzanga are located in Idodi, while Kisanga and Isele are found in Pawaga division's. The remaining 7-villages, receive revenue from the 25 percent allocation from tourist hunting in LMGCA north. [Figure2].

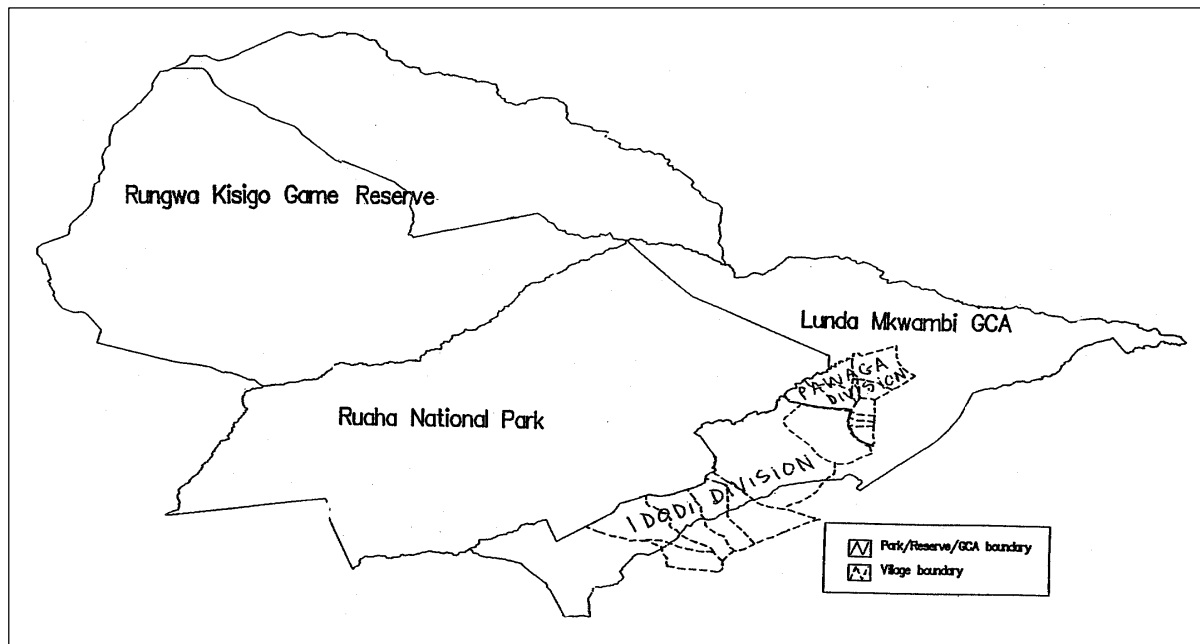
The overall objective of MBOMIPA is the sustainable use of wildlife resources in the sixteen villages in Idodi and Pawaga Divisions. Specifically, MBOMIPA aims to alleviate poverty and improve the livelihood of the villagers through sustainable community natural resource management. It intends to achieve this by transforming the existing LM GCA into a sustainable Wildlife Management Area (WMA) under community responsibility and management. Unlike

REWMP, which placed an emphasis on the sustainable utilization of game, MBOMIPA aims to promote the sustainable management of all natural resources, both flora and fauna. The project expects to achieve the following outputs:

- Appropriate institutional framework for CBC established in Idodi and Pawaga
- Village and District stakeholder capacity to sustainably manage natural resources in
- Idodi and Pawaga enhanced
- Sustainable utilization of natural resources in Idodi and Pawaga ensured
- Community benefits from natural resource utilization increased
- Agreed strategy to convert LMGCA into WMA.

MBOMIPA is a collaboration between two institutions under the Ministry of Natural Resources and Tourism, namely the Division of Wildlife and Tanzania National Parks (TANAPA) and the Iringa District Council. The project receives technical and financial support from the United Kingdom Department for International Development (DFID).

Figure 1 Map. Lunda Mkwambi Game Controlled Area



was designated a World Heritage Site by the United Nations. In 1996, the reserve generated revenue from revenue from visitor's fee (US\$ 300,000 per annum) and revenue from tourist hunting (US \$ 3.6m per annum).³

The major issues facing the management of SGR prior to the establishment of the SCP stem from problems of under-funding, illegal off-take of wildlife, and incompatible land use practices in the buffer zones that propagated human-wildlife conflicts. During the 1980's commercial poaching for ivory and rhino horn reached disastrous levels. Wildlife was competing with livestock for water and grazing land; and infecting livestock with diseases. Peasants suffered crop damage from wildlife such as bush pig, baboon, monkeys and elephants⁴, making agricultural production in the buffer zones of the reserve an incompatible form of land use. Considerable amount of time and money was being spent by the communities on crop protection- guarding fields and purchasing kerosene for lamps.⁵ It can be summarized that the communities surrounding the SGR did not accrue any direct benefits from wildlife, if anything they were shouldering a cost through crop losses. As a result, villages served as entry points for poachers. Villagers did most of the poaching because they are knowledgeable about the distribution and behavior of animals. Even though villagers received little money from illegal sales of ivory, poaching was the only activity from which they could earn money easily.

In addition, the SGR management authorities were severely constrained through the lack of sufficient trained personnel, finances and equipment to effectively service their mandates.

Foremost among Tanzania's efforts at community-based conservation is the Selous Conservation Program (SCP), initiated in 1987. It is the first pilot initiative in Tanzania that targets rural people as a basis for more effective wildlife Conservation.⁶ It is a called a National Project and the administration reports directly to the Directorate of Wildlife.

SCP is a pilot program aimed at integrating conservation of the Selous Game Reserve (SGR) by empowering local communities living on the periphery of the SGR to manage the natural resources on those lands and in particular wildlife. Initially, the SCP was aimed at three districts of Morogoro, Songea, and Tunduru regions encompassing sixteen villages, which were key

³ Selous Game Reserve Statistics, 1998/99.

⁴ Masunzu, C. : Assessment of Crop damage and Application of Non lethal Deterrents for Crop Protection East of the Selous Game Reserve. (in) Siege, L. & Baldus, R. (eds.): Tanzania Wildlife Discussion Paper NR. 24. Dar Es Salaam. 1998.

⁵ Ibid.: pg. 12

⁶ Krischke, H. et al. The Development of Community-based Conservation around the Selous Game Reserve. (in) Leaders-Williams, N. et al. (ed.) Community-based Conservation in Tanzania. IUCN Occasional Paper No. 15, 1996.

routes and centers for poachers (Figure 3). The geographical coverage of the project has grown since its inception in 1987. Now the project supports community-based conservation initiatives in the game reserve vicinity in Songea, Tunduru, Liwale, Rufiji and Morogoro districts in the buffer zone surrounding the Reserve (See Table 1). In Morogoro District alone the SCP is already being implemented in 20 villages with over 75,000 people directly involved in one way or another the program.⁷

Table 1. Geographical/Administrative coverage of SCP

District	Village
Morogoro	Kisaki station, Gomero, Nyarutanga, Sesenga, Milengwelengwe, Vigolegole, Mngazi, Dakawa, Bwakirachini, Bonye, Mbwade, Tulo, Kongwa, Mvuha, Kiganila, Bwilajuu, Bwilachini. Magogoni, Lukulunge, Kidunda.
Songea	Kitanda, Nambecha, Likuyuseka maganga, Mchomoro, Kilimasera, Mterawamwahi
Tunduru	Rahaleo, Mbungulaji, Kajima, Kindamba, Twendembele, Hulia, Namwinju, Nalujinde, Namakungwa.
Liwale	Mpigamiti, Barikiwa, Chimbuko, Mlembwe, Kikulyungu, Kimambi, Mirui, Naujombo, Ndapata
Rufiji	Ngarambe, Tapika

SCP is a joint pilot project between the government of Tanzania and Germany through its technical cooperation agency (GTZ). It involves several administrative authorities, and represents a rich cross-section of society and the local communities, these being government agencies, local representatives, women, men, youth, Donors, NGO's, Research institutions, farmers, pastoralists, beekeepers, fisher folk, and the private sector.

The overall objective of the SCP is to develop a pragmatic and lasting solution for sustainable conservation of the Selous ecosystem. The project envisages benefiting communities directly with tangible benefits (meat) and financial benefit sharing for them to become committed to protecting wildlife. The project has two major objectives:

- To safe guard the existence and ecological integrity of the SGR as a conservation area; and

⁷ Nduguru & R. Hahn: Reconciling human interests with conservation in the Selous Game Reserve, May 1998.

- To reduce conflicts between the reserve and the local population by creating a buffer zone around the SGR, which will be used for community wildlife utilization and conservation by bordering local villages.

The Project is expected to achieve the following outputs:

- More efficient wildlife conservation techniques adopted;
- Land Use Plans in the buffer zone developed;
- Infrastructure in the SGR improved; and
- Conditions for a profitable and sustainable management of the SGR established.

Box 1. Case Study Area: SCP Community Wildlife Management in Songea

Songea district borders the SGR in southern Tanzania. 8 villages with a total population of approximately 23,000 people border the reserve. The area between the village settlements hosts an important dry season concentration of elephants, sable, buffalo, eland and other woodland wildlife species. The area is an important catchment area for rivers such as the Luwengu and Mbarang'andu which later form the Rufiji river. Seasonal and permanently swampy habitats feature frequently although proportionately smaller in size in comparison to the more extensive dry woodland grassland dominated by the miombo. The habitat associated with permanent sources of water serves as a dry season concentration of free water drinking animals i.e., buffalo, waterbuck and sable antelope. Other species that are not regular free water drinkers, such as the eland tend to spread over a large area, particularly during the dry season, in search of succulent plants for animals. The residents do not keep enough livestock and lack of animal protein encourages the residents to look for wild animals as alternative sources of meat. Poaching for meat was an important activity in rural communities. Subsistence hunting has ceased and poaching was done for commercial motives.

Source: Ndunguru, I. Practical Experiences with village community wildlife management- Songea District, (in) Baldus, R. 1991.

Box 2. Case Study Area: Selous Conservation Community Wildlife Management in Morogoro Region

Community wildlife management in Morogoro has involved 20 villages. Villages involved are situated in the southern part of Morogoro District, north of the SGR. The area is bounded by Mikumi national Park to the west, Uluguru mountains to the north and Kisarawe district in the Coast region to the east. Mobilization of village communities and their subsequent involvement has been approached in three-phases. 11 villages in Bwakira division were involved in phase one of SCP (1989/90), and 4 villages along the Mvuha/Kisaki and Mvuha/Magogoni road on the eastern banks of the Ruvu river in phase III. The WMA consists of 2 blocks with a total area of 71,000ha. The western block has a common border with Mikumi national park while the other borders the SGR. The area bordering the SGR, especially the Gonabis, has abundant wildlife. Common species include wildebeest, buffalo and warthogs. Other common species are zebra, hartebeest, impala, waterbuck, eland, Reedbuck, giraffe, lion and elephant, while less common species include sable antelope, hippo and leopards. The east of the Ruvu has not been surveyed sufficiently to determine wildlife abundance although the area is commonly believed to be rich in wildlife. Local residents are not livestock keepers, and look at wildlife as the main source of protein.

Source: Lyamuya, V. Community Wildlife Management in Morogoro Region (in) Baldus, R. 1994.

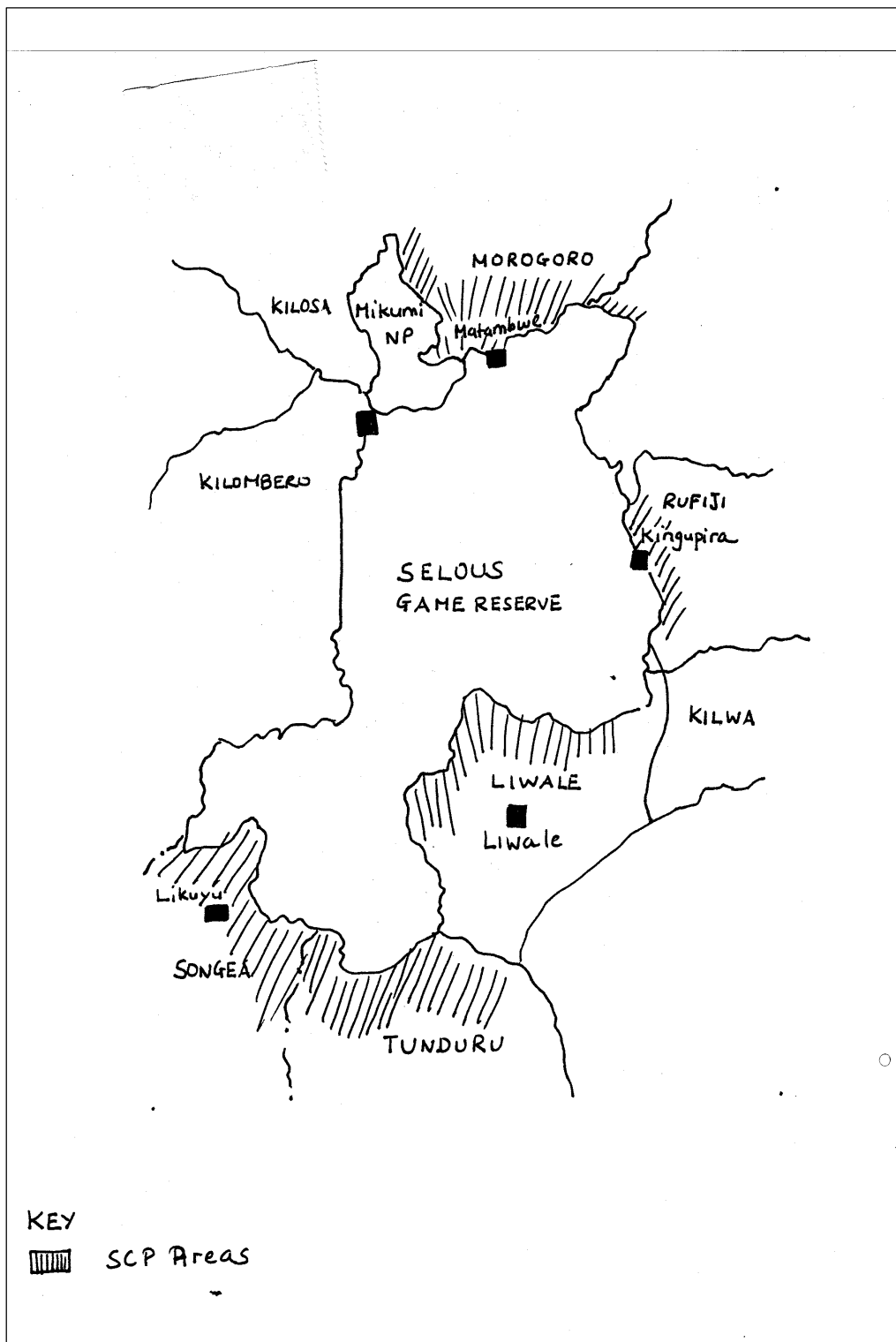


Figure 3 Map. Selous Conservation Program Areas

Figure 4 Map: Selous Buffer Zone Project – Morogoro Region

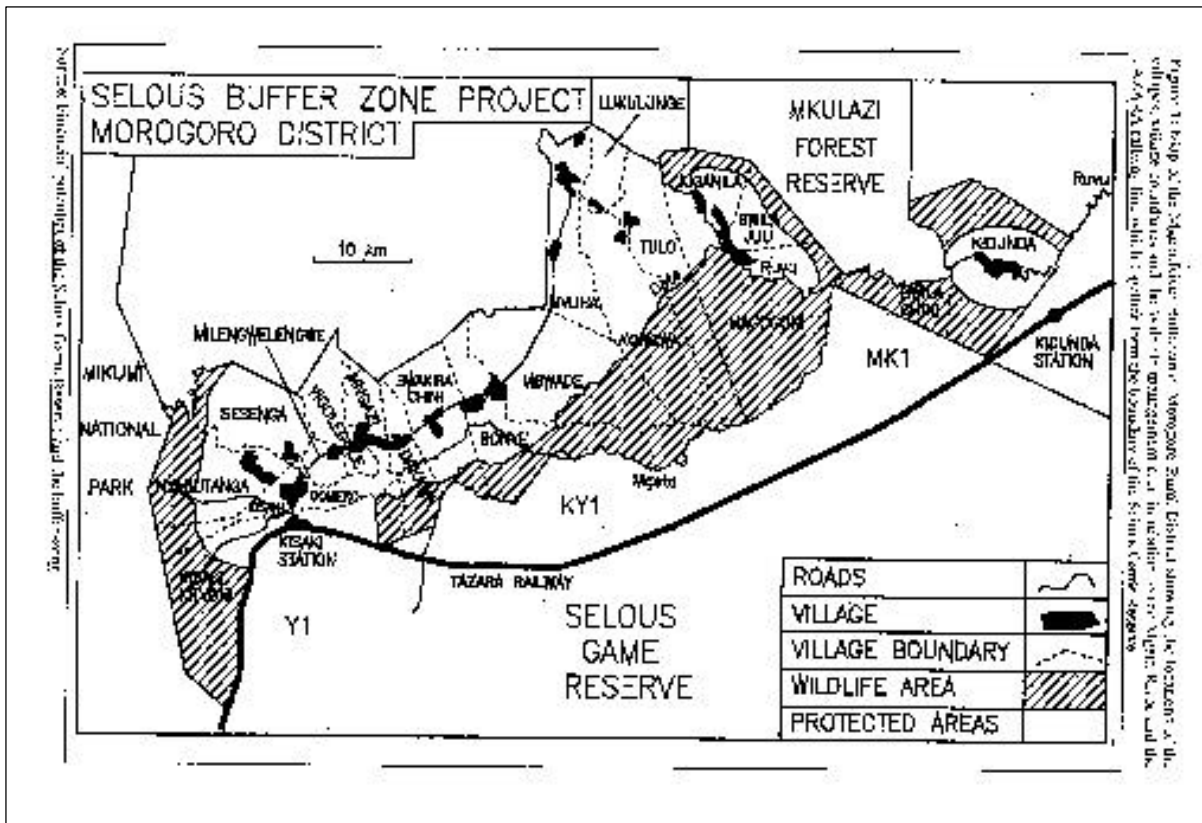


Figure 4 Map: The Selous Buffer Zone Project – Morogoro District. The map shows the boundaries of the villages, village boundaries and the wildlife areas. The map also shows the boundaries of the Selous Game Reserve and the Mkulazi Forest Reserve. The map is titled 'SELOUS BUFFER ZONE PROJECT MOROGORO DISTRICT'.

2. Socio-Economic Issues

2.1 Population Demographics

The human population in Tanzania is currently doubling almost every 20 years, and since approximately 80 percent of the people are directly dependent on the land, it is essential that CBC initiatives are done in a way that takes this into consideration. The population in the MBOMIPA and SCP project areas is heterogeneous in terms of its ethnic composition. Some of the people immigrated to the areas during the government policy of villagization in the early 1970s. The literacy level is low and small holder farming, wage labor and a range of petty trading activities form the basis of the local economy, as there are few opportunities for off-farm, salaried employment.

2.1.1 MBOMIPA

About 4 of the 16 project villages were relocated to LMGCA after the RNP was gazetted in 1964. The area north of the Ruaha River is largely uninhabited and currently used exclusively by tourist hunters. In contrast, the southeast of LMGCA is densely populated. Data obtained in 1995, show that the human population in the LMGCA is about 30,000. The Population comprises a heterogeneous mixture of different tribal groups. The Hehe and Gogo are indigenous to the area. Other tribes include the Bena, Kinga Kosisamba, Maasai, Barabaig and Sukuma. Research findings also reveal that migration of pastoralists, especially the Sukuma and Barabaig, has increased particularly after the gazettment of the Usangu Game Reserve in Mbeya.

2.1.2 Selous Conservation Program

The population around the SGR also consists of a heterogeneous mixture of several tribal groups, for example the Bena, Pogoro, Ndegereko, Ngoni and others. The 42 villages directly involved in SCP have a population in excess of 75,000 people see Table2.

Table 2. Demographics of SCP

District	Year Program Initiated	No. of villages	No. of households	Population
Morogoro	1989	20	7,781	41,361
Songea	1989	5	1,602	12,054
Tunduru	1993	6	1,413	9,680
Liwale	1995	9	2,086	10,716
Rufiji	1996	1	260	1,692
Total		41	13,142	75,503

Source: Ndunguru, I & Hahn, R. Reconciling human interests with conservation in the Selous Game Reserve. May 1998.

2.2 Status of Social Services

Rural water supply is basically based on the traditional water sources such as boreholes, windmills, shallow wells, small and medium dams and traditional wells. The water supply situation in most of the project areas is worse during the dry season. The new techniques such as rainwater harvesting and exploitation of ground water are gradually being introduced in some of the areas.

2.2.1 MBOMIPA

As with most places throughout the country, the social infrastructure in the project villages is inadequate to meet the needs of the growing population. Dispensaries are under equipped and understaffed, water facilities are run down or broken, and schools are often in need of staff, supplies, and renovation or new buildings. The majority of the rural population in the area still rely on surface and ground water sources such as the Ruaha River, hand dug wells, waterholes or unlined and unprotected shallow wells. Surface water sources depend on the availability of rainfall and in most cases its quality is questionable. Utilization of ground water resources is at a low scale mainly due to technological and financial implications of extraction.

2.2.2 Selous Conservation Program

Inadequate and run down social services plague the project villages surrounding the SGR. Educational facilities are limited and most health services have deteriorated. Roads are inaccessible and safe drinking water unavailable. Most of the water sources dry up during the dry season, distances covered to the sources are still very long and most of the natural sources are unprotected thus easily polluted by wild animals. Below is a description of one of the several project areas established by SCP:

Box 3. Mgeta River Buffer Zone

Mgeta River Buffer Zone (MRBZ) covers a total area of 1,670km² across three administrative areas Bwakira Chini, Mvuha and Ngerengere – which incorporate lands of 20 villages, and in which the dominant topographic units are the floodplain and valley bottoms of the Mgeta river. It is an area of fertile alluvial plain and black cotton soils, with a favorable annual rainfall regime of 900-200mm and plentiful year round surface water. A large proportion of the buffer zone remains under natural vegetation – mainly Acacia-Combretum open woodland. A large population of buffalo, wildebeest, impala and reedbuck are found at high densities on the swampy grasslands of the Gonabis Open Area between the Mgeta and Ruvu confluence. However, although the zone is richly endowed in terms of natural resources, it is relatively isolated in terms of transport and communications and is characterized by limited social and economic development. Road transport is very unreliable and in the rainy season not available at all. Poverty is widespread within the MRBZ villages, such that a large proportion of the households own virtually no assets beside their own labor, earn very low cash incomes, and have limited access to health care and educational services. In 1981, a NORAD project drilled a total of 40 boreholes in all the villages except Kisaki Station. 20 were supplied with pumps, but by 1988 10 of the pumps were out of order.

Source: Gillingham, S.: Conservation attitudes of villagers living next to SGR, SCP Discussion Paper NR 23, 1998 & Kaggi, D. Experiences from the Mgeta River Buffer Zone (in) Baldus, R. 1991.

2.3 Main Economic Activities

Agriculture is the main important economic activity for the majority of Tanzania's people. It employs 60 percent of the national labor force, produces 48 percent of the GDP and contributes 75 percent of the foreign exchange earnings.⁸ Agriculture is central to Iringa, Songea, Tunduru and Morogoro regional economies and will continue to be so for the foreseeable future. Over 90 percent of the populations of these regions is either, directly or indirectly, engaged in agricultural production. Most of the agricultural labor is contributed by women. Mixed farming is practiced by growing crops and rearing livestock. Most of the farmers use hand hoes, and as a result farm size is small. In most parts of these regions animal power is widely used.

2.3.1 MBOMIPA

The area is characterized by semi-arid to arid climate, with a rainfall of approximately 500mm per rainy season. The vegetation is varied ranging from Acacia woodlands to Miombo woodlands. Land use is extensive, ranging from subsistence agriculture, agro-pastoralism, to pastoralism. The majority of the population are small-scale farmers dependent on agricultural production for both daily subsistence and as a source of cash income. The major crop species cultivated are maize, millet (finger millet and sorghum), and rice. However, the most important cash crop is rice, which is grown and irrigated by the Ruaha River in Pawaga division. The indigenous ethnic groups have fewer livestock than in the past, but other immigrant groups such

⁸ DFID, Tanzania Country Strategy Paper, Draft December 1998.

as the Maasai, Barbaig and Sukuma have substantial livestock holdings. It is estimated that depending on the season and movement of pastoralists, there are between 40,000 and 60,000 cattle in the LMGCA.

In 1994 and 1995 REWMP conducted a wildlife survey which can be compared with a survey conducted in 1990 see Table 3.

Table 3. Comparison of large mammal population estimates in LMGCA between 1990 & 1994/95

Species	1990 # estimated	Density #/km ²	1994-95 # estimated	Density #/km ²
Buffalo	2240	0.67	63	0.02
Impala	2457	0.74	916	0.28
Zebra	397	0.12	249	0.08
Giraffe	777	0.23	358	0.11
Elephant	0	0	888	0.27
Kudu	0	0	220	0.07
Hartebeest	18	<0.01	0	0
Sable	36	0.01	0	0
Eland	162	0.05	0	0
Warthog	252	0.08	0	0
Waterbuck	18	<0.01	0	0
Cattle	18214	5.5	28359	8.6
Goats	3162	0.95	11828	3.6

Source: Taylor, R. 1995.

Between 1990 and 1995, wildlife densities decreased by more than half whilst livestock numbers doubled. Wildlife populations, especially large game species such as buffalo⁹were generally depleted for a number of reasons including over hunting and high human densities estimated to have reached 18 persons per square kilometer. The last wildlife aerial census were conducted by REWMP in 1994 and 1995, and showed a marked increase in settlements and clearing of land for agriculture and livestock. Crop raiding and loss of livestock due to wildlife such as lion, leopard, hyena, monkeys, and wild pig is not uncommon in all sixteen villages.

An assessment of the potential for community management of wildlife resources in LMGCA¹⁰, concluded that there is a negative relationship between the proportion of wild land and human

⁹ Taylor, R. An assessment of the potential for community management of wildlife resources in LMGCA Adjacent to the South Eastern Border of the Ruaha National Park. WWF/Harare 1995

¹⁰ Ibid.

population density in the villages within LMGCA. The assessment also indicated that the grazing resources would not sustain both wildlife and the current livestock population in the area. The assessment was able to predict, on ecological grounds, which villages are more likely to succeed in some form of wildlife management activity.

2.3.2 Selous Conservation Program

A majority of the population in the Selous ecosystem, are small-scale farmers dependent on agricultural production for their livelihood. Agriculture is based on shifting cultivation using traditional methods and technology. The cropping cycle follows the rainfall pattern covering the period from late February/early March to July/August and from November to December. The major crop species cultivated are maize, millet (finger millet and sorghum), cashew nuts, rice and tobacco. The area has no tradition of keeping livestock due to prevalence of tsetse fly transmitted disease. Few alternatives to farming as a livelihood strategy are available. For most households net revenue from farming is small since the remote locations of villages pose a formidable transport and marketing problem. Some of the population's protein requirements come from poultry, and, even prior to the establishment of SCP, a larger proportion from poached game meat.

The portion of people involved in off-farm salaried employment such as teachers, health workers or under local government is negligible. Some of the people are involved in other secondary economic activities as artisans (building or carpentry), petty traders and casual laborers.

As with most important wildlife areas in Tanzania, SGR is characterized by a high degree of seasonal movement of the large mammal species. Compared with other protected areas, which have become 'islands', wildlife is abundant in the areas outside the reserves boundaries. Elephants move extensively throughout the area and are a source of human-wildlife conflicts in any village where they are found, raiding crops and causing human death. It has been claimed that ruinous animals destroy approximately a quarter of the food crops produced in the area, and an average of ten people are killed by wild animals annually,¹¹ the principal species involved being elephant, buffalo, wild pig and baboons. The growth of the human population in the area has led to an expansion of agricultural activities, which limits wildlife habitat. This led to competition for resources between human and the wildlife population around the reserve. Any sustainable community wildlife management scenario had to address the human-wildlife conflict. There is photographic tourism in parts of the northern sector along the Rufiji River and trophy hunting based on 'block' concessions in the other parts of the Selous ecosystem.

¹¹ Nduguru, I. Ibid.

During 1995-98, Price Waterhouse¹² conducted a study on the economic potential of the SGR and the buffer zone which concludes that the long term economic potential of the buffer zone is high once the villages have been empowered to be partners in safari hunting as envisaged by community wildlife management programs.

2.4 Local Institutions and Level of Local Participation in Decision-Making

For the long-term sustainability of CBC it is essential that all the stakeholders, including villagers, local government, NGOs and private companies should be involved. MBOMIPA and SCP are implemented through existing government structures, and have forged strong links with development and natural resource staff in the districts within which they operate, adopting a team approach to project implementation.

Local government in Tanzania is lodged first and foremost at the village level, supported by 'service agencies' like the Ward, Division and District level. Each village in Tanzania comprises of 250 or more families. The Village Assembly (VA), the 'supreme authority' in the village, is made up of all constituent member households in the village and meets every 3-months. The VA elects its own village government or village council (VC). According to the Local Government (District Authorities) Act 1982, the Village Council is an independent legal entity able to sue and to be sued, hold property and enter into contractual arrangements. Democratization has made the VC the starting point of governance. The VC is formed by the Village Chairpersons, Village Executive Secretaries from all the sub-villages, sub-village chairpersons from all existing sub-villages, all extension officers – mainly from the agriculture and livestock and community development, and Heads of other institutions such as dispensaries, churches, mosques and primary schools. The Village Government forms several village committees, including a finance, economic affairs and planning committee; a services and self help activities committee; and a security and defense committee. Where necessary, mechanisms exist for reducing management to the level of sub-villages or even smaller sub-divisions.

The District Council (DC) was also created by the Local Government (District Authorities) Act No. 7 of 1982. The full District Council meets four times annually and is made up by the Members of Parliament, the District Executive Director (DED), the Ward Councilors, the District Commissioner, the District Council Chairperson, the District Administrative Secretary (DAS), the District Heads of departments, Ward Development Officers and one representative from each village. At District level there is also a District Development Committee (DDC).

¹² GTZ : Report on the Internal Evaluation of Project PN 95.2079.2 Selous Conservation Program, Tanzania. February, 1998.

The Division is the next level of local government. The Division is made up of Wards, which are formed by all villages in an area as demarcated by certain natural features such as rivers or mountains as deemed fit by DC. At Ward level there is a Ward Development Council which is required to meet every 3-months. It comprises the Ward Councilor, Ward Executive Officer, Village Chairpersons, Executive Officers, and the Extension Officers.

The last level of local government is the Regional Consultative Committee which is formed by the Regional Commissioner (RC), Regional Administrative Secretary (RAS), Members of the Regional Secretariat, the District Executive Directors (DED), Members of Parliament (MP), District Council Chairpersons, District Councilors and District Administrative Secretaries (DAS).

3. Analysis of the Main Findings

3.1 Management

3.1.1 Consensus and the Planning process

Practical experiences show that the more communities run conservation projects themselves, the more likely they will be successful (Balduş, R. 1991). CBC experiences in other Southern African countries such as Botswana and Namibia, prove that working with communities to arrive at development plans that satisfy the needs and aspirations of the local communities will also accomplish the conservation objectives of governments. It is axiomatic that farmers, woodcutters and poachers are more likely to better manage the natural resource base if they are confident that the fruits of their labor will return to them. However, stating this ‘truism’ is much easier than demonstrating its feasibility.

The attitudes of the communities living around MBOMIPA and SCP have implications for the long-term development of community-based conservation of wildlife. However, rebuilding the relationship between conservation authorities and local people after a history of policing and exclusion has often proved difficult. There are skeptics within local governments who have been uncertain to devolve real responsibility and power to local communities, but long-term commitment to the establishment of an effective co-management partnership has helped to propagate sustainable impacts in both project areas. MBOMIPA and SCP have employed interactive dialogue and dedicated the time, human resources and commitment necessary to rebuild trusting relationships required to arrive at consensus with communities. Although significant trust has been regained, research indicates that this has not yet been fully achieved (Gillingham, 1998). To promote effective community participation in sustainable wildlife management, MBOMIPA and SCP have conducted participatory rural appraisals to build up pictures of natural resource endowments, the means by which they are managed and the socio-economic make-up of communities. The existing community institutions have also been analyzed to gauge the extent to which they are already managing wildlife resources, assess their capacity and identify mechanisms for resolution of conflicts.

3.1.2 MBOMIPA

The project has made significant progress in implementation of community-based wildlife management areas and has established a solid foundation for future management in the 16 project villages. These villages were selected based on the following criteria:

- Proximity to RNP, especially if village shares a border;

- Population of wildlife;
- Incidences and number of poaching; and
- Significant crop raiding issues.

MBOMIPA began with a research phase during which they identified the various issues and established a baseline data set. Participatory rural appraisals which included village meetings, identification of existing natural resources, problem ranking exercises, and village mapping of natural resources of the 16 villages were completed. Attempts have been made to find out and make constructive use of what villagers know and think about their natural resources in the development of village resource maps.

A participatory and action-oriented approach was adopted. Village meetings and informal discussions were initiated with village councils, district officials, members of parliament, and many others relevant to the project. A series of meetings and dialogue with the village councils, culminated with open village assembly meetings, during which the project was explained to community members. The positive feedback from these discussions was encouraging and prompted a submission of a proposal to the Wildlife Division to recognize the area as a wildlife management area under the management of 16 villages in Idodi and Pawaga. For the project to succeed the WD had to excise these areas, which were within existing hunting blocks/concessions, from the resident hunters to the communities. To gain the confidence of the highly suspicious villagers, the project financially supported self-help projects such as the rehabilitation or construction of wells, dispensaries, schools, roads and grain mills.

With facilitation from the project the villagers elected members of the VNRC and Village game Scouts (VGS). Initially, the project did not prescribe criteria for the VNRC in terms of membership. This permitted Committees to develop organically around the strengths and weaknesses of their respective communities. Through the village assembly, the villagers elected members of VNRC based on their own criteria. However, these VNRC encountered numerous problems due to the inability of their members to read and write, their members holding other positions in the village government or political parties, and due to a lack of clear guidelines of the role of the VNRC vis-à-vis the Village Government.

The project has made significant contributions towards developing an enabling environment by collaborating closely with and exposing the district level officials, who are the key implementers, to the new tenets of the wildlife policy; and working with the Community Conservation Service (CCS) of TANAPA.

3.1.3 Selous Conservation Program

The objectives of the Selous Conservation program were explained at all levels within the communities during lengthy and repeated village meetings. During these meetings villagers identified the problems and bottlenecks they faced. These included:

- Problems with infrastructure and transport;
- Unfavorable economic framework;
- Heavy workload for women;
- Over-exploitation of timber resources;
- Lack of management skills;
- Missing incentives and appropriate technology for alternative employment;
- Problems in constructing housing;
- Deficits in marketing, technology and extension in local agriculture;
- Crop damage;
- Food storage problems;
- Nutritional deficiency; and
- Health problems.

Support with self-help projects was usually the first form of cooperation between SCP and the villages. Institutionally, the self-help projects accelerated organizational development for collective resource management. These self help projects aimed at winning the confidence of the villagers who did not trust the wildlife authorities. A goal-oriented project-planning workshop involving all key stakeholders was organized by GTZ and held in November 1989. This workshop incorporated the findings of the village meetings, and developed a project operation plan. During this planning workshop the following were summarized as the key issues facing the Selous ecosystem, namely

- Natural resource in PA not managed effectively;

- Illegal exploitation of natural resource in Selous ecosystem;
- Uncontrolled burning;
- Encroachment;
- Introduction of animal diseases to wildlife by livestock;
- Threat of major negative environmental impacts through proposed stock-route; and
- Natural resources in unprotected areas poorly managed.

Once some level of trust had been built the program facilitated the development of land use plans in co-operation with the Institute of lands. These plans designated suitable areas for wildlife management. Further, the project encouraged and supported villagers to form community wildlife management committees (CWMC) that would facilitate the management of their wildlife areas. For example, under the SCP in Morogoro 19 villages in the Gonabis GCA, located directly north of the reserve and incorporated into one of the SGR tourist hunting blocks, have joined to administer a wildlife conservation-oriented buffer zone, designating a total of 740km² as a communal wildlife management area. The area possesses abundant wildlife resources such as wildebeest, buffalo, impala, zebra, giraffe, warthog and waterbuck among others. The villagers have collectively created a NGO known as JUKUMU (Jumuiya ya Kuifadhi Mazingira Ukutu), which is charged with running their wildlife area.

In a study carried out from 1996-97 in Bwakira chini in Morogoro district, Gillingham (1998) demonstrates the existence of a significant level of local support for the conservation of wildlife. Her research findings show that the benefits from the SCP have positively influenced the valuation of wildlife by some of the local residents. However, she concludes that the relationship between the wildlife authorities and the grassroots villagers (not the village elite) continues to be characterized by a widespread mistrust which stems from a combination of a perceived lack of decision-making authority for wildlife management and a paucity of accessible information. Limited community participation in some areas of the SCP has led to lack of accountability and transparency in the village institutions responsible for local-level implementation.

3.1.4 Linkages with other Programs

Some local and International NGO's and Community Based Organizations (CBOs) exist in the project areas. Few of them, however, address conservation issues, as more of them have their objectives more rooted in poverty alleviation, health and education issues. Both programs

cooperate with several organizations and there are opportunities to collaborate even further with institutions in other parts of the country involved in CBC.

In MBOMIPA, HIMWA, a former Maasai- focused NGO based in Iringa, represents the interests of nomadic pastoralists from different ethnic groups in the project. HIMWA's objective is to educate pastoral communities on how they can improve their lives by reducing the number of cattle they own, stopping clearing of trees and through the creation of permanent settlements. There is also scope for collaboration with other DANIDA funded projects such as the HIMA and MEMA (Matumizi Endelevu ya Misitu Asili). HIMA, which has been working in Iringa on environmental and resource management issues since 1989, started in 1990, and is in its second 5-year phase (1995-2005). It is not involved with game issues but in other resource management issues at village level. HIMA has facilitated the formation of District Environmental Committees involving a variety of government agencies. These Committees are more of an environmental forum than a working group that meets quarterly to review projects and discuss issues. MEMA is involved in the sustainable management of indigenous forests. MBOMIPA is also involved in awareness raising activities and collaborates with WWF funded program to raise the awareness of school children.

SCP has cooperated with numerous development projects including, Irish Aid promoting a District Development Program in Ulanga District, SNV sponsored Songea Development Action (SODA) which supports strengthening of the District administration and village development, WWF Elephant and Rhino project in eastern Selous, the African Development Bank, DANIDA funded Wami-Mbiki CBC project and Frankfurt Zoological Society sponsored Tanzania Wildlife Conservation Monitoring.

3.2 Activities and Linkages with Private Sector, Government and NGO's

MBOMIPA and SCP have also established strong linkages with the government and the private sector. Although the government should practice a "hands-off" policy, it must act as a catalyst in the forming years of WMAs, by advising, assisting, guiding and coordinating WMAs. The government has a leading role in encouraging the success of CBC and efforts are being directed at utilizing expertise within government (local and central) by both projects. Under the pilot CBC projects, the Minister for natural resources and tourism allows the devolution of use-rights of wildlife to communities as long as they adhere to the management plans governing use. This user-right is accompanied by responsibility to sustainably manage the resource. However, this delegation of proprietorship to communities is not absolute, as wildlife remains the de jure property of the State. So far enabling processes in Tanzania have focused only on decentralizing the right to manage and exploit wildlife resources and not ownership. The Minister retains the right to withdraw user rights from communities not conforming to the objectives and conditions

under which it was guaranteed. Until the establishment of the SCP the Regions bordering the SGR it did not have any links with the reserve (Krischke, H. in Baldus, R. 1991).

Both MBOMIPA and SCP are fostering long-term commitment from private companies. Private sector involvement in community areas is based on community understanding, equity and support. Tourist operators will play an important role in development of viable mechanisms to long-term association with rural communities. Besides trophy hunting, marketing of wildlife and their by-products are poorly developed. Hunting is ideally suited to the remote locations under MBOMIPA and SCP, and it has vitalized local economies, which are currently poorly positioned to tap the mass-tourism market, nor have there been any substantial joint ventures that link local communities and the private sector in developing tourism and wildlife use enterprises. However, for wildlife to contribute substantially to community development, there is need to focus on a broad spectrum of products that can be marketed from wildlife. In future, it is expected that tourist operations, for instance, wildlife based tourism such as nature trails or wild experiences, fashioned curios or skins could be promoted both domestically and internationally. This however, requires extensive market research and product promotion. In order to maximize the potential of wildlife, in future communities may wish to look for partners to introduce, market and manage different business enterprises for their WMAs; or may communities may decide to identify and develop their own ancillary enterprises to complement the activities of private sector partners.

3.2.1 MBOMIPA

In 1993, tourist hunting started in LMGCA, but was stopped shortly after in LMGCA South due to depleted wildlife populations¹³. Tourist hunting for lion, leopard, buffalo, greater kudu and impala trophies continues in the north. From the safari operator's perspective, hunting is satisfactory to good but is reliant on and complemented by hunting in hunting blocks in adjacent Rungwa Game Reserve. The wildlife quotas include Buffalo, Kudu, and Impala.

Resident Tanzanians have for the past thirty years undertaken recreational hunting in South LMGCA. Most of the resident hunters, whose interests are represented through the Hunter's Association of Tanzania (HAT), are comparatively wealthy citizens who live in Iringa. There are reports and allegations of malpractice by resident hunters by villagers and other observers who allege that among other misdeeds hunters shoot animals and numbers of animals which they do not have licenses for, frequently break hunting regulations by shooting from vehicles, and cross

¹³ Taylor, R. Consultancy to assess the potential for community management of wildlife resources in the Luanda-Mkwabi Game Control Area adjacent to the South Eastern border of the RNP, 1995

over into Luanda North and RNP to take advantage of the rich pickings which can be had along the Great Ruaha River.¹⁴ The hunters have however denied these allegations.

Until 1995, the resident hunters were allocated the entire south LMGCA quota through licenses issued by the District and Regional Game Officers. This was changed in the 1995 hunting season when the Director of wildlife directed that a portion of the game quota be transferred to REWMP's six villages. Not surprisingly, the HAT members did not welcome this major shift in resource access in favor of the villages or the subsequent rise in price see Box 3. The introduction of MBOMIPA in 1997 was also initially met with considerable resistance from the resident and non-resident safari operators. The project has instituted mechanisms to track and monitor hunting and have made it mandatory for hunters to report to the office of the Village Natural Resources Committee before and after the hunt, and to be accompanied by a village game scout during the hunt.

Box 3. Negotiation a crucial first step

In 1996 the game quota for LMGCA South was auctioned for the first time and the conflict that ensued between the hunters and the REWMP project implementers threatened to undermine the whole process. In 1997 an agreement was negotiated between the resident hunters and MBOMIPA which brought a notable improvement in relations. It was agreed that the quota in the 4 village blocks should be purchased by HAT Iringa at a price set by the 9 villages, while the quota in the fifth district controlled block will be sold to the Ruaha Conservation Group. The HAT members were guaranteed that they would be given priority as purchasers of the village quota. Some misunderstandings about the new procedures have occurred and there are signs of division between HAT members. Considerable project effort is being expended to keep negotiations on course, with the promise that if successful, the income of the villages will also increase.

Source: Walsh, M. 1995.

As animal populations increased the hunters have become more receptive towards the project. Although the village levy that the hunters are required to pay continues to generate some controversy among the hunters unwilling to pay it, in 1998 the majority of the hunters accepted without question, the process and procedures established by the project steering committee in 1997. Hunting quota prices are in Tanzania Shillings and are determined by the value of the Tanzania shilling and prices obtained during the previous hunting season.

There has been increased involvement of private companies through NGOs such as, the Ruaha Conservation Group, a newly established organization (1997) whose core objective is conservation rather than utilization per se. Through the group, safari operators and tour companies have donated funds and a vehicle for anti-poaching, conducted aerial anti-poaching

¹⁴ Walsh, M. Consultancy to assess the potential for community management of wildlife resources in the Luanda-Mkwabi Game Control Area adjacent to the South Eastern border of the RNP, 1995

surveys and have initiated programs to motivate VGS by providing them with allowances. This has motivated HAT to improve its organization. Some members of HAT have proposed to form a new society to be known as the Iringa Wildlife Conservation Association, which will contribute to natural resource management in the project villages. It may prove to be in their interests to be seen involving themselves in positive way in efforts at sustainable management and benefit sharing.

3.2.2 Selous Conservation Program

SCP cooperates with NGOs, which also support the Selous such as the Frankfurt Zoological Society, AWF and the WorldWide fund for Nature (WWF). Tourist hunting is currently allowed to operate hand-in-hand with community hunting activities, and continues to be the most economically rewarding. The tourist hunting companies sometimes make voluntary contributions to the villages. However, although these contributions have helped improved social services, they are not an assured source of funds and in no way contribute to a framework of sustainable CBC. The project plans to develop wildlife related village tourism at a later stage (Krischke, in Baldus, 1991).. For example, in February 2000, JUKUMU signed a short-term 10year concession lease worth US \$200,000 with a tour company known as Tent with a View.

3.2.3 Activities Related to Marketing or Increasing Access to Markets and Value-Added Processing

The sustainability of CBC projects relies on favorable legislative and administrative frameworks and accessibility to and availability of markets for products. Under MBOMIPA and SCP markets are insufficient and inaccessible, and have failed to reflect the full value of wildlife products such as game meat¹⁵. Markets have not been open as a result of existing laws, and thus game meat initiatives have not responded to market demands and opportunities outside the project areas. The lesson, which this experience teaches, is that during the initial stage of developing a WMA, marketing can be a fruitful area for investment. Direct marketing of game meat for instance, is more labor intensive and difficult than simple tendering of hunting quota; but it increases the communities control and employment opportunities.

Villagers in MBOMIPA have enthusiastically entered the external market for wildlife resources. Their taste for subsistence usage of wildlife has been in their calculations, displaced by the realization that the external resident hunting market provides prices, which makes the value of wildlife, sold far higher than its meat value. The communities are on a sharp learning curve regarding the details of their market. The village game scouts monitor all hunts, and the records of the hunter are carefully checked against village records. However, prices are still hampered by

¹⁵ Fred Nelson, 1999

the fact that the resident hunters have exclusive access to purchase the quota at non-competitive market prices therefore denying the villagers the potential for earning higher revenues.

Existing wildlife legislation precludes villagers from legal hunting since they cannot afford to buy expensive firearms required by law as suitable hunting weapons. The purpose of establishing a meat program is to satisfy the community's basic nutritional needs by availing animal proteins to villagers at reasonable prices. However, currently, pricing is being centrally planned and external markets have not been allowed to legally form, as a result, the existing price structure is not competitive see Box 4.

Box 4. Understanding the Economics of the sale of game meat

The meat sales program is flawed in its fundamental economic conception given that all the transactions occur within the villages there is no revenue flow into the community from outside. The program does not improve the overall economic situation in the area. The villagers are required to fund their social development through the purchase of game meat, with money they do not have. However, the prices offered for legally obtained meat is more competitive than that of poached meat. Poached meat is sold for Tshs 1,200/kg while quota meat is sold for TShs. 300/kg.

Source: Nelson, F.: Observations of the SCP in Morogoro District 1999.

The economics of the sale of game meat are expected to change. Since July 1999, JUKUMU has obtained a trophy dealers license which will enable them to market the game meat outside the project villages, and especially in poachers markets.

3.2.4 Collaboration of different CBC Initiatives

Presently, both projects have not established very close links with other community-based natural resource management programs. They aim at establishing closer links with other agencies and NGOs, which are dealing with natural resource issues, and/or stakeholder interests, which complement the concerns of the projects.

MBOMIPA project staff and HIMA are working closely with the District Natural Resource staff. The Chief Technical Advisor of HIMA is a permanent member of the MBOMIPA Steering Committee. In the future, MBOMIPA expects to forge closer ties with MEMA.

3.3 Institutional and Legal Aspects

3.3.1 Issues of Land Tenure

Fundamentally, there are three types of "capital" involved in community-based natural resource management that need to be brought together for economic value to be manifested, namely natural capital, physical facilities necessary for producing products and services and thirdly human capital. First, and foremost, is the natural capital, i.e. the land with its wildlife.

Appropriate land and natural resource tenure systems are the fundamental basis of the long-term nature of community-based natural resource management strategies, as it allows communities access to natural capital.

In Tanzania there have been attempts to provide an administrative and legislative framework conducive to guaranteeing such rights. This process began with the adoption of a National Land Policy by Cabinet in March 1995. Among other things, the policy:

- Vests all land “in the President as trustee on behalf of all citizens.” However, the Government is only the jurisdictional authority, or manager, not the owner.
- Recognizes both customary and statutory rights of occupancy as equal in law
- States that it is the Village Council which is to administer Village Lands; and
- Provides that women acquire land in their own right.

The new Land Laws Land Act No. 5 (1999) and the Village Land Act No. 4 (1999) have been drafted, approved by parliament and are in their last stages of becoming law. Under the Land Law Tanzania is divided into 3 major categories of land for the purpose of land administration, i.e. general land, reserved land and village land. The Commissioner of land will administer all land other than village land. Village land will be demarcated and administered by their respective Village Assemblies and Village Councils (VC) under the Local Government (District Authorities) Act, 1982. Each village will be granted certificate of boundary and the VC empowered to issue subtitles (customary rights of occupancy) to villagers for land within the village.

The Village Land Law defines village land to mean:

“All land within the boundaries of a village registered under section 22 of the Local Government (District Authorities) Act, 1982; all land designated as village under land tenure (Village Settlements) Act, 1965; area demarcated as village under law; and land which had been used by a village for at least 12 years before the enactment of the proposed Village Land Act, 1999”

The Village Land Law allows villages to declare as common land and designate a part of their land as wildlife management areas (WMAs).

The Land Law No.5 (1999) establishes reserved land, of which GCA are a part, as a land management category, and makes it possible for any other legal person apart from the state, to

secure tenure of such an estate as long as they abide by the laws governing reserved land. It is important to note that a VC constitutes such a legal entity. This provides the opportunity for the Village Council and the private sector to be designated managers of GCA.

The WD is in the process of revising the WCA in order to enable villages to acquire custodianship of the wildlife that occurs on their village lands

3.3.2 MBOMIPA

Some of the village's settlement area extends beyond the GCA boundary. Little more than 20 percent or 1/5th of LMGCA South appears available for wildlife use¹⁶. However, research has concluded that the area has the potential to become a viable wildlife management unit given the appropriate management inputs, the time for wildlife populations to recover and rehabilitation of degraded habitats (Taylor, R. 1995).

Project villages have registered village status but do not hold land title deeds or certificates of boundary for their land. The lack of secure tenure did not preclude the initiation of CBC in MBOMIPA. The villages, most of which were resettled from within RNP, are very small and their land bases do not constitute viable wildlife management units on their own. Negotiations at the ward and divisional level were of great importance in order to ensure involvement of all villages.

All forms of land use in these project villages are governed by a well-defined Land Use Plans (LUP). With support and guidance from the District land use planning authorities the project has facilitated villages to develop and enforce land use plans. Participatory techniques including transects, sketch maps, seasonal calendars, village histories and household interviews were used. The maps were made in the field to encourage people to think spatially and look and reflect upon their resources. The seasonal calendars were integrated with the maps to provide practical information to help avoid conflicts in timing project implementation. The household interviews helped translate various resource issues into specific livelihood strategies. Villagers were the principle researchers and the results were discussed in larger village assemblies. They decided on how best to zone different types of land use. Within each village area there are exclusive zones for the management of wildlife and other natural resources.

The output of the LUP process are village maps depicting boundaries, households, farms, land use and land tenure, soil and vegetation types, surface water, topographical features, wildlife

¹⁶ Nduguru, I. Ibid.

distributions, community facilities, and important cultural sites. Individual village maps are put together to build a ward, division and finally WMA map.

3.3.3 Selous Conservation Program

The success of community wildlife management very much hinges on village land Use Plans (VLUPs).. In 1983, the government embarked on a national program of village land titling, demarcation, survey and registration. Through this process the VC was able to obtain leaseholds over their village areas and sub-lease portions of these areas to member villagers for settlement and farms. During the initiation of SCP there were no supportive laws, regulations, administrative practices or clear tenure of public lands in Tanzania SCP in collaboration with the District Land Officers has facilitated the development of VLUPS in project villages since 1993. Planning involved:

- Survey of village land and boundary identification;
- Mapping out present land uses;
- Determining and mapping land capabilities;
- Determining present land use requirements based on the population size; and
- Projecting and mapping out future village land use requirements based on population growth.

All the villages were eager to participate in village boundary demarcation, and upon request from the village governments, SCP financed the operational costs of the Regional Planning teams to survey the land and demarcate the reserve and project boundaries in the project area. SCP has assisted 42 villages within the SGR buffer zone to obtain certificates of land boundaries. LUPs were officially approved for villages in Songea, Tunduru, Liwale and Rufiji District.¹⁷ However, the new land policy makes it necessary to set beacons on the borders of village land, a step that was not done during demarcation and the preparation of VLUPs. Although the process of developing VLUPs was laborious and expensive, it was necessary to enable community-based conservation.

The major forms of land use that were identified were areas for settlement, agriculture, fuel wood, livestock grazing, areas for future expansion and areas for wildlife management. To minimize conflicts between land uses such as agriculture, livestock grazing and wildlife the

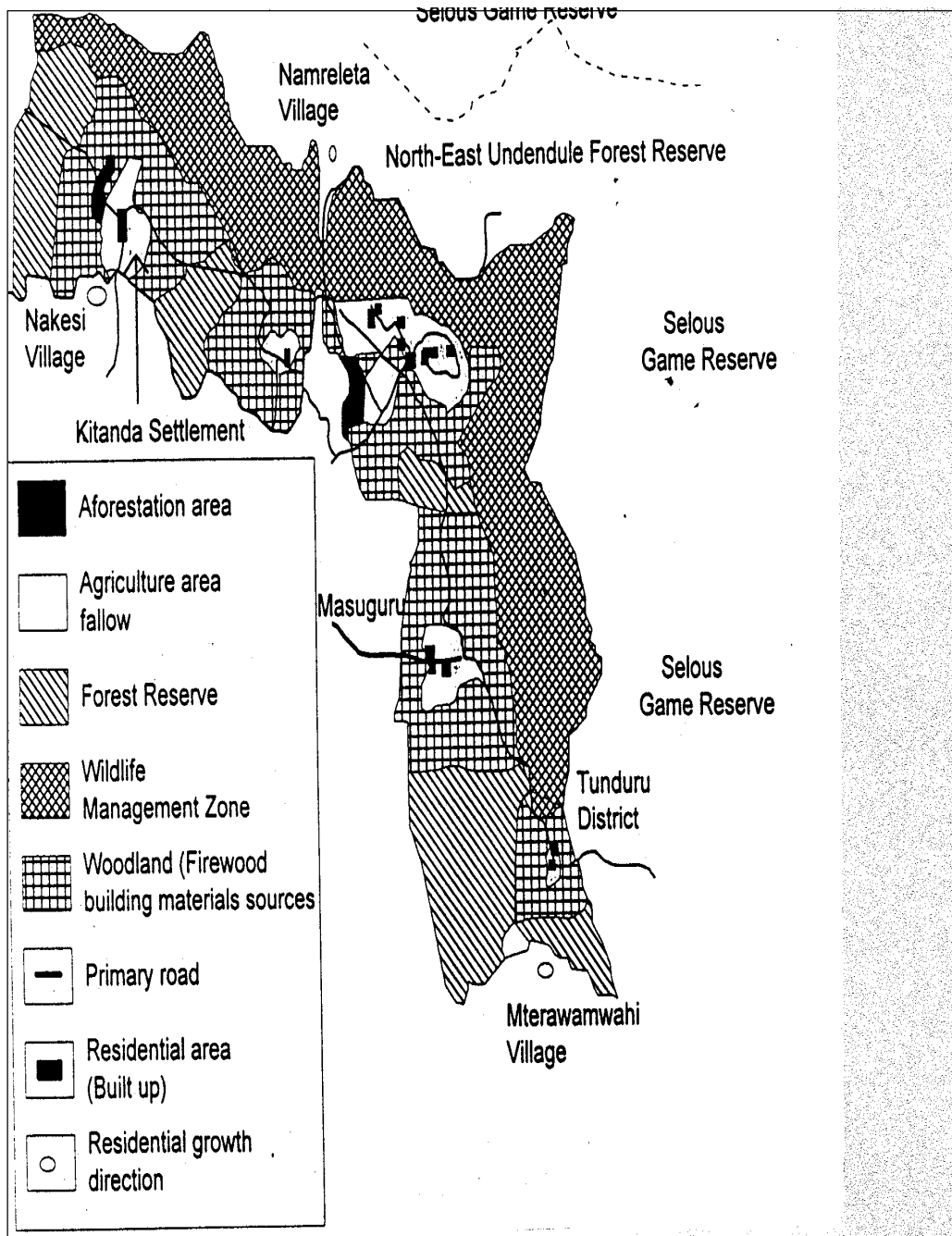
¹⁷ GTZ: Internal Evaluation Report, 1998.

different land uses were zoned far apart. Village areas known as Wildlife Management Areas (WMAs) have been zoned out as buffer areas to the SGR and are used for sustainable wildlife utilization with the goal of procuring sustainable economic benefits from wildlife resources see Figure 5. Each WMA has legal administrative boundaries based on VLUPs approved by the Districts and may include one or more villages. In 1994, villages in Morogoro Rural District and Songea District had set aside a total of 71,000 ha. and 126,480 ha. for their WMA's respectively. Other designated forms of land use include forestry reserves, wood lots, bee keeping, swamps, agricultural areas, roads and settlements¹⁸.

Land Use Planning has to take into account seasonal climatic occurrences that could affect community-based wildlife management efforts. For example, the 20 villages under SCP in Morogoro district are located near the Gonabis GCA, which lies within the flood plain of the Mgeta River. During the rainy season, the area is submerged for much of the wet season as a result of floods and the population is living in elevated reed platforms. Not surprisingly, it is at this time of the year that poaching is rampant, as people need meat and enforcement is limited by the weather.

¹⁸ Nduguru, I. Ibid

Figure 5 Map. Depicting Land Use Types in Areas of Songea District bordering the SGR



3.4 Management and Institutions Established

Community-based natural resource management will not be effective in the absence of a fully functioning and sustainable institutional framework and process at district and village levels, the critical vertical linkages. To develop this framework, the projects have facilitated the formation of committees, provided training and have put in place procedures and modalities for district-level facilitation. A working-group approach to bureaucratic transformation of wildlife management has effectively been adopted in MBOMIPA and SCP. District Steering Committees have been formed with representatives from all agencies with an interest in wildlife issues. This approach encourages interagency cooperation and provides “critical mass” of support for a new approach to wildlife management.

3.4.1 MBOMIPA

For implementation close communication and cooperation of all the key stakeholders is essential. MBOMIPA implements its activities through the District Natural Resources staff, namely the District Game, fisheries, forestry, Bee-keeping, Cooperatives, Livestock, Agricultural and Community Development Officers. The main activities fall within the departments of natural resources and community development. The project is further involving the cooperatives and planning departments during facilitation and training on procedures and rules governing leadership, maintaining records and accounts and the process of establishing small-scale income generation projects. The knowledge of the Land, Livestock and Agricultural officers was useful during the preparation of VLUPs. During implementation, the project works through the well placed and highly regard extension staff at village, ward or division level rather than through District staff. Community development and game assistants located at the divisional offices have been provided with reliable transport such as motorcycles for effective operation.

Mbomipa has established a District Steering Committee (SC).

3.4.2 Selous Conservation Program

The SCP is implemented by respective District staff and GTZ- SCP staff and the SGR staff. The GTZ SCP staff is comprised of three senior officers (2 German advisors and 1 Tanzanian rural development officer) and 4 village workers. SCP formed District wildlife management committees, now known as District Technical Advisory Committees. SCP is implemented in collaboration with the District Natural Resources Officers, Game Officers, Community Development Officers and Community Wildlife Officers, the Village Assembly, and the management of SGR.

3.5 Locus of Decision-making: Composition and Mandates of Management Team and Linkages with Village and District Council

Sound legal community institutions are required for the successful involvement of communities in wildlife management. During the establishment of MBOMIPA and SCP some of these institutions did not exist let alone have any management experience. With facilitation from other institutions it was expected that community institutions could learn from experience the required management. Community-based systems and institutions have evolved, although these rurally based institutions are not without their shortcomings, for example, they still lack the full technical capacity required to manage their resources and operate successful resource-based operations, they have started managing their natural resources.

3.5.1 MBOMIPA

Constant contact is maintained between the project and the WD in Dar Es Salaam, TANAPA in Arusha, and the management of RNP through the project manager and the project community conservation officer, both of whom are employees of the WD and TANAPA respectively. MBOMIPA is the first project nationwide which involves such a close collaboration between these two organizations. Other such projects include the Katavi Rukwa Conservation Development Project.

In 1988, TANAPA began a pilot program for park outreach around the Serengeti, Tarangire and Arusha national parks. Lessons from this park based experience resulted in TANAPA constituting the community conservation service (CCS) to become an integrated part of park management. The CCS program has grown into a national program operating in all twelve of Tanzania's national parks including RNP.¹⁹ This program distributes funds allocated by TANAPA to individual parks to financially support 50 percent of village initiated development projects in communities adjacent to parks. MBOMIPA also provides funds to match TANAPA's contribution.

MBOMIPA is guided by a District Steering Committee (SC) comprised of the District Commissioner, District Executive Director (DED), District Natural Resources Officer, District Community Development Officer, Councilors from relevant Wards, a representative from RNP, a representative from the Hunters Association of Tanzania (HAT) and representatives from a local Pastoral NGO. The SC that was formed during REWMP was reconstituted at the start of the MBOMIPA project under the new chairmanship of the District Commissioner. The SC meets

¹⁹ For more information see: Bergin, P & Dembe, E, 1995.

quarterly and reviews progress, ensures coordination of activities, monitors project implementation and safeguards the interests of the different stakeholders. The DC and DED play an active role in facilitating project implementation outside of committee meetings.

The role of the District Game Officers (DGO) has been reoriented from that of policeman to one of facilitation. Initially, the DGOs felt threatened by a loss of their control over resources and feared that communities had been alienated from their wildlife for so long such that they would not be able to manage it. However, these perceptions and attitudes have changed as a result of continued interaction and dialogue between the project staff and District staff, and the districts 'hands-on' involvement in project implementation. The DNRO, District Community Development officer (whose divisional officers play a key role in facilitating work at village level), District Planning Officer, and the District Lands Officer are all involved in project implementation. The District staff are responsible for provision of relevant extension services, and the process of district level facilitation is evidently much stronger now than it was during the REWMP-MBOMIPA transition.²⁰ The project, which is housed in the District natural resource office, is developing joint work plans with the district natural resource office.

The VA has adopted additional responsibilities related to the management of natural resources in the project communities. The committees are called *Village Natural Resource Committees* (VNRC) to reflect the wider responsibility of the committees and their full incorporation within village government. The focal point for most, although not all, management is the VNRC. Membership has changed overtime, the composition reflecting an organic evolution in response to demands to administrative and negotiatory skills. The committees are representative and responsive to their own local constituency. The committees make decisions on the use of wildlife resources and revenue utilization, and also to select village game scouts (VGS).

By the end of the first quarter of 1998, MBOMIPA had succeeded in facilitating the establishment of Village Natural Resource Committees (VNRC), the local level management entity, in all 16 project villages.²¹ The VNRC are formed under the auspices of the Village government and do not function independently of other local government structures. The VNRC is a sub-committee of the village government's Social Development Committee. This has implications in decision-making and autonomy.

The VNRC are formed by seven members who are elected at a Village Assembly meeting. It has numerous responsibilities see Box 5.

²⁰ MBOMIPA Project Quarterly report – April-June 1998.

²¹ Ibid.

Box 5: Responsibilities of the VNRC

1. To strengthen the relationship between the village government and VNRC; the village and other villages; the villagers and the RNP; and the villages and the Ward, Division, and District Natural resources and Community Development departments.
2. To prepare NR use plans and ensure these become village plans
3. To ensure that the village NR plans are properly implemented
4. To advise the village government on the formulation and implementation of by-laws on NR and environmental protection and ensure that these are observed
5. To coordinate village game scouts' patrols and reporting; receive and safeguard confiscated and found exhibits/trophies and hand them to the NR office
6. To monitor and evaluate sustainable NR utilization activities in the village
7. Supervise licensing and hunting activities
8. To oversee and develop new income generating projects linked to harvesting fish, honey and forest products
9. To provide environmental education to the community on protection and sustainable utilization through public meetings, community groups and primary schools
10. To prepare and submit monthly income and expenditure reports of NR utilization. To estimate and budget for NR utilization activities and submit monthly reports at village meetings and to the DNRO's and MBOMIPA. To oversee budgetary expenditure
11. To research areas of natural interest with potential for attracting tourists and maintain records.

The existing VNRC already exhibit a strong sense of purpose and provides a lively forum for debate. They have developed the will and capacity to manage wildlife resources.

There are ten VGS, selected based on their physical fitness, literacy and honesty, serve in a voluntary capacity. The VGS are responsible for patrolling the village wildlife areas, ensuring hunting is done appropriately, and monitoring the availability of animals in their areas. The VGS collaborate with the District Game Assistants and the staff of the RNP in anti-poaching activities, which are sometimes done jointly.

MBOMIPA comprises of a technical team of four. There are 2 government officers, namely 1 from WD—Project Manager and 1 from TANAPA and 2 technical advisors –1 British and 1 Tanzanian, who are employed directly by DFID. The staff continue to monitor representativeness and effectiveness of VNRCs and provide advice when necessary. They have also begun to work with district staff in collecting baseline information and examining options for CBC in different natural resource sectors such as development of fish farms, bee-keeping and forestry projects. The initial assumption that NGOs or CBOs could play a key role as intermediaries in the institutional development has proved premature.

3.5.2 Selous Conservation Program

SCP is under the field supervision of the Community Wildlife Management Officer (CWMO). The CWMO is a new position that is assumed by the District Game Officer. The CWMO is an important link between the committees, DGO and SCP. The CWMO is responsible for advising and training for community development, presenting VLUP for approval by respective authorities, preparing plans for training of VGS, border demarcation, realization of income shares from district for villages, self-help promotion and range management. The CMWO works in collaboration with the VNRC and the VGS in anti-poaching operations, limiting agricultural expansion and prosecuting poachers.

SCP has facilitated the formation of VNRC in each project village. Where the villages are small and close to each other, two or more villages may combine to form one committee. These VNRC comprise 10 to 12 members elected by the Village Assembly, namely a chairperson, Secretary, Treasurer, and 6 ordinary members. The members must include whom 2 elders, 2 women, 2 youth, 2 head of government sectors in the village and 2-experienced local hunter (*Warumba*). The responsibilities of the VNRC include:

- Prepare village land use plans;
- Supervise and coordinate patrol including crop protection;
- Oversee communal hunting and distribution of meat;
- Manage and keep records of the profits earned from wildlife-related enterprises;
- Prepare work plan and budget
- Formulate village by-laws;
- Educate the community on sustainable use of natural resources; and
- Use funds according to the wishes of the entire community.

The committees have had 'light touch' facilitation guidance from the project but decisions remain under their control. Based on the realization that cooperative efforts are required to manage migratory natural resources, nineteen villages in Morogoro District bordering the Gonabis Game Controlled Area, have opted to form a non-governmental organization called JUKUMU, which is administering the natural resources in the Wildlife Management Area (WMA) on behalf of the villages. JUKUMU is composed of ten-member Central Committee, which is the administrative body, and a Board of Trustees made up of three representatives from

all 19 villages charged with running the community's WMA. The organization is responsible for owning firearms, organizing meat sales and transporting the meat to the market, and signing contracts with hunters.

A District Technical Advisory Committee for villages with WMAs has also been established to facilitate District level involvement in the Program. The committee comprises the District Game, Fisheries, Forestry, Agricultural and Livestock Officers, the District Councilor, elected councilors and representatives of the Protected Areas. The DNRC is responsible for settling disputes and conflicts, developing guidelines for wildlife management and proposing or setting quotas for utilization.

The village assembly is responsible for selecting 6 strong and energetic village game scouts (VGS). The villages pay them small allowances or provide rations. The VGS serve in voluntary capacity and are required to collaborate with the District Game scouts and with the SGR staff on anti-poaching activities, which are sometimes done jointly, and in preparing an inventory of wildlife species and game counts. Most of the project villages have acquired rifles²².

The duties of the VGS include:

- Schedule and undertake patrol activities in the village wildlife areas at least 10 days a month;
- Report on conservation activities encountered during patrols;
- Arrest and apprehend poachers;
- Monitor game populations;
- Prepare hunting trails for hunting, camping sites, prevent encroachment and boundary demarcation;
- Supervise resident and tourist hunting e.g. Gonabis GCA;
- Conduct Problem Animal Control;
- Conduct hunting for meat for the village; and
- Carry out fire management

3.5.3 Regulations and By-laws for Natural Resource Use

Under both projects village stake holding over the areas has consolidated as the villages succeed in establishing rigorous and effective protection regimes and use-regulation. Both projects have activated the capacity of registered Tanzanian villages to make by-laws in respect of any village matter or resource as stated in the Local Government (Districts Authorities) Act 1982. Village governments have defined clear objectives for wildlife management, are willing to combat illegal use of wildlife and have developed by-laws to enforce compliance. These by-laws are binding upon all persons, irrespective of whether they belong to the community or not. The process for preparing these village by-laws is set out in sections 163-167 of the 1982 Act. Failure to put these rules into formal by-laws usually results from they not being consistent with other statutory provisions, or not being presented formally to the District Council for its endorsement. Without this form of approval the rules cannot enter statutory law and be upheld in courts.

In collaboration with the district staff and by drawing on experiences of other projects, MBOMIPA and SCP have facilitated project villages to develop appropriate natural resource by-laws that will enable villages to utilize the allocated game in an institutionalized legal way. Each of the project villages concerned have with facilitation from the project staff, drafted their own natural resource management by-laws, and proceeded to secure the approval of the District Council, as required by law. Village leaders and natural resource committees have been exposed to existing legal provisions that would enable the development of these by-laws. Use regimes have matured and become more detailed, usually as a consequence of conflict between the users and the VNRC, or the evidence that a rule was unworkable, or unfair.

3.5.4 Rights and Responsibilities of Communities, Village Government, District and Central Government

A CBC coordination unit has been established at the WD headquarters. The unit which is attached to the section of the wildlife development and management of Pas, serves as a think-tank in further enhancing CBC countrywide. Under MBOMIPA and SCP the communities, local government and central government have various rights and responsibilities. Table 4 below summarizes these roles.

²² Discussions with GTZ SCP Staff

Table 4. Institutional Rights and Responsibilities

Institution		Rights and Responsibilities
Central Government	Wildlife Division	<ul style="list-style-type: none"> • Maintains an overall role of coordination of policy, capacity building and monitoring • Right to set quotas of game
Local Government The District government is closely involved in implementation	District Council	<ul style="list-style-type: none"> • Coordinates activities of the WD at local level. • Building trust and awareness among the communities. • Approve village by-laws • Providing technical advice. • Assist villages monitor wildlife. • DGO advises the DW on setting wildlife utilization quotas for different uses. • Problem Animal Control is conducted by the WD through the DGO. • Help assure transparency and accountability.
	District Steering Committee Technical Advisory Committee	<ul style="list-style-type: none"> • Discusses proposed game quota • Provides hunters, through their representative, an opportunity to bargain • Responsible for settling disputes and conflicts • Develops guidelines for wildlife management
	Village Council	<ul style="list-style-type: none"> • Solve conflicts • Approve proposed prices for each animal • Develop natural resource by-laws
	Village Assembly	<ul style="list-style-type: none"> • Right to retain wildlife related income and decide how to spend it • Elect members of VNRC and VGS
	VNRC	<ul style="list-style-type: none"> • Recommend quotas for utilization • Right to hunt a determined quota • After receiving their quota, and with advice from project staff, the proposes prices for each animal • Problem animal control • Protection of natural resources • Manage revenue accrued from utilization of natural resources

3.5.5 Binding Legal and Policy issues

The complexities of environmental issues require comprehensive and coordinated environmental management policy and legislation. Policies deal with rational utilization of resources. They provide direction for the development of the economy and influence resource allocation and

investment decision. The economic value to wildlife is a threat to its conservation if that value is appropriated by people who do not have responsibility for it. Rural communities with secure tenure will appreciate their natural resources more than those without it.

The conservation of natural resources in Tanzania began in the colonial period. This is evidenced by the promulgation of the Fauna Conservation Ordinance, Cap 302 in 1954 and wildlife and forest resources areas established by legislation between 1951 and 1957. At independence Tanzania adopted the same conservation strategies as exemplified in the Arusha Manifesto: *'The survival of wildlife is a matter of grave concern to all of us in Africa... The conservation of wildlife and wild places calls for specialized knowledge, trained manpower and money, and we look to other nations to cooperate with us in this important time'*. Legislation governing resources were enacted. These include Fauna Conservation Ordinance, Cap 302, the National Parks Ordinance, 1959; Ngorongoro Conservation Area Ordinance Cap 413 of 1959 and the Wildlife Conservation Act, 1974.

CBC in Tanzania has been limited by the absence of an enabling policy mechanism and clear legislative guidelines. According to section 26 of the WCA, 1974, the Minister can declare a village to be an authorized association to which a game license can be granted. The village has the right and duty to sustainably utilize and protect wildlife. However, at present there is no provision for WMA in the WCA. The absence of a legislative framework for CBC leads to a lot of indecision and political maneuvering. However pilot initiatives such as MBOMIPA and SCP have supported the promotion of community management of wildlife resources by providing on-the-ground experiences to the wildlife policy experts responsible for developing national policy and legal frameworks which support community wildlife tenure, local management structures and equitable distribution of benefits.

In the past, many policies and legislation were formulated through top-down approaches without involvement of all stakeholders, inadequate background information and baseline data and without the provision of clear guidelines for incorporation of natural resource management concerns.

Fortunately, in Tanzania there is some ground for optimism as several national policies reflect a desire to decentralize some authority over natural resources and development. Between 1992 and 1994 there was the evolution of a number of draft policies on community conservation. Now there are many new policies in Tanzania driven by new concepts of governance, markets and environmental sustainability (Land, Wildlife, Forestry, Fisheries and Bee-keeping policies). The challenge is to coordinate and implement these policies so that government environmental issues are not divided into different vertically defined government bodies, which show little horizontal integration. The tendency is for policies to become the visions of departments rather than

government and society as a whole. The government has been successful in designing policies, but is unproven in terms of its coordination and creating any real synergy.

This is on route to change with the focus on decentralization and localization of development. Local government is central to this process. The Amendment of the Local Government Act (1999) effects decentralization of central government functions and coordination of sectoral policies and programs, and increases the responsibility of the local government for natural resource management. The crucial question is whether local government has the capacity to perform the role of facilitating a more participatory policy process and whether the environment will remain a low priority compared to health, agriculture and education.

Tanzania's Wildlife Policy (1998) strives to achieve sustainable utilization of wildlife resources whilst stressing the need for broader participation of all stakeholders in the process. However, the policy does not provide clear guidelines on how to involve communities and existing wildlife laws have been restrictive. The Wildlife Conservation Act (1974) has no provision that adequately caters for the wildlife policy progressive development, which emphasizes the need to conserve and manage wildlife by involving local people at the grassroots. However, the WD is in the process of developing WMA guidelines and reviewing and amending the wildlife legislation to ensure that villagers have custodianship of wildlife on their land.

The Wildlife Policy, amended wildlife legislation and WMA guidelines will function to strengthen Tanzania's CBC Policy and clarify actions. The WD reporting lines are also becoming more functional and clearly defined with the formation of a CBC unit attached to the section of wildlife development and management of protected areas. Currently the unit receives technical support from GTZ.

3.5.6 Mechanisms for Conflict Resolution

Mechanisms for village and inter-village NRC collaboration and coordination which have been given particular emphasis by both MBOMIPA and SCP, are contributing in conflict resolution. At the village level, there are low cost mechanisms for conflict resolution. The natural resource committees are responsible for management of conflicts, if they fail the Village Council is consulted. At District level, the District Steering Committee forms an arbitration panel to settle disputes and conflicts that cannot be addressed at village level.

While local conflicts do occur over access to resources these are usually resolved within the village and through negotiations. Sometimes NGO's have been involved in finding solutions for conflicting issues. For example, in MBOMIPA immigrant livestock keepers form a small and mobile minority and have a low degree of representation on village government. This interest group complained about their exclusion from the areas which have been set aside as WMAs,

which they had previously been able to graze and water their animals freely. The ban had been instigated by the villagers to prevent the spread of disease and to minimize competition for the same resources. With assistance from HIMWA the pastoralists have organized and started dialogue with the chairmen of the villages concerned.

3.6 Facilitation

3.6.1 Sources of Funds

Increasingly it is being seen that the viability of a nations conservation estate depends on its contribution to rural, local and national economics. Activities relating to community conservation are increasingly being supported by bilateral and multilateral donors as community conservation is seen as one of the main hopes for the better integration of conservation with rural livelihood objectives.²³ However, there remain considerable unmet funding needs and alternative sources of funding are required and one way of meeting these costs is to make CBC financially self sustaining.

The majority of funding for facilitation of MBOMIPA is funded by the United Kingdom Department for International Development (DFID). To- date DFID has provided a total of U.K. pounds sterling 2 million²⁴. The GOT has provided staff and equipment support for their role in MBOMIPA through the WD and TANAPA..

TANAPA also contributes to MBOMIPA through its CCS funded SCIP activities The level of financial input into the SCIP fund from Ruaha National Park to-date is estimated to be TShs. 40 million.²⁵ The conservation of natural resources and protection of the environment is one of the priorities of the German development policy. SCP is funded through the German Agency for Technical Cooperation (GTZ). SCP is set for a period of 15 years. The following matrix illustrates the phases totaling 11 years that have already been implemented:

²³ Barrow, E. et. al. : Comparative Review and Analysis of Community Conservation in East Africa. (work in progress)

²⁴ Discussions with Project Staff, July 1999.

²⁵ Discussions with MBOMIPA Project Staff, July 1999.

Preparation phase	Oct 1987- Sept 1988	750,000 DM
Orientation phase	Oct 1988- Sept 1990	2.5 million DM
Implementation phase I	Oct 1990- Sept 1992	3.2 million DM
Implementation phase II	Oct 1992 – Sept 1995	4.5 million DM
Implementation phase III	Oct 1995 – Sept 1998	4 million DM
Supplemented: 2million DM		

Source: GTZ : Report on the Internal Evaluation of Project PN 95.2079.2 Selous Conservation Program, Tanzania. February 1998.

The inputs to be contributed by Tanzania towards SCP, as stipulated in the bilateral country agreement, include 50 percent of the reserve's income into the retention scheme of the Selous Game Reserve. The income into the scheme now stands at over one million U.S. \$ per annum.²⁶ The table below depicts sources of income into the retention scheme from SCP.

Month	Game Fees	Block fees	P/Hunters Fees	Permits & Conservation Fees	Observers Fees	Total
1997						
June	-	52,875	20,500	29,025	-	102,400
May	14,665	48,750	6,000	5,750	-	75,165
April	20464	-	-	-	-	20,464
March	-	-	-	-	-	-
February	30,500	-	-	-	-	30,500
January		-	-	-	-	25,967
1996						
December	214,609	-	-	2,700	8,550	225,859
November	91,715	-	-	40,700	525	132,940
October	125,219	-	1,000	41,610	-	169,829
September	59,116	-	1,000	63,175	-	123,291
August	14,175	-	1,000	59,550	100	74,825
July	1,820	15,000	9,500	41,275	875	68,470
TOTAL	598,250	116,625	39,000	283,785	10,050	1,047,710

Source: GTZ: Report on the Internal Evaluation of Project PN 95.2079.2 Selous Conservation Program, Tanzania. February 1998.

²⁶ GTZ : Report on the Internal Evaluation of Project PN 95.2079.2 Selous Conservation Program, Tanzania. February 1998

Although the villages are becoming more self sufficient, both projects continue to depend on outside funding to cover transport costs and allowances for project staff and districts to render services to the project villages.

3.7 Capacity Building and Monitoring Process

Another form of “capital” and probably the most important form of capital is human organizational skills. Under MBOMIPA and SCP efforts have been directed at developing villagers organizational capacity to manage wildlife, hunting concessions and the revenue that they generate, and to assist the WD in the control of illegal activity. Both projects have supported adaptive training of a new cadre of staff through workshops, short courses and ‘learning-by-doing’. This capacity has built on existing indigenous systems of local knowledge, natural resource use and locally supported decision-making structures.

Through the creation of democratic local institutions that enable the involvement of local people in decision-making and management of wildlife resources, communities under MBOMIPA and SCP are now able to capture an equitable proportion of the revenue derived from a range of wildlife uses, gradually enhance the wildlife attraction for tourism development and provide alternative sources of livelihood. However, a gap still exists for certain necessary skills and information including information on markets and access of capital to finance community wildlife enterprises, how to form and operate successful business entities, how to form community-private sector partnerships, and how to negotiate and enter into joint ventures. Creating a viable business attitude is difficult and time consuming. Business-based handouts will not work; rather the enterprise development requires training in planning, legal issues, management and accounting. Moreover, there have not been considerable efforts directed at building strong partnerships at local level, for example information exchanges between villages in different buffer zones

3.7.1 MBOMIPA

The project has empowered communities to play a more effective role in resource management through the provision of training. Appropriate training and support is provided to the VNRC to facilitate various aspects of their operation. Some training is conducted in collaboration among the project staff, district officers, and RNP staff. The project has organized a workshop for VNRC members to define their roles and responsibilities and assess further training needs. During this workshop guidelines on the roles of VNRC were developed. It has also provided training to strengthen the planning and financial management skills of village governments and VNRCs; and developed its own training program for VGS in the field. This training includes among other things, components such as basic patrol techniques and the development of game population monitoring procedures. In future the project intends to organize a joint workshop for

village and VNRC leaders to discuss ways of further integrating the VNRCs into the village government.

It has been argued that remaining populations of game are insufficient to support community WMA cropping at significant levels, even assuming continuous replenishment of LMGCA by animal dispersal from RNP²⁷. Moreover, increased cropping in community WMAs would compete for the limited harvest with licensed hunting. There is therefore a need to adopt a broad-based resource utilization strategy and investigate the potential of other natural resource uses such as fishing and bee keeping. To enable the project to track and report on inputs and make informed mid-course interventions, collection of baseline information and systems of impact monitoring and evaluation are being established. Currently there is very little effective monitoring. Aspects that should be considered include ground estimates of key wildlife populations, monitoring of trophy hunting quality, monitoring of visitors activities and monitoring of revenue generated. The project has initiated a number of technical studies on natural resources and their utilization in the project area. These studies include a survey of the vegetation (forest) in the project area and the impacts of utilization and bi-annual survey of game resources to guide quota allocation and assess the impact of hunting.

3.7.2 Selous Conservation Program

SCP has made considerable progress in orienting the district staff toward an outreach instead of a policing role. The implementation of community-based wildlife management has changed the role of the game personnel. Before they were policemen, matching wills and wits with local population, however, through community-based planning they have become partners in development and agents of technical assistance to support local-level training in participatory approaches, wildlife planning and management, financial accounting and conflict resolution. SCP has provided programs for human resource development of extension staff, project personnel and community leaders that focus on awareness of rights and responsibilities. The project has also sponsored training of VGS at the WD Community-based Conservation Training Center (CBCTC) located at Likuyusekamaganga in Songea District see Box 6. Initially, the program provided the VGS with some basic the equipment such as uniforms, boots, tents, field gear, firearms and ammunition, this is now being financed from the income from the sale of game meat. The program has organized international study tours to different countries such as South Africa, Zimbabwe, Botswana, Zambia, Uganda, Kenya and Malawi.

²⁷ Overview of the Ruaha Ecosystem Wildlife Management Project , Community Conservation Workshop 15-16th November 1994.

Box 6. Elements of the six-week VGS Training course

- Control of unlawful utilization of NR (discipline, patrols, use of fire arms and the law)
- Collection of important data for NR monitoring (identifying species, record keeping)
- Methods of quota estimation, fish inventory, forest survey & methods of animal counts
- Utilization of natural resources (supervising hunting, tourism & trophy preparation)
- Understanding of Wildlife and Forestry products (timber harvesting, licensing)
- Range management (water conservation & fire management)
- Principles of accounting (receipts, cash book & journal management)

3.8 Economic and Environmental Impact – Benefit sharing

Wildlife provides numerous benefits which are related to the various use and non-use values. A distinction is often made between consumptive and non-consumptive uses of wildlife. Wildlife management also entails various costs, namely direct, indirect and opportunity costs.

The WMA system is ultimately a partnership venture between the wildlife authorities and rural people. The wildlife authorities and local communities are sharing the responsibility for protecting and managing natural resources, and both parties should share in the results. The financial and economic profitability of wildlife use varies considerably between different types of enterprises. The household incomes of many village members will be low which means that they should pay low or no taxes on equity grounds. Taxes on the use of land and resources by communities in WMAs should be judicious and flexible.

3.8.1 Categories, Type and Value of Benefits

There are multiple economic benefits associated with wildlife management. Communities involved have largely derived benefits from utilization of hunting quotas provided by the wildlife division. There are several important tangible (money, employment, meat, hides and wider ecological and service functions) and non-tangible (empowerment, democratization) benefits from both projects. The benefits of MBOMIPA and SCP can be summarized as follows:

Table 5. Summary of the Benefits of MBOMIPA and SCP

Impact	Description
Socio-political	<ul style="list-style-type: none"> • Responsibility for wildlife management devolved to level of villages where decisions are made democratically and transparently in face-to-face public meetings • Powerless villagers become proprietors of natural resources, gain self esteem • Accountable institutions develop • Community unity fostered

Impact	Description
	<ul style="list-style-type: none"> • Improved relations between the communities and wildlife authorities • Development of positive attitudes and awareness of the values of wildlife • Community self development projects • Development of human capacity
Economic	<ul style="list-style-type: none"> • Financial empowerment. For the first time villagers have their own money in group form • Process has linked wildlife and benefits in people's minds. Clear understanding of the project and its objectives. • Generated employment opportunities • Problem Animal Control • Improved services to hunters through VGS and less interference from illegal hunting
Environmental	<ul style="list-style-type: none"> • Communities begin tackling resource management issues to include more than wildlife for instance forest products, thatching grass and water sources • Projects have helped secure RNP and SGR boundaries • Informal social control to stop illegal hunting institutionalized • VLUPs in place • Increase in wildlife numbers • Areas under protection has increased

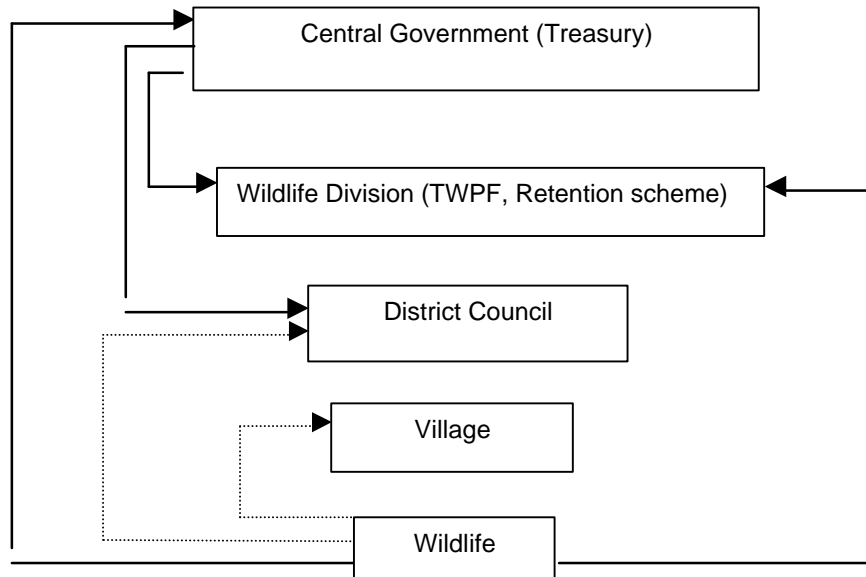
3.8.2 Financial Benefit

Under the current legal set-up in Tanzania (See figure 7), all funds generated by trophy hunting goes to the Treasury. 25 percent of the game fees is then directed to District Councils (DC) that have part of their areas falling within Protected Areas (PAs). In cases where PAs fall within multiple districts, the 25 percent is divided equitably among the DCs. Of the percentage that goes to the DC a certain percentage goes to the villages directly bordering the PAs. This is used to finance wildlife management, clinics, schools and other forms of social infrastructure. However, in some cases, the Districts opportunistically allocate the revenue received from wildlife, thereby affecting the revenue for distribution to communities bordering PAs. The WD is exploring the options for changing the revenue sharing policy with the establishment of WMAs.

With the evolving framework of CBC under MBOMIPA and SCP projects the distribution of benefits, particularly revenue derived from wildlife utilization, goes directly to producer communities. For Project facilitators it is important that the disbursement of revenues to producer communities is seen as the link between producers and the wildlife resource from

which the revenue is generated. For community-based management of wildlife to be successful, the benefits, of whatever nature, have to outweigh the costs of conservation as a land use (Murphree, 1995). Both projects wildlife provides valuable cash resources to institutions, which at present have no other source of revenue, for implementation of community development activities.

Figure 7. Schematic Representation of current wildlife revenue flows



Key

- Revenue from Trophy Hunting
- Revenue from Resident Hunting

Wildlife management is by far the highest income earner for some project villages and this is expected to rise as villages tap other potentials such as trophy hunting. However, there is no detailed data to indicate the average benefit per household, and wildlife utilization can at best, only supplement other forms of agricultural and non-agricultural income in some project areas.

3.9 Environmental Benefits

Satisfying community and conservation goals and objectives is a major crux for CBC. The development of improved local level natural resource management, particularly of wildlife is dependent on ecological, economic and socio-political factors. There are observable increases in

wildlife numbers in the project areas and neighboring hunting blocks, for example in the Rungwa Kizigo GCA bordering Ruaha National Park.

3.9.1 MBOMIPA

The total revenue generated from wildlife based activities under the MBOMIPA project between 1996 and 1999 is approximately TShs. 41 million (Table 6). All of this revenue has been disbursed to responsible villages and district.

Table 6. Total Revenue accrued from each hunting block in MBOMIPA: Lunda-Mkwambi South 1996-1999 TShs. (Excluding license fees)

Village/HUNTING BLOCK	1996	1997	1998	1999
Isele	194,200	600,000	1,325,500	1,500,000
Kisanga	374,500	600,000	1,325,500	1,500,000
PAWAGA	586,700	1,200,000	2,651,000	3,000,000
Malinzanga	854,860	1,250,000	1,325,500	1,500,000
Mafuluto	774,860	1,250,000	1,325,500	1,500,000
LUANDA	1,629,720	2,500,000	2,651,000	3,000,000
Idodi	388,500	600,000	1,325,500	1,500,000
Mapogoro	273,000	600,000	1,325,500	1,500,000
KITISI	661,500	1,200,000	2,651,000	3,000,000
Tungamalenga	281,233	400,000	883,666	1,000,000
Makifu	281,233	400,000	883,666	1,000,000
Mahuninga	281,233	400,000	883,666	1,000,000
MKUPULE VILLAGE	843,699	1,200,000	2,650,998	3,000,000
SUB-TOTAL	3,703,619	6,100,000	10,603,998	12,000,000
MKUPULE DISTRICT	1,402,100	2,100,000	2,700,000	3,000,000
TOTAL	5,105,719	8,200,000	13,303,998	15,000,000

Source: MBOMIPA Project, Ministry of Natural Resources and Tourism.

There is already evidence to suggest that beneficial changes in the villager's attitudes to wildlife are possible, given the right incentive. The project has promoted a new interest in wildlife as an alternative revenue source. The beneficiaries of revenues from sustainable resource utilization in MBOMIPA are the communities who have started accruing tangible benefits though they are not yet significant. The communities perceive that their total socio-economic and financial benefits exceed their individual total input. The primary source of village income from CBC activities to-date is from the sale of the hunting quota to resident hunters in LMGCA South and from a percentage of the revenue obtained from tourist hunting in LMGCA North. Income from resident hunting is available to 9 villages, which share the 5 hunting blocks in the area. In 1998 resident

hunters offered to pay approximately TShs. 8.1million for the hunting quota.²⁸ Ruaha Conservation Group do not hunt, however, they buy the quota for resident hunting in Mkupule for conservation. Revenue accrued from the sale of the animal quota in Mkupule is accrued by the district council.

The project has successfully re-directed the 25 percent hunting revenues received by the District from tourist fees paid to the Treasury to communities. It has effectively reached the traditionally disadvantaged rural poor because their marginal communal lands are becoming profitable lands in terms of wildlife production system.

In an effort to develop community wildlife management areas so as to return rights of access to and benefits from these resources, the project assisted villagers to initiate the provision of meat through the cropping of buffalo, impala and eland. However, revenue earnings from cropping were so small and with advice from the project, the villagers unanimously agreed to opt for sale of their animal quota to resident hunters. Resident hunters who wish to hunt on village land have entered into verbal agreements with the villages through HAT. Even though the villagers earn more from the sale of the quota, it is argued that the gross earnings per capita from resident hunting are only marginally different to the returns from cropping at the existing trophy fees levied by the village.²⁹ By comparison, tourist hunting would be more than double the revenues earned by resident hunting.

During discussions with VNRC they noted that there is evidence of an increase in wildlife populations and the improvement of habitat in specific locations³⁰; however, there is insufficient evidence to conclude any cause and effect relationships of project activities to broad biophysical trends.

3.9.2 Selous Conservation Program

The villagers are allowed to harvest a quota of game for their own consumption (See Appendix II).. In July 1999 JUKUMU obtained a trophy dealer's license which permits the sale of game meat outside the SCP area. There are no provisions for villages in the SCP buffer zones to get a direct share from the hunting royalties and fees, however, all safari companies are requested to contribute towards village development. In Morogoro, the District Council receives 25 percent of the game fees paid for the Gonabis hunting block and the villages receive a meager 12 percent of

²⁸MBOMIPA Project Quarterly report – April-June 1998.

²⁹ Taylor, R. An assessment of the potential for community management of wildlife resources in LMGCA Adjacent to the South Eastern Border of the Ruaha National Park. WWF/Harare 1995

³⁰ VNRC meetings Tunamalenga, Malinzanga, Idodi & Itunundu.

the Districts portion. SCP has supported the rehabilitation or construction of wells, school buildings, dispensaries, roads, bridges and oil and grain mills. Through the project villagers have legal access to game meat for which they have a high preference. Trophy hunting is a major opportunity to earn revenue from wildlife in the buffer zone, however currently villages are not allowed to enter into arrangements with companies carrying out trophy hunting. SCP has made efforts to address the unbalanced profit sharing and income generation through tourist and resident hunting. As a result, at present, the income for the villages generated from the WMAs cannot compete with income from generated by alternative land uses such as framing.

However, although SCP has not generated large cash returns from consumptive use of the wildlife (See Annex III), the income from wildlife utilization constitutes the largest source of income for the villages. At present, the benefits from sale of meat or hunting revenues to communities are very limited. The villagers derive revenue from the sale of meat from their quota, however, the sale of meat does not generate considerable revenue and sometimes cannot even cover the costs for hunting, let alone fund game scouts and other social development. The basic problem is that the villagers do not have the money with which to buy the meat, even at meager prices of around 300 TShs. per kilogram. There is also evidence that, in general the profitability of many income generating schemes do not match that of illegal uses.

The main benefits that have accrued to the communities have been through village self help development projects funded by GTZ or the hunting companies, these. SCP ceases its support towards self help projects as the hunting revenues in the villages grow. Self-help projects are adapted to the resources abilities of the target group and based on appropriate technology. Applicants can be the village council, a group of farmers, women, youth or individuals. If the number of applicants is small there has to be demonstrative effect or a secondary beneficial effect for the rest of the community such as the provision of basic services. Each applicant subsidizes 50 percent of the costs, usually in the form of labor, to any project in order to receive funding from SCP. In turn, SCP contributes 50 percent of the material and training costs, and the transfer of knowledge. This funding has been used for infrastructure, social and income generating projects such as construction of dispensaries, schools and rehabilitation of other social services. For example, in Mgeta River Buffer Zone the following self-help projects have been initiated:

- 20 tube well were rehabilitated and new pumps installed in 5-villages.
- To improve supply farmers, nurseries for 14,000 coconut seedlings were established in Dakawa and Mngazi and sunflower seeds have also been marketable crops and production of cooking oils.
- Introduction and sale of sunflower oil presses.

- Formation of women's tailoring groups in Gomero, Bonye, Dakawa and Mgazi/Vigolegole villages.
- Provision of 1-month horticultural training.
- Youth groups have formed and purchased brick-making machine, trained in carpentry.
- Construction of a dispensary and secondary school at Bakirachini.
- Grain drying and storage facilities.
- Crop diversification.
- Fishpond management.

In the future it is expected that villages will be able to increase their income by increasing their options to include leasing of their WMAs to tourist trophy hunting or photographic tourism. The essential step in the formation of sustainable CBC is establishing the means for communities to benefit directly from tourist hunting. Through tourist hunting the economic value of species such as buffalo, lion, impala and wildebeest can be realized and generate an enormous amount revenues for communities. It is expected that once the legal framework has been revised to enable communities to benefit from tourist hunting, then communities can begin to enjoy the major economic benefits for responsible management of wildlife resources.

As a result of SCP, wildlife populations have improved. Elephant, lions, and hippos were now being seen close to villages. Elephant poaching in SGR had reduced elephant populations from 100,000 recorded in the 1970's to less than a third of this number. An aerial survey conducted in 1998 showed an increase of the elephants to more than 57,000.³¹ Due to improve enforcement and patrols, incidences of poaching have fallen. The protective status in buffer zones, in particular south of the reserve, has improved due to community-based wildlife management schemes. However, illegal harvest of wildlife remains still occurs in some areas. Village game scouts were reluctant to arrest relative and friends who were poachers.

SCP has assisted in the rehabilitation of the SGR and helped secure a 50 percent retention scheme in the reserve. With an assured source of revenue, anti poaching activities, infrastructure development, and staff social amenities have greatly improved and this has positively impacted

³¹ Baldus, R. 1994

the communities surrounding the SGR. For example, because the SGR staff have transportation they can assist the communities with transportation during hunts.

3.10 Mechanisms to Share Benefits

Benefit sharing is an attempt to redress the inequities of the conventional system of wildlife conservation that directly affect rural resource users.³² The process of negotiating what types of benefits to share, with whom, over what duration and for what purpose was of fundamental importance for MBOMIPA and SCP. Communities as landholders are the ones bearing the highest cost of living with wildlife, and thus are the primary beneficiaries of all returns from wildlife in both projects. All revenues from wildlife accrued to the respective village bank account which are managed by the VNRC. Usually the communities decide during village assembly meetings whether the money should be paid out as a cash dividend to individual households or should be used for development projects such as clinics, schools or grain mills. However, in some project areas this has not always occurred. For example, in Bwakira chini in Morogoro district, the majority of the villagers tend to be poorly informed about the processes of wildlife management by the village authorities, and marginalized in terms of project benefit. This has resulted from a lack of transparency and accountability of members of VNRC and has led to problems of mismanagement of wildlife revenues.³³

3.10.1 MBOMIPA

MBOMIPA deems it crucial for the benefit sharing mechanism to be transparent and to avoid complicated mechanisms of distribution of revenue. The village governments are directly empowered with the responsibility to choose how to utilize benefits accrued from wildlife. The project and district staff advises and monitors use of the revenue to ensure that village development activities are supported in a transparent way for the benefit of all members of the community.

In Idodi Division, the 7 villages, which share 5 hunting blocks, receive 100 percent of all income obtained from sale of their wildlife quota. The 7 villages in Pawaga Division which do not have hunting blocks on their land, benefit by receiving a portion of the license fees generated by tourist hunting in LMGCA North. The Project, through the Director of Wildlife, has worked to ensure that the 25 percent of the total game fees from tourist trophy hunting in LMGCA north is disbursed accrued by the District Council is distributed to the 7 villages in Pawaga. The benefits being accrued by the rural communities have had a profound attitudinal impact. The people's

³² Barrow, E. Community Conservation Approaches and Experiences from East Africa. AWF Discussion Paper, Series No. 4

³³ Gillingham, S. 1998.

perception of their wildlife resources has changed as one elder stated: *'We no longer see wildlife as our enemy but as the route to our economic well-being'*

In addition to income from sales of hunting quotas, a number of villages have already benefited substantially from special benefit sharing funds provided through TANAPA's Support for Community Initiated Project (SCIP). SCIP, initiated in 1993, stresses supporting community initiated projects. The approval of funding is at park level and TANAPA tries to ensure that the support is institutionally viable, transparent and accountable. To-date TANAPA and MBOMIPA have contributed approximately TShs. 40 million to communities in the project area³⁴. These funds have been used for community development projects for instance building a secondary school and rehabilitating primary schools and dispensaries.

However, criticisms have been leveled against SCIP. Although the income from the SCIP exceeds the revenues from hunting so far, unlike the revenue accrued from the sale of the animal quota; villages are not free to allocate the funds from SCIP as they wish. Most projects have involved repairs to buildings as opposed to natural resource projects that would promote the idea of conservation. Although it is a valuable extension tool, it has been argued that SCIP is unlikely to be long-term or self-sustaining strategy.³⁵

3.10.2 Selous Conservation Program

Game has always constituted the major source of animal protein in the communities surrounding the reserve. Under SCP the harvested wildlife meat is sold to the villagers in the project area and the revenue obtained from the sale is used in village development projects and for conservation activities (See Annex IV). In addition, JUKUMU receives approximately TShs. 2 million from the tourist hunting companies operating in the area as an incentive for conservation; this amount is distributed equally to all the village members.

3.10.3 Mechanisms to Address Age, Gender and Equity issues

Human rights and levels of participation are critical issues in CBC, that focus attention on those who are currently marginalized or denied access to social, economic and political resources. Consequently, MBOMIPA and SCP direct more effort at facilitating the participation of minority groups such as women, youth, immigrant livestock-keepers and people living in sub-villages far outside the village centers.

³⁴ Africare/Ugalla Community Conservation Project: Report of a Study Tour of MBOMIPA and SCP, July 1999.

³⁵ Walsh, M. Consultancy to assess the potential for community management of wildlife resources in the Luanda-Mkwabi Game Control Area adjacent to the South Eastern border of the RNP

Gender is one of the key variables that define access to and control over natural resources. The different ways in which women and men participate in and benefit from CBC are significantly shaped by prevailing constructions of gender, whose norms, expectations and institutional expressions constrain women's access to the social and economic, and thus political, resources of the community. Socially conferred roles and responsibilities differentially determine how women and men may contribute and benefit from community-based conservation (CBC). True measures of the effectiveness of CBC programs entail more than a measure of wildlife, trees or the number of wildlife management areas or community forest reserves established, but also the number of women, men and children whose well-being has improved as a result of improved natural resource management. CBC must be gender sensitive if it is to be equitable, sustainable and effective.

Understanding the gender dynamics is key to planning for an *equitable, effective and sustainable* community-based conservation. Project staff, whether men or women, have to be gender-aware in order that women's needs and interests are addressed and women themselves brought into the planning process. For example, gender-aware planning would be sensitive to the particular vulnerability of women to poverty and their specific economic survival strategies which will only be reflected if information is disaggregated by gender.

Mainstreaming gender issues into CBC is a major issue for MBOMIPA and SCP. Both projects have taken into consideration that wildlife utilization may also foster the development of economic differentiation as well as widen the gender gap in access to resources; and the danger that the revenue accrued from utilization of wildlife may become a subject of conflict over their control and disbursement of these resources in the future. For this reason the projects have ensured that the interests of different sections of the community are fully represented in wildlife management and utilization. Special efforts are made to explore ways in which women's participation in community wildlife management can be improved.

This early attention to gender issues is already paying off. MBOMIPA has ensured proportional representation of women during training and on the VNRC, the village NR planning and decision-making bodies. This was done to ensure that economic development and plans for new Wildlife Management Areas provide opportunities for women, and also reflect women's concerns. As a result of preliminary gender sensitization efforts, local people have also started to appreciate women as key stakeholders and decision-makers within the community and are increasingly electing women to management committees. In SCP there is a general awareness of the importance of involving both men and women in management of wildlife resources. For example, women's self-help projects are the direct and primary beneficiaries of financial support. Initially, SCP enforced a 25 percent quota representation of women on VNRC. Although this has not always been enforced, there are at least 2 women on a majority of the VNRC. The presence and number of women on the committees is usually determined by the social traditions and

religion and therefore varies between program areas. Female members of the VNRC usually take a lead in managing the finances and meat sales.

Although both projects have tried to address gender, there are some weaknesses. Criticisms have been leveled against a quota or 'counting-women' approach as rarely a substitute for identifying and addressing the gender issues associated with training representation. For example, if women and men do different tasks in the WMA, it will be far more effective to target training in each of those tasks to the men or women who will perform them. Some training may be more effective if it is 90 percent men, and other training may need to be 90 percent women. Further analysis also needs to be undertaken to investigate whether the presence of women on the VNRC automatically means that they are effectively participating in community-based decision making.

Another weakness is the paucity of reliable gendered qualitative and quantitative data. Disaggregated information and statistical data, which depicts resource allocation and ownership, and the different productive activities, performed by men and women is not available for MBOMIPA or SCP. It is also crucial to understand what CBC means for the gender division of labor and intra-household resource allocation with the establishment of WMA's, i.e., whether women are being further disadvantaged, whether their work burdens have increased, whether they are working longer days, or whether they have less access to resources and decision-making power as a result of CBC programs. Therefore, a crucial first step in ensuring gender-sensitive best practices is to document and quantify their uses more systematically, collect gender-disaggregated baseline data and include gender-specific indicators that can be tracked during project monitoring and evaluation. Sufficient recognition must be placed on how women and men use natural resources and contribute to the community in different ways; how this is influenced by their different responsibilities in the household and how this in turn affects their ability to engage in public life.

A fresh perspective is needed, which recognizes marginal groups as integral players in community-based conservation and which facilitates their participation.

4. Constraints and Opportunities

The table below summarizes the key challenges and constraint to effective CBC in Tanzania

Constraints	Possible Solutions	Opportunities
<p>4.1 Institutional</p> <ul style="list-style-type: none"> • Overall tenurial framework for integrated village common property resource regimes does not exist: <ul style="list-style-type: none"> ○ There are no comprehensive guidelines for the establishment of WMAs ○ Wildlife legislation does not support the devolution Community WMA • Jurisdiction over resource access can be confused between the different sectors of statutory governance: <ul style="list-style-type: none"> ○ Clear rights and responsibilities at the village, ward, district and national level in regard to wildlife management, do not exist ○ The technical input of sectoral agencies (land, agriculture, water, forestry and wildlife) is all backed by individual statutory powers, which are usually ambiguous. This makes CBNRM very complex, as so many parties need to cooperate. • Multiplicity of overseer authorities Administratively, several authorities have legal responsibility over Wildlife. These different authorities are specialized and disjointed which often leads to overlapping mandates, conflicting pieces of legislation and inefficiency e.g. Mining policy versus PA conservation policies • The WD does not offer compensation for people injured or killed by wildlife 	<ul style="list-style-type: none"> • To address this the Project has facilitated the establishment of the District Natural Resources Committee discussed earlier. • Devise and implement a system of transparent accountability of committee activity in relation to wildlife. • Clarify defined property regimes: who is entitled to what? • VNRC prepare guidelines for compensating villagers affected by wildlife • Strengthen integration across sectors (horizontally) and between different sectors (vertically) 	<ul style="list-style-type: none"> • Institutions at community level have evolved and indicate the capacity of community's, motivated by ownership of valuable resources, to organize themselves effectively. • Compensation schemes established at village level will not be subjected to countless claims • Existence of ready made and maturing local level organizations of management. Tanzania has institutions that reach right to the grassroots.
<p>4.2 Human Resources</p> <ul style="list-style-type: none"> • Little human resource capacity for community conservation e.g. villagers lack capacity to negotiate with the private sector for appropriate terms and conditions of operations • WD does not have the rural extension experience or capacity • Inadequate understanding /awareness of public and government officials of existing laws prohibits enforcement of regulations 	<ul style="list-style-type: none"> • Develop negotiation skills and ability to develop leases and enter into joint agreements • Form partnerships with district extension workers from the outset, are knowledgeable of the local environment and are highly valued by the communities. 	

	Constraints	Possible Solutions	Opportunities
4.3 Political	<ul style="list-style-type: none"> • Management of community property: transaction costs high as decisions are sought. • Top down planning and implementation approaches— inadequate consultations to encourage grass roots participation • Lack of transparency of various institutions • Multiplicity of strategic planning frameworks which address the same issues due to uncoordinated donor activities and priorities 	<ul style="list-style-type: none"> • Apply institutional economics to determine how CBC management can be made more efficient • Develop linkages and networking involving exchange of information and expertise between institutions • Enhance national priorities to avoid donor driven priorities in strategic planning 	<ul style="list-style-type: none"> • Intensify the coordination between wildlife authorities and villagers through dialogue.
4.4 Economic	<ul style="list-style-type: none"> • Constraints of budget and resources. Most conservation related activities are externally supported by over 90 percent of total funding • Limited benefits for affected communities. • Process of allocating market values to wildlife leads to distorted values of resources • Misappropriation of revenue • Financial disagreements and mismanagement in VNRC, and between the VNRC and VC • Flawed meat sale program • Lack of transparency in village accounting of wildlife revenue • Scrupulous private investors interested in setting up tourist camping sites within WMA without consulting district or MBOMIPA 	<ul style="list-style-type: none"> • Accord priority in financing community-based management of natural resources • Reduce distortions in pricing signals • Need for a fuller economic analyses of the different resource options to determine the market values of wildlife resources • Provide villages with information on market trends and prices • Clear definition of the jurisdiction of the VNRC and VC over revenues accrued 	<ul style="list-style-type: none"> • Consider other options: <ul style="list-style-type: none"> o raising rentals on resident hunting camps o non-consumptive options such as negotiation of land leases for tour operators wishing to access RNP
4.5 Environmental	<ul style="list-style-type: none"> • Agricultural encroachment • Some land use plans still waiting for official sanction from the District, and are difficult to enforce 	<ul style="list-style-type: none"> • Develop a simple monitoring system to measure changes in illegal wildlife activity, animal abundance and range land condition 	<ul style="list-style-type: none"> • Raised awareness of the values of wildlife (consumptive and non-consumptive utilization) land use potential provides incentive for improved management

5. Practical Lessons Learned

This assessment attempts to provide a review of the lessons and experiences from the practitioners and communities perspective. The following are some lessons garnered from practice, which may determine the success of CBC projects in Tanzania. It is by no means an exhaustive list; these are best seen as a starting premise for CBC programs not as immutable building blocks.

5.1 Building Trust Among Stakeholders – A Crucial First Step

Since wildlife is state owned in Tanzania, local communities living on the peripheries of PA, bear numerous conservation costs in the form of loss of ancestral land which is now under parks or reserves, and wildlife damage to crops, livestock and human lives. Many of these communities bordering Protected areas (PAs) in Tanzania, as is common in many parts of Africa, originally resided in or obtained crucial natural resources such as firewood, meat, or honey from the PA. These communities were evicted or re-settled during the formation of the PA without compensation and usually to unfertile land; and no longer have access to the NR, creating great resentment among the local population.

This historical background has necessitated CBC projects to carryout trust building initiatives to gain the trust and mend the rift between the wildlife agencies and communities in the project areas. Community-based natural resource management is a slow, long-term process, which involves change of attitude among local communities. It also requires a tenurial revolution, which faces the obstacles of political, legal and bureaucratic inertia. In order to establish a firm foundation for the process, sufficient time needs to be set aside at the beginning of the process (up to three years) for confidence building among the local communities and between the local community and conservation staff. Confidence building can be enhanced by selecting initial activities that are prioritized by the community itself. CBC projects should have an active and creative awareness-raising component at different levels. This should include, among other things, explanation of the wildlife policy, project objectives, and a participatory examination of the different forms of wildlife utilization at community level. As a result of these awareness-raising efforts, communities are now becoming very positive towards collaborating with the WD and TANAPA in establishing and managing WMAs in SCP and MBOMIPA.

5.2 Definition of “Community”

Communities are not necessarily clearly bounded social or geographic units, or homogeneous entities, with single or agreed interests. The process may be to identify socio-geographic units that can function and achieve consensus to undertake management of natural resources within their purview on a collective basis. Sufficient attention must be given to the diversity in the

make-up of communities so as to understand the issues of equity over access to resources and distribution of benefits. Community-based wildlife management protection of natural resources involves complex issues, and balancing the interests of a wide array of stakeholders from community-level upwards. This balancing act requires institutional innovation and careful facilitation.

5.3 Considering Gender in Community Involvement in Natural Resource Management

In general, women are better represented at the local rather than at state or national level, although they still remain a minority at all levels of government. Indeed, it has been suggested that decentralization can increase rather than decrease the number of people engaged. This has led some to view the process of decentralization of natural resource management to community level as positive for women. But decentralization does not necessarily facilitate women's participation in natural resource management. Increasing the power of local levels of government involves increasing its access to and control over local resources. Such access and control renders local government more important to local economic and political elite and interest groups who are unwilling to relinquish control.

Nor does decentralization always mean devolution of power—including the transfer of resources and decision-making power along with tasks. It may simply mean privatization, being the transfer of tasks previously performed by state agencies to the private sector. Thus, decentralization is no panacea but when it works well it can encourage greater participation of women and other marginalized groups (both electoral participation and participation in organizations of civil society) and can enhance local government responsiveness to local demands.

For CBC processes to be made more gender sensitive, a concerted approach is necessary. The key elements of such an approach are:

- An improvement of women's and other marginalized groups representation in decision-making structures because CBC is a political as well as a technical and institutional process which benefits from women's participation and from women's perspectives;
- A gender-sensitive and inclusive approach to the development of new partnerships. Gender-sensitive partnerships must recognize the different approaches that women and men often adopt in organization, negotiation and planning as a result of their socialization and experience of public life. All too frequently women are included in partnerships only at the implementation stage and remain excluded from the formulation, design and resource allocation stages of programs and projects. New forms of partnership, therefore,

need to adopt an enabling approach. This should foster (on the part of all parties involved) a commitment to developing relationships conducive to genuine participatory processes that include both women and men, and at all stages.

5.4 Security of Tenure – Devolution of Proprietorship Rights and Management Authority Over Local Natural Resources to Local Communities

The consultations and visits to CBC initiatives in SCP and MBOMIPA provides increasing evidence that communities co-existing with wildlife are well positioned and prepared to participate and benefit from the protection and management of wildlife and other natural resources. This is particularly true when these communities are supported by some security of access or tenure. A major factor of success includes the fact that both initiatives began at village level and the fact that peoples' empowerment went beyond participation to include more say in the management via increased rights and access to benefits. However, the rules and regulations surrounding land tenure are changing rapidly and many people feel their rights are insecure. For community conservation to be successful there has to be a sense of responsibility and ownership or proprietorship devolution at the community and resource user level.

5.5 The Centrality of the Political Process to Long-term CBC Success

As Tanzania embarks on the implementation of CBC nationally, it is vital to ensure that the necessary vision, legislation, regulations and conducive policy and legislative environment. As Murphree (1995) hypothesizes: *CBNRM Programs in Southern Africa have spent a lot of time and money in implementation on the ground, leaving the outcomes of the political battlefield which surrounds it largely unresolved.* It is important to make an effort at shaping the necessary policy, legislative and incentive frameworks, which will provide local communities with statutory control and decision-making power over wildlife resources. The policy and legislative review process in Tanzania will aid in removing the inconsistencies affecting resource management and conservation.

5.6 Intra- and Inter-sectoral Coordination

It is necessary for sufficient political support for CBNRM as a development strategy through out government and not just in a few sectoral agencies. No fewer than four Ministries conduct or influence activities that have a direct impact on the natural environment. Each Ministry has its own constituency and objectives, which are sometimes overlapping, or even contradictory, e.g. Minerals Act. The Vice Presidents Office and the MNR&T, have the mandate for regulation, enforcement, policy and resource management.

Given the complexities of the management of natural resources in Tanzania including the numerous players, the technical sponsorship of community-based conservation of wildlife can no longer be the exclusive purview of the Wildlife Department if its potential is to be fully developed. This interdependence is a useful foundation for the work at hand. Institutions involved in CBC must be broadened to include the insights and expertise of other technical line ministries and departments responsible for forestry, fisheries, bee keeping and lands.

5.7 Process for Community-based Involvement in NRM Should Be Simple

Practitioners in the field expressed the need for WMA guidelines, which were not complicated and cumbersome so as to facilitate the establishment and effective operation of WMAs by local communities. Baldus (1991) eloquently captures the need for simplicity when he wrote: *‘Conservation by the people has to be unsophisticated, as the people have to manage it themselves. In a communally managed area there will not be a modern abattoir, but a number of people drying or smoking meat the traditional way. Hygienic standards of meat preparation correspond to local requirements and standards. There will not be culling teams in 4x4 drive vehicles, but village hunters. Potential cash expectations are smaller but realistic. Projects are less impressive but viable’.*

WMA guidelines will bring cohesion and consistency to the diverse CBC approaches being tried out in Tanzania. There were proposals from project staff that a task force of CBC practitioners from the various Community-based Natural resource management initiatives should be established to present a forum where ideas, that could shape the future of CBC in Tanzania, could be exchanged based on practical experiences.

5.8 Promote Community Institutional Mechanisms and Capabilities for Knowledge Sharing and Resource Control

It is important that communities establish institutions for decision-making, cost and benefit sharing and interaction with other institutions. These institutions should have representative and democratically elected leadership with the authority to govern, make decisions and resolve conflicts. Moreover, they should have functioning linkages with state and district levels of government, traditional authorities and the market sector; and should possess the technical capacity to manage resources and operate successful resource-based enterprises.

5.9 Economic Potential: Diversification of Wildlife Use

The sustainability and success of a community-based approach to wildlife conservation depends largely on wildlife’s ability to compete as a form of land use by generating substantial revenues through consumptive and non-consumptive forms of utilization. Even if the villagers have

obtained legal user rights and have the organizational capacity to profit from wildlife, it means little if there is only very limited potential for them to earn income from this resource. Conservation must increasingly become part of local people's household economic base. If conservation does not pay at this level then CBC is at risk. It is crucial to demonstrate a link between conservation and alleviation of poverty, and the medium and long-term economic advantages of conservation. To ensure that conservation provides tangible benefits, then it is essential for WMAs to operate on an increasingly commercial basis, and to diversify the use of wildlife from mono-cultural practices for example trophy hunting, to include curio sales, tourist campsites, and walking safaris.

5.10 Monitoring and Evaluation: Biological Sustainability

If CBC is to be successful as an efficient instrument of natural resource management, utilization may not go beyond reproduction levels. Baldus (1991) notes that the concept of sustainable use of renewable resources is being misused as a euphemism to camouflage non-sustainable practices. Many ecologists question the issue of sustainability and whether the allocation of quotas can solely depend on aerial census. A major thrust is to develop a system of comprehensive monitoring and evaluation of resources. Reliable information on trends in wildlife population's quotas and off-take is an essential component of any long-term management plan. Assessments of wildlife resources ensure that legal-off takes are sustainable, equitable and properly regulated and controlled. Moreover, monitoring and evaluation will establish the potential for sustainable community wildlife management and provide an informed opinion whether wildlife populations are likely to recover under more effective management.

5.11 Element of Risk

Devolution of authority to manage and sustainably utilize wildlife involves a gamble on the competence and integrity of the rural communities. However, the alternative, that of putative state proprietorship is unsustainable and unrealistic in the face of shrinking wildlife habitats. The risk taken is already paying off in MBOMIPA and SCP.

5.12 Conclusion

Since the late 1970's thinking on conservation has moved towards more people-oriented strategies which aim to integrate human development needs with conservation objectives at local level. There is an increased acceptance that the future of wildlife is bleak unless it can contribute to human survival. The two fundamental tenets of CBC as a conceptual approach to conservation are empowerment at the local level and decentralization of managerial responsibility. The most fundamental incentives for proper guardianship is the right to make decisions and to be responsible for the consequences. This has led to the emergence of participatory 'hands-on' approaches, which aim at involving people in the process of wildlife management.

MBOMIPA and SCP are such efforts to foster improved conservation ethic through sharing benefits. They have forged a close link between wildlife and people, with benefits from wildlife providing the people who live alongside it with strong and direct incentives to practice sound conservation. These benefits include cash income, revenue for development projects, enhanced protein intake from increased supply of game meat, and self-esteem that comes with proprietorship and active involvement in management. The projects have incorporated CBC into their conservation strategy, and fully acknowledge that the sustainable preservation of the RNP and SGR depend largely upon the support and protection they receive from the numerous villages near their borders. However, only by linking wildlife conservation with social development and communal improvement through economic reality will the RNP and SGR ecosystems have an opportunity at lasting wildlife conservation.

Pilot CBC projects such as MBOMIPA and SCP do not offer a blue print solutions for CBC. Every village involved in a CBC initiative possess unique and often complex socioeconomic circumstances which may profoundly effect any efforts at sustainable conservation. Any practical approaches have to be tailor made according to the socio-economic context. Key conditions that seem to work well in one location may be ineffective or counter productive elsewhere. However, a good deal of commonality exists in practice between the projects. Primary realities such as the existence of the village as the prime institutional framework and the common socio-economic relationships with PAs, tend to result in broadly similar plans of action by village natural resource committees. There is evidence that different initiatives have much to learn from each other and that certain fundamental principles and processes apply. Pivotal among these is the need for community involvement to be genuinely participatory and preferably community driven.

MBOMIPA and SCP show just how linked conservation is to broader social and political factors. One vital issue is the size and ethnic diversity of the population. It is difficult to involve a majority of the community in conservation activities, and spread the benefits evenly. The lack of social homogeneity and thus the lack of social integration results in many inhabitants lacking much sense of communal membership. CBC is not inviolable; it may be corrupted or diluted. These issues pose a challenge for CBC initiatives to find ways of involving as many members of the community as possible.

The projects have been to a large extent designed and implemented by communities with a lot of assistance from project staff. External facilitation is crucial, however, a danger lies in the tendency of enthusiastic facilitators to move forward quickly and slide from facilitator to a top-down directive mode. This is no to say that they need to be passive, on the contrary, it is important for them to act as catalysts of change. However, it would suffice to say that communities have started to manage and make decisions about their natural resources. CBC in Tanzania is in its formative stages, and it may be a long an arduous effort to reform the

centralized and bureaucratic modes of management which have characterized Tanzania's wildlife policy since independence. It has been difficult to persuade the numerous skeptics of the merits of devolving effective proprietorship over wildlife to communities where it is difficult to apportion accountability.

Successful CBC is unlikely to be achieved by an emphasis on disbursing funds and linking these to measurable results, but rather through constructive dialogue, joint analysis and participatory planning. CBC is still proving itself but there is evidence that it is already alleviating hardships faced by local communities. However, while its potential contribution to rural development is large, it is not a panacea for rural development problems. MBOMIPA and SCP have successfully placed critical habitats under community management and have allowed communities who have been paying the price for living with animals, the opportunity to share some of the benefits. There is further potential for communities to receive even more significant revenues from trophy hunting and photographic tourism. In order to benefit wildlife resources in the long term it is necessary to provide incentives at the grass-roots level by driving up prices of wildlife to their true values and combining this with proprietorship.

Community-based participatory approaches to conservation such as MBOMIPA and SCP, build upon local environmental knowledge and practices and combine these with scientific knowledge and technical expertise. They draw heavily on participatory methodologies and intend to complement existing conservation practices. These projects exemplify how attempts to collate management, ownership, tenure rights and the equitable distribution of costs and benefits in wildlife resource management is a challenge. CBC offers a pragmatic approach to conservation of natural resources that are currently under threat. The learning process and challenges are far from over, but the experiences and "best practices" that have been gained are of value to other CBC initiatives.

References

- African Development Fund: Selous Game Reserve Management Project Appraisal Report United Republic of Tanzania, November 1996.
- Baldus, R. (Ed.) Community Wildlife Management around the SGR. SCP Decision Paper No 12. 1991.
- Baldus, R. Krischke, People and Wildlife Experiences from Tanzania. SCP
- H., Lyamuya, V.& Ndunguru, I. Discussion Paper No. 16. 1994.
- Barrow, E. et. al. Comparative Review and Analysis of Community Conservation in East Africa (Work in Progress)
- Barrow, E. Community Conservation Approaches and Experiences from East Africa. AWF Discussion Paper: Series No.4
- Bergin, P. & Dembe, E. Parks and People in Tanzania: An overview of the Tanzanian National Parks Community Conservation Service, 1995.
- Bikurakule, D. (ed.): MBOMIPA Report the roles of a village NRC. Report No. MPG 1 September 1998.
- Bikurakule, D. (ed.): MBOMIPA Report on seminars for village leaders & treasurers. Iringa 2-4 & 9-13 November 1998. Report No. MWR 4 February 1999.
- Bikurakule, D. & MBOMIPA Report on a workshop for village Mutabilwa, J. (ed.): NRC. Iringa Msembe 4-5 May 1998. Report No. MWR 1 September 1999.
- Gillingham, S. Conservation Attitudes of Villagers living next to the Selous Game Reserve. Tanzania Wildlife Discussion Paper NR 23.
- GTZ: Report on the Internal Evolution of the Project PN 95. 20792.2 Selous Conservation Program Tanzania, February 1998.
- Hartley, D.: "Ruaha Ecological Wildlife Management Project: the first step" (in) N. Leader-Williams et. al. (ed.): Community-based Conservation in Tanzania. IUCN Occasional Paper No. 15, 1996.

- Krischke, H. et. al.: “The development of CBC around Selous Conservation Program” (in) Leader-Williams, N. et. al. (ed.): Community-based Conservation in Tanzania. IUCN Occasional Paper No. 15, 1996.
- Masunzu, C. : Assessment of Crop damage and Application of Non lethal Deterrents for Crop Protection East of the Selous Game Reserve. (in) Siegel, L. & Baldus, R. (eds.): Tanzania Wildlife Discussion Paper NR. 24. Dar Es Salaam. 1998.
- MBOMIPA Project 2nd Quarterly Report: April-June 1998. July 1998
- Murphree, M. 1995 Optimal Principles and Pragmatic Strategies: Creating an Enabling Politico-Legal Environment for Community Based Natural Resource Management (in) Rihoy, E. The Commons without the Tragedy? Strategies for Community Based Natural Resource Management in Southern Africa, Proceedings of the Regional Natural Resources Management Program Annual Conference, Kasane, Botswana, April 3-6 1995.
- Mutabilwa, J. (ed.) et. al. :MBOMIPA Report on a study tour of Likuyu CBC Training Institute. Songea District 2-5 March 1998. Report No. MSTI March 1998.
- Mutabilwa, J. (ed.): Community based bee keeping in Northern Tanzania. Report of a study tour to Arusha & Kilimanjaro regions. 20-28 May 1998. Report No. MST 3 June 1998.
- Mutabilwa, J. (ed.): MBOMIPA Report on workshop to prepare an action plan for conservation education activities for primary schools. Iringa 19-20 April 1999. Report No. MWR 5 April 1999.
- Mutabilwa, J. Summary of Workshop procedures and implementation of Community-based wildlife Monitoring Programs
- Nduguru, I. & Hahn, R.: Reconciling human interests with conservation in the Selous Game Reserve, May 1998.
- Selous Conservation Program: Project Brief. 1997
- Selous Conservation Program: Statistical Data for wildlife quota's, supply, income and utilization. 2000
- Taylor, R. D. : The Consultancy to Assess the Potential For Community Management of Wildlife Resources in the Lunda-Mkwambi Game Control Area Adjacent to the South-Eastern Border of the Ruaha National Park, A Report to the British Development Division in Eastern Africa Overseas Development Administration, November 1995.

Ugulumu, C. & Ngowi, R. MBOMIPA Project Seminar on the Principles of keeping financial records & accounts in village government. Iringa 9-13 November 1998. Report No. MWR 3.

Walsh, M.: The Potential For Community Management Wildlife Resources in the Lunda-Mkwambi Game Control Area Bordering Ruaha National Park, Southern Tanzania, A Report to ODA, Dar Es Salaam, November 19

Appendix I. SCP CBC Wildlife Utilization Data/Hunting Results – 1990 – 2000.

Year	District	Spp	Spp	Spp	Spp	Spp	Spp	Spp	Spp	Spp	Spp
		Bfal	Wbst	Ela	Hbt	Wbk	Rdb	Cdk	Whg	Impl	Bpg
1990	Morogoro	48	96								
1991	Morogoro	45	72								
	Songea	5	-	3	-	2	1	1	3		
Total		50	72	3	-	2	1	1	3		
1992	Morogoro	4	43								
	Songea	16	-	10	-	6					
Total		20	43	10	-	6					
1993	Morogo	30	106								
	Songea	11	-	7	-	6	4				
	Tundur	6	-	2	1						
Total		47	106	9	1	6	4				
1994	Morogoro	25	118								
	Songea	18	-	12	-	8					
	Tundur	17		6	6						
Total		60	118	18	-	8					
1995	Morogoro	38	113								
	Songea	14	-	7	-	6	5				
	Tunduru	15		5	13	6	2				
	Rufiji	2									
Total		69	113	12	13	12	7				
1996	Morogoro	57	155								
	Songea	21	-	14	-	3	8	4			
	Tunduru	22	-	7	5	5	2				
	Liwale	18	-	5	4						
	Rufiji	2									
Total		120	155	26	9	8	10	4			
1997	Morogoro	1	169								
	Songea	28	-	14	3	5	3	-			
	Tunduru	17	-	6	10	12					
	Liwale	27	-	15	3						
	Rufiji	10	8	-	-	-	-	-	-	4	
Total		92	177	35	16	17	3	-	-	4	
1998	Morogoro	37	130								
	Songea	20	-	12	-	3	3	-	-	-	2
	Tunduru	24	-	5	13	7					

Year	District	Spp	Spp	Spp	Spp	Spp	Spp	Spp	Spp	Spp	Spp
		Bfal	Wbst	Ela	Hbt	Wbk	Rdb	Cdk	Whg	Impl	Bpg
	Liwale	-	-	-	-	-	-	-	-	-	-
	Rufiji	15	12	-	4	-	-	-	-	11	
Total		96	142	17	17	10	3	-	-	11	2
1999	Morogoro										
	Songea	33		5		9	2				3
	Tunduru										
	Liwale										
	Rufiji										
Total											

Appendix II. Supply Of Game Meat For Villages From 1991-2000

		Year 1991–1992				Year 1992–1993				Year 1993–1994			
District	Village	No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold	
				Dried	Fresh			Dried	Fresh			Dried	Fresh
Morogoro	Kisakistation	8	88.8		440	4	44.4		554	8	62	—	707
	Gomero	8	88.8		400	4	44.4		522	8	62	—	449
	Nyarutanga	7	77.7		400	4	44.4		480	7	54	—	246
	Sesenga	4	44.4		300	2	22.2		409	4	31	—	340
	Milengwele	7	77.7		300	3	33.3		369	4	31	—	243
	Vigolegole	10	111		500	3	33.3		393	6	46	—	591
	Mngazi	7	77.7		340	3	33.3		407	8	62	—	475
	Dakawa	7	77.7		300	4	44.4		394	8	62	—	312
	Bwakirachini	8	88.8		280	4	44.4		342	7	54	—	546
	Bonye	9	100.		430	3	33.3		415	5	38	—	473
	Mbwade	9	100		400	3	33.3		441	10	77	—	573
	Tulo	8	88.8		145	2	22.2		120	10	77	—	768
	Kongwa	8	88.8		200	-	-		-	7	54	—	401
	Mvuha	7	77.7		105	4	44.4		240	5	38	—	229
	Kiganila	-	-		-	-	-		-	8	62	—	336
	Bwilajuu	-	-		-	-	-		-	6	46	—	394
	Bwilachini	-	-		-	-	-		-	6	46	—	-
	Magogoni	3	33.3		110	2	22.2		120	5	38	—	359
	Lukulunge	7	77.7		200	2	22.2		120	6	46	—	362
	Kidunda	-	-		-	-	-		-	8	62	—	414
Total		117	65		4850	47	26		5326	136	52	—	8218
Songea	Kitanda	1	13	33.3		6	75	170.5		5	63	155.5	-

		Year 1991–1992				Year 1992–1993				Year 1993–1994			
District	Village	No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold	
				Dried	Fresh			Dried	Fresh			Dried	Fresh
	Nambecha	3	38	24.5		8	100	225		3	38	439	-
	Likuyuseka	5	62.5	174.6		9	113	573.3		8	100	157	-
	Mchomoro	5	62.5	423.3		7	88	602		8	100	1044	460
	Kilimasera	1	13	10		2	25	138		4	50	381	-
Total		15	38	665.7		32	80	1708.6		28	70	2176.5	460
Tunduru	Rahaleo									1	13	38	-
	Mbungulaji									3	38	67	-
	Kajima									-	-	-	-
	Kindamba									-	-	-	-
	Twendembele									2	25	87	-
	Hulia									3	38	221	-
Total										9	19	413	-
Liwale	Mpigamiti												
	Barikiwa												
	Chimbuko												
	Mlembwe												
	Kikulyungu												
	Kimambi												
	Mirui												
	Naujombo												
	Ndapata												
Total													
Rufiji	Ngarambe												
Total													

		Year 1991–1992				Year 1992–1993				Year 1993–1994			
District	Village	No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold	
				Dried	Fresh			Dried	Fresh			Dried	Fresh
Gross		132		665.7	4850	79		1708.6	5326	173		2589.5	8678

District	Village	Year 1994–1995				Year 1995–1996				Year 1996–1997			
		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold	
				Dried	Fresh			Dried	Fresh			Dried	Fresh
Morogoro	Kisakistation	9	69	-	660	6	46	-	475	13	100	—	838.4
	Gomero	8	61	-	405	7	57	-	586	12	92	—	617
	Nyarutanga	3	23	-	139	7	57	-	505	12	92	—	510
	Sesenga	4	30	-	-	6	46	-	625	8	61	—	322
	Milengwele	4	30	-	142	7	57	-	530	14	107	—	430
	Vigolegole	10	76	-	641	7	57	-	650	11	84	—	641.5
	Mngazi	5	38	-	178	7	57	-	583	10	76	—	326
	Dakawa	7	54	-	271	8	61	-	549	13	100	—	495
	Bwakirachini	8	61	-	253	5	38	-	320	10	76	—	435
	Bonye	7	57	-	397	11	84	-	618	13	100	—	928.4
	Mbwade	12	92	-	575	11	84	-	385	10	76	—	646.4
	Tulo	6	46	-	261	1	7	-	52	5	38	—	-
	Kongwa	7	54	-	425	1	7	-	-	7	54	—	541
	Mvuha	12	92	-	606	18	138	-	863	14	107	—	570
	Kiganila	9	69	-	437	-	-	-	-	11	84	—	303.5
	Bwilajuu	6	46	-	222	11	84	-	722	12	92	—	199.6
	Bwilachini	6	46	-	134	11	84	-	632	6	46	—	332
	Magogoni	9	69	-	383	6	46	-	348	11	84	—	544
	Lukulunge	10	76	-	661	12	92	-	967	16	123	—	885.6
	Kidunda	1	7	-	50	9	69	-	490	4	30	—	368
Total		143	55	-	6840	151	58	-	9900	212	81	—	9933.4
Songea	Kitanda	7	70	881.4	-	6	46	503	—	7	70	516	-
	Nambecha	12	120	782.9	-	5	38	394	—	18	180	969	799
	Likuyuseka	9	90	672.9	-	7	57	1380	—	8	80		1297

District	Village	Year 1994–1995				Year 1995–1996				Year 1996–1997			
		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold	
				Dried	Fresh			Dried	Fresh			Dried	Fresh
	Mchomoro	7	70	461.6	-	8	61	780	—	9	90	1143	195
	Kilimasera	3	30	515.3	-	6	46	553	—	8	80	666	-
Total		38	76	3314.1	-	32	49	3610	—	50	100	3294	2291
Tunduru	Rahaleo	7		796.8	-	5	42	1027	—	9	75	204	1835
	Mbungulaji	7		438.8	462	5	42	835	—	5	42	25	609
	Kajima	3		208.3		9	75	585	—	8	67	700	105
	Kindamba	2		196	196	7	58	798	—	8	67	841	-
	Twendembele	6		626.5		10	83	757	—	6	50	446	199
	Hulia	4		440.7	421	5	42	534.3	—	5	42	217	188
Total		29	44.6	2530.7	1079	41	57	4536.3	—	41	57	2433	2936
Liwale	Mpigamiti	-	-		-	-		-	—	5	50	562	-
	Barikiwa	-	-		-	-		-	—	3	30	422	-
	Chimbuko	-	-		-	-		-	—	2	20	207	-
	Mlembwe	-	-		-	-		-	—	1	10	91	-
	Kikulyungu	-	-		-	-		-	—	7	70	531	-
	Kimambi	-	-		-	-		-	—	5	50	500	-
	Mirui	-	-		-	-		-	—	-	-	-	-
	Naujombo	-	-		-	-		-	—	2	20	259.5	-
	Ndapata	-	-		-	-		-	—	2	20	227	-
Total		-	-		-	-		-	—	27	30	2799.5	-
Rufiji	Ngarambe	-	-	-	-	10	100	1316	—	2	20	243	-
Total						10	100	1316	—	2	20	243	—
Gross		210	-	5,844.8	7,919	234	-	9,462.3	9,900	332	-	8,769.5	15,160.4

District	Village	Year 1997–1998				Year 1998–1999				Year 1999–2000		
		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold
				Dried	Fresh			Dried	Fresh			
Morogoro	Kisakistation	11	85	67	658	11	85	424	500			
	Gomero	13	100	-	905	13	100	895	-			
	Narutanga	7	54	-	496	9	69	346	300			
	Sesenga	10	77	-	610	7	54	360	300			
	Milengwele	11	85	48	549	10	77	338	315			
	Vigolegole	10	77	65	399	10	77	280	285			
	Mngazi	9	69	66	354	9	69	300	122.25			
	Dakawa	11	85	61	438	9	69	226	200.5			
	Bwakirachini	12	92	81	532	11	85	392	300			
	Mbwade	14	108	50	661	13	100	216	300.5			
	Bonye	5	38	-	317	12	92	300	387			
	Tulo	-	-	-	-	5	38	170	100			
	Mvuha	9	69	-	709	9	69	118	1195			
	Kiganila	9	69	-	759	3	23	-	250			
	Bwilajuu	10	77	-	809	4	31	56	33			
	Bwilachini	6	46	-	524	4	31	130	60			
	Magogoni	7	54	-	520	4	31	101	110			
	Kongwa	6	46	-	464	6	46	149	100			
	Lukulunge	7	54	-	335	8	61	523	277			
	Kidunda	3	23	-	191	10	77	171.5	463.5			
Total		170	65	438	10,230	167	64	5,495.5	5,598.5			
Songea	Kitanda	8	47	356	679							
	Nambecha	10	55	937	79							

District	Village	Year 1997–1998				Year 1998–1999				Year 1999–2000			
		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold		No. of Animals	Quota percent Fullfill	Kg. Meat Sold	
				Dried	Fresh			Dried	Fresh			Dried	Fresh
	Likuyuseka	13	76	145	1,509								
	Mchomoro	11	61	1,615	-								
	Kilimasera	11	100	1,304	-								
Total		53	68	4,357	2,267								
Tunduru	Rahaleo	10	52	107	1,367								
	Mbungulaji	7	58	154	700								
	Kanjima	8	50	384	285								
	Kindamba	2	18	144	-								
	Twendembele	9	50	353	253								
	Hulia	9	56	1,161									
Total		45	47	2,303	2,605								
Liwale	Mpigamiti	10	100	385	442								
	Barikiwa	7	70	489.5	100.5								
	Chimbuko	5	50	309.75	19								
	Mlembwe	5	50	663	-								
	Kikulyungu	6	60	240	-								
	Kimambi	6	60	265	-								
	Mirui	2	20	160	-								
	Naujombo	1	10	72	-								
	Ndapata	3	30	330	-								
Total		45	50	2,914.25	561.5								
Rufiji	Ngarambe	22	62.8	485	1963								
Total		22	62.8	485	1963								
Gross		335		10,497.25	17,626.5								

Appendix III. Income Generation From Wildlife Management

District	Village	Year 1991–1992			Year 1992–1993			Year 1993–1994			Year 1994–1995		
		Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Financial Status
Morogoro	Kisakistation	132,000	-	132,000	166,200	16,000	182,200	176,700	25,000	201,700	262,350	25,000	287,350
	Gomero	120,000	-	120,000	156,700	16,000	172,700	112,200	25,000	137,200	55,800	25,000	80,800
	Nyarutanga	120,000	-	120,000	96,000	16,000	112,000	61,400	25,000	86,400	-	25,000	25,000
	Sesenga	90,000	-	90,000	61,400	16,000	77,400	85,050	25,000	110,050	57,000	25,000	82,000
	Milengwele	90,000	-	90,000	55,350	16,000	71,350	160,800	25,000	185,800	256,100	25,000	281,100
	Vigolegole	150,000	-	150,000	118,100	16,000	134,100	147,825	25,000	172,825	71,415	25,000	96,415
	Mngazi	102,000	-	102,000	122,150	16,000	138,150	118,900	25,000	143,900	108,395	25,000	133,395
	Dakawa	90,000	-	90,000	118,290	16,000	134,290	77,900	25,000	102,900	101,075	25,000	126,075
	Bwakirachini	84,000	-	84,000	68,500	16,000	84,500	161,640	25,000	186,640	158,900	25,000	183,900
	Bonye	129,000	-	129,000	124,640	16,000	140,640	143,340	25,000	168,340	229,951	25,000	254,951
	Mbwade	120,000	-	120,000	132,340	16,000	148,340	93,985	25,000	118,985	104,500	25,000	129,500
	Tulo	43,500	-	43,500	-	16,000	16,000	66,975	25,000	91,975	170,000	25,000	195,000
	Kongwa	60,000	-	60,000	-	16,000	16,000	100,300	25,000	125,300	242,455	25,000	267,455
	Mvuha	31,500	-	31,500	-	16,000	16,000	57,288	25,000	82,288	174,675	25,000	199,675
	Kiganila	-	-	-	-	16,000	16,000	59,175	25,000	84,175	88,700	25,000	113,700
	Bwilajuu	-	-	-	-	16,000	16,000	48,449	25,000	73,449	53,525	25,000	78,525
	Bwilachini	-	-	-	-	16,000	16,000	-	25,000	25,000	153,395	25,000	178,395
	Magogoni	33,000	-	33,000	-	16,000	16,000	114,700	25,000	139,700	264,550	25,000	289,550
	Lukulunge	60,000	-	60,000	-	16,000	16,000	215,700	25,000	240,700	160,200	25,000	185,200
	Kidunda	-	-	-	-	16,000	16,000	53,400	25,000	78,400	20,000	25,000	45,000
Total		1,455,000	-	1,455,000	1,219,670	320,000	1,539,670	2,055,727	500,000	2,555,727	2,732,986	500,000	3,232,986
Songea	Kitanda	10,000		10,000	51,150		51,150	43,700	250,000	293,700	352,550	498,579	851,129
	Nambecha	7,350		7,350	67,500		67,500	141,650	25,000	391,650	313,150	550,000	863,150
	Likuyuseka	52,400		52,400	172,000		172,000	155,650	25,000	405,650	269,150	694,897	964,047

District	Village	Year 1991–1992			Year 1992–1993			Year 1993–1994			Year 1994–1995		
		Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Financial Status
	Mchomoro	12,7000		127,000	180,600		180,600	153,600	25,0000	403,600	184,652	335,675	520,327
	Kilimasera	3,025		3,025	41,340		41,340	117,100	25,0000	367,100	206,100	605,600	811,700
Total		199,775		199,775	512,590		512,590	611,700	125,0000	1,861,700	1,325,602	2,684,751	4,010,353
Tunduru	Rahaleo							11,375	-	11,375	239,025	-	239,025
	Mbungulaji							20,150	-	20,150	131,625	-	131,625
	Kajima							-	-	-	62,475	-	62,475
	Kindamba							-	-	-	58,800	-	58,800
	Twendembele							26,000	-	26,000	187,936	-	187,936
	Hulia							66,150	-	66,150	132,200	-	132,200
Total								123,675	-	123,675	812,061	-	812,061
Liwale	Mpigamiti												
	Barikiwa												
	Chimbuko												
	Mlembwe												
	Kikulyungu												
	Kimambi												
	Mirui												
	Naujombo												
	Ndapata												
GrossTotal.		1,654,775	-	1,654,775	1,732,260	320,000	2,052,260	2,791,102	1,750,000	4,541,102	4,870,649	3,184,751	8,055,400

District	Village	Year 1995–1996			Year 1996–1997			Year 1997–1998			Year 1998–1999		
		Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Financial Status
Morogoro	Kisakistation	189,800	100,000	289,800	469,600	175,000	644,600	435,350	762,331	1,197,681	369,600	83,317	452,917
	Gomero	293,200	100,000	393,200	389,000	180,000	569,000	542,900	735,631	1,278,531	421,800	212,111	633,911
	Nyarutanga	201,900	100,000	301,900	321,200	32,000	353,200	223,200	620,505	852,705	258,300	125,009	383,309
	Sesenga	187,530	100,000	287,530	210,300	30,000	240,300	366,410	627,046	993,456	197,950	41,000	238,950
	Milengwele	212,175	100,000	312,175	294,035	21,000	315,035	386,950	606,215	993,165	191,300	————	191,300
	Vigolegole	260,550	100,000	360,550	428,000	125,000	553,000	278,450	858,359	1,136,809	193,750	200,000	393,750
	Mngazi	233,400	100,000	333,400	157,550	40,000	197,550	251,800	620,309	872,109	168,900	79,336	248,231
	Dakawa	219,600	100,000	319,600	244,605	45,000	289,605	299,600	547,946	847,546	150,750	80,000	230,750
	Bwakirachini	128,050	100,000	228,050	203,950	12,000	215,950	367,900	565,621	933,521	207,565	53,766	261,331
	Bonye	247,450	100,000	347,450	449,100	15,000	464,100	190,600	599,946	790,546	274,850	————	274,850
	Mbwade	153,850	100,000	253,850	258,930	45,000	303,930	427,000	644,696	1,071,696	206,500	50,000	256,500
	Tulo	15,600	100,000	115,600	-	-	-	-	515,946	515,946	81,000	————	81,000
	Kongwa	-	100,000	100,000	243,600	-	243,600	139,100	537,346	676,446	74,700	————	74,700
	Mvuha	345,375	100,000	445,375	228,040	120,000	348,040	283,700	536,591	820,291	330,200	83,360	413,560
	Kiganila	-	100,000	100,000	199,105	40,000	239,105	227,600	596,282	823,882	75,000	55000	130,000
	Bwilajuu	216,630	100,000	316,630	177,370	-	177,370	242,830	603,032	845,862	24,800	98000	122,800
	Bwilachini	189,750	100,000	289,750	83,000	-	83,000	157,200	582,521	739,721	57,000	————	57,000
	Magogoni	104,425	100,000	204,425	163,150	-	163,150	156,175	543396	699,571	63,200	97020	160,220
	Lukulunge	293,200	100,000	393,200	265,690	100,000	365,690	133,940	641,132	775,072	240,250	107244.35	347,494
	Kidunda	147,200	100,000	247,200	110,500	80,000	190,500	76,275	221,000	297,275	271,150	200,000	471,150
Total		3,639,685	200,000	5,639,685	4,896,725	1,060,000	5,956,725	5,186,980	11,965,845	17,161,825	3,858,565	1,565,158	5,423,723
Songea	Kitanda	352,550	384,704	737,254	337,750	448,254	786,004	657,200	589,204	1,246,404			
	Nambecha	157,600	305,978	463,578	805,650	356,798	1,162,448	613,700	637,548	1,251,248			
	Likuyuseka	511,990	252,538	764,528	639,605	144,866	784,471	1,058,500	386,644	1445,144			
	Mchomoro	315,040	103,327	418,367	846,990	176,126	1,023,116	1,130,600	455,986	1,586,586			
	Kilimasera	396,125	157,374	553,499	465,800	69,980	535,780	936,860	133,580	1,070,440			

District	Village	Year 1995–1996			Year 1996–1997			Year 1997–1998			Year 1998–1999		
		Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Financial Status
Total		1,733,305	1,203,921	2,937,226	3,095,795	1,196,024	4,291,819	4,396,860	2,202,962	6,599,822	—	—	—
Tunduru	Rahaleo	308,115	113,725	421,840	694,400	315,715	1,010,115	898,450	1,346,673	2,245,123	—	—	—
	Mbungulaji	253,000	56,325	309,325	421,640	508,400	930,040	300,400	883,931	1,184,331	—	—	—
	Kajima	218,275	705	218,980	553,100	403,805	956,905	390,325	644,130	1,034,455	—	—	—
	Kindamba	239,400	29,710	269,110	465,050	374,000	839,050	101,300	138,075	239,375	—	—	—
	Twendembele	227,225	45,881	273,106	367,125	326,025	617,125	315,025	440,670	755,695	—	—	—
	Hulia	297,375	30,000	327,375	283,675	447,600	731,275	813,750	982,094	1,795,844	—	—	—
Total		1,543,390	276,346	1,819,736	2,784,990	2,375,545	5,084,510	2,819,250	4,435,573	7,254,823	—	—	—
Liwale	Mpigamiti	-	-	-	45,850	25,0000	295,850	536,295	25,0000	786,295			
	Barikiwa	-	-	-	366,915	25,0000	616,915	392,175	262,670	654,845			
	Chimbuko	-	-	-	321,300	25,0000	571,300	227,325	261,230	488,555			
	Mlembwe	-	-	-	96,080	25,0000	346,080	397,000	325,750	722,750			
	Kikulyungu	-	-	-	242,000	25,0000	492,000	120,000	413,500	533,500			
	Kimambi	-	-	-	188,280	25,0000	438,280	167,475	183,662	35,1137			
	Mirui	-	-	-	-	25,0000	25,0000	80,000	25,0000	330,000			
	Naujombo	-	-	-	297,700	25,0000	54,7700	36,000	212,100	248,100			
	Ndapata	-	-	-	48,962	25,0000	298,962	102,500	281,000	383,500			
Total		-	-	-	1,607,087	225,000	3,857,087	2,058,770	2,439,912	4,498,682			
Rufiji	Ngarambe	526,450		526,450	97,300	-	577,250	782,900	722,000	1,922,650	—	—	—
Total		526,450		526,450	97,300	-	577,250	782,900	722,000	1,922,650			
Gross		7442,830	3,480,267	10,923,097	12,481,897	6,881,569	19,767,391	15,244,760	21,766,292	37,437,802	—	—	—

District	Village	Year 1997–1998			Year 1998–1999			Year 1999–2000			Year 2000–2001		
		Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Financial Status
Morogoro	Kisakistation	435,350	762,331	11197,681	369,600	83,317	452,917						
	Gomero	542,900	735,631	1,278,531	421,800	212,111	633,911						
	Nyarutanga	223,200	620,505	852,705	258,300	125,009	383,309						
	Sesenga	366,410	627,046	993,456	197,950	41,000	238,950						
	Milengwele	386,950	606,215	993,165	191,300	————	191,300						
	Vigolegole	278,450	858,359	1,136,809	193,750	200,000	393,750						
	Mngazi	251,800	620,309	872,109	168,900	79,332	248,231						
	Dakawa	299,600	547,946	847,546	150,750	80,000	230,750						
	Bwakirachini	367,900	565,621	933,521	207,565	53,766	261,331						
	Bonye	190,600	599,946	790,546	274,850	————	274,850						
	Mbwade	427,000	644,696	1,071,696	206,500	50,000	256,500						
	Tulo	-	515,946	515,946	81,000	————	81,000						
	Kongwa	139,100	537,346	676,446	74,700	————	74,700						
	Mvuha	283,700	536,591	820,291	330,200	83,360	413,560						
	Kiganila	227,600	596,282	823,882	75,000	55,000	130,000						
	Bwilajuu	242,830	603,032	845,862	24,800	98,000	122,800						
	Bwilachini	157,200	582,521	739,721	57,000	————	57,000						
	Magogoni	156,175	543,396	699,571	63,200	97,020	160,220						
	Lukulunge	133,940	641,132	775,072	240,250	107,244	347,494						
	Kidunda	76,275	221,000	297,275	271,150	200,000	471,150						
Total		5,186,980	11,965,845	17,161,823	3,858,565	1,565,158	5,423,723						

District	Village	YEAR 1997/98			YEAR 1998/99			YEAR 1999/2000			YEAR 2000/2001		
		Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Financial Status
Songea	Kitanda	657,200	589,204	1,246,404	292,100	238,750	530,850						
	Nambecha	613,700	637,548	1,251,248	563,200	635,048	1,198,248						
	Likuyuseka	1,058,500	386,644	1,445,144	386,000	387,754	773,754						
	Mchomoro	1,130,600	455,986	1,586,586	890,800	1,508,000	2,398,800						
	Kilimasera	936,860	133,580	1,070,440	539,850	97,980	637,830						
	Mterawamwai	—	—	—	125,750	20,600	146,350						
Total		4,396,860	2,202,962	6,599,822	2,797,700	2,888,132	5,685,832						
Tunduru	Rahaleo	898,450	13,466,73	2,245,123	469,375	581,063	1,050,438						
	Mbungulaji	300,400	883,931	1,184,331	597,100	50,000	647,100						
	Kajima	390,325	644,130	1,034,455	678,490	—	678,490						
	Kindamba	101,300	138,075	239,375	218,400	—	218,400						
	Twendembele	315,025	440,670	755,695	452,200	116,436	568,636						
	Hulia	813,750	982,094	1,795,844	567,400	65,519	632,919						
	Namwinyu	—	—	—	382,550	12,250	394,800						
Total		2,819,250	4,4355,73	7,254,823	3,365,515	825,268	4,190,783						
Liwale	Mpigamiti	536,295	25,0000	786,295	—	—	—						
	Barikiwa	392,175	262,670	654,845	—	—	—						
	Chimbuko	227,325	261,230	488,555	—	—	—						
	Mlembwe	397,000	325,750	722,750	—	—	—						
	Kikulyungu	120,000	413,500	533,500	—	—	—						
	Kimambi	167,475	183,662	351,137	—	—	—						
	Mirui	80,000	25,000	330,000	—	—	—						
	Naujombo	36,000	212,100	248,100	—	—	—						
	Ndapata	102,500	281,000	383,500	—	—	—						
Total		2,058,770	2,439,912	4,498,682	—	—	—						
Rufiji	Ngarambe	782,900	722,000	1,922,650	874,950	2,212,697	3,087,647						

District	Village	YEAR 1997/98			YEAR 1998/99			YEAR 1999/2000			YEAR 2000/2001		
		Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Total	Meat Sale	Other Sources	Financial Status
	Tapika	—	—	—	240,900	—	240,900						
Total		782,900	722,000	1,922,650	1,115,850	2,212,697	3,328,547						
Gross		15,244,760	21,766,292	37,437,802	11,137,630	7,491,255	18,628,883						

Appendix IV. Utilization Of Money Generated From Wildlife Management

		Year 1991–1992					Year 1992–1993					Year 1993–1994				
District	Village	Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%
Morogoro	Kisakistation	132,000	132,000				182,200	45,940	25	46,760	26	201,700	76,500	3	56,000	28
	Gomero	120,000	120,000				172,700	83,000	48	41,000	24	240,700	115,750	48	-	-
	Nyarutanga	120,000	120,000				112,000	46,005	41	24,595	22	137,200	88,600	64	-	-
	Sesenga	90,000	90,000				77,400	35,700	46	10,000	13	86,400	51,430	59	-	-
	Milengwele	90,000	90,000				71,350	32,500	45	9,000	13	110,050	60,200	55	-	-
	Vigolegole	150,000	150,000				134,100	42,509	32	10,000	7	185,800	112,300	60	-	-
	Mngazi	102,000	102,000				138,150	45,276	33	10,000	7	172,825	72,000	42	-	-
	Dakawa	90,000	90,000				134,290	65,260	49	17,000	13	143,900	99,400	69	-	-
	Bwakirachini	84,000	84,000				84,500	45,035	53	10,250	12	102,900	62,300	60	-	-
	Bonye	129,000	129,000				140,640	63,740	45	20,400	15	186,640	134,700	72	-	-
	Mbwade	120,000	120,000				148,340	75,540	51	16,800	11	168,340	85,500	51	-	-
	Tulo	43,500	43,500				16,000	16,000	100	-	-	118,985	48,000	40	-	-
	Kongwa	60,000	60,000				16,000	16,000	100	-	-	91,975	37,000	40	-	-
	Mvuha	31,500	31,500				16,000	16,000	100	-	-	125,300	90,070	72	-	-
	Kiganila	-	-				16,000	16,000	100	-	-	82,288	30,000	36	-	-
	Bwilajuu	-	-				16,000	16,000	100	-	-	84,175	42,100	50	-	-
	Bwilachini	-	-				16,000	16,000	100	-	-	73,449	23,650	32	-	-
	Magogoni	33,000	33,000				16,000	16,000	100	-	-	25,000	42,000	168	-	-
	Lukulunge	60,000	60,000				16,000	16,000	100	-	-	139,700	77,800	56	-	-
	Kidunda	-	-				16,000	16,000	100	-	-	78,400	50,300	64	-	-
Total		1,455,000	1,455,000				1,539,670	724,505	47	215,805	14	2,555,727	1,399,600	57	56,000	1
Songea	Kitanda	10,000	10,000				51,150	51,150	100		-	293,700	-	-	-	-
	Nambecha	7,350	7,350				67,500	67,500	100		-	391,650	-	-	-	-
	Likuyuseka	52,400	52,400				172,000	172,000	100		-	405,650	-	-	-	-

District	Village	Year 1991–1992					Year 1992–1993					Year 1993–1994				
		Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%
	Mchomoro	127,000	127,000				180,600	180,600	100		-	403,600	-	-	-	-
	Kilimasera	3,025	3,025				41,340	41,340	100		-	367,100	-	-	-	-
Total		199,775	199,775				512,590	512,590	100		-	1,861,700	-	-	-	-
Tunduru	Rahaleo											1,1375	-	-	-	-
	Mbungulaji											20,150	-	-	-	-
	Kajima											-	-	-	-	-
	Kindamba											-	-	-	-	-
	Twendembel											26,000	-	-	-	-
	Hulia											66,150	-	-	-	-
Total												123,675	-	-	-	-
Liwale	Mpigamiti											-	-	-	-	-
	Barikiwa											-	-	-	-	-
	Chimbuko											-	-	-	-	-
	Mlembwe											-	-	-	-	-
	Kikulyungu											-	-	-	-	-
	Kimambi											-	-	-	-	-
	Mirui											-	-	-	-	-
	Naujombo											-	-	-	-	-
	Ndapata											-	-	-	-	-
Total												-	-	-	-	-
Rufiji	Ngarambe											-	-	-	-	-
Total												-	-	-	-	-
Gross		1,654,775	1,654,775	100		0	2,052,260	1,237,095	60	215,805		4,541,102	1,399,600	55	56,000	2

District	Village	Year 1994–1995					Year 1995–1996					Year 1996–1997				
		Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%
Morogoro	Kisakistation	287,350	150,000	52	-	-	289,800	130,000	45	-	-	644,600	262,000	40	75,000	11
	Gomero	185,200	123,000	66	-	-	393,200	154,000	39	-	-	569,000	194,300	34	-	-
	Nyarutanga	80,800	135,000	75	-	-	301,900	135,000	45	-	-	353,200	159,900	3	-	-
	Sesenga	25,000	-	-	-	-	287,530	110,000	38	-	-	240,300	107,960	28	-	-
	Milengwele	82,000	52,000	63	-	-	312,175	127,600	41	-	-	315,035	149,710	31	62,500	13
	Vigolegole	281,100	156,000	56	-	-	360,550	167,000	46	-	-	553,000	142,650	26	-	-
	Mngazi	96,415	57,000	59	-	-	333,400	86,000	26	-	-	197,550	128,245	21	65,000	19
	Dakawa	133,395	97,500	72	-	-	319,600	115,000	36	-	-	289,605	133,090	31	-	-
	Bwakirachini	126,075	86,250	68	-	-	228,050	96,000	42	-	-	215,950	134,385	35	-	-
	Bonye	183,900	112,,500	61	-	-	347,450	144,000	41	-	-	464,100	136,060	30	50,000	8
	Mbwade	254,951	129000	50	-	-	253,850	102,000	40	-	-	303,930	206,640	47	20,000	4
	Tulo	129,500	100,050	77	-	-	115,600	54,000	47	-	-		-	-	-	-
	Kongwa	195,000	120,200	61	-	-	100,000	80,000	80	-	-	243,600	119,250	28	28,000	7
	Mvuha	267,455	97,800	36	-	-	445,375	135,000	30	-	-	348,040	—	-	-	-
	Kiganila	199,675	112,200	56	-	-	100,000	80,000	30	-	-	239,105	149,280	40	11,300	3
	Bwilajuu	113,700	61,300	54	-	-	316,630	98,000	31	-	-	177,370	126,500	36	-	-
	Bwilachini	78,525	41,200	52	-	-	289,750	76,500	26	-	-	83,000	51,325	20	50,000	19
	Magogoni	178,395	98,350	55	-	-	204,425	102,400	50	-	-	163,150	131,700	40	-	-
	Lukulunge	289,550	163,000	56	-	-	393,200	177,000	45	-	-	365,690	210,200	48	3,500	0.7
	Kidunda	45,000	20,000	44			247,200	67,000	27	-	-	190,500	—			
Total		3,232,986	1,912,350	56			5,639,685	2,236,500				5,956,725	2,543,195	27	365,300	4
Songea	Kitanda	851,129	534,838	63			737,254	328,400	45	-	-	786,004	386,400	49	30,000	4
	Nambecha	863,150	541,890	63	-	-	463,578	70,500	15	-	-	1,162,448	673,330	83	140,760	17
	Likuyuseka	964,047	739,290	77	-	-	764,528	327,555	43	-	-	784,471	705,150	110	100,000	15
	Mchomoro	520,327	246,200	5	-	-	418,367	205,300	-	-	-	1,023,116	1,205,730	75	-	-
	Kilimasera	811,700	654,240	80	-	-	553,499	95,625	17	-	-	535,780	351,600	68	-	-

District	Village	Year 1994–1995					Year 1995–1996					Year 1996–1997				
		Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%
Total		4,010,353	2,716,458	57	-	-	2,937,226	1,027,380	40	-	-	4,291,819	3,322,210	77	270,760	7
Tunduru	Rahaleo	239,025	125,300	52	-	-	421,840	234,000	55	-	-	1,010,115	748,900	79	61,000	6.4
	Mbungulaji	131,625	75,300	57	-	-	309,325	57,000	18	-	-	930,040	527,918	64	225,800	27
	Kajima	62,475	61,770	99	-	-	218,980	67,860	31	-	-	956,905	530,100	66	173,000	21
	Kindamba	58,800	29,090	49	-	-	269,110	77,475	29	-	-	839,050	474,000	66	318,130	44
	Twendembe	187,936	142,055	75	-	-	273,106	127,300	5	-	-	617,125	446,270	72	264,000	42
	Hulia	132,200	122,200	92	-	-	327,375	192,660	59	-	-	731,275	478,000	89	62,000	11
Total		812,061	555,715	71			1,819,736	756,295	42			5,084,510	3,205,188	73	1,103,930	25
Liwale	Mpigamiti	-	-	-	-	-	-	-	-	-	-	295,850	11,900	4	-	-
	Barikiwa	-	-	-	-	-	-	-	-	-	-	616,915	134,200	21	11,9500	19
	Chimuko	-	-	-	-	-	-	-	-	-	-	571,300	25,375	4.4	82,000	14
	Mlembwe	-	-	-	-	-	-	-	-	-	-	346,080	22,660	6.5	-	-
	Kikulyungu	-	-	-	-	-	-	-	-	-	-	492,000	62,850	12	-	-
	Kimambi	-	-	-	-	-	-	-	-	-	-	438,280	64,450	14	-	-
	Mirui	-	-	-	-	-	-	-	-	-	-	25,0000	-	-	-	-
	Naujombo	-	-	-	-	-	-	-	-	-	-	547,700	56,300	0.1	-	-
	Ndapata	-	-	-	-	-	-	-	-	-	-	298,962	26,280	8.7	-	-
Total		-	-	-	-	-	-	-	-	-	-	3,857,087	404,015	8	201,500	5
Rufiji	Ngarambe		-	-	-	-	526,450	46,500	9	-	-	577,250	159,500	28	-	-
Total			-	-	-	-	526,450	46,500	9	-	-	577,250	159,500	28	-	-
Gross		8,055,400	5,184,523	64	-	-	10,923,097	4,066,675	37	-	-	19,767,391	9,634,108	49	1,941,490	9

District	Village	Year 1997–1998					Year 1998–1999					Year 1999–2000				
		Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%
Morogoro	Kisakistation	1,197,681	568,192	47	86,000	7										
	Gomero	1,278,531	531,742	41	230,000	18										
	Nyarutanga	852,705	389,042	45	53,000	6										
	Sesenga	993,456	471,052	57	114,200	11										
	Milengwele	993,165	455,792	46	150,000	15										
	Vigolegole	1,136,809	417,292	37	80,000	7										
	Mngazi	872,109	356,442	41	114,200	13										
	Dakawa	847,546	418,442	49	100,000	12										
	Bwakirachini	933,521	506,742	54	80000	8.5										
	Bonye	790,546	359,442	45	50000	6										
	Mbwade	1,071,696	520,842	48.5	125,000	12										
	Tulo	515,946	218,842	42	-	-										
	Kongwa	676,446	343,942	51	14,000	2										
	Mvuha	820,291	452,542	55	50,000	6										
	Kiganila	823,882	337,992	41	108,450	13										
	Bwilajuu	845,862	390,542	46	71,130	8										
	Bwilachini	739,721	308,642	42	67,400	9										
	Magogoni	699,571	375,017	54	-	-										
	Lukulunge	775,072	349,782	45	43,000	5.5										
	Kidunda	297,275	-	-	-	-										
Total		17,161,825	7,772,323	45	1,536,380	8										
Songea	Kitanda	1,246,404	447,600	40	130,000	10										
	Nambecha	1,251,248	511,080	41	-	-										
	Likuyu	1,445,144	1,203,390	83	-	-										
	Mchomoro	1586,586	935,650	59	158,000	10										
	Kilimasera	1,070,440	484,620	44	522,000	48										

District	Village	Year 1997–1998					Year 1998–1999					Year 1999–2000				
		Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%	Total Income	Mgt/ Protection	%	Village Dev't	%
Total		6,599,822	3,582,340	53	810,000	14										
Tunduru	Rahaleo	2,245,123	417,515	18	409,600	18.2										
	Mbungulaji	1,184,331	338,740	26	153,000	13										
	Kajima	1,034,455	296,340	46	219,800	29										
	Kindamba	239,375	54,100	23	43,000	18										
	Twendembe	755,695	249,824	33	101,300	13										
	Hulia	1,795,844	518,875	29	414,400	23										
Total		7,254,823	1,875,394	29	1,341,100	19										
Liwale	Mpigamiti	786,295	-	-	65,000	8										
	Barikiwa	654,845	-	-	-	-										
	Chimbuko	488,555	50,000	10	-	-										
	Mlembwe	722,750	142,000	20	-	-										
	Kikulyungu	533,500	-	-	-	-										
	Kimambi	351,137	70,000	20	15,000	4										
	Mirui	330,000	-	-	86,000	26										
	Naujombo	248,100	-	-	76,000	31										
	Ndapata	383,500	-	-	-	-										
Total		4,498,682	262,000	6	242,000	5										
Rufiji	Ngarambe	1,922,650	100,450	5	414,000	22										
Total		1,922,650	100,450	5	414,000	22										
Gross		37,437,802	13,592,507	36	4,343,480	12										

Appendix IV. Activities In SDC Performed By Other Players

Mara Farmers Initiative Project (MaraFIP)

Project Components

Crop production	<ul style="list-style-type: none"> multiplication of plant material (coffee, cassava, beans) integrated pest management farming systems improvement
Live stock; for small holders	<ul style="list-style-type: none"> rehabilitation of dips and construction of crushes animal health services (vaccinations, tick control)
Rain water harvesting and irrigation	<ul style="list-style-type: none"> dam construction for irrigation; human and animal use dams for specific project use (rice cultivation)
Village wells (groundwater)	<ul style="list-style-type: none"> hand dug shallow wells machine drilled bore holes
Health	<ul style="list-style-type: none"> combat water related diseases development of village health plans provision of dispensaries and medical stocks health education
Farm input supply	<ul style="list-style-type: none"> implemented by the Diocese of Musoma
Farm to market road improvement	
Capacity building	<ul style="list-style-type: none"> local government strengthening; focus on planning office user group formation for community level development savings and credit societies Entire project is managed through the relevant District Offices and Officers

Health, Sanitation & Water (HESAWA)

Project Components

Human resources development	training (Village, Ward & District levels)
Promotion (District Promotion Team)	5 individuals (2 Community Development; 2 Health; 1 Education; 1 District Promotional Advisor (Administrator)) popularization and public relations
Meetings	District Action Team (DC, DED, key departmental heads) Information collection from all levels
Construction	shallow wells; over 230 in 12 wards traditional water source improvement – 120 improved water harvesting tanks; latrines; 1400 for households, 53 for primary schools

Project initiated using Robanda as a pilot village. Project completion date June 2000. Funding disbursement from SIDA and the Government of Tanzania. 12 out of 14 wards were covered by this initiative.

Appendix V. Projects Supported By SENAPA/CCS IN SDC

Project	Status
1. Soitsabu Village: Construction of dispensary & Medical Assistant's accommodation	Completed
2. Olsipiri Village: Construction of Teachers accommodation	Completed
3. Natta Village: Construction of primary school classroom & teachers accommodation	Completed
4. Robanda Village: Construction of 3 primary school classrooms & staff accommodation	Completed
5. Robanda Village: Funding provided for campsite development	Completed
6. Procurement and installation of 11 Tawira pumps	
Kibaso Village-2	TARGET
Kitowesa Village-2	20 Pumps
Masaininga-2	Installed
Mangucha-2	
Kagonga-3	
7. Nyambuni Village: Construction of 4 primary school classrooms & staff accommodation	Completed
8. Natta Village: Renovation of dispensary & women's ward	Completed

- | | |
|--|--------------------|
| 9. Ololosokwani Village: Construction of primary school classroom &
staff accommodation | Completed |
| 10. Demarcation of area from where thatching and quarry materials collected | Completed |
| 11. Training of VGS from villages neighboring SENAPA | In Progress |

Source: Tibanyenda & Mwanauta, 1996

References

- Chausi, E. B. (1995). "The need for a CBC Policy in Tanzania, with special reference to Ngorongoro Conservation Area" . In Rihoy E. (1995). The commons without the tragedy: Strategies for CBNRM in Southern Africa. SADC, Wildlife Technical Coordination Unit (SADC- WTCU), Lilongwe Malawi.
- FZS & SRCP (1998) Proceedings of Makao proposed Wildlife Management Area. Stakeholders workshop held at Mwanhuzi, Meatu District, Shinyanga Region–Tanzania. June 1998 (Unpublished)
- FZS & SENAPA (1998) A program to establish Makao Wildlife Management Area. December 1998 (Unpublished)
- FZS & SRCP (1999) Proceedings on workshop results of the stakeholders Meeting for Establishment of Eramatare and Lake Natron WMAs in Ngorongoro District. held at Waso, Loliondo, Ngorongoro District. May 1999 (Unpublished)
- FZS & SRCP (1999) Workshop results of the stakeholders meeting for establishment of IKONA wildlife management area. A Program to establish IKONA Wildlife Management Area. May 1999 (Unpublished)
- Kisamo, E (1998). "Mpango wa Elimu ya Uhifadhi" In "Habari za Elimu ya Hifadhi Serengeti" No. 3, January 98. TANAPA Leader-Williams, N; Kayera J. A. and Overton, G. L. (Eds) (1996). Community Based Conservation in Tanzania. IUCN Gland, Switzerland and Cambridge, United Kingdom ix + 226 pp.
- Maige, M. K. S. (1995). "Community-based conservation around the Serengeti: the SRCS approach." In Rihoy, E. (1995). The commons without the tragedy: strategies for CBNRM in Southern Africa. SADC-WTCU, Lilongwe, Malawi.
- Melamari, L. (1995). "The need for a community–based conservation Policy in Tanzania: TANAPA's perspective" In Rihoy, E (1995), The commons without the tragedy: strategies for CBNRM in Southern Africa. SADC WTCU, Lilongwe .
- Nkwabi, C. & Ole Kaigil, A. (undated) A report of Participatory Rural Appraisal. Fieldwork in Makao. (unpublished)
- ODA/International Institute for Environment and Development (1994) Whose Eden? An Overview of Community Approaches to Wildlife Management.

- Rihoy , E. (1995). The commons without the Tragedy. Strategies for Community Based Natural Resources Management in Southern Africa. Proceedings of the Regional Natural Resource Management Program Annual Conference. SADC, Wildlife Technical Coordination Unit, Lilongwe, Malawi
- SRCP (1999). The Wildlife Management Area Establishment (Robanda, Mbiso/Natta, Nyakitono/Makundusi and Nyichoka Villages Mugumu District, Mara Region–Tanzania. January 1999 Unpublished)
- Talbot, K. & Khadka, S (1994). Handing it over. Analysis of the legal and policy framework of Community Forestry in Nepal . Washington, DC. World Resource Institute.
- Tanzania Ministry of Natural Resources and Tourism. Ngorongoro Conservation Area Authority. Ngorongoro Conservation Area. General Management Plan. May 1996
- Thomsen, J. & E. Kiwango (1999)–Inter-sectoral coordination of Community Based Conservation: Analysis of Natural Resources Policies in Tanzania, EPIQ Tanzania, Decision Paper No. 1
- Tibanyenda & Mwanauta (1996). Report on the field trip to TANAPA CCS programs in the Northern part. TANAPA (Unpublished)
- Wild Coast Sun (1999). “Conservation and Development: Taking CBNRM into the 21st Century” Background paper to the 3rd Biennial SADC NRM Conference 1999. 25- 29 October 1999. (Unpublished)