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COMMUNITY BASED NATURAL RESOURCE MANAGEMENT: STOCKTAKING ASSESSMENT

MALAWI PROFILE



OCTOBER 2010

This publication was produced for review by the United States Agency for International Development. It was prepared by DAI in collaboration with World Wildlife Fund, Inc. (WWF).

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Program Title:	Capitalizing Knowledge, Connecting Communities Program (CK2C)
Sponsoring USAID Office:	USAID/Office of Acquisition and Assistance
Contract Number:	EPP-I-00-06-00021-00/01
Contractor:	DAI
Date of Publication:	October 2010
Author:	Daulos D.C. Mauambeta and Robert P.G. Kafakoma, Malawi CBNRM Forum, DAI
Collaborating Partner:	COPASSA project implemented by World Wildlife Fund, Inc. (WWF); Associate Cooperative Agreement Number: EPP-A-00-00004-00; Leader with Associate Award Number:LAG-A-00-99-00048-00

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CONTENTS

- ACKNOWLEDGMENTS.....V**
- ABBREVIATIONSVII**
- INTRODUCTION 1**
- OBJECTIVES OF THE STUDY 1**
- APPROACH AND METHODOLOGY 1**
- LIMITATIONS OF THE STUDY 1**
- LAYOUT OF THE REPORT 1**

- 1.0 HISTORY OF CBNRM IN MALAWI 3**
- 1.1 PRE-CBNRM STATUS 3**
- 1.2 MAJOR PROGRAMMATIC MILESTONES..... 13**
- 1.3 NATIONAL VISION AND OBJECTIVES OF CBNRM 16**
- 1.4 CBNRM STAKEHOLDERS AND THEIR ROLES 18**
- 1.5 CBNRM PROGRAMS, INSTITUTIONS AND LEVELS OF FUNDING 19**

- 2.0 ENABLING CONDITIONS AND SCALE OF CBNRM IN MALAWI 23**
- 2.1 BILATERAL AGREEMENTS AND PROGRAMS WITH CBNRM APPROACHES..... 23**
- 2.2 CONDUCIVE POLICY AND LEGAL FRAMEWORK..... 24**
- 2.3 RESTORATION OF RIGHTS TO MANAGE NATURAL RESOURCES 25**
- 2.4 COMMUNITY WILLINGNESS..... 25**
- 2.5 AWARENESS OF ENVIRONMENTAL PROBLEMS 25**

- 3.0 CBNRM INITIATIVES IN MALAWI..... 27**
- 3.1. CBNRM IN THE FORESTRY SECTOR..... 28**
- 3.2 CBNRM IN THE FISHERIES SECTOR 31**
- 3.3 CBNRM IN THE WILDLIFE AND TOURISM SECTOR..... 34**
- 3.4 CBNRM ACTIVITIES IN THE NATURAL PLANT PRODUCT SECTOR 36**
- 3.5 CBNRM ACTIVITIES RELATED TO GRAZING AREAS..... 37**
- 3.6 CBNRM ACTIVITIES RELATED TO WATER MANAGEMENT 38**
- 3.7 CBNRM ACTIVITIES RELATED TO AGRICULTURE..... 39**

4.0	IMPACTS OF CBNRM PROGRAMS IN MALAWI	41
4.1	IMPACTS RELATED TO CHANGES IN RIGHTS TO BENEFIT FROM NATURAL RESOURCES..	44
4.2	CHANGES TO THE NATURAL RESOURCE BASE – STATUS AND TRENDS	47
4.3	CHANGES IN GOVERNANCE, RURAL REPRESENTATION AND PARTICIPATION.....	54
4.4	CHANGES IN BENEFITS	59
4.5	NEGATIVE IMPACTS OF CBNRM	65
5.0	LESSONS LEARNED.....	67
5.1	POLICY AND LEGAL FRAMEWORKS	67
5.2	NATURAL RESOURCE MANAGEMENT AND MONITORING	67
5.3	NATURAL RESOURCE GOVERNANCE	67
5.4	GENERATION AND MANAGEMENT OF BENEFITS	68
6.0	CHALLENGES AND OPPORTUNITIES FOR SCALING UP.....	69
6.1	CHALLENGES AND BARRIERS FOR CBNRM	69
6.2	OPPORTUNITIES FOR SCALING UP CBNRM	71
7.0	RECOMMENDATIONS.....	73
7.1	HARMONIZATION OF SECTORAL POLICIES	73
7.2	SCALING UP CBNRM EFFORTS	73
7.3	INCREASE VALUE ADDITION IN CBNRM	73
7.4	PROMOTE SUSTAINABLE CBNRM INITIATIVES.....	73
7.5	BUILD CAPACITY IN CBNRM	73
7.6	PROVIDE INCENTIVES AND RECOGNIZE STRONG TRADITIONAL LEADERSHIP	74
7.7	ESTABLISH A NATIONAL INSTITUTION FOR CBNRM COORDINATION AND IMPLEMENTATION	74
7.8	DISTRICT LEVEL BY-LAWS.....	74
7.9	DATA COLLECTION AND MONITORING AND EVALUATION SYSTEMS FOR CBNRM PROGRAMS	74
8.0	CONCLUSION.....	75
9.0	REFERENCES.....	77
ANNEX 1	CBNRM PROFILE QUESTIONNAIRE FOR MALAWI	81
ANNEX 2	INDIVIDUALS CONTACTED.....	85
ANNEX 3	INFORMATION ON NATIONAL PARKS, GAME RESERVES AND FOREST RESERVES.....	87

TABLES AND FIGURES

TABLE

1	Evolution of USAID CBNRM Programs in Southern Africa	12
2	Key Players and Their Roles in CBNRM in Malawi.....	18
3	CBNRM Programs, Institutions and Levels of Funding	20
4	IFMSLP Sites	29
5	Total Number of BVCs in Malawi	32
6	Total Number of VNRCs and CBOs around Protected Areas and other Sites in Malawi	35
7	Summary of CBNRM Impacts in Malawi	42
8	BERDO Tree Planting and Management by Gender (January 2009 - June 2010) ...	52
9	Beekeeping Clubs of the Sapitwa Beekeepers Association.....	53
10	SABA Membership by Zone since 2002	55
11	SABA Membership by Gender	56
12	BERDO Membership as of June 2010	57
13	Communities Involved in the Rivirivi Watershed Management Initiative, Balaka	57
14	CBOs around Majete Wildlife Reserve by Gender.....	58
15	Fish Catches and Income around Lake Chilwa, April 2009 to April 2010	61

FIGURE

1	Population Growth in Malawi (1907-2008)	5
2	National and Kasungu Elephant Populations in 1979 and 1995	5
3	Populations of Key Wildlife Species in Nyika National Park, 1992 and 2002.....	6
4	Animal Population Trends in Lengwe National Park since 1967	7
5	Forest Cover Loss in Malawi (1972 to 1990 in square kilometers)	8
6	Malawi Land Cover, 1979 and 1999	8
7	Protected Areas of Malawi	15
8	Location of Selected CBNRM Sites	28
9	Malawi Forest Area (%) in 1998	29
10	Livestock and Poultry Numbers in Malawi, 2007	37
11	Wildlife Statistics in Majete Wildlife Reserve (2003 to 2009)	49
12	Fish Catches in Lake Chiuta and Lake Chilwa, 2010.....	54
13	SABA Membership Growth since 2002	56
14	SABA Membership by Club and Gender.....	57
15	SABA Membership Income	60
16	Number of Visitors and Income for African Parks (Majete) Limited.....	61
17	CBO Income, Majete Wildlife Reserve 2007-2009.....	62

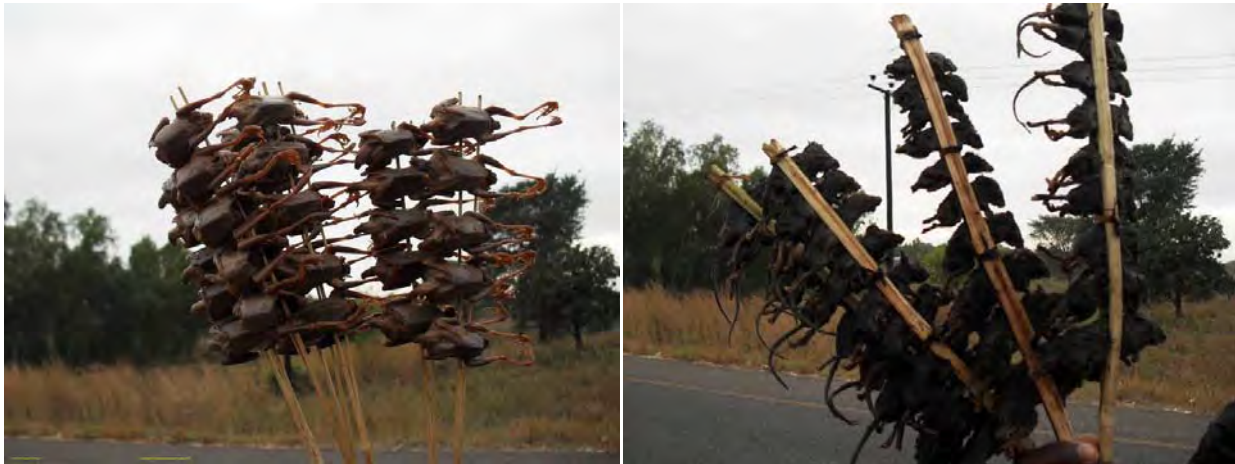
ACKNOWLEDGMENTS

The authors would like to extend their sincere thanks to all the people and organizations who took their precious time to respond to the lengthy questionnaire used in this study. Many thanks also go to the Malawi CBNRM Steering Committee for recognizing our potential and giving us a chance to carry out the study. The CBNRM Steering Committee also deserves many thanks for reviewing the study approach and methodology as well as guiding the team during the study period. The Malawi CBNRM Forum members deserve a big thank you for providing comments and accepting the study as a true reflection of the current state of CBNRM in Malawi.

It is also very befitting to thank COPASSA and CK2C for facilitating the study in the country and the region, and USAID for providing financial support. CURE played a very big role in coordinating and handling the logistical arrangements for the study and therefore deserves a big thank you. We hope that the study report has raised issues that are relevant to scaling up CBNRM in Malawi.

DISCLAIMER

Views expressed in this report are those of the authors and do not necessarily represent the views of the Malawi CBNRM Forum, Development Alternatives Inc. (DAI), nor the United States Agency for International Development (USAID)



Otherwise, enjoy the CBNRM Snacks Provided in the Report

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25th August 2010

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ABBREVIATIONS

BAM	Beekeepers Association of Malawi
BERDO	Bwanje Environmental and Rural Development Organization
BVC	Beach Village Committee
CBNRM	Community-Based Natural Resource Management
CBO	Community-Based Organization
CK2C	Capitalizing Knowledge, Connecting Communities
COMPASS	Community Partnerships for Sustainable Resource Management
COPASSA	Conservation Partnerships for Sustainability in Southern Africa
CURE	Coordination Union for Rehabilitation of the Environment
DANIDA	Danish International Development Agency
DNPW	Department of National Parks and Wildlife
EAD	Environmental Affairs Department
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GoM	Government of Malawi
GTZ	Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IFMSLP	Improved Forest Management for Sustainable Livelihoods Program
IGA	Income-Generating Activity
IGPWP	Income Generating Public Works Program
M&E	Monitoring and Evaluation
MEET	Malawi Environment Endowment Trust
MGDS	Malawi Growth and Development Strategy
MK	Malawian Kwacha
MMCT	Mount Mulanje Conservation Trust
MOMS	Management Oriented Monitoring Systems

NAPA	National Adaptation Program of Action
NGO	Non-Governmental Organization
NORAD	Norwegian Agency for Development Cooperation
NRM	Natural Resources Management
NTFP	Non Timber Forest Product
PA	Protected Area
SABA	Sapitwa Beekeepers Association
SADC	Southern African Development Community
SMIF	Sustainable Management of Indigenous Forests
UNDP	United Nations Development Program
US	United States
USAID	United States Agency for International Development
VDC	Village Development Committee
VFA	Village Forest Area
VNRC	Village Natural Resources Committee
VNRMC	Village Natural Resources Management Committee
WESM	Wildlife and Environmental Society of Malawi
WWF	World Wide Fund for Nature

INTRODUCTION

OBJECTIVES OF THE STUDY

In October 2008, the United States Agency for International Development (USAID) awarded a cooperative agreement to the World Wide Fund for Nature (WWF) through the Leader with Associates funding mechanism for implementation of the Conservation Partnerships for Sustainability in Southern Africa (COPASSA) project. The main function of the project is to promote community-based natural resource management (CBNRM) as an appropriate conservation strategy by strengthening networks of CBNRM service providers across southern Africa. As a way of demonstrating the potential of CBNRM in the region, the Capitalizing Knowledge, Connecting Communities (CK2C) project is collaborating with WWF and its COPASSA partners in conducting a CBNRM stocktaking assessment to generate country CBNRM profiles for 5 Southern African Development Community (SADC) countries that are implementing CBNRM programs. The country-specific stocktaking assessments will be consolidated to produce a regional analysis of CBNRM impacts, enabling conditions, strategies and threats. The consolidated assessment also intends to provide a comparative analysis of experiences across the sub-region to determine if there are universal principles for establishing and strengthening CBNRM.

APPROACH AND METHODOLOGY

The current study comprised a desktop review of various relevant documents, stakeholder consultations, and discussions with the National CBNRM Forum on the terms of reference, a study checklist, and the draft report. A number of documents were reviewed during the study to identify the experiences, lessons, challenges, threats, and opportunities for CBNRM in Malawi. In addition to the literature review, selected CBNRM sites in the fisheries, forestry, water, and wildlife sectors were visited and interviews with various stakeholders were conducted. The terms of reference, questionnaire³, and checklist for the study were discussed during a National CBNRM Forum steering committee meeting and a draft report was presented to the National CBNRM Forum for their comments before the final version was produced.

LIMITATIONS OF THE STUDY

The study was limited by three factors. Time allocated to the study was limited; consequently, the consultants were not able to visit all of the many areas that should have been visited for data collection. Second, many respondents complained that the questionnaire was too long and complicated like an examination paper! Finally, it was difficult to find data at most sites because most community-based organizations (CBOs) do not keep good records.

LAYOUT OF THE REPORT

The report has seven major sections. The first section of the report covers the history of CBNRM in Malawi; this is followed by sections on enabling conditions and the scale of CBNRM in Malawi. The

³ Please see Annex 1 for the questionnaire employed and Annex 2 for a list of stakeholders contacted for the stocktaking assessment.

fourth section examines the impacts of CBNRM in Malawi and the fifth section addresses lessons learned. The last two sections cover challenges and opportunities in CBNRM and recommendations, respectively.

1.0 HISTORY OF CBNRM IN MALAWI

1.1 PRE-CBNRM STATUS

1.1.1 PRE-COLONIAL PERIOD

During the pre-colonial period there were important aspects that characterized access to, and control of natural resources (Nhantumbo et. al, 2003a). During this period, access to natural resources was either regulated by traditional laws or unregulated, in which case open access regimes prevailed. The first settlers in Malawi survived on gathering natural resources for their survival and livelihoods. Land and natural resources belonged to the people through traditional chiefs or village headmen who controlled and allocated land to members of the group; once allocated a piece of land, the member acquired access rights to the natural resources.

According to Inkosi Ya Makosi Mbelwa IV (Mauambeta and Chadza, 1998; Moyo and Epulani, 2002), before colonialism, traditional leaders were the custodians of natural resources. Every resource in the village land was looked after by the traditional leaders (this was before we had political leaders). Traditional leaders used their own cultural norms to care for the natural resources and everything decreed by the traditional leaders was respected. When people wanted to cut down trees they had to get permission from the Chief. Similarly, if villagers wanted to go hunting they had to get permission from the traditional leaders. Certain animals and trees were spared due to specific reasons. All of these practices assisted in conserving natural resources. Overall, people had incentives for conserving natural resources as they provided food, medicine, construction materials, and other products.

As such, unless there was a specific reason to cut a tree, the traditional leaders provided permission and followed certain regulatory and control mechanisms such as the following two examples. (1) During hunting, special norms were observed and all game that was killed was heaped together and shared amongst the entire village. (2) Bush fires were controlled: people realized that once a fire is set, normal life would be disrupted because fire destroyed construction material and medicinal plants. Consequently, fire was used sparingly to regulate hunting and ensure that people had enough resources to harvest from the forests. For example, nobody would set a fire until all the members of the community had cut grass for thatching their houses. Any offenders were punished severely. Moreover, there was nothing like selling fuelwood during this period as everyone saw the benefits of natural resources.

1.1.2 COLONIAL AND POST-COLONIAL ERA

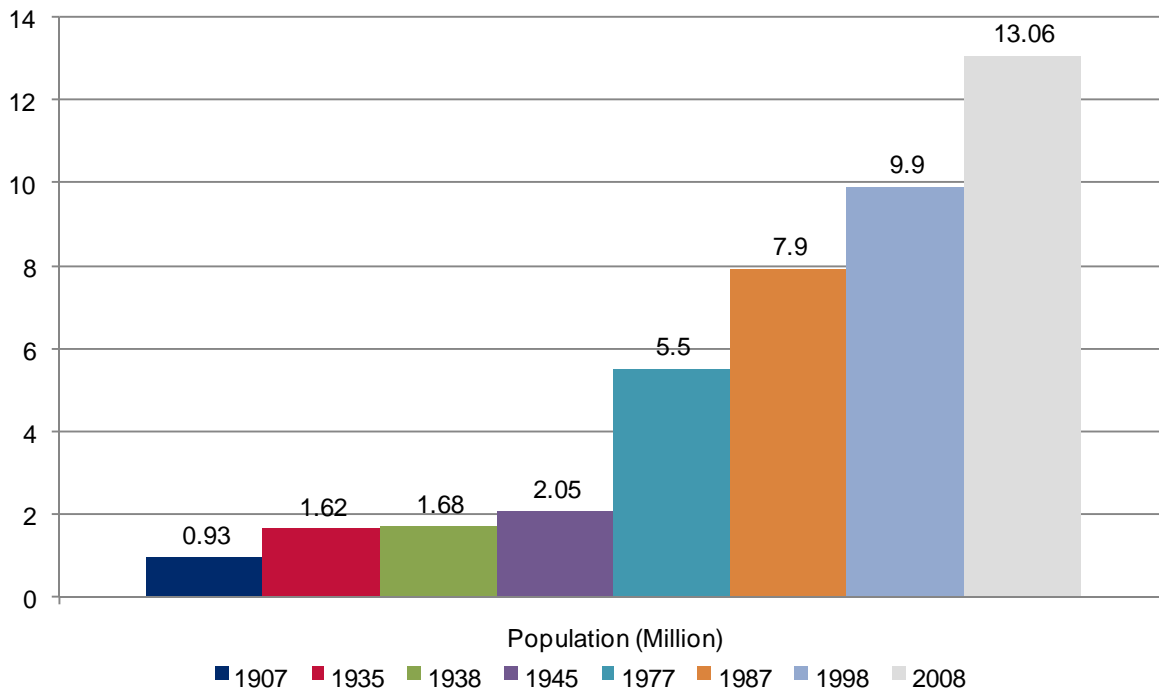
From the late 1800s to 1964 when the country was colonized, and from 1964 to the early 1980s, there was a process of exclusion and alienation of the local people from their natural resources such as forests, land, water, wildlife, and fisheries (Kafakoma, 1997; Anton, 2005), especially in public protected areas (PAs) such as forest reserves, national parks, wildlife reserves, and lakes. Government, through various sector ministries and departments, was responsible for managing those resources. Institutions and systems of natural resource management were changed to suit the interests of the colonialists. However, traditional

Chiefs played an important role in managing resources found on customary land (Mauambeta and Chadza, 1998; Senior Chief Chapananga, Senior Chief Mabuka, Paramount Mkhumba, pers. comms.).

During this period, a centrally controlled system of natural resource management was put in place whereby the government was responsible for defining the way the resources were managed with limited or no involvement of the people who directly benefitted from them. Several people were relocated from areas that were earmarked for gazettelement into forestry reserves, game reserves, and national parks. For example the creation of Nyika National Park and Vwaza Game Reserve in the 1960s resulted in the expulsion of human populations resident in the park areas (particularly the Phoka, a group of hunter-gatherers) to areas that were considered marginal by the resettled people. These changes had serious implications for the local people with respect to access rights and ownership of natural resources. The resettlement of people caused much conflict between the government workers in the PAs and surrounding communities, resulting in high rates of deforestation, encroachment, over fishing and mismanagement of water resources and facilities (ARD-BioFor IQC Consortium, 2004). Various efforts by the government and donors, during this period, to reverse the high rate of natural resource degradation in the country yielded limited results. The impact of such policies has been the decline of resources in almost all of the sectors.

It should also be brought to the attention of the reader that such a decline in natural resources could be partially attributed to the high population growth that Malawi has seen over the years. The 2008 Population and Housing Census indicated that the total population of Malawi was 13.06 million in 2008, an increase of 32% from that of 1998. This increase represents a 2.8% annual growth rate during the period. Malawi's population was only 0.93 million in 1907, 2.05 million in 1945 (Nthara, 1949), and 5.5 million in 1997. Similarly, the population density grew from 85 people per sq. km in 1978 to 105 people per sq. km in 1998 and then increased further to 159 people per sq. km in 2008 (Government of Malawi, 2008a). In general, population growth increases pressure on natural resources (see Figure 1 below).

FIGURE 1: POPULATION GROWTH IN MALAWI (1907-2008)

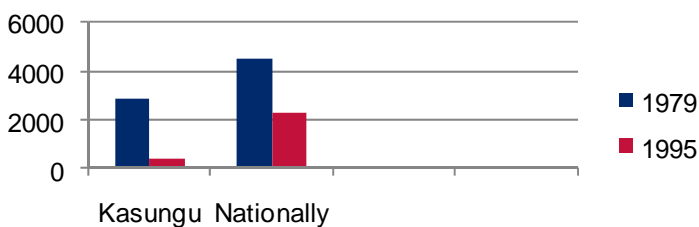


Sources: Nthara (1949), National Statistical Office (1977, 1988, 1998, 2008)

1.1.2.1 Trends in Wildlife Resources

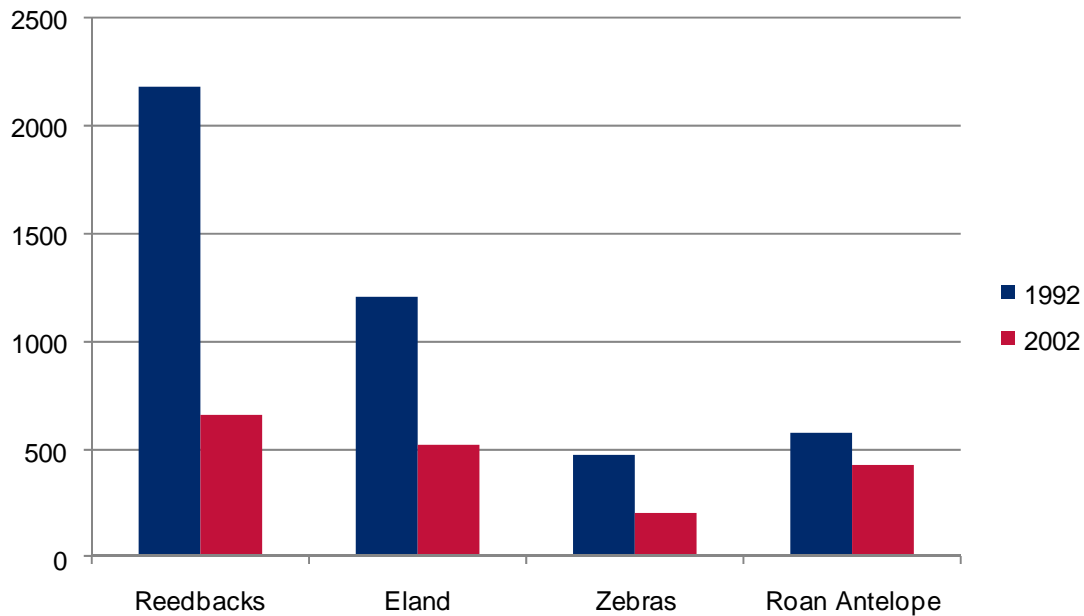
In the wildlife sector, populations of wildlife and game, especially elephants and other large mammals, declined due to encroachment and poaching. Nationally, animal populations in protected areas have declined over the years. An indicator species, Elephant, for Kasungu National Park declined from 2,853 in 1979 to 391 in 1995, and national declined by 50% from 4,500 in 1979 to 2,250 in 1995 (see Figure 2 below). Present data is currently not available, but could be much lower.

FIGURE 2: NATIONAL AND KASUNGU ELEPHANT POPULATIONS IN 1979 AND 1995



In Nyika National Park, animal populations for key species also declined by over 50% between 1992 and 2002 as shown in Figure 3 below.

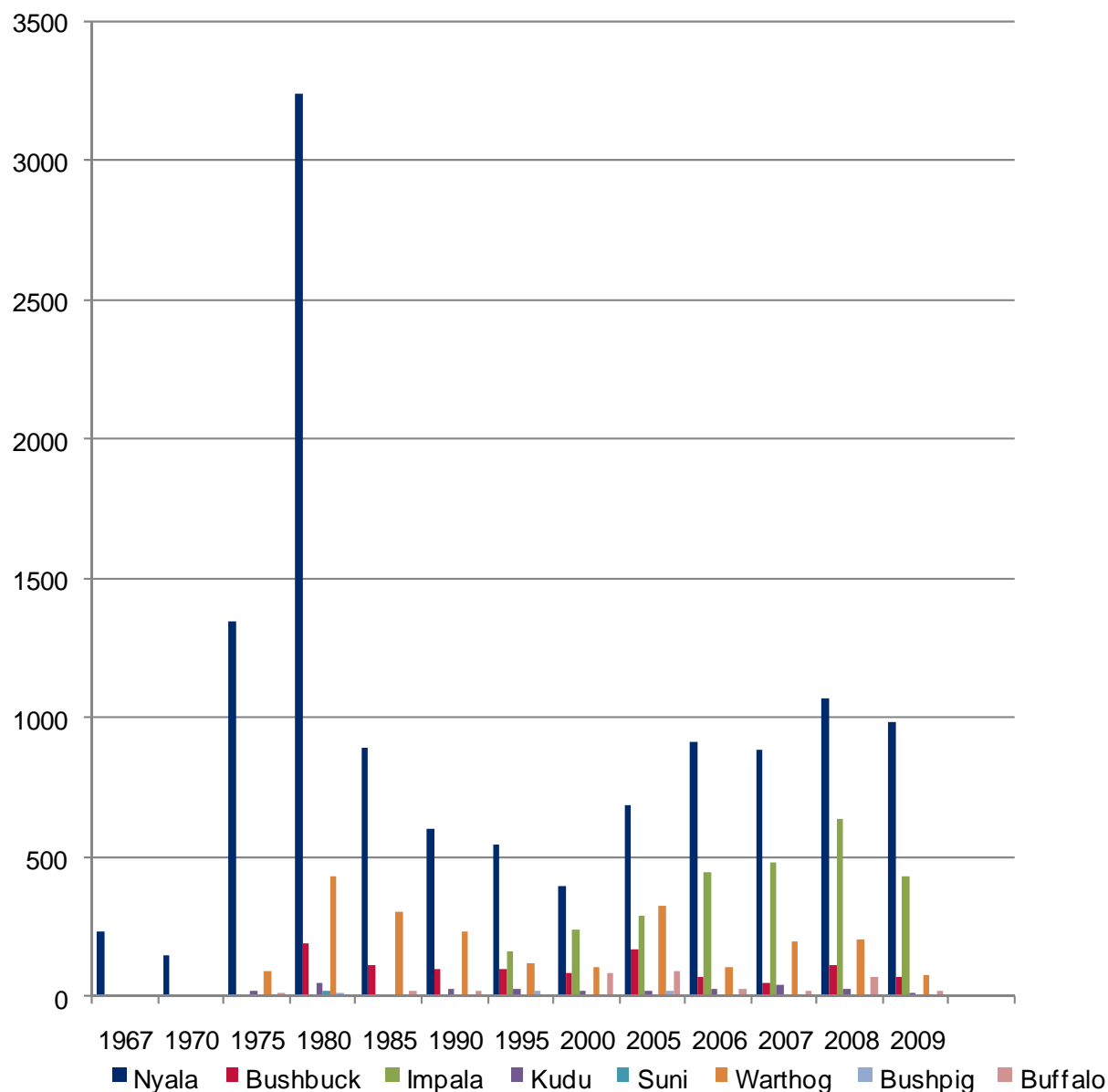
FIGURE 3: POPULATIONS OF KEY WILDLIFE SPECIES IN NYIKA NATIONAL PARK, 1992 AND 2002



In Majete Wildlife Reserve, the entire elephant population was wiped out by 1992. By 2003, only a few small mammals could be found in the reserve. However, the wildlife population has recovered after the Malawian government entered into a concession agreement with the African Parks (Majete) Limited Company to manage the reserve for the next 25 years. As a result of translocation efforts implemented since 2003, as well as CBNRM activities around the reserve, the animal population has increased sharply.

In Lengwe National Park, animal counts have been conducted by the Wildlife and Environmental Society of Malawi (WESM) every October since 1967 for the indicator species, Nyala (and for other species since the 1980s); the counts depict a steady decline of all animal species. Figure 4 below shows the trends from 1969 to 2009.

FIGURE 4: ANIMAL POPULATION TRENDS IN LENGWE NATIONAL PARK SINCE 1967

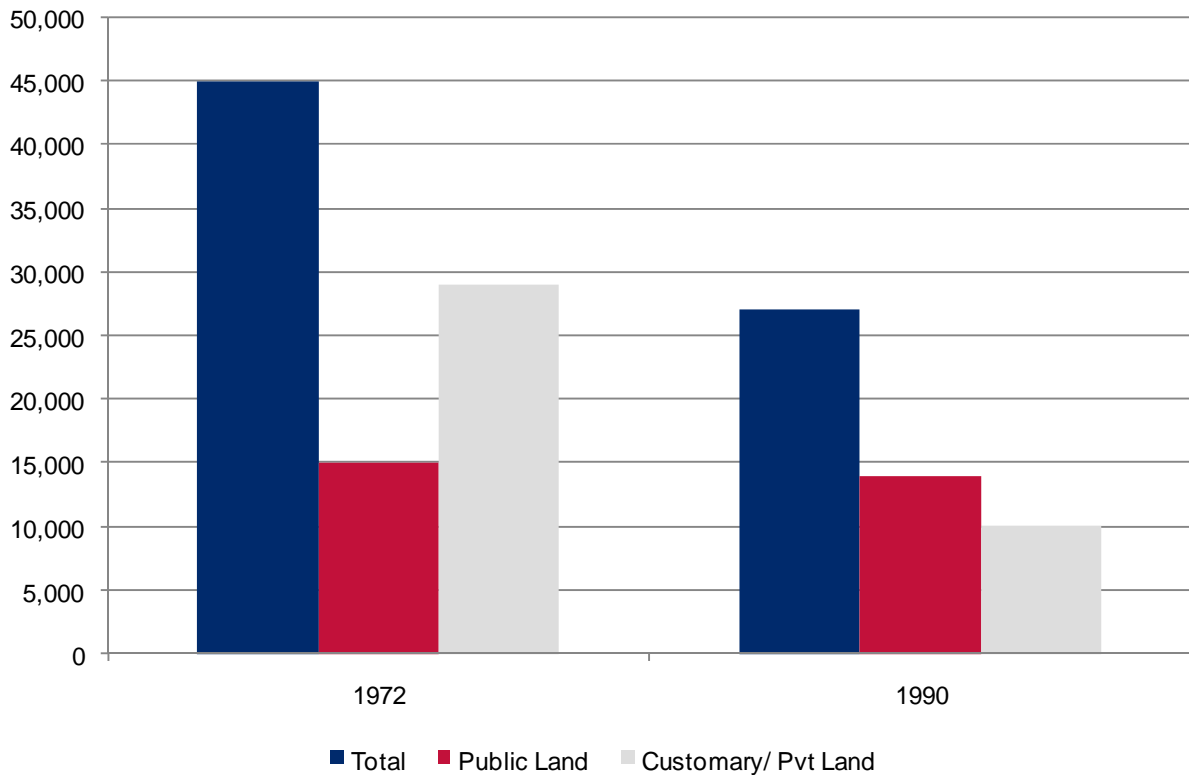


Source: WESM, Blantyre Branch, Animal Counts Data (1967-2009)

1.1.2.2 Trends in the Forestry Sector

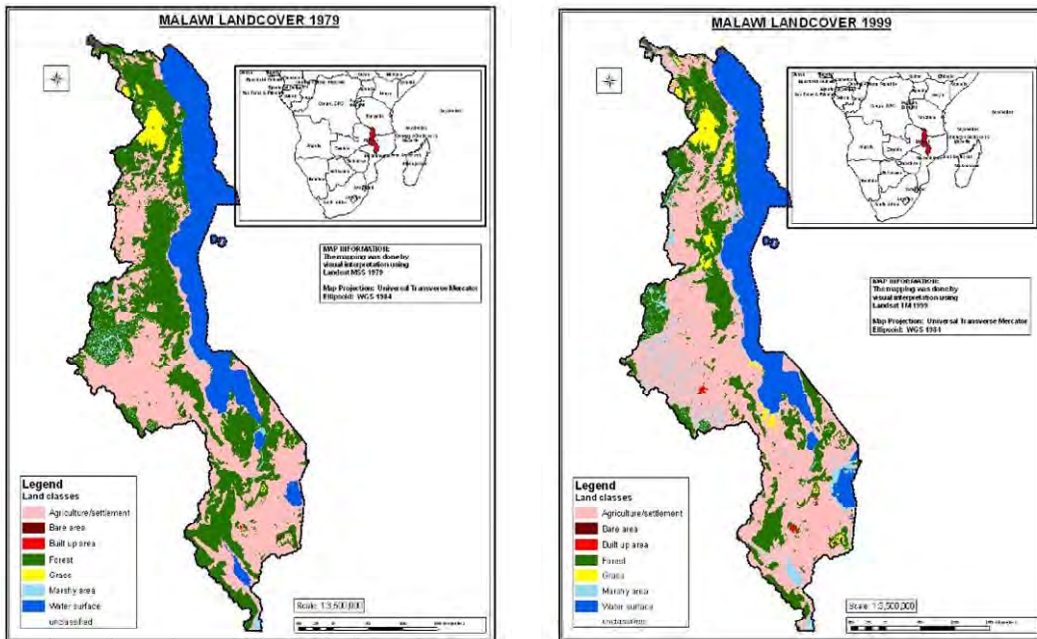
In the Forestry Sector, Malawi lost 2,501,571 ha of both indigenous and plantation forests between 1972-1992; since 1992, these trends increased, with a remarkable deforestation rate of about 3.5% per annum. Between 1972 and 1990, overall forest cover declined by 41% at the rate of 2.3% per annum; forest cover declined by 5% on public land – mainly in PAs – at the rate of 0.03% per annum, and 61% on customary and private land at the rate of 3.4% per annum. Most of this deforestation can be attributed to increased demands for farmland and wood (Bunderson & Hayes, 1997). See Figures 5 and 6 below.

FIGURE 5: FOREST COVER LOSS IN MALAWI (1972 TO 1990 IN SQUARE KILOMETERS)



Source: Bunderson and Hayes (1997)

FIGURE 6: MALAWI LAND COVER, 1979 AND 1999



1.1.2.3 Trends in the Fisheries Sector

In the fishing industry, fish landings declined heavily, especially in Lake Malawi and Lake Malombe as well as in other lakes and river systems, affecting the livelihoods of many people in the process. Malawi experienced an annual catch decline from an average of 68,000 metric tons between 1976 and 1990 to an average of 55,000 metric tons between 1993 and 2003 (Njaya, 2009). Lake Malombe's total fish production declined from 10,000 tons/yr in the 1980s to 2,000-3,000 tons/yr in the late 1990s. Revenue collection from market centers declined heavily as a result of the declining fish catch from the main lakes in Malawi. According to the market clerk at the Salima Town Assembly market, the largest proportion of market revenues during market days was collected from fish sellers and therefore it was normal that, with the decline in fish landings, the revenue also declined.

1.1.2.4 Conclusion on Natural Resource Trends

Natural resources in open access areas suffered greater declines than natural resources in PAs partly because of the political system that prevailed between 1964 and the early 1990s. The trends became much worse after 1994 when Malawi went through a democratic multiparty period. Between 1964 and 1990, resources in PAs such as national parks, wildlife reserves and forestry reserves were protected from heavy destruction. The political machinery was so powerful that it played a big role in law enforcement and encroachers or poachers were afraid of the consequences if caught. However, whenever people found a chance to enter PAs, they made sure they collected as much as they could before they could be caught by the "policemen."

After 1994, many people misinterpreted the meaning of democracy. To many, democracy meant freedom to do anything without responsibility. As a result, lawlessness was the order of the day as illustrated by illegal vending in cities, daylight theft, poaching, and encroachment in PAs. There was literally no enforcement of the country's laws. Above all, government sectors responsible for resource management were given very little operational money. This period saw many forest reserves including Ndilande, Thyolo and others lose most, if not all, of their trees.

1.1.2 CBNRM ERA

1.1.2.1 Origins and Evolution of CBNRM

Lowore and Wilson (2000), Ferguson and Mulwafu (2001), Jossierand (2001), Seymour (2004a), ARD-BioFor IQC Consortium (2004), and Anton (2005), all observed that the continued degradation of natural resources in the country caused the government to rethink its position regarding the participation of various stakeholders, especially communities, in natural resource management. Just like many other countries in Africa, Malawi embarked on policy reforms and a democratization process in the 1990s in order to embrace the paradigm shift of community participation in natural resource management. Since the Earth Summit in Brazil in 1992, countries the world over have embraced this shift in natural resource management which aims at promoting sustainable management of natural resources, social justice and improved well-being for local communities, and strong partnerships between local communities and the government.

Since the 1970s, several countries in the SADC region have experimented with involving local communities in the protection and management of natural resources. In Zimbabwe, for example, the Communal Area Management Program for Indigenous Resources (CAMPFIRE) project has had some notable successes and similar efforts are underway in Namibia, Botswana, and Zambia as well as in other

countries. The new paradigm shift came to be known as community-based natural resource management (CBNRM). Many scholars have tried to define CBNRM in the context of their understanding and implications for the communities. In Malawi, CBNRM is often called co-management since it involves a negotiated agreement between the State and the local stakeholders.

CBNRM replaced the former paradigm due to a number of reasons. The previous systems were rigid and emphasized command and control, while others did not consider equitable sharing of benefits as an important element; overall, communities were viewed as cheap labor to manage the natural resources. The previous systems also did not promote ownership of the natural resources for local communities. Finally, these systems did not build the capacity of the local communities for fear of making them (communities) powerful, hence rendering extension staff irrelevant and creating fear of unemployment.

Johnson and Erdmann (2006) have described CBNRM as going through a series of generations from first generation to fourth generation (1G to 4G) initiatives. Their thesis is that CBNRM's early focus on conservation objectives, or on governance aspects, highlighted gaps in rural economic development, yet after 30 years and millions of dollars invested, adoption of CBNRM remains donor driven. Shifting CBNRM's focus to wealth creation may increase its effectiveness while driving organic growth to the ecosystem scale. Johnson and Erdmann (2006) note that, "CBNRM is the local management of natural resources to achieve local and national economic development and long-term conservation of those resources. CBNRM developed in the early 1970s as a response to evidence that 'command-and-control' methodologies for natural resource conservation were politically, socially, economically, and environmentally unsustainable. Simply put: many governments were too poorly resourced—in financial and human terms—to tackle ecosystem degradation. Empowering local people to manage their natural resources emerged as a superior⁴ approach."

Johnson and Erdmann (2006) note that, CBNRM in many parts of the world, including Africa, consisted of involving communities in the management of natural resources. In Africa, wildlife and forest management involving communities took root. They note that, by the 1980s, the more generic term CBNRM began to be applied to these trends. Bilateral development agencies supported CBNRM field programs, as did multilateral finance institutions (especially the World Bank) and private foundations such as Ford. USAID remains by far the largest supporter of CBNRM, with nearly United States (US) \$500 million invested. At the end of the discussion, they pose a serious and debatable question on whether these investments have yielded tangible returns.

Johnson and Erdmann (2006) describe potentially successful 4G CBNRM (see details in Table 1 below) as needing three main enabling conditions:

- (a) A policy environment conducive to community involvement in natural resource management (NRM), including provisions for the profitable utilization of resources;
- (b) The existence in priority ecosystems of sufficient resources to operate natural products-based businesses at harvest levels that maintain profitability while allowing regeneration of the resources;
- and

⁴ Some practitioners may disagree with this assessment, viewing CBNRM as a complementary approach that was never meant to replace governmental roles and responsibilities.

- (c) The existence of growing markets within profitable reach of producers—a challenge in much of Africa.

The multiplicity of players in CBNRM indicated different intentions, motives, and interests which have resulted in varying definitions of CBNRM. Nhantumbo et al. (2003b) and Josserand (2001) describe CBNRM as a decentralization process aimed at giving grass roots institutions the power of decision making and rights to control their resources. Decentralization in the context of natural resource management is principally a result of recognition by governments of their weak capacity to be, simultaneously, legislators, law enforcers, service providers, and advisers. Some people simply define CBNRM as an approach for involving communities in natural resource management. The World Rainforest Movement has defined CBNRM as assuring the environmentally sustainable use of natural resources while benefiting local communities. Kayambazinthu et al. (2003) consider CBNRM as a means to resolving the injustices of protected areas where local people were excluded from the land they had traditionally occupied and depended on for their livelihood. Simply defined, CBNRM seeks to promote sustainable management of natural resources by the local communities who live next to them and use them on a daily basis.

As reported by Blaikie (2006), CBNRM is, in various forms, an established policy goal of rural development, especially in Africa. It is also a simple and attractive one—that communities, defined by their tight spatial boundaries of jurisdiction and responsibilities, by their distinct and integrated social structure and common interests, can manage their natural resources in an efficient, equitable, and sustainable way. The natural resources in question are usually, though not exclusively, common pool resources. In southern Africa, these are typically forests, open woodland or grasslands for livestock grazing, wood sources, medicines, and famine foods as well as farm land for grazing (after harvest) and crop residues, wildlife for meat and safari incomes, fish in fresh water lakes, and aquifers, tanks, and irrigation channels for domestic and livestock water supply and irrigation.

CATTLE GRAZING IN THE LOWER SHIRE, PHOTO BY DAULOS MAUAMBETA



TABLE 1: EVOLUTION OF USAID CBNRM PROGRAMS IN SOUTHERN AFRICA

Examples	Primary Purpose	Paradigm for Benefits	Land Management Authority/Decision Making Body	Natural Resource Access/User Rights for Community	Financial Incentives for Households
1G—Zimbabwe Communal Areas Management Program for Indigenous Resources(CAMPFIRE, 1980– present)	Wildlife conservation through community “buy in” to reduce poaching	Rural District Councils sell hunting leases to safari operators, then manage and disburse funds on behalf of communities	Rural District Councils and State wildlife authority	Very restricted; sometimes received meat from large game (elephants) hunted for trophies	Very few or none; communities received schools, clinics, other non-NRM benefits for reducing poaching
2G—Namibia LIFE (1993–present); Botswana NRMP (1991–2000); Zambia Administrative Management and Design (ADMADE, 1995–1999)	Wildlife conservation and communal economic gains, primarily through shared hunting and tourism revenue	Communal land leased to business operators(lodge, safari, tourism); concession fees go to communal organization (existing or created)	Local government, tribal, or other communal management entity, often created by projects or NGOs; State approval required	Restricted; some veld, game and other products allowed (e.g., grasses, fuelwood, mushrooms)	Jobs in lodges and other enterprises or ventures (close to 1400 jobs created in Namibian conservancies by the end of 2005); Payments directly to Trusts in Botswana and conservancies in Namibia based on contract with hunting or JV private sector partner; Management entity for distributions unrelated to NRM itself (with the exception of Namibia)
3G—Malawi COMPASS I (1999–2004); Great Limpopo TBNRM (2001–2004); others	Biodiversity conservation through IGAs that provide greater returns for longer periods than resource harvest alone	Village groups receive small grants to establish natural resource-based enterprises, often using minor products from forests, protected areas or communal resources	Village natural resource committees or similar community organizations, often created by projects or NGOs; State approval required	Restricted access to protected areas; subsistence use outside protected areas allowed with few restrictions	Harvest of minor resources from within protected areas; income from IGAs (rarely enough to cover business costs without continued grant financing)
4G—Malawi COMPASS II (2004–2009); Uganda Productive Resource Investments for Managing the Environment-Western Region (PRIME West, 2003–2008); Madagascar ERI (2004–2009)	Natural resource conservation through utilization that competes favorably against gains from liquidation of natural assets	Technical support in establishing and operating viable natural resource-based businesses in sub-sectors with robust domestic and regional markets	State transfers management responsibility to village government subcommittee or association; enterprises obtain access permits or harvest licenses from village subcommittees	Communities have full managerial authority to regulate access/use rights for customary lands outside protected areas	Incomes from business operations flow directly to households; range of horizontally and vertically integrated subsectors provides diverse business options

Source: Johnson and Erdmann (2006) (modified)

1.1.2.2 Types of CBNRM in Malawi

According to some schools of thought (Kamperewera, Wilson: pers. comms.) Malawi has seen three distinct types of CBNRM: these are “organic,” “assisted,” and “imposed” CBNRM.

(a) Imposed CBNRM

This is defined as a donor-, government- or non-governmental organization- (NGO) driven program. If not properly empowered or if sufficient incentives – especially financial incentives – do not exist, communities abandon the program once the funding ceases. There are a lot of examples of such CBNRM programs in Malawi including, but not limited to, the Kam’wamba Indigenous Forest Management project funded by the German Agency for Technical Cooperation (GTZ) and implemented by WESM, the Community Partnerships for Sustainable Resource Management (COMPASS) I & II projects, the Improved Forest and Livelihood project funded by the European Commission and implemented by the Department of Forestry, and many more. Overall, communities become active when they receive money from the donor.

(b) Assisted CBNRM

This is a form of CBNRM built on existing community initiatives. Examples of this include Nkalo in Machinga where there was a strong village headman, who used to climb up the mountain whenever he heard someone cutting down a tree.

(c) Organic CBNRM

This is a form of CBNRM where local communities have ownership with respect to ideas, implementation and generation of benefits. Relatively, this type is the most sustainable. Examples in Malawi include the Mbenje Island Fisheries Management initiative, Sendwe Village Forest Area in Lilongwe, Kasiyamwini Village Forest Area in Machinga, and Howe Village Forest Area in Zomba.

In addition, it should also be noted that a number of participatory approaches have been used to mobilize communities for CBNRM in Malawi. Details can be found in Msukwa and Svendsen (2003).

SENIOR CHIEF CHAPANANGA BELIEVES IN ORGANIC CBNRM



1.2 MAJOR PROGRAMMATIC MILESTONES

1.2.1 NEW DEMOCRATIC DISPENSATION AND MULTIPARTY ERA

A new era for Malawi was ushered in with the advent of multiparty democracy in 1993 and the election of a new government

to manage the affairs of the country in 1994. It was at this time that the Malawi Government adopted and

committed itself to poverty alleviation as the core of Malawi's development agenda. The vision of the government to tackle poverty was outlined in the Poverty Alleviation Program Framework which the then State President Mr. Bakili Muluzi launched on 20 August 1994. Since that time, the government has invested enormous effort, time, and financial resources in programs that directly address the needs of the people, especially the socially and economically disadvantaged.

The paradigm shift to CBNRM has made government realize that answers to the problems of natural resource management lie within the communities that have traditionally been regarded as a problem. For example, communities who live close to a particular forest resource have the potential to sustainably manage forest resources if there are conducive policies and legal frameworks, motivation, and clear usufruct and tenure arrangements which are supportive of their efforts.

It should also be noted that during this transitional period, Malawi saw "*chinambalala*" (i.e., chaos) in the natural resource sector (Senior Chief Chapananga, pers. comm.). This is when unsustainable utilization of natural resources escalated in Malawi. Most people in Malawi thought democracy meant freedom to do what they wanted. The government of the day relaxed enforcement of laws. This resulted in many illegal activities including illegal vending, theft, poaching, encroachment into protected areas, and many more. Funding priorities of the government also changed. Very little funding was directed to conservation. Many protected areas, including forest reserves, were cleared of trees, for example, Ndirande and Thyolo to name a few.

1.2.2 THE REPUBLICAN CONSTITUTION AND SECTOR POLICIES AND LAWS

In line with the new thinking, the government adopted a new Republican Constitution in 1995 which called for sustainable management of the environment and natural resources as well as the participation of all people in Malawi in the national development process. Since the new constitution was adopted, a number of sector policies such as forestry, fisheries, wildlife, water, land, and others were reviewed. During the same period, the government approved the Decentralization Policy (1998) which aimed at giving decision making power to local people.

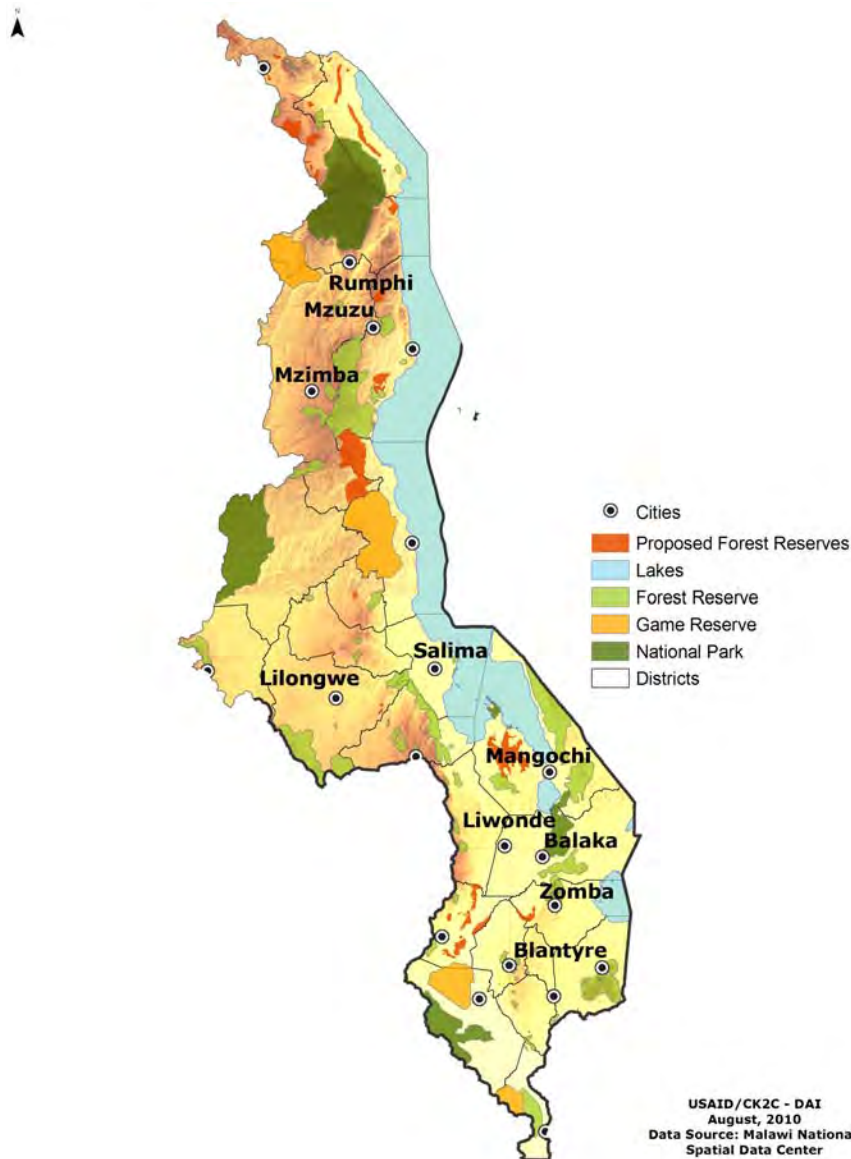
Various other national policy documents and strategies have been developed which recognize the important role and participation of local communities in decision making processes. Some of the key policy documents include the Vision 2020, the Malawi Growth and Development Strategy (MGDS) of 2006, and others. All these policies promote the concept of community-based management and participation in natural resource management.

The Malawi Government has indeed put in place well articulated policies for CBNRM. This is evident in most of the policy and legal instruments developed by key sectors such as Tourism, Wildlife, Fisheries, Forestry and others. However, it should be noted that, despite this recognition, CBNRM is not recognized as an activity that can drive and improve the economy of Malawi, mainly because of the lack of CBNRM financial data contributing to the national economy. The Malawi Growth and Development Strategy 2006-2011 (2006) does not mention CBNRM as an engine for economic growth in Malawi.

Apart from protected areas and forest reserves, Malawi does not possess ample natural resources. Malawi, therefore, has very limited ecosystems that have sufficient resources to generate natural products which can be harvested, processed and marketed sustainably under proper management. Most of these resources

are found in protected areas – national parks, wildlife reserves and forest reserves (see Figure 7⁵ below depicting the protected areas of Malawi). The rest are resources found in communal areas such as graveyards, dambos, and farming systems. Therefore, CBNRM in Malawi is a mixed bag that operates chiefly in rural farming ecosystems and protected areas where there is potential for using natural resources to improve people’s livelihoods. Markets for any product depend on two marketing principles: demand and supply. High value natural products are seen as exotic products in urban areas and have a demand. For example, mushrooms, honey, indigenous fruits, fish, and game meat are in great demand in urban areas where they do not exist. However, the quantity of these products is currently insufficient to satisfy such demands (Mauambeta et al., 2007).

FIGURE 7: PROTECTED AREAS OF MALAWI



⁵ Additional information on Malawi’s protected areas can be found in Annex 3 below.

1.3 NATIONAL VISION AND OBJECTIVES OF CBNRM

Initiatives to formalize and institutionalize CBNRM in Malawi started in 1999 when a National Forum on CBNRM met to establish principles and approaches for effective CBNRM in Malawi (Waston, 2000). To facilitate this process, the National Council for the Environment approved the creation of a CBNRM working group whose primary mandate was to “coordinate the formulation and implementation of policies and programs and projects related to CBNRM.” The guiding principles that were established at this forum are presented in Watson (2000). The CBNRM Working Group has met over seven times to discuss a number of issues including commissioning a study to establish a framework for strategic planning for CBNRM in Malawi (Simons, 2000). Some of the major milestones of the CBNRM Working Group in Malawi, since its establishment, are described below (see also, National Council for the Environment, 2001).

1.3.1 WORKSHOP ON PRINCIPLES AND APPROACHES FOR CBNRM

The COMPASS I Project organized an initial workshop on the principles and approaches for CBNRM in Malawi in 2000 (Watson, 2000). That workshop aimed to achieve the following three main objectives:

- (a) Elaborate a set of principles that would help guide and support the implementation of CBNRM activities in Malawi;
- (b) Adopt a coherent approach to providing incentives for CBNRM in Malawi; and
- (c) Adopt CBNRM initiatives among government, donors and NGOs.

At the end of the workshop, a number of recommendations were agreed on the principles and approaches for CBNRM (see Watson, 2000).

1.3.2 FIRST NATIONAL CONFERENCE ON CBNRM IN MALAWI

COMPASS II initiated the first National Conference on CBNRM in Malawi from 16 to 18 May 2001 (Kapila et al., 2001). Among other issues, the workshop was meant to set up a working group to examine and coordinate the strategies and policies of CBNRM in Malawi. The Working Group was given the following terms of reference:

- (a) Commission the development of a strategic plan for the implementation of CBNRM in Malawi;
- (b) Develop tools and mechanisms to ensure that CBNRM guidelines are adhered to by all stakeholders, including exploring options for sustainable financing for CBNRM and providing guidance on public awareness campaigns for CBNRM;
- (c) Give guidance on the development and review of sectoral policies that impinge upon CBNRM activities;
- (d) Ensure the formulation of procedures for improved coordination of CBNRM activities in the country and ensure their implementation;
- (e) Commission the development of a monitoring system for the CBNRM process in the country;
- (f) Ensure the development of elaborate procedures for ensuring representation of local communities in the CBNRM process;

- (g) Facilitate the development of guidelines to ensure that the costs and benefits of sustainable management of natural resources are distributed equitably; and
- (h) Facilitate the annual assessment of CBNRM activities in Malawi.

A number of paper presentations were made focusing on the terms of reference. These included the following:

- (a) Developing a commonly understood CBNRM concept and vision;
- (b) Maintaining a dynamic policy reform process;
- (c) Developing CBNRM sectoral strategies and an action plan;
- (d) Developing planning and implementation tools;
- (e) Providing strategic implementation support;
- (f) Investing in monitoring and evaluation; and
- (g) Other strategic actions (including coordination).

The workshop developed an action plan to address these broad areas, allocating each activity to an agency with a specific time frame and strategic outcome (Kapila et al., 2001). These efforts ended up producing a strategic plan for CBNRM in Malawi (Kapila et al., 2001). It is, however, unfortunate that all these efforts did not materialize into implementation of the strategic planning document. Many have attributed this failure to the fact that the initiative was facilitated by a project and was not anchored in an institution that would continue the activity. After the COMPASS Project, CBNRM proponents started to implement elements of a regional CBNRM program with support from the Norwegian Agency for Development Cooperation (NORAD) and WWF, but again without a strategy. A description of selected CBNRM activities since 2007 follows.

1.3.3 CURRENT CBNRM FORUM FOCAL AREAS AND ACTIVITIES

The current CBNRM Forum was activated in 2006 via a regional CBNRM project implemented with funding from the Norwegian Embassy, Lusaka and coordinated by the WWF regional program in Zimbabwe (the first phase ran from 2006 to December 2008). The goal and purpose of the program was to enhance rural livelihoods from sustainable management of natural resources in order to increase human welfare and sustain the productivity of ecosystems that support livelihoods. The overall implementation approach of the regional CBNRM program was to harness and capitalize on the vast wealth of knowledge, skills, resources, and technical expertise that has been developed in local, national and regional institutions following more than fifteen years of development and implementation of CBNRM in southern Africa. Based on this approach, focal national institutions were supported to transfer skills and appropriate best practices.

Actions at the national level were supposed to contribute to poverty alleviation and securing the livelihood base for the rural poor. At the regional level, actions resulted in expanding the opportunities for enhanced rural livelihoods by facilitating the ability of national-level institutions to address underlying causes of biodiversity loss. The regional program focused on the following goals:

- (a) A functional Regional CBNRM Forum and National CBNRM Fora for sharing best practices, information, and carrying out performance review are strengthened and supported;
- (b) Appropriate CBNRM training is supported in formal and non-formal institutions;
- (c) Strategic institutional capacity building of focal organizations involved in CBNRM in the public and private sectors, civil society, and at the community level is implemented in the partner countries;
- (d) Policy and legislation support is provided at the country level to promote and improve implementation of CBNRM with linkages to regional sectoral policies and trans-boundary initiatives; and
- (e) Program management and coordination (including communications and fundraising) is functional.

The Malawi CBNRM Forum focused on the following program areas which were implemented by thematic working groups:

- (a) Policy and Legislation,
- (b) Management Oriented Monitoring Systems (MOMS),
- (c) Conservation-Based Enterprises,
- (d) Training,
- (e) Performance Monitoring and Evaluation, and
- (f) CBO and Organization Development.

Again, the Malawi CBNRM Forum has focused on a funded program and not on the focus areas of the draft strategic plan that was developed in 2001 through the COMPASS 1 Project. Despite this challenge, the current initiatives of the Malawi CBNRM Forum, with support from the Regional CBNRM program, are addressing the key CBNRM issues in the country.

1.4 CBNRM STAKEHOLDERS AND THEIR ROLES

The paradigm shift to CBNRM in Malawi meant that the aspirations of many other players in natural resource management needed to be considered. This is reflected in the various policy frameworks that relate to CBNRM in the country. All the policies and legal frameworks in Malawi have articulated the need for effective multi-stakeholder participation in natural resource management. Following the policy recommendations, the country today has many stakeholders who are playing various roles in community-based natural resource management. Table 2 summarizes some of the key players and their roles in CBNRM corresponding to the sector to which they belong.

TABLE 2: KEY PLAYERS AND THEIR ROLES IN CBNRM IN MALAWI

Name of stakeholder	Category	Summary of roles in CBNRM
Government	Central government	Setting policies, legal frameworks and guidelines; coordination of CBNRM initiatives; providing guidance in the implementation of CBNRM initiatives
	Local government	Coordinating local-level CBNRM initiatives;

Name of stakeholder	Category	Summary of roles in CBNRM
		implementing CBNRM initiatives; approving by-laws; fundraising for CBNRM; providing policing support to community efforts; provision of technical and financial support for CBNRM
	Research institutions	Conducting research on CBNRM; documentation and dissemination; advising central and local government on CBNRM
	Academic institutions	Training of personnel; research and documentation
	Legislature	Passing legislation
Private sector	Processing companies and individuals, Tourist operators, Community-based enterprise groups	Tourism activities; processing of CBNRM products; harvesting of CBNRM products; technical and financial support to communities and local government; management of natural resources; technical and financial support for CBNRM
Civil society organizations	NGOs, CBOs, Faith-Based Organizations, associations	Facilitating implementation of CBNRM initiatives; provision of technical and financial support; policy advocacy and lobbying; community mobilization; capacity building
Local leaders	Traditional leaders, faith leaders	Community mobilization; dispute and conflict resolution
Communities	Women, men, children,	Implementation of CBNRM initiatives; management and utilization of natural resources
Village-level institutions	VNRMC, BVC, VNRC	Coordinating CBNRM activities at local level; facilitating CBNRM activities at local level
Funding agencies (DFID, USAID, UNDP, CIDA, Irish AID, NORAD, MEET, MMCT, etc.)	Bilateral and multilateral agencies	Provision of financial and technical support for CBNRM activities and institutions

Sources: Kafakoma, 2009; Mauambeta et al., 2007

1.5 CBNRM PROGRAMS, INSTITUTIONS AND LEVELS OF FUNDING

There are a number of organizations that are or have implemented CBNRM programs in the country with support from various donors. Table 3 summarizes some of the programs and organizations that are implementing CBNRM activities in Malawi. All the projects that are being implemented emphasize community participation and promotion of people's livelihoods.

TABLE 3: CBNRM PROGRAMS, INSTITUTIONS AND LEVELS OF FUNDING

Name of Organization	Type of Project	Funding Level	Funding Period	Source of Funding
Agriculture Ministry	Smallholder Flat Plains Development Program	US \$15,200,000	1998-2006	IFAD, Government of Malawi (GoM)
Agriculture Ministry	Better Land Husbandry Project	MK 35,101,209	2003-05	EU, GoM
Agriculture and Food Security	Development of the Upper Shire Management Plan			Millennium Challenge Account (MCA)
Community Partnerships for Sustainable Resource Management (COMPASS I)	Community-Based Natural Resource Management Project	US \$5,200,000	1999-2004	USAID, GoM
Community Partnerships for Sustainable Resource Management (COMPASS II)	Community-Based Natural Resource Management Project	US \$12,500,000	2006-2009	USAID, GoM
Department of National Parks and Wildlife - Malawi Border Zone Development Project	Co-management of Nyika National Park and Vwaza Wildlife Reserve		1996-2004	GTZ, Rumphi District Assembly, GoM
DNPW & Nyika Vwaza Association	Co-management of Nyika National Park and Vwaza Wildlife Reserve			Local contribution, government, concession and entry fees, various donors, MEET, DHA, Total Land Care, COMPASS II
Department of Wildlife and Parks/Peace Parks Foundation	Nyika Trans-Boundary Management Program			World Bank
DNPW & African Parks (Majete) Limited	Restoration of Majete Wildlife Reserve		2003 to date	
DNPW & Upper Shire Association for Conservation of Liwonde (USACOL)	Co-Management of Liwonde National Park			DNPW and local communities surrounding Liwonde National Park
Environmental Affairs Department	Small grants to support CBO and NGO efforts in environment and NRM			UNDP/GEF
Environmental Affairs Department	Nature Program	US \$9,000,000		USAID, GoM
Environmental Affairs Department	National Capacity Self-Assessment (NCSA)	US \$239,780	2003-05	GEF/UNDP/UNEP, GoM
Fisheries Department	Artisanal Fisheries Project			African Development Bank, GoM
Fisheries- Mbenje Natural Resource Management Committee	Management of Mbenje Island fisheries resources	Local funding		Local resources, Fisheries Department
Forestry Department, SADC Unit	Southern Africa Biodiversity Support	US \$270,000	2000-05	UNDP/GEF, SADC, IUCN

Name of Organization	Type of Project	Funding Level	Funding Period	Source of Funding
	Program (SABSP)			ROSA, GoM
Forestry Department, JICA	Community Vitalization and Afforestation in middle Shire area	US \$754,300	2002-04	JICA, GoM
Forestry Department	Improved Forest Management for Sustainable Livelihoods Program (IFMSLP)			European Union, Department of Forestry
Forestry Department, European Union, Food Security	Public Works Program - Forestry Component	Initial: MK 329,545,998 Actual: MK 471,356,323	1998 to 2010	European Union
Forestry Department, Chancellor College, World Fish Center	Lake Chilwa Basin Catchment Climate Change Program	US \$5,434,794		NORAD
Forestry Department/Mount Mulanje Conservation Trust (MMCT)	Management of Mulanje Mountain			World Bank, NORAD, EU, and others
Irrigation and Water Development Ministry	National Water Development Programme II			World Bank
Malawi Environmental Endowment Trust (MEET)	Grants to government departments and civil society organizations, CBOs, and academia for management of natural resources in Malawi & training	MK 470 million approved; MK 330 million disbursed since 2003	Since 2003	MEET, USAID, DANIDA (from initial endowment of MK 445 million (US \$4.4 million))
Mount Mulanje Conservation Trust, WESM, CU	Conservation of Mount Mulanje, Conservation and promotion of livelihoods	US \$3,000,000	2010-2013	USAID
Total Land Care	KULERA Biodiversity Project	US \$7,000,000	2010 -2013	USAID
Wildlife and Environmental Society of Malawi	Sustainable Management of Indigenous Forests	DM 540,000 €600,000	1996-2006	GTZ, WESM, Department of Forestry
Wildlife and Environmental Society of Malawi	Sustainable Management of Natural Resources in Neno District	€99,000 £79,856	2001-2005	
Wildlife and Environmental Society of Malawi	Biodiversity project	€70,854	2002-2004	EU, WESM, ART
Other civil society organizations (Concern Universal, TSP, NASFAM, etc.)	Various CBNRM initiatives			Various donors and programs

Sources: Government of Malawi (2004), COMPASS (2004), WESM (1996), MEET (2009)

2.0 ENABLING CONDITIONS AND SCALE OF CBNRM IN MALAWI

Most of the enabling conditions for CBNRM in Malawi developed due to a variety of factors. To a large extent, the impetus for change derived from international conventions such as the Convention on Biological Diversity in 1992, international forums such as the United Nations Conference on Environment and Development, bilateral agreements such as that between NORAD and the Forestry Department for the Blantyre City Fuelwood Project, and donor interest from organizations such as GTZ, USAID, and the Danish International Development Agency (DANIDA).

2.1 BILATERAL AGREEMENTS AND PROGRAMS WITH CBNRM APPROACHES

In Malawi, components of CBNRM started to be implemented in the early 1990s. The Nyika-Vwaza Border Zone Project was implemented around Nyika National Park and Vwaza Wildlife Reserve and was funded by GTZ. The focus of the project was livelihood improvement for communities around the protected areas via a range of interventions. These included the development of social infrastructure such as schools and health clinics as well as resource utilization. The project also introduced conservation-based enterprises; beekeeping for honey production was the major intervention in this realm. The Beekeepers Association of Malawi (BAM), based in Mzuzu, was the main output of this project. It was established as an institution which would continue to market honey and other bee-related products beyond the project life. Unfortunately, BAM collapsed immediately after donor funding ended because one of the senior staff of BAM had stolen all the money from honey sales belonging to the beekeepers – a governance incident endemic to many CBNRM initiatives. On resource utilization, communities were allowed to collect thatch grass, palm fruits, termites and other products (Hess et al., 1996). After this, a number of CBNRM programs and projects have been implemented in Malawi (Mauambeta et al., 2007).

In 1996, with funding from GTZ, the Wildlife and Environmental Society of Malawi (WESM), together with the Department of Forestry, began to implement a regional project under the Southern Africa Development Community's Forestry Sector Technical Coordination Unit. The project was called Sustainable Management of Indigenous Forests (SMIF). USAID commissioned an independent evaluation of the SMIF project in 2000 in order to draw lessons for possible replication and incorporation into the COMPASS I project (Mkamanga and Chimutu, 2001).

USAID, through the Community Partnerships for Sustainable Resource Management (COMPASS), supported the implementation of a five-year community-based natural resource management program between 1999 and 2004. The initiative was meant to improve natural resource management and the development of successful and sustainable models that could be replicated by other communities. COMPASS also emphasized income generation consistent with USAID /Malawi's Strategic Objective framework of "sustainable increases in rural incomes." COMPASS 1 support covered so many areas including public awareness, reforestation and afforestation, fish farming, horticulture production,

alternative energy sources, apiculture (beekeeping), sustainable agriculture, eco-tourism, wildlife domestication, wildlife management, wildlife extension, medicinal herb production, collaborative management, capacity building, and other cross cutting issues such as environmental education, Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), and gender. By the end of the first phase of COMPASS in 2004, a number of tree nurseries, village woodlots, and fish ponds had been established, and a number of farmers had been involved in beekeeping, chili pepper and mushroom production, guinea fowl rearing, fruit processing, production of fire briquettes and fuelwood-saving stoves, and eco-tourism.

Available records indicate that at the start of COMPASS 1 in 2001, only 315 communities were practicing CBNRM, but by the end of COMPASS 1 in 2004, 642 communities had adopted CBNRM practices involving 61,083 households (COMPASS Project, 2004). Communities were able to generate financial and other non-monetary benefits equivalent to US \$511,130 between 2000 and 2004. As a result of capacity building and awareness raising, local governance of natural resources improved substantially, enabling communities to take full responsibility and control of their natural resources. Immediate economic benefits and good natural resource governance have been the foundation for improved natural resource management (Mauambeta et al., 2007).

USAID implemented a second phase (2004 to 2009) of COMPASS which focused on consolidating the gains made during COMPASS 1. More specifically, they supported decentralized environmental management and capacity building in enterprise development in order to mainstream CBNRM as a viable rural development strategy for Malawi (COMPASS II Project, 2007). During this period, COMPASS worked with CBNRM community-based organizations (CBOs) around protected areas such as Nyika, Vwaza, and Nkhotakota, and around some forest reserves.

In 2000, the Malawi Environmental Endowment Trust (MEET) was established by the Government of Malawi as an independent trust to finance environmental and natural resource projects in Malawi with an initial endowment of US \$4.4 million provided by USAID and DANIDA. Ten years later, MEET has financed a total of 222 environmental projects totaling Malawian Kwacha (MK) 460 million (MEET, 2010), over 80% of these comprising CBNRM projects.

2.2 CONDUCTIVE POLICY AND LEGAL FRAMEWORK

The study findings reveal that CBNRM as an approach to natural resource management is aligned with the government paradigm shift as presented in the various natural resource management related policies that have been developed in the recent past. Sectoral policies and various government strategies pointed to the need for natural resource users to be the managers of the natural resources.

The Department of Forestry embraced CBNRM as outlined in its 1996 and 1997 Forestry Policy and Act, respectively, as well as in the Community-Based Forestry Management Policy Supplement of 2001. Using the Policy and Act, the Forestry Department has implemented a number of CBNRM-related initiatives. For example, it developed a National Forestry Program to guide implementation of the National Forestry Act and a number of projects and programs have been implemented. CBNRM activities

in the forest sector are implemented through Village Natural Resources Management Committees⁶ (VNRMCs).

2.3 RESTORATION OF RIGHTS TO MANAGE NATURAL RESOURCES

For many years, the government had alienated local communities from natural resource management; the change in the policies and approaches to natural resource management to allow community participation is considered a positive milestone by the communities. Overall, the policy framework is conducive to CBNRM in Malawi. Through changes in these sectoral policies, the government has restored the rights of communities to manage natural resources.

2.4 COMMUNITY WILLINGNESS

Communities have been willing to participate in, and try CBNRM, especially where there are tangible benefits. Communities have realized that once they invest their efforts in managing a particular natural resource, with a management agreement in place, they are assured of getting the benefits at the end of the process.

However, the realization of the full benefits of CBNRM is being hampered by weak policy implementation processes at the government level. There is limited or no mechanism to monitor and evaluate implementation of CBNRM. In addition, the project nature of most CBNRM initiatives leaves community processes, such as capacity building, incomplete.

2.5 AWARENESS OF ENVIRONMENTAL PROBLEMS

Aware of the negative impacts of environmental degradation in their areas, some communities started to take actions to reverse the situation. The Sendwe community in Lilongwe is a very good example:

Sendwe Village Forest Area (VFA) was deforested in the decade starting in the early 1980s as a result of dark-fired tobacco curing in the area. Curing of dark-fired tobacco required a lot of firewood and the source was the forest area. After deforesting the area, the rainfall pattern changed and people realized that the deforestation that took place in the forest area was one of the contributing factors to the changing rainfall pattern. People, especially women, were also walking long distances to collect firewood. The tobacco smallholder farmers could not easily get the firewood and poles for curing their tobacco and constructing tobacco barns in the area. The challenges of changing rainfall patterns, reduced access to firewood and building materials, as well as scarce firewood for curing tobacco influenced villagers, especially local leaders, to establish control and management measures for managing Sendwe VFA. The local people set up their own by-laws to manage the forest area which allowed them to punish encroachers and law offenders from the neighboring villages and beyond. The VFA today is one of the shining examples where local communities are aware of the environmental challenges and take it upon themselves to solve the problems.

⁶ The VNRMC is a ten-member committee elected by a village or group of villages to represent their interests related to community forest management. The committee acts as a liaison with extension workers and other government officials. It is a sub-committee of the Village Development Committee (VDC). It has the lead role in planning and management of community forests at the VDC level.

3.0 CBNRM INITIATIVES IN MALAWI

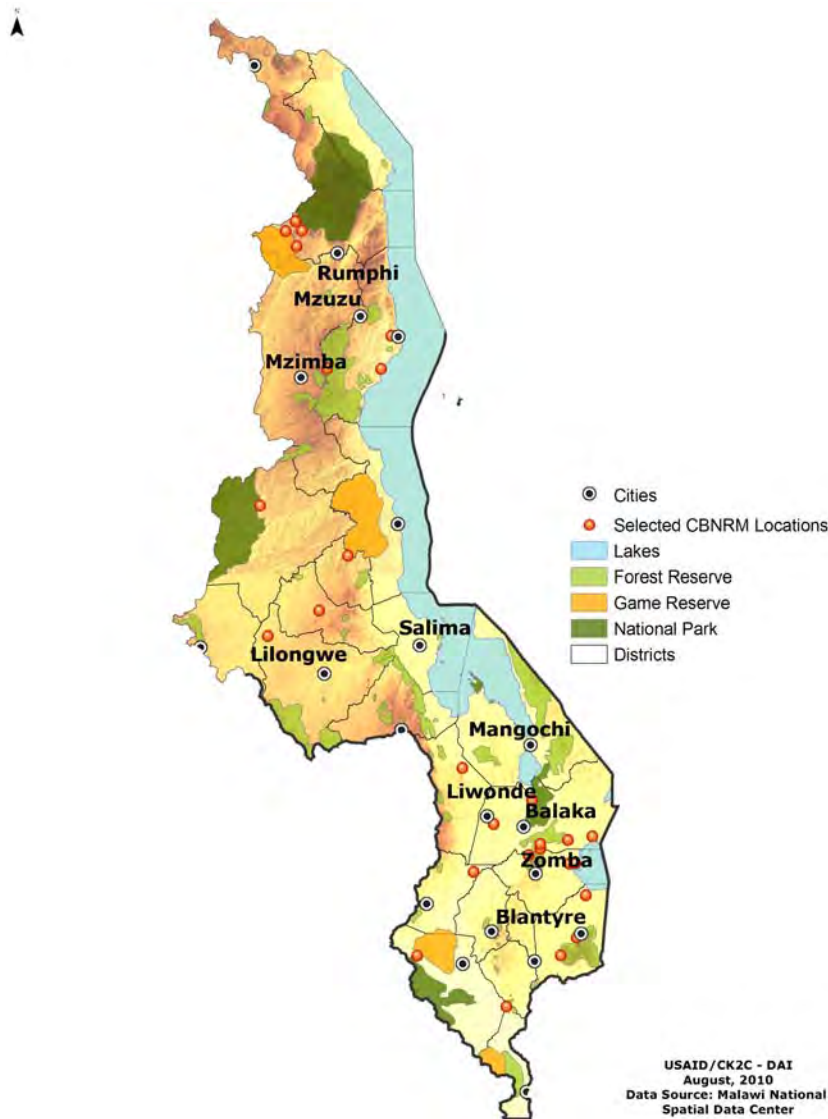
Compared to other countries in the region, Malawi's CBNRM sector is not dominated by wildlife but other forms of natural resources (Mauambeta et al., 2007; Schuster and Steenkamp, 2007). CBNRM is taking place in all the natural resource sectors as part of a policy implementation process. The sections below summarize some of the CBNRM activities in three natural resource sectors: Forestry, Wildlife, and Fisheries.

Overall, it was difficult to quantify the scale, especially geographically, of CBNRM in Malawi. There is no unified data base on CBNRM in the country, many CBNRM projects were unwilling to share information (Muwuso Chawinga, pers. comm.), and spatial data associated with CBNRM initiatives was often non-existent. Nonetheless, the following summary statistics can be highlighted:

- It is estimated that 4,500 VNRMCs are operational and involved in community-based forest management;
- Over 350 Beach Village Committees (BVC) exist and practice community-based fisheries management;
- Approximately 270 villages are involved in co-management of protected areas;
- By the end of 2004, the COMPASS I project had facilitated CBNRM practices in 642 villages (comprising about 61,100 households); and
- Several thousand households (probably over 10,000) participate in natural product collection and transformation, including beekeeping; most of these products are collected from community-managed areas.

Despite the fact the fact that it is currently impossible to calculate the area under CBNRM in Malawi, Figure 8 below depicts some of the pre-eminent CBNRM sites in Malawi, many of them associated with the COMPASS 1 and II projects.

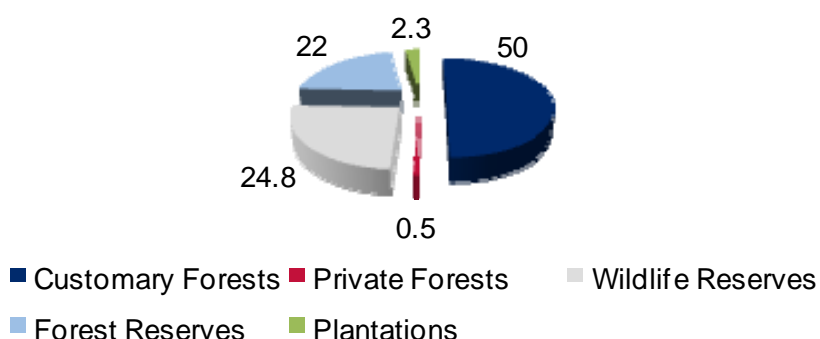
FIGURE 8: LOCATION OF SELECTED CBNRM SITES



3.1. CBNRM IN THE FORESTRY SECTOR

The Environmental Affairs Department (EAD) estimated in 1998 that the country had 50% of its natural forests on customary land under the jurisdiction of traditional authorities, less than 0.5% on private land, and 49% under government control in wildlife reserves (24.8%), forest reserves (22%), and government plantations (2.3%) – see Figure 9 below. Between 1970 through the 1990s, forest cover declined tremendously; this loss was considerably higher after the 1990s due to increased deforestation and high levels of encroachment into protected areas.

FIGURE 9: MALAWI FOREST AREA (%) IN 1998



A number of CBNRM activities are currently being supported in the forestry sector. These include tree nursery establishment, tree planting and management, collaborative forest management, tree product utilization, forest protection and patrols, and similar initiatives. A total of 4,500 VNRMCs are reported to be operational across Malawi and engaged in Village Forest Area management (Stella Gama, pers. comm.).

There are a number of forestry programs that have taken up the CBNRM approach to forest management. The Improved Forest Management for Sustainable Livelihoods Program (IFMSLP) operates in 12 of Malawi's 27 Districts. Both forest reserves and customary land forests provide the geographic focus for program implementation. Funded by the European Union, the program is focused on improving the livelihoods of the people living close to selected forest reserves in 12 districts (Chikhwawa, Chitipa, Dedza, Karonga, Kasungu, Mchinga, Mzimba, Nsanje, Ntcheu, Ntchisi, Rumphu and Zomba). Table 4 below provides the forest area covered by the program which is under co-management.

TABLE 4: IFMSLP SITES

District	Forest	Forest type	Area (ha)	Comments
Chikhwawa	Masenjere Escarpment	Communal	171,654	IFMSLP
Chitipa	Mughese	Reserve	736	IFMSLP
	Wilindi	Reserve	907	IFMSLP
	Matipa	Reserve	1,060	IFMSLP
Dedza	Mua-Livulezi	Reserve	12,147	IFMSLP
Karonga	Vinthukutu	Reserve	2,334	IFMSLP
	Karonga South Escarpment	Reserve	10,800	IFMSLP
Kasungu	Chawa	Proposed	538	IFMSLP
Machinga	Liwonde	Reserve	Not available	IFMSLP
Mzimba	Mtangatanga	Reserve	9,770	IFMSLP
	Perekezi	Reserve	15,370	IFMSLP
Nsanje	Matandwe	Reserve	26,205	IFMSLP
Ntcheu	Dzonzi –Mvai	Reserve	8,292	IFMSLP
	Dzonzi-Mvai	Pine plantation	3,164	IFMSLP
Ntchisi	Ntchisi	Reserve	9,720	IFMSLP
Rumphu	Uzumara	Reserve	596	IFMSLP
Zomba	Zomba	Reserve	5,937	IFMSLP
	Malosa	Reserve	8,599	IFMSLP
	Customary Forests	Customary	2,405	IFMSLP

The program has facilitated development of management plans and co-management agreements between the government and local communities living around forestry reserves. During the first phase of the program, over 8 management agreements were signed between the government and Village Natural Resource Management Committees through their block committees. The signing of the management agreements for example in Malosa, Zomba, and Liwonde Forest Reserves improved access to natural resources for local communities. However, despite these agreements, encroachment and charcoal production continued uncontrolled in other forest reserves. Since the project was implemented in selected areas, people from the non project areas interpreted the co-management agreements to mean that government had approved cutting down trees in forest reserves. Though the blocks under co-management agreements were not seriously affected by encroachment and charcoal burning, the surrounding and nearby areas were affected by heavy deforestation and encroachment for farming, for example, around Malosa and Zomba Forest Reserves. People interviewed indicate that extensive woodlots and woodlands have been planted and protected and some wild game such as duikers, rabbits, and hyenas could be spotted in some woodland areas where co-management is taking place.

Another program run by the Government of Malawi through the Ministry of Local Government with funding from the European Commission is the Income Generating Public Works Program (IGPWP). The program was designed to promote income generating activities as well as productive activities for the rural and peri-urban poor. The IGPWP fully supports the objectives of the government's decentralization policy (1998) through its district assembly capacity enhancement component. The program has four main objectives, namely: (1) Contribute to the government's objective of poverty reduction in line with the Malawi Growth and Development Strategy; (2) Increase employment creation, access to markets and social facilities through rehabilitating and maintaining rural infrastructure; (3) Develop productive local forestry and agriculture activities; and (4) Enhance the implementation capacity of the district assemblies.

Initially, the target was to work with 1,600 clubs in 15 districts (Lilongwe, Mchinji, Kasungu, Dowa, Mzimba, Nkhatakota, Dedza, Ntcheu, Machinga, Zomba, Mangochi, Blantyre, Thyolo, Mulanje and Chikhwawa), but due to funds received from the food security budget, the program will now work with 2,050 clubs or committees. By the end of the period the program will have planted 42,500,000 trees and assisted in the management of 2,250 ha of existing forest areas. To date 37,500,000 trees have been planted and 1,800 ha of existing forest area has been managed (Rose Bell, pers. comm.).

At the community level, in Balaka District, local communities along the Rivirivi River decided to address poverty-environment issues at a local and ecosystem level in 2006 with support from WESM, Balaka Branch. Rivirivi River flows down into the Shire River. Although the river was once perennial, it had become reduced to a few pools in the dry season. This was affecting local livelihoods, as people were dependent on the river for watering livestock, washing and fishing. WESM Balaka Branch and local communities identified the clearance of forest vegetation from the river banks as a key factor affecting river flow, and so began a project, funded by the Malawi Environmental Endowment Trust (MEET), to try to reverse the situation.

The project covers about 40 km of river and 25 villages, and is focused mainly on environmental management – reforestation, agroforestry, water-harvesting, and the use of vetiver grass to control erosion. To implement the project, WESM works very closely with the government extension services from the departments of agriculture and forestry. Not only does this allow the project to benefit from the capacity of these agents in the area (about 20 extension agents), but it also helps with skills transfer, and ensures some continuity and sustainability beyond the end of project funding.

A visit to two of the 25 village communities, Chiputula Village and Joshua Village, demonstrated the enthusiasm as the visiting delegates were met with singing and dancing. Overall, the communities were eager to show off the results of their efforts. At Joshua village, the delegates scrambled down the river bank and across a muddy tributary and entered the shade of a young forest where the discussion focused on how the new forest would be used. Now five years old, and the result of a combination of natural regeneration and enrichment planting, the woodland is now well established. The community explained how they are starting to keep bee hives in the forest, which currently covers 25 ha of land adjacent to the river. They have also planted trees that they use for medicine, and in the longer term they hope to manage the area for fuel wood and maybe charcoal production.

At Chiputula, land adjacent to the reforestation area showed what can happen when the forest is cleared: a deep erosion gully had formed – a scar across the hillside. Yet the signs are encouraging that this can be reversed. Although the project is only 5 years old, and it would be foolish to attribute changes only to the project, in the last dry season the river continued to flow.

3.2 CBNRM IN THE FISHERIES SECTOR

Fisheries resources are under considerable stress in Malawi, to the extent that the commercial fish catch declined by over 20 per cent between 1988 and 1992 in Lake Malawi. Estimates for Lake Malombe show annual production down from almost 16,000 tons in 1988 to less than 4,000 tons in 1997. Many factors contributed to the declining fish catch in the main lakes in Malawi including population growth, over fishing, use of improper gear, lake shore development, and catchment degradation, all of which are putting serious pressures on fishery resources.

In an effort to reduce the declining fisheries trend in the country, the Fisheries Department developed the Fisheries Management and Aquaculture Policy (2001) which followed the Fisheries Conservation and Management Act of 1997 (Government of Malawi, 1997) whose main thrust is to enhance the quality of life for fishing communities by increasing harvests within safe, sustainable yield limits. The policy seeks to incorporate the socio-cultural and socio-economic conditions prevailing in the sector by using participatory approaches. In the policy, the Department of Fisheries declares that it will work in close collaboration with other stakeholders in conserving and managing fisheries resources and may enter into agreements with communities, the private sector, and NGOs. The policy elucidates sub-sectoral policies in eight areas: extension, research, participatory fisheries management, fish farming, training, enforcement, riparian and floodplains fisheries, and fish marketing.

In every one of these subsectors, the policy articulates specific measures to foster community-based management. The Fisheries Conservation and Management Regulations provide for empowerment of Beach Village Committees⁷ (BVC) to scrutinize licenses, enforce fishing regulations, close seasons, enforce conditions, seize vessels, formulate and review regulations, and undertake environmental conservation. Another milestone in the fisheries sector is the development of the Chambo Restoration Strategic Plan (2003-2015) which is a brief statement of commitment to the recovery of the Chambo, especially in the southern part of Lake Malawi. The strategic plan demonstrates commitment to

⁷ The BVC comprises all people on a beach engaged in the fishing industry. There is a 10-member executive sub-committee of the BVC, elected by the BVC members, which provides a forum for dialogue and debate within the fishing community to identify problems and solutions, organize and implement activities, evaluate progress, and adapt solutions as needed. The BVC also acts as a liaison between the fishing community, the Fisheries Department, other government and traditional authorities, and other institutions. Membership of the BVC extends to all individuals operating on the beach.

conversion from “open access” to “restricted access” of the fisheries resources in the southern part of Lake Malawi including Lake Malombe.

In line with the policy, the Fisheries Department facilitated formation of BVCs which, under the Fisheries Conservation and Management Act, can develop management plans and enter into co-management agreement with the government. The Fisheries Conservation and Management Rules (2000) require that the community-based organization party to a fisheries management agreement (BVC) possesses a legal personality through registration with the Trustees Incorporation Act (Seymour, 2004b). To date, a total of 365 BVCs have been established and are operational from Nsanje to Songwe in Karonga as shown in the Table 5 below (Source: Department of Fisheries, 2010).

TABLE 5: TOTAL NUMBER OF BVCS IN MALAWI

Location	Number of BVCs
Chikhwawa	8
Karonga	14
Lake Chilwa	48
Lake Chiuta	14
Lake Malombe	31
Likoma	18
Nkhotakota	57
Nsanje	50
Salima	46
Songwe River	15
Southern Lake Malawi	74
Total	365

The Fisheries Department has also assisted BVCs by providing fishing gear, such as boats, bought under the Artisanal Fisheries Project. The Fisheries Department has introduced Participatory Fisheries Management (another form of CBNRM) where the government is only facilitating the process of fisheries management.

Some quarters within the fishing communities expressed concern over the composition of the BVCs and their legitimacy as representatives of fishing communities. The BVCs are not legally empowered and do not have legal rights to enforce regulations. They are also not part of the local government administration and legal systems but they are recognized in the village as sub-committees under the Village Development Committees. Currently, there are no legal instruments at the local government level to empower BVCs such as district by-laws, constitutions, and management agreements.

Despite these challenges with BVCs, there are some good examples where CBNRM is working. For example, the Mbenje Island Fisheries Management Committee, a traditionally recognized fisheries management structure on Mbenje Island, is a good example of community-based fisheries management along Lake Malawi. The committee was not set up by the Fisheries Department but by the local leaders that are responsible for Mbenje Island. The committee stated that management of fisheries resources at Mbenje Island started without government influence in the early 1950s when the fishermen who settled on the island noted that the fish catch was declining towards December and that processing of fish during the rainy season on the island was a problem.

In an effort to improve the catch and processing of fish, the then Traditional Authority Msosa advised the people on the island to observe a closed season every year between December and April. He advised the committee to develop by-laws and established sub-committees to be responsible for enforcing the by-laws as well as monitor the fishing activities on the island. In order to respect the spirits, the by-laws do not allow cutting down of trees and killing of animals, such as snakes and birds, on the island. Drinking, smoking and women are not allowed on the island during the fishing season (April-December).

The opening and closing of the seasons is observed through traditional systems where people in the area pay homage to their spirits on the island. People prepare different types of food which they give to the spirits. During the actual days of the closing and opening, several local leaders and government heads of various departments are invited to attend. Recognizing the efforts by the local leaders on the island, the Fisheries Department procured a motorized boat for use by the committee to assist in the by-law enforcement. The Fisheries Department said that they have limited control over the management of fisheries activities on the island apart from the taxation of the fishing gear.

The Mbenje Island Management Committee believes that, without the by-laws, the fish resources, trees, and wildlife on and around the island, would be completely wiped out. Anyone found engaging in illegal activities (such as cutting down trees or killing snakes) is punished using the by-laws. The wildlife, especially the snakes on the island, has coexisted with people and today behaves like it is tame. Snakes do not fear people, and neither do people fear the snakes.

**TRADITIONAL AUTHORITY MSOSA, AT A FISHING SEASON OPENING CEREMONY
©DAULOS MAUAMBETA, 2010**



3.3 CBNRM IN THE WILDLIFE AND TOURISM SECTOR

The Government of Malawi considers wildlife as a major boost to tourism apart from other forms of tourist attractions such as Lake Malawi, cultural values, mountains, and scenic views. It is because of this belief that the Tourism and Wildlife Departments have been put under one Ministry. EAD (1998) estimated that there are about 4,000 species of wild animals in Malawi on customary, public, and private land. Currently, 11% of the total land of the country is protected via five national parks and four wildlife reserves. Deforestation, clearing of land for farmland, illegal game hunting, consumption of birds and mammals for food, and increased human-animal conflicts have placed much wildlife and game under serious threat. For example, a survey of birds at Lake Chilwa (the Ramsar site in Malawi), found that 450 local hunters kill almost a million birds annually. The population of large mammals has declined at an alarming rate due to encroachment in the protected areas.

Realizing the challenges that the national parks and wildlife reserves were facing, the government, through the Department of National Parks and Wildlife, consolidated the four Acts that governed wildlife and game management in the country (Game Act, National Parks and Wildlife Act, Wild Bird Protection Act, and Crocodile Protection Act) into the National Parks and Wildlife Act in 1992 (Government of Malawi, 1992). The consolidated Act intended to revise the Department of National Parks and Wildlife (DNPW) approach of “fencing and policing” to allow access by local people into the protected areas.

It should be noted that the old Act of 1970 (Section 27) allowed the Chief Parks and Wildlife Officer to limit access to parks and reserves and not to allow any person to take resources or cultivate land within the protected areas. The government was able to limit access because the political machinery at that time was strong and could be used to enforce the Act. However, conflicts between surrounding communities and DNPW personnel could not be easily controlled.

The consolidated Act of 1992 allows controlled harvesting of natural resources within the protected areas. The Act provided for community participation in the conservation and management of wildlife (section 22A) and it also allows the Director of National Parks and Wildlife to enter into wildlife management agreements with legally recognized wildlife management authorities (defined as any local community organization or other private organization established for promoting local community participation). The Act allows revenue sharing between the DNPW and communities through organized wildlife management authorities. The main focus of the DNPW’s policy is to promote collaboration between the government and communities in managing wildlife. The policy asserts that government should create an enabling environment for local government, the private sector and NGOs, and specifically calls for community-based management for sustainable use of wildlife resources.

In line with the new policy and consolidated Act, the DNPW started a resource use program in Vwaza Game Reserve and Nyika National Park in 1996. Under this program, surrounding communities were allowed to hang beehives and collect non timber forest products from the protected areas but not kill animals and cut down trees. Even though the policy allowed communities to use resources from the protected areas, some members of the DNPW staff were not sure whether allowing communities to enter the protected areas would work and were not sure of CBNRM overall.

The change in the government’s approach saw the formation of Village Natural Resources Committees⁸ (VNRCs) to coordinate the natural resource management efforts around the protected areas and also assist

⁸ The VNRC is a ten-member committee elected by a village or group of villages to represent their interests related to wildlife management around protected areas. The committee acts as a liaison with national parks extension workers and other

DNPW in policing around the parks. Through the VNRCs, people were allowed to collect natural resources within 5 kilometers of the protected area boundaries and also could hang bee hives deep inside the protected areas. Currently, there are over 272 VNRCs around some protected areas and other sites in Malawi (see Table 6 below).

TABLE 6: TOTAL NUMBER OF VNRCs AND CBOS AROUND PROTECTED AREAS AND OTHER SITES IN MALAWI

Protected area	No. VNRCs / CBOs	Protected area	No. VNRCs / CBOs
Kasungu National Park	53	Majete Wildlife Reserve	19
Lake Chilwa Ramsar Site	20	Mwabvi Wildlife Reserve	zero
Lake Malawi National Park	zero	Nkhotakota Wildlife Reserve	19
Lengwe National Park	7	Nyika National Park	87
Liwonde National Park	31	Vwaza Wildlife Reserve	36

Source: Department of National Parks and Wildlife, 2010

In 2000, a resource-sharing fund was established after the Ministry of Finance (Treasury Dept.) approved the fund and the DNPW opened a suspense account based in Mzuzu. The money that goes into this account is derived from concession agreements and entrance fees from visitors who visit the two protect areas (Nyika and Vwaza). Using the benefit sharing scheme as stipulated in the wildlife legislation, the government distributes the money from the fund to the Nyika Vwaza Association. The association uses the money for development activities as identified by the Village Development Committees (VDC) in the villages around the Nyika and Vwaza national park and game reserve, respectively.

On the other hand, the Department of Tourism mainly works with the private sector and the hospitality industry to ensure that tourism services offered to visitors are of acceptable standards. The Department has developed a Tourism Plan for Malawi. The plan advocates for public engagement in the promotion of tourism products including the development of cultural lodges, promotion of the Lake Malawi Yachting Marathon, promotion of the Lake of Stars Music Festival, and promotion of the Mulanje Porters Race. These events happen annually in Malawi and attract both local and international participants. At the local level, communities are encouraged to promote local products such as dances, food, and clothes.

government officials. It is a sub-committee of the Village Development Committee (VDC) and has the lead role in planning and management of wildlife at the VDC level. VNRCs sharing the same protected areas have formed associations. For example there are associations in Majete, Nyika-Vwaza, Liwonde, and Lake Chilwa.



3.4 CBNRM ACTIVITIES IN THE NATURAL PLANT PRODUCT SECTOR

Unlike other countries in the SADC region, Malawi's CBNRM activities are largely dependent on non timber forest products (NTFPs). Such products include both natural products and plant derivatives such as honey. Malawi has scaled up processing and value addition activities for transformation of indigenous fruits into juices, jams, and sweets. For example, Malawi is producing Baobab juice, flour, oil, sweets, and jam which are now on the market. Started as a project, Baobab juice and other products are now produced throughout the country both at the household level and via commercial companies. Much of the Baobab fruit is collected from the Lisungwi Valley in Neno District, the Mangochi, Balaka, and Dedza-Mua areas, and in Chipoka in Salima.

Traditionally, Malawians have collected honey from tree holes, caves, and similar habitats. In some cases, traditional beehives have been made from tree bark and other materials. With the advent of CBNRM, modern beehives, i.e., the Malawi Standard Top Beehive, were promoted. Today, beekeeping is the commonest CBNRM activity in Malawi, especially where there is still tree cover. The known beekeeping sites include Nyika-Vwaza protected areas, all forest reserves in Malawi, Sendwe community forest reserve, Mulanje forest reserve, Kunyinda, Ngabu, Chikwawa, Neno, and Mwanza.

Malawi also produces good quality palm and cane furniture products such as chairs and tables of various forms. Other palm products include hats, sleeping mats, door mats, toys, and similar items. These activities are very common in the lake shore districts of Salima, Dowa, Mangochi, Balaka, and Machinga. A lot of communities are also engaged in the curio (mainly wood carving) market, which is mainly targeted at tourists and exterior markets, especially. There are large curio markets in Blantyre, Mua, Mangochi, Zomba, Lilongwe, Nkhata Bay, Machinga, and most of the lake shore districts.

Indigenous mushroom collection is a major activity of communities bordering most forest reserves including Liwonde forest reserve. Mushrooms are also collected and sold by the road side on the M1 road

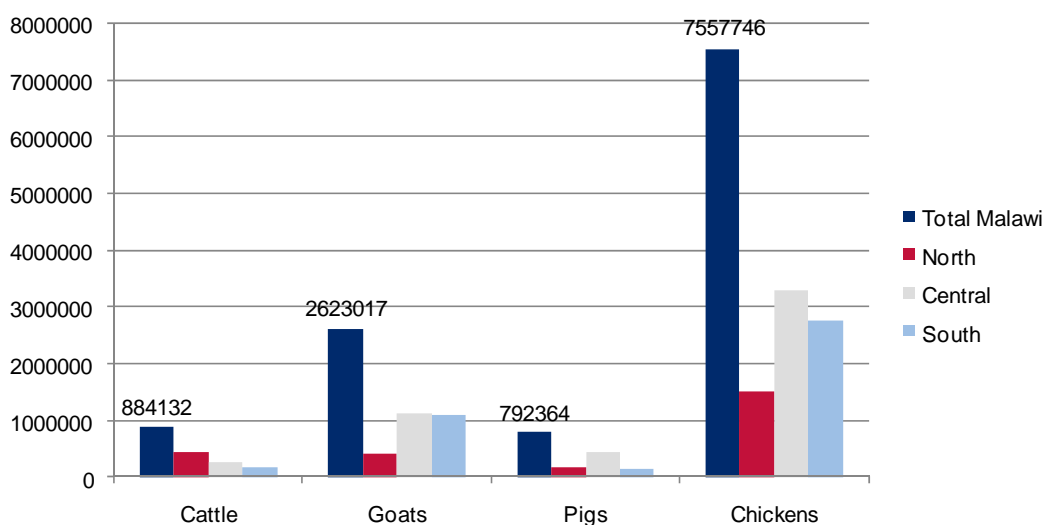
in Ntcheu and Dedza when they are in season. Unfortunately, most of these activities are not regulated, especially when it comes to determining sustainable harvesting levels for the plant product in question. The result has been over harvesting of the resource. Government and civil society organizations are implementing awareness activities on sustainable environment and natural resource management in order to reduce the problem.

3.5 CBNRM ACTIVITIES RELATED TO GRAZING AREAS

Apart from agriculture, livestock farming or animal husbandry is one of the major livelihood activities in Malawi, practiced by almost each and every rural household. Ownership of livestock and poultry at the household level is important both for food security and as an asset to be sold if the need arises. The National Census of Agriculture and Livestock conducted by the Ministry of Agriculture and Food Security showed that 57 percent of the households in Malawi owned or kept livestock or poultry. The proportion that owned or kept livestock was larger among male-headed households as compared to female-headed households, 61 percent and 48 percent, respectively. Households in the Northern region were more likely to have kept livestock than households in the other regions, 77 percent compared to 51 and 57 percent for the Southern, and Central regions, respectively (Government of Malawi, 2008b).

The number of livestock, especially of cattle and goats, has a great bearing on grazing areas. Cattle require large areas to graze. Goats are both grazers and browsers and tend to be non-selective when it comes to eating. The population of livestock in Malawi is moderately large compared to available grazing land because many cattle owners graze their cattle in dambos⁹ and other communal areas. In 2007, the population of livestock was as shown in Figure 10 below. The census also recorded the following livestock populations: 14,191 donkeys, 167,501 rabbits, 34,011 guinea pigs, 429,171 ducks, 281,514 guinea fowls, 610,575 doves, and 61,081 turkeys in the smallholder sector.

FIGURE 10: LIVESTOCK AND POULTRY NUMBERS IN MALAWI, 2007



Source: http://www.nso.malawi.net/data_on_line/agriculture/NACAL/Nacal%20Report.pdf

⁹ A dambos is a seasonal wetland or marshland which becomes water logged in the rainy season, and remains humid during the dry season with pools of water at selected points.

Most of the smallholder farmers in Malawi follow free range system of livestock rearing. This means that most of the livestock graze in the communal areas such as dambos and other open spaces during the rainy season, and wander around in gardens after the harvest. This practice has an impact on natural resources in such communal areas.

Senior Chief Chapananga has bemoaned the large numbers of cattle and goats in the Lower Shire which has resulted in degradation of soils and grazing areas. He considers cattle to be the major threat to CBNRM in the Lower Shire because of a lack of by-laws and policies governing numbers kept and owned by an individual, and areas for grazing. In the Northern Region of Malawi, large herds of cattle communally graze in Karonga, Chitipa, Mzimba, Rumphu, and Nkhata Bay.

MPATSANJOKA DAMBOS, SALIMA ©DAULOS MAUAMBEA, 2010



3.6 CBNRM ACTIVITIES RELATED TO WATER MANAGEMENT

Most water in Malawi originates from mountains and hills which have been designated as protected areas in the form of forest and wildlife reserves and national parks. Therefore, most of the work to manage water catchments is done by the sectors conserving protected areas. Another form of water management occurs in communal areas, especially agriculture fields, gardens, and along rivers. However, there are competing demands for land along rivers and around water bodies to such an extent that water catchments and buffer zones have been cleared for irrigated farming land. In some cases, communities have cleared trees in water catchment areas such as mountains and hills. Water utility companies and water boards are not doing enough to manage water catchment areas. Community-based water management is focused on water facilities but not on water catchment or watershed management, even though the legislation allows for the establishment of water catchment management authorities.

Overall, these trends have posed a threat to water management. They have also posed threats to the hydro-electric power generation plants along the Shire River; the associated dams constantly require dredging due to siltation from erosion. Similar threats are feared for the planned Shire River-Zambezi Inland Port in Nsanje and the Greenbelt Initiative along the lakeshore.

3.7 CBNRM ACTIVITIES RELATED TO AGRICULTURE

Malawi is an agricultural economy with 86% of the population living in rural areas and practicing subsistence farming. While most farmers depend on chemical fertilizers which have become affordable in the recent past due to the government's agriculture input subsidy program, a number of farmers still carry out a number of natural resource management activities on their farms. Some of the most important activities include:

- Construction and maintenance of soil and water conservation structures in agricultural fields. These include planting of vetiver and rhodes grass along contours and along field boundaries, and construction of contour bands, water infiltration pits, box ridges, and similar structures.
- Practicing agroforestry, a system of farming where crops are planted under nitrogen fixing trees such as *Faidherbia albida*, or in association with other woody perennials such as *Cajanus cajan* and *Sesbania sesban*.
- Crop rotation whereby crops are planted in succession over time. For example, maize with groundnuts, maize with tobacco, etc.
- Conservation agriculture whereby communities use minimum tillage, green manure, and mulching to conserve soil moisture, increase fertility, and enhance soil structure.
- Processing and marketing of agricultural and horticultural products: communities are selling products as groups or cooperatives in a number of areas in Malawi.

COMMUNITY HORTICULTURAL PRODUCE MARKET, MVERA, DOWA ©DAULOS MAUAMNBETA, 2010



A combination of all these activities at the farm level has the potential to increase land productivity and crop yields with minimum inputs. In Salima, the Ngolowindo cooperative is producing, processing and marketing farm produce as group. There are many examples of communities in Thyolo and Mulanje producing bananas and sugarcane in groups. Some farmers in Chiradzulu, Thyolo, Mulanje, Zomba, Neno, Mwanza, and Blantyre are raising dairy cattle and selling milk in bulk in groups.

4.0 IMPACTS OF CBNRM PROGRAMS IN MALAWI

The introduction of CBNRM in Malawi has had both positive and negative impacts on natural resource management and communities. As many people have written about the positive impacts of CBNRM initiatives, for example Josserand (2001), Schuster and Steenkamp (2007), ARD-BioFor IQC Consortium (2004), and Naughton et al. (1998), the present stocktaking exercise hypothesized that the introduction of CBNRM in Malawi has produced positive economic, ecological and social impacts at the household, community, and national levels. Overall, this appears to be true: some of these impacts are summarized in Table 7 below. There are also varied impacts across sectors and within sectors. However, the general impression is that CBNRM has generated some impacts both at the natural resource level and economic and livelihood levels of communities.

In the fisheries sector, it is believed that communities are now able to manage their natural resources by allowing fishing only with recommended gear with a specified mesh size. These communities are also able to collect data (presented below) on catches and income at their respective beaches. In Lake Chilwa, fish catches have improved because lake patrols are performed by the communities themselves, unlike in the past. With income from fishing, community members have been able to buy agricultural inputs such as fertilizer.

With respect to natural products, a number of CBOs and communities agree that CBNRM is adding value to the economy of Malawi via the sale of these natural products. Revenue from tourism to protected areas is also cited as a positive impact. However, it is generally difficult to quantify the economic returns of CBNRM because of a lack of recordkeeping at the local level (this indicates a need to institutionalize participatory monitoring and evaluation). Others say that while the charcoal trade is still illegal in Malawi, the sale of charcoal provides revenue for community members. In summary, CBNRM is thought to have contributed to the following impacts:

- Recovery of natural resources in isolated sectors and sites,
- Promotion of democratization of resource use,
- Governance improvement with respect to local-level structures involved in natural resource management,
- Raising the profile of the contribution of the natural resource sector to the national economy,
- Improving household cash income through the sale of natural resource products, and
- Strengthening the voice of advocacy institutions in natural resource management.

TABLE 7: SUMMARY OF CBNRM IMPACTS IN MALAWI

	Fisheries	Wildlife	Water	Forestry
Economic impacts				
Household level	<ul style="list-style-type: none"> Income generated from sales of fish Increased levels of upland fish farming (2007 statistics: 1,500 MT from upland fisheries) Availability of revolving loans Increased level of awareness on NRM 	<ul style="list-style-type: none"> Increased tourism operations which has led to increased employment opportunities for individuals and households Reduced conflicts Increased access to natural resources in protected areas Increased level of awareness on NRM 	<ul style="list-style-type: none"> 70% of households have improved access to safe water Increased employment opportunities for water system repairs More households employed in constructing water systems 	<ul style="list-style-type: none"> Increased levels of income generated from forest-based enterprises More people engaged in the charcoal business Improved access to NTFPs for food Increased level of awareness on NRM
Community level	<ul style="list-style-type: none"> Economic empowerment through economic fishing units Availability of group loans Increased participation through the Presidential initiative on aquaculture development 	<ul style="list-style-type: none"> Increased community level income from collaborative agreements 	<ul style="list-style-type: none"> Increased employment opportunities Water user associations able to generate their own income through sale of water 	<ul style="list-style-type: none"> Improved access to markets Participatory forestry has brought more employment and income opportunities for marginal groups
National level	<ul style="list-style-type: none"> Contribution to GDP Large-scale aquaculture investments, including project by MALDECO Involvement of private sector (boat construction, net making) 	<ul style="list-style-type: none"> Revenue from ecotourism concessions Taxes, entrance fees, private sector involvement More tourist visits 	<ul style="list-style-type: none"> Reduced expenditure on treatment and management of water borne diseases 	<ul style="list-style-type: none"> Increased GDP contribution from 2% to 3.5% GDP¹⁰ Licensing of timber utilization and concessions contributing to government budget Increased levels of public private partnerships
Ecological impacts				
Community level	<ul style="list-style-type: none"> Improved watershed management Decline in catches of popular fish, e.g., chambo, kampango 	<ul style="list-style-type: none"> Community ecosystem management Improved management of buffer zones 	<ul style="list-style-type: none"> Improved catchment management Increased level of community ownership of water systems 	<ul style="list-style-type: none"> More individual and communal woodlots established Improved forest management through

¹⁰ The contribution of CBNRM to GDP needs to be further analyzed by the National Statistic Office (NSO).

	Fisheries	Wildlife	Water	Forestry
			<ul style="list-style-type: none"> Catchment management committees formed in some parts of the country 	VNRMCs <ul style="list-style-type: none"> Improved management of Village Forest Areas Improved protection, management and utilization of trees on farm (agroforestry) by villagers
National level	<ul style="list-style-type: none"> Improved management of the Chambo 	<ul style="list-style-type: none"> Increased awareness resulting in initial reduction of tree cutting and poaching in Liwonde National Park (but lack of funds reversed trend) Improved management of buffer zones 	<ul style="list-style-type: none"> Improved catchment management Improved management of water supply systems 	<ul style="list-style-type: none"> More tree planting Increased level of participation in forest management activities Reduced forest fires in timber plantations and natural forests Improved catchment management (e.g., Middle Shire)

Source: Kafakoma, 2009

MARKETING OF BAOBAB PULP FOR THE PRODUCTION OF JUICE AND FROZEN PRODUCTS AT LIMBE MARKET
©DAULOS MAUAMBETA, 2010



4.1 IMPACTS RELATED TO CHANGES IN RIGHTS TO BENEFIT FROM NATURAL RESOURCES

There are a number of impacts related to changes in rights to benefit from natural resources in the associated sectors such as wildlife, fisheries, forestry, and agriculture. Both policy makers and local communities recognize that access to natural resources is not only a need but a right for all Malawian citizens; this right is enshrined in the country's Constitution. There is also a high level of recognition by local people that the degradation of the environment and natural resources is affecting or impinging on their ability to exercise these rights as well as the ability of the generations to come. It should also be noted that community-level platforms for advocacy are still in their infancy or not yet fully developed; this, in turn, affects the ability of rural communities to demand meaningful access to, and control of natural resources.

4.1.1 RIGHTS IMPACTS IN THE WILDLIFE AND TOURISM SECTOR

In the wildlife and tourism sector, changes in rights to benefit from wildlife resources has meant that communities are now able to participate in wildlife management. This is stipulated in the National Parks and Wildlife Act of 1992. Communities surrounding protected areas have always suffered as a result of problem animals destroying their property and sometimes their lives. With collaborative arrangements, adjacent communities now have the right to participate in, and make decisions with respect to managing wildlife in protected areas and other sites. During the stocktaking assessment, this was observed at Kasungu National Park in traditional Chulu, Nyika-Vwaza Association, Lake Chilwa wetland, Liwonde National Park, and Majete Wildlife Reserve.

Case Study 1: Nyika-Vwaza Association around Nyika National Park and Vwaza Wildlife Reserve

With support from GTZ, the DNPW implemented a Border Zone Wildlife and Natural Resource Management project which facilitated the formation of many VNRCs and the Nyika-Vwaza Association. In line with the wildlife policy and Act of 1992, the association signed a resource sharing agreement with the DNPW which stipulated that the association will receive 50% of the gate or entrance fees and 20% from the concession agreements that the department signed with tourist operators and other resource users.

The Nyika-Vwaza Association was formed in 2000 with support from the GTZ Border Zone Development Project. The association comprises 108 VNRCs and beekeeper groups. Currently, the association is grouped into 28 zones around the two protected areas and has a board of trustees and a small management unit that coordinate the activities of the association. The main objectives of the association are to conserve natural resources in and around the protected areas as well as facilitate development projects within the boundary communities from the proceeds realized from the resource sharing arrangement with the government. Apart from the revenue from the government, the association has, since its formation, received financial support from MEET, COMPASS II, WWF through the Coordination Union for the Rehabilitation of the Environment (CURE), the Danish Hunters Association, and Total Land Care. The various groups such as the beekeepers pay a small subscription fee to the association in order to hang bee hives in the protected areas.

The formation of the association around the two protected areas has improved the relationship between local people and DNPW personnel. Cases of poaching and encroachment into the protected areas have declined. Many community facilities such as primary schools, roads and health centers have been constructed and

rehabilitated in the villages around the two protected areas via the shared revenue from the association. Surrounding communities are now aware of the benefits of the two protected areas and are able to access the various NTFPs as well as carry out activities such as beekeeping in the protected areas.

Case Study 2: Khomola Beekeepers and Environmental Trust, Kasungu

The Khomola Beekeepers and Environmental Trust operates within the Kasungu National Park. The Trust dates back to 2007 when local people noted increasing poverty, poor nutrition, erratic rainfall, and thought that conventional NTFP activities such as beekeeping could help counteract these trends. The Trust encompasses the four group village headmen of Kamtuwale, Zanda, Kamzati, and Kathongola within the traditional authority of Chulu in Kasungu. They decided to embark on beekeeping because honey is food and medicine, the cost of beekeeping was lower compared to other businesses, and labor inputs were low compared to farming.

The Trust currently has a total membership of 70, composed of 41 women and 29 men. Members reported that women were more interested in beekeeping than men because women suffer more from household-level poverty. The Trust is under registration with the Register General and is also registered with CURE. Election of leaders is done by voting through show of hands and the quorum is set at 50%. They have placed 350 beehives in Kasungu National Park on a total land area of 15,800 hectares. Over 50% of the hives are colonized by bees. They obtained a loan through the New Building Society of MK 900,000 (about US \$6,050) as capital investment into the beekeeping business. They have since repaid MK 300,000 (about US \$2,000).

The Trust is facing a number of challenges including:

- Slow colonization of beehives,
- Inadequate equipment (beehives, bee suits, etc.), and
- Long distances between the villages and the national park (making it difficult to monitor activities within the park).

Case Study 3: Lake Chilwa Bird Hunters Association, Zomba

Lake Chilwa is a shallow lake bordered on all sides by swamps and seasonally flooded grasslands. It is very rich in fish and supports the livelihoods of about 60,000 people. The lake itself is about 700 km² in size, but is liable to dry up; surrounding grasslands cover an additional 400 km². Lake Chilwa was designated as a Ramsar Site in 1997. Snaring and shooting of birds have been practiced for a long time in the area, but commercial exploitation of waterfowl started on a large scale in 1996, following the seasonal drying of the lake and collapse of the fishery in 1995. This ability to shift between resources is an important dimension to the resilience of the local people who are dependent on natural resources and are living in an uncertain environment. It allows them to survive despite crop failure and a crash in productivity of their usual livelihood activity: fishing. A survey in 1998/99 estimated that over a million waterfowl were snared or shot following the drying of the lake.

WESM's response wasn't to seek a ban on bird hunting – something that would have been impossible given the size of the lake – but to give local communities the responsibility for managing their resource sustainably. Although Lake Chilwa is a Ramsar site, it doesn't have any other protected area designation under Malawian law. A revision of the Wildlife Act in 2004 allowed for the establishment of Community Conserved Areas and WESM used this opportunity to empower communities around Lake Chilwa to take care of the lake's water birds. Supported with funding from the Danish Hunters Association, a project is being implemented which aims at building the capacity of communities to effectively manage hunting in this vast area.

There are twenty hunting clubs which have been created all around the lake in Zomba, Phalombe and Machinga. These clubs elect representatives to an umbrella body, the Lake Chilwa Bird Hunters Association. Working together with local government, WESM, and other technical support organizations, an agreement was reached on appropriate management measures such as a closed hunting season, sanctuaries where hunting is prohibited year round, and the introduction of licensing and bag limits. These measures have been written into by-laws, together with the appropriate framework of fines, and measures for dealing with infractions. Most importantly, the whole process operates at the local level – offenders are dealt with by traditional chiefs, and fines are contributed to community funds that are used for social projects such as repairing bore holes and improvements to school buildings. Within each club, there are monitors who are responsible for ensuring that the closed seasons and no-hunting zones are respected. There are a total of 40 monitors in the Lake Chilwa basin.

So far the system seems to be working well. Whilst there are (and always will be) people who hunt illegally, the regulations seem to be generally respected. On a visit to Kachulu Beach, the fishing season had just re-opened and there was a carnival atmosphere as fishermen landed buckets of tiny matemba (*Barbus paludinosus*) which were then being laid out on long racks to dry in the sun. Great sacks of dried fish were being loaded onto vehicles for transport to the market.

The Bird Hunting Clubs are also looking at ways of diversifying their livelihoods and earning extra income. They have constructed ponds of their own volition, in an effort to provide a place where visitors can come and watch the birds more easily. Already, they are earning a bit of extra income by guiding tourists, and this is something they would like to enhance. Adding market value to the birds that are trapped is an objective for a (hoped for) next phase of the project. The birds are smoked and sold, mainly in Zomba – a spur-winged goose (*Plectropterus ganbensis*) fetches about MK 1,500 (US \$11). But improved smoking has the potential to produce a much improved product with a higher market value.

4.1.2 RIGHTS IMPACTS IN THE FORESTRY SECTOR

In the forestry sector, it has been found that local communities appreciate the importance of adding value to forest products. This is practiced, for example, in the Sustainable Management of Indigenous Forests (SMIF) project, via the Kam'mwamba Natural Resource Management Association. There has also been a change in attitude among extension staff and local communities with the realization that forests have to be managed for improving livelihoods, not just preservation or conservation. A number of rights have been granted to communities. In Mulanje, and around Nyika and Vwaza, communities are now allowed to hang beehives in the forest reserves and PAs. In Lengwe, Liwonde, and Majete, communities are allowed to collect some resources such as thatch grass and firewood for communal activities such as funerals.

4.1.3 RIGHTS IMPACTS IN THE FISHERIES SECTOR

In the fisheries sector, communities have developed by-laws which they are using to enforce fishing regulations with respect to open and closed seasons, recommended fishing gear, and mesh sizes. Certain communities such as the one on Mbenje Island in Salima, have practiced this since 1958. Around Lake Chiuta, Malombe, and Chilwa, BVCs have also developed by-laws and are enforcing them so that their fish catches can increase. Almost all BVCs have also conducted awareness meetings to sensitize the members of their rights as well as limitations on fishing. Traditional Authority Msosa who controls fishing activities on Mbenje Island organizes big festivals during the closing and opening of the fishing season in his area.

COMMUNITY TREE NURSERY, MWANZA ©DAULOS MAUAMBETA, 2010



4.2 CHANGES TO THE NATURAL RESOURCE BASE – STATUS AND TRENDS

In general, where CBNRM has been practiced seriously, there have been positive changes to the natural resource base. Forest cover has increased, animal populations in protected areas and village forest areas have increased, and fish catches have increased. In some cases, communities are seeing more small

animals, such as duikers and rabbits, in their forest areas than before. This section provides details on the changes that have been observed in the natural resource base as a result of CBNRM.

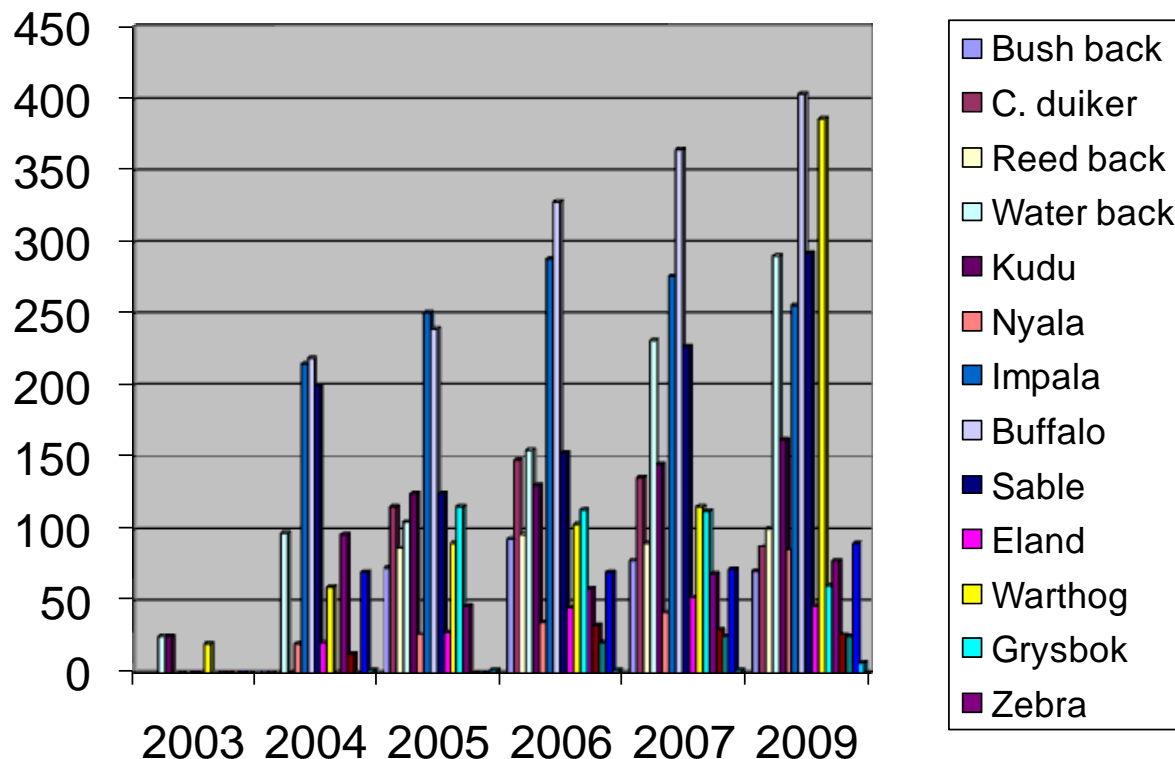
4.2.1 NATURAL RESOURCE BASE IMPACTS IN THE WILDLIFE SECTOR

It was widely accepted by the interviewed stakeholders that CBNRM in protected areas, such as Nyika and Liwonde National Parks, and Majete and Vwaza Wildlife Reserves, has helped to reduce conflicts between DNPW and the surrounding communities as well as between animals and people. Communities report on problem animals once they are out of the protected area. Together with park authorities, communities are also engaged in natural control of problem animals through the planting of chili pepper plants around their fields, and constructing fences around water points to avoid crocodile attacks. Some communities have also been taught to construct big ridges and ditches across hippo paths (hippos are not able to cross big ridges and ditches because of their short legs and large bellies). There is also evidence of larger populations of wildlife, especially small mammals, while the population of big mammals in Vwaza game reserve, such as elephants, has stabilized.

The level of poaching in some protected areas has decreased and the bird population has recovered in the Lake Chilwa wetlands as a result of the existence of a wildlife CBO, Mwawi Wa Mbalame Association. In the Majete Wildlife Reserve, the population of mammals has increase tremendously as a result of translocations, good management, and good working relationships with surrounding communities (see Figure 11 below). Government and communities have signed co-management agreements in some locations such as Majete and Nyika-Vwaza. From 2005 onwards, considerable natural population increases have been detected.



FIGURE 11: WILDLIFE STATISTICS IN MAJETE WILDLIFE RESERVE (2003 TO 2009)



Source: African Parks (Majete) Limited

4.2.2 NATURAL RESOURCE BASE IMPACTS IN THE FORESTRY SECTOR

Wherever CBNRM is taking place, and with strong traditional authority leadership, improved management of forest areas which were previously degraded has taken place. For example, positive results have been noted in Kam’wamba in Neno, Khuzumba Forest in Machinga District, Sendwe Village Forest Area (VFA) in Lilongwe, and many other areas. Improved forest management has also been linked to soil and water conservation. For example, rehabilitation of riparian areas such as Rivirivi in Balaka, Thuchila in Mulanje, and Thangadzi and Laranje Rivers in Nsanje, has resulted in the minimization of river bank erosion.

4.2.2.1 The Case of the Sustainable Management of Indigenous Forests Project, Kam’wamba Neno

Community-based forest management is a strategy being adopted by many governments in developing countries. One objective is to enhance local control of, and benefits from local forest resources. Conforming to this objective, the Wildlife and Environmental Society of Malawi (WESM) has been implementing a community-based project called Sustainable Management of Indigenous Forests (SMIF) at Kam’wamba in Neno District (formerly known as Mwanza East). The SMIF project began in 1996 with a goal of sustainably managing these forests through tree planting, encouraging natural regeneration, fire protection, and engaging the communities in a number of income-generating activities (IGA) such as beekeeping (honey production), fruit juice production, and guinea fowl rearing.

242,021 trees of various species were planted for soil amelioration, firewood, timber, and nutritional (e.g., fruits) purposes during the project period. This translates into approximately 97 hectares of forest cover if planted at 2 m x 2 m spacing. Most of the trees were planted by individuals (181,144 trees). This means that 0.5% of the project area has been brought under forest cover.

Following an initial inventory conducted in indigenous forests in 1998, a second inventory was executed to determine the impact of the project interventions on forest cover. Results have revealed that the indigenous forest cover has increased by over 30% in stocking from 1998 to 2006 with the individual forest areas under strong leaderships gaining 68% in forest cover. Forest cover in the VFAs increased by over 48%. The individual forest areas under weak leadership attained the lowest forest cover increase (24%) over the same period.

Most of the individual forest areas fall under weak leadership and are largely degraded due to charcoal production. These individuals must be sensitized on the importance of conserving their forest resources. In addition, the active participation of the Forestry Department in enforcing existing laws will help to reduce this practice. Lastly, carrying out enrichment planting with more economically-, socially- and ecologically-important species in such areas will enhance the forest resource condition as well as the livelihoods of local communities. Some of the recommended species include *Terminalia sericea*, *T. stenostachya*, *Tamarindus indica* and *Adansonia digitata* (Mwalukomo, 2006; Chanyenga et al., 2006).

4.2.2.2 The Case of Sendwe Village Forest Area, Traditional Authority Khongoni, Lilongwe

Sendwe Village Forest Area is situated to the northwest of Lilongwe City. It shares a boundary with Kazingatchire village to the north, Nambuma River to the west, Bua River to the east and Malembo Trading Center to the south. Between 1980 and 1997, all trees in the VFA were wantonly cut by local communities. This resulted in a bare Sendwe hill. Communities cut down trees because they needed firewood for curing tobacco and for construction of shade for burley tobacco.

Subsequently, people began to experience several problems including lack of firewood, soil erosion, loss of medicinal plants, changes in rainfall patterns, and low crop yields. This resulted in hunger and women traveling long distances to collect firewood. Aware of these problems, the communities came together in 1998 to try to address them. In that year, traditional leaders and extension workers from the Forestry Department and other representatives from six villages held the first six-hour meeting on Sendwe conservation. They developed and agreed on a set of objectives and by-laws. There were two main objectives: promoting and protecting regeneration of natural trees to increase forest products, and encouraging sustainable utilization of forest products. In 1999, the community tilled the whole bare hill and planted 4,000 seedlings of *Senna siamea* which did not survive because they were suppressed by regeneration of natural trees. In 2000, the communities decided to encourage regeneration of trees from tree stumps and roots. They also promoted the growing and planting of agroforestry trees and exotic trees as woodlots, and on homesteads as boundary plantings. In that year, Sendwe community won MK 30,000 (about US \$200) for properly managing the largest VFA in Malawi; the forest covered 73 ha and was composed primarily of natural regeneration.

The Sendwe VNRMC also went to Bwanje Valley to visit the Bwanje Environmental and Rural Development Organization (BERDO) to learn about VFA management. In 2003, with support from the Forestry Department, the community conducted a participatory forest resource assessment of the VFA. In 2004, with support from WESM, Sendwe VNRMC visited Kam'mwamba in Neno District and Mulanje to learn about beekeeping. During that visit, the VNRMC was given a sample beehive, and beekeeping

equipment. This year (2010), they started beekeeping in the VFA as an IGA. In 2005, the community started to notice increases in wild animals in the forest such as hyenas, baboons, antelope, and birds. In 2006, with funding from COMPASS II, the community completed a management plan, mapping, and developed a constitution.

A visit to Sendwe VFA in June 2010 proved the fact that the 73 ha VFA, dominant with miombo species, is the largest and best managed VFA in Malawi. The VFA now encompasses contributions from 20 villages.

SENDWE COMMUNITY FOREST ©DAULOS MAUAMBETA, 2010



4.2.2.2 The Case of Bwanje Environmental and Rural Development Organization

The Bwanje Environmental and Rural Development Organization (BERDO) was registered as an NGO in 1999 after its formation in 1998. The organization was formed to address the problem of deforestation in the Bwanje Valley under traditional authority Ganya in Ntcheu in the central region of Malawi. BERDO's efforts are based in rural areas and it works directly with local communities. It is a membership organization where rural people interested in participating in its activities pay a small contribution fee. BERDO currently works in 300 villages with a total population of over 10,000 people. Its thematic focus areas include community-based environmental and natural resource management, agriculture, food security, HIV and AIDS, and gender.

The two main goals of these projects are: (a) improved sustainable livelihoods in the Bwanje area, particularly for female-headed, and HIV/AIDS-affected households, and (b) participatory watershed management in the Bwanje Valley. Specifically, these projects aim to achieve the following objectives: the livelihood security project aims to increase access to food for 50% of the food-insecure households by

three months after harvest in the target area; improve the levels of income by 50% of at least 75% of the targeted, vulnerable households; and improve the welfare of HIV/AIDS-infected, and -affected people through increased access to care and health services. Overall, BERDO has managed to establish the principles of CBNRM in the Bwanje Valley. During the first half of 2009, a number of trees were planted and managed by communities in this area (see Table 8 below). Some of the main activities of BERDO members include establishing a forest management plan for Mawira VFA, participatory patrols around forest areas, tree nursery establishment, planting of trees along river banks and in catchment areas, and promotion of agroforestry activities.

INSIDE SENDWE COMMUNITY FOREST, A BEEHIVE ©DAULOS MAUAMBETA



TABLE 8: BERDO TREE PLANTING AND MANAGEMENT BY GENDER (JANUARY 2009 - JUNE 2010)

Month	Trees Planted /Managed or Area Managed	Participation By Gender			Comment on Work done
		Women	Men	Total	
January 2009	71,947	198	186	374	Transplanting of seedlings
February 2009	58,000	270	167	437	Transplanting of seedlings
March 2009	68,522	412	481	893	Transplanting of seedlings & weeding
April 2009	1,140	132	117	249	Weeding
May 2009	75,960	170	146	316	Tree protection - firebreaks & weeding & patrols
June 2009	88,000	523	315	848	Tree protection - firebreaks & weeding & patrols
January 2010	19,146	77	199	276	Planting of seedlings
February 2010	9,748	211	109	320	Planting of seedlings
March 2010	8,300	190	124	314	Planting of seedlings
April 2010	5,170 m2	42	28	70	Planting of seedlings

Month	Trees Planted /Managed or Area Managed	Participation By Gender			Comment on Work done
		Women	Men	Total	
May 2010	1,121 m2	114	120	260	Tree protection- firebreaks & weeding & patrols
June 2010	1,565 m2	373	257	702	Tree protection- firebreaks & weeding & patrols

Source: BERDO MOMS Field Data, 2010

4.2.2.3 The Case of Sapitwa Beekeepers Association, Mulanje Forest Reserve Area

Started in 2003, beekeeping has made a substantial impact on natural resource management in the Mulanje and Phalombe Districts. The initiative has changed peoples' attitudes: they now see that they can economically benefit from trees, water, and forest insects without necessarily and directly using or killing trees or insects. This provides the basis for understanding the need for properly managing natural resources to sustain benefits.

Around the forest, in places where beehives are hung, there is total protection from fire and cutting of trees. Beehive owners are always voluntarily putting out fires close to apiaries. Frequent patrols in the area guard against illegal cutting of trees. Bees are a threat themselves as people cannot approach apiaries with ease. As such, trees with beehives are protected. The area of the forest protected due to beekeeping is estimated at 20% of the Mulanje Forest Reserve. Overall, since the start of the initiative, a total of 10,938 beehives have been hung in and around Mulanje Forest Reserve (see Table 9 below).

The Mulanje and Phalombe Districts have seen complete attitudinal change to natural resource management as a result of beekeeping. People have realized the hidden treasure in bees, trees, and water through beekeeping. This realization is a motivating factor that has led to the creation of eleven (11) VFAs and associated beekeeping clubs. The clubs have been grouped into an overarching association known as the Sapitwa Beekeepers Association or SABA. Overall, this activity has resulted in the addition of significant natural resources (i.e., well maintained forests) to the land.

TABLE 9: BEEKEEPING CLUBS OF THE SAPITWA BEEKEEPERS ASSOCIATION

Name of Zone	No. of Clubs	No. of Beehives		Beehive Totals
		Colonized	Not Colonized	
Likhubula	15	1,201	514	1,716
Mwnamulanje	12	65	54	119
Muloza	5	362	398	760
Likulezi	5	11	8	19
Lujeri	4	94	180	274
Misanjo	9	806	574	1,380
Limbuli	16	93	754	847
Milumbe	27	1,944	1,296	3,240
Makhawani	13	944	1,416	2,360
Michesi	26	42	81	123
Kholongo	15	12	88	100
Totals	147	5,574	5,363	10,938

Source: Mount Mulanje Conservation Trust (MMCT), 2010

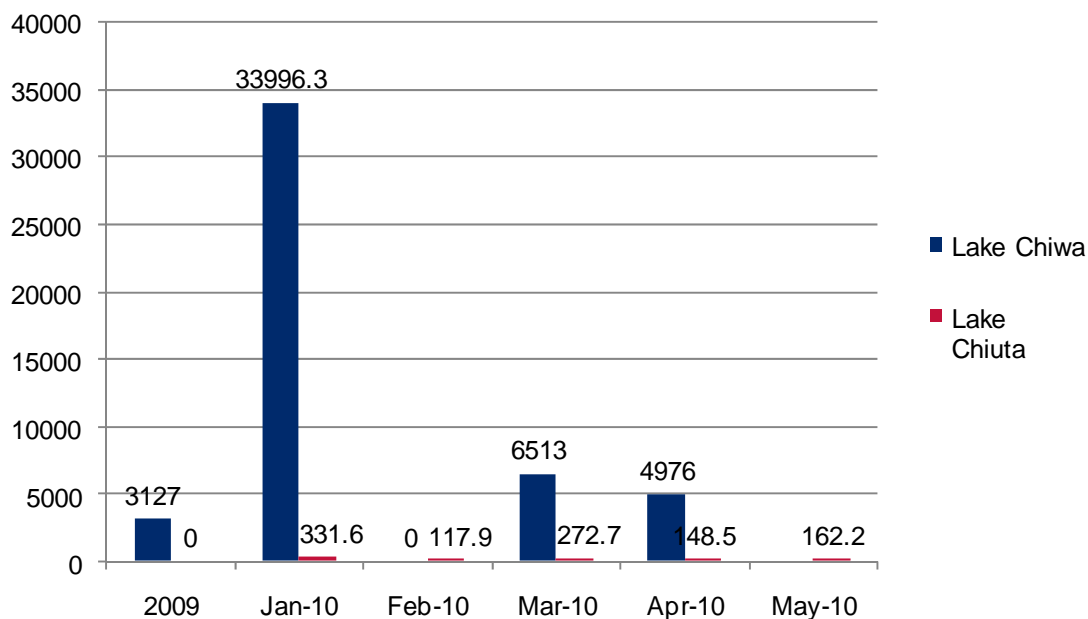
4.2.2.5 The Case of the Income Generating Public Works Program, Forestry Component

The IGPWP has so far planted 37,500,000 trees and assisted in the management of 1,800 ha of forest areas. It will have planted 42,500,000 trees and assisted in the management of 2,250 ha of existing forest areas by the end of 2010 in the impact districts of Lilongwe, Mchinji, Kasungu, Dowa, Mzimba, Nkhatakota, Dedza, Ntcheu, Machinga, Zomba, Mangochi, Blantyre, Thyolo, Mulanje, and Chikhwawa.

4.2.3 NATURAL RESOURCE BASE IMPACTS IN THE FISHERIES SECTOR

With respect to fisheries, CBNRM has enabled the recovery of fish stock in Lakes Malombe, Chilwa, and Chiuta, and some parts of Lake Malawi through the active participation of 365 BVCs in fisheries management. Due to by-laws and involvement of communities in fisheries management, fish catches have increased at Lake Chiuta, Lake Chilwa, and around Mbenje Island. Figure 12 below provides some data on fish catches in Lake Chiuta and Lake Chilwa from selected BVCs. It should be noted that in Lake Chiuta in 2009, fish catches declined because weeds in the lake were destroyed and the fish did not, therefore, have breeding grounds.

FIGURE 12: FISH CATCHES IN LAKE CHIUTA AND LAKE CHILWA, 2010



Source: MOMS Field Data, 2010

4.3 CHANGES IN GOVERNANCE, RURAL REPRESENTATION AND PARTICIPATION

Previous efforts in the natural resource management sector mainly involved men, as they were the traditional decision makers, even though women played a critical role in implementing natural resource management activities such as tree planting. Subsequently, the introduction of CBNRM has seen changes in women's participation, mainly in decision making related to natural resources. Women are now playing a central role in decision making and some of them have taken leadership positions as chairpersons, secretaries, and treasurers of various CBNRM-related institutions such as VNRMCs, VNRCs, Association Boards, and others. People in Rumphi district said that local-level institutions headed by

women are stronger and more accountable than those headed by men. In general, CBRNM has resulted in improved transparency amongst local-level institutions. In the past, some VNRMCs collapsed because the leadership was not accountable to the people. For example, in Ntcheu District at Mtanda VFA, the first VNRMC was very corrupt which resulted in the whole forest area being deforested, but when the leadership of the committees changed to include women, participation in forest management activities and accountability both improved. The VNRMCs around this forest area are now very strong.

4.3.1 NUMBER OF PEOPLE SUPPORTED THROUGH CBNRM

Analysis of various CBNRM areas visited demonstrates that more than a million people are participating in CBNRM and have been supported by CBNRM programs. Please see specific details in the sections below.

4.3.1.1 Sapitwa Beekeepers Association, Mulanje District

Around Mulanje Mountain, a beekeeping initiative began in 2002 and has continued to date. The initiative, organized under the umbrella of SABA, has grown significantly in membership, from a mere 3 beekeepers in 2002 to 2,417 members in 2008 as shown in Table 10 below.

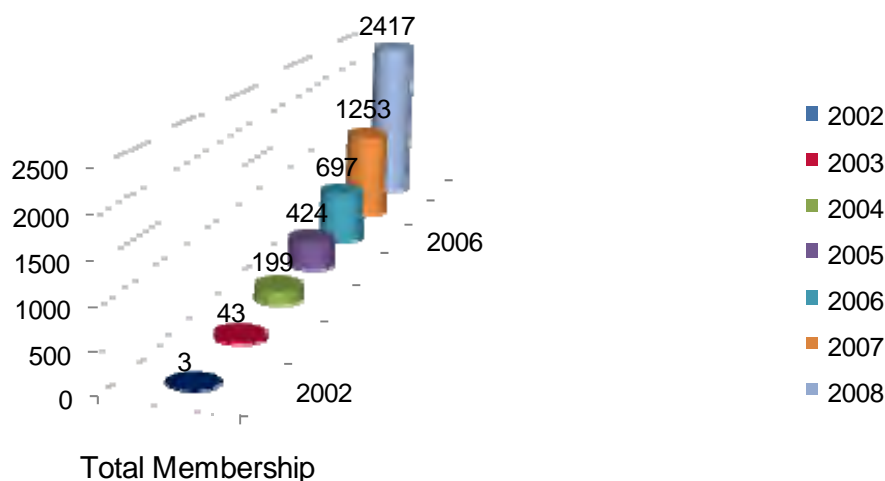
TABLE 10: SABA MEMBERSHIP BY ZONE SINCE 2002

Name of Zone	2002	2003	2004	2005	2006	2007	2008
Likhubula	3	15	61	129	200	257	260
Mwnamulanje	0	8	41	85	85	145	241
Muloza	0	8	28	49	67	71	71
Likulezi	0	0	12	33	53	71	71
Lujeri	0	12	30	71	82	102	103
Misanjo	0	0	0	0	80	100	128
Limbuli	0	0	28	58	131	164	217
Milumbe	0	0	0	0	0	187	313
Makhawani	0	0	0	0	0	156	260
Michesi	0	0	0	0	0	0	321
Kholongo	0	0	0	0	0	0	432
Phalombe	this is a new zone; detailed figures are unavailable						
Totals	3	43	199	424	697	1,253	2,417

Source: MMCT, 2010

Graphically, there has been exponential growth in membership since 2002 as represented in Figure 13 below.

FIGURE 13: SABA MEMBERSHIP GROWTH SINCE 2002



SABA Membership by Gender

While beekeeping is traditionally a man’s job, women have been at the forefront of beekeeping in Mulanje and Phalombe under SABA. This is illustrated in Table 11 below.

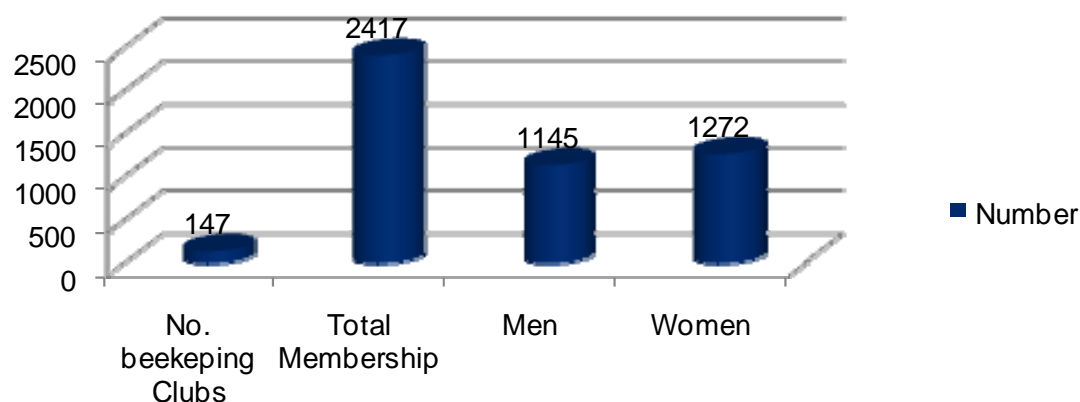
TABLE 11: SABA MEMBERSHIP BY GENDER

Name of Zone	No. of Beekeeping Clubs	Membership		Totals
		Men	Women	
Likhubula	15	144	116	260
Mwnamulanje	12	79	162	241
Muloza	5	36	35	71
Likulezi	5	28	43	71
Lujeri	4	61	42	103
Misanjo	9	60	68	128
Limbuli	16	87	130	217
Milumbe	27	189	124	313
Makhawani	13	144	116	260
Michesi	26	136	185	321
Kholongo	15	181	251	432
Totals	147	1,145	1,272	2,417

Source: MMCT,2010

Graphically, this can be presented as in Figure 14 below.

FIGURE 14: SABA MEMBERSHIP BY CLUB AND GENDER



4.3.1.2 Bwanje Environmental and Rural Development Organization, Ntcheu

BERDO's participatory watershed management project aims to empower 6,000 community members from 30 villages to manage forest resources, and promote agroforestry, soil conservation, and tree planting and afforestation activities in the area. BERDO has nine sections namely: Kahowera, Kampheko, Sharpvally, Kasinje, Mitsitsi, Nthumbo, Bwanje, Chawanje, and Masese. The total membership of BERDO is about 1,500, with approximately 70% being women as indicated in Table 12 below.

TABLE 12: BERDO MEMBERSHIP AS OF JUNE 2010

No.	Section Name	Women	Men	Total
1	Kahowera	307	116	423
2	Kampheko	95	73	168
3	Sharpvally	259	109	368
4	Kasinje	41	10	51
5	Mitsitsi	32	14	44
6	Nthumbo	56	17	73
7	Bwanje	180	83	263
8	Chawanje	60	29	89
9	Masese	No report	No report	No report
	Total	1,032	451	1,483

Source: BERDO MOMS data, 2010

4.3.1.3 Watershed Management along the Rivirivi River, Balaka

Women constitute the majority of the membership – approximately 79% – in the Rivirivi project as shown in Table 13 below.

TABLE 13: COMMUNITIES INVOLVED IN THE RIVIRIVI WATERSHED MANAGEMENT INITIATIVE, BALAKA

Name of VNRMC	Participation by Gender			Type of Tree Planted	Plot Size (ha)	Year Started
	Men	Women	Total			
Chiputula	14	46	61	Both exotics &	1.25	2004

Name of VNRMC	Participation by Gender			Type of Tree Planted	Plot Size (ha)	Year Started
	Men	Women	Total			
				Indigenous		
Sakaiko	12	37	49	Both	0.5	2004
Kodo	9	42	51	Both	0.75	2004
Khoswe	7	29	36	Both	0.25	2004
Pakamwa	11	27	38	Both	0.25	2004
Joshua	9	53	62	Both	1.25	2004
Chingagwe	6	31	37	Both	0.5	2004
Lire	10	47	57	Both	0.5	2004
Lupanga	11	33	44	Both	0.5	2004
Njopilo	7	29	36	Both	0.5	2004
Nzati	11	26	37	Both	0.5	2008
Total	106	400	508			

Source: WESM Balaka Branch Office, 2010

4.3.1.4 Income Generating Public Works Program, Forestry Component

Initially, the target of this program was to work with 1,600 clubs in 15 districts (Lilongwe, Mchinji, Kasungu, Dowa, Mzimba, Nkhotakota, Dedza, Ntcheu, Machinga, Zomba, Mangochi, Blantyre, Thyolo, Mulanje, and Chikhwawa) but due to an influx of funds from the food security budget the program works with 2,050 clubs. The proportion of women in these clubs is 52%.

4.3.1.5 Beach Village Committees around Lake Chilwa and Lake Chiuta

There are a total of fourteen CBOs covering Lake Chilwa and Lake Chiuta; each CBO comprises ten members with a total of 30 women and 110 men. This is due to the fact that fishing is traditionally a male activity. Women are only involved in the processing and selling of fish after the fish have been brought to the beaches.

4.3.1.6 CBO Membership around Majete Wildlife Reserve, Chikwawa, Mwanza and Blantyre

Majete Wildlife Reserve draws its membership CBOs from Chikwawa, Mwanza and Blantyre Districts. There are a total of 19 CBOs with 204 members of which 37% are women. In three CBOs (Miyowe, Kambewe and Kaola), there are no women members while in some CBOs, such as Ndife amodzi, Mthumba and Phwadzi, women represent over 50% of the members (see Table 14 below).

TABLE 14: CBOS AROUND MAJETE WILDLIFE RESERVE BY GENDER

No.	Name of CBO	Male	Female	Total members	% Women
1	Chingalumba	9	7	16	44
2	Nthawabingu	10	4	14	29
3	Kapichira	7	5	12	42
4	Mbwemba	8	4	12	33
5	Mthumba	7	19	26	73
6	Madzi atenthath	11	3	14	21
7	Mphemba	10	5	15	33
8	Ntayandolo	12	6	18	33

No.	Name of CBO	Male	Female	Total members	% Women
9	Miyowe	16	0	16	-
10	Ndife amodzi	12	18	30	60
11	Tilitonse	26	14	40	35
12	Mavuwa	10	8	18	44
13	Phwadzi	7	7	14	50
14	Kadumba	10	6	16	37
15	Namitsempha	7	5	12	42
16	Kambewe	12	0	12	-
17	Matope	11	3	14	21
18	Kaola	10	0	10	-
19	Malungwi	9	5	14	36
	Total	204	119	323	37

Source: African Parks (Majete), Ltd.

4.4 CHANGES IN BENEFITS

The major reason why many communities are engaged in CBNRM is because of the immediate economic benefits that they can obtain. In Malawi, any activity that can bring immediate economic benefits to an individual will obviously be seriously considered. However, amongst individuals, there are risk takers and non-risk takers. It is the risk takers that become champions after an innovation is successful. This is what has happened in the CBNRM sector in Malawi.

Communities engaged in various forms of CBNRM have seen some type of positive change in both direct and indirect benefits at both CBO and individual levels. Communities are able to meet basic needs such as firewood and wild foods. Others have developed natural resource-based enterprises such as beekeeping, while some communities have gone into community-based tourism entrepreneurship.

At the national level, some economists estimate that benefits derived from CBNRM could reach more than 3% of the gross domestic product (GDP), but this is just a crude figure as no systematic quantification has been carried out. Below are some of the examples of benefit changes in the sampled areas visited during the stocktaking assessment.

4.4.1 COLLECTIVE INCOME AT THE CBO LEVEL

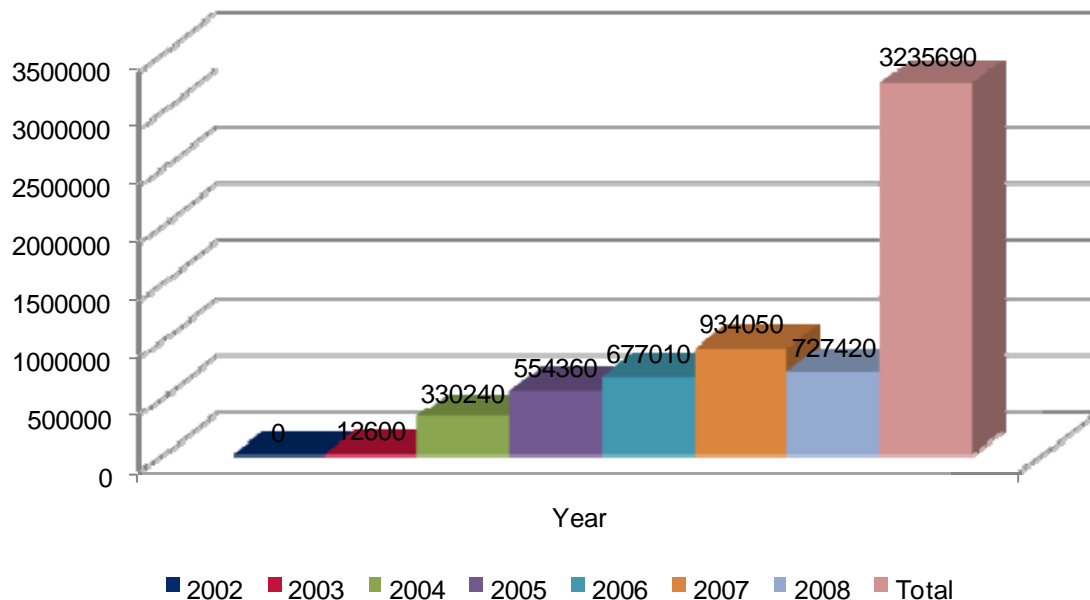
There are a number of income sources that accrue to the CBO depending on the nature of the activity. In the fisheries sector, CBOs are benefiting as groups through membership fees, contributions from fishermen and natural resource users, fines and permits, and, in some cases, via transport services. In beekeeping, CBOs are benefiting through membership fees and sometimes contributions from beekeepers. In the tourism sector, CBO members are benefiting from tourism levy contributions, including park entry fees, that are shared between individual protected areas and CBOs involved in the activity. These sources are discussed below in detail under each of the following sub-headings.

4.4.1.1 SABA Income from Beekeeping

Beekeeping has increased total annual income amongst SABA members by over 40% during the period 2002-2008. Over MK 3,235,690 (about US \$21,700) was earned by SABA members in 2008 (see Figure

15 below). The availability of disposable income is the basis for livelihood improvement, including flourishing auxiliary businesses and heightened food security.

FIGURE 15: SABA MEMBERSHIP INCOME



Source: MMCT, 2010

4.4.1.2 Khomola Beekeepers and Environmental Trust of Kasungu

In 2009, the Khomola Trust produced 560 kg of honey which was sold around Kasungu town at an average price of MK 750/kg (about US \$5/kg). However, it was difficult for members to sell their honey individually. In 2010, the Trust entered into an agreement with NALI which will buy all the honey at an average price of MK 300/kg (about US \$2/kg). Members think this will improve sales as NALI is an established market as opposed to selling individually within the village.

4.4.1.3 Mapira, Ntira and Mtumbura BVCs, Lake Chilwa, Machinga

Beach Village Committees around Lake Chilwa have reported increased fish catches since they started observing their by-laws. There are eight BVCs in this area. Data collected using MOMS since 2009 indicates that fishermen are making good money. There are four main fish species that the BVCs catch. These are Matemba, Makumba, Mlamba, and Kasawala (small Tilapia). Over MK 3,568,457 (about US \$23,950) was earned by three CBOs around Lake Chilwa in Machinga. However, this data is underestimated because of some months when data was not captured. Table 15 below provides detailed catch and income data since July 2009, by BVC.

TABLE 15: FISH CATCHES AND INCOME AROUND LAKE CHILWA, APRIL 2009 TO APRIL 2010

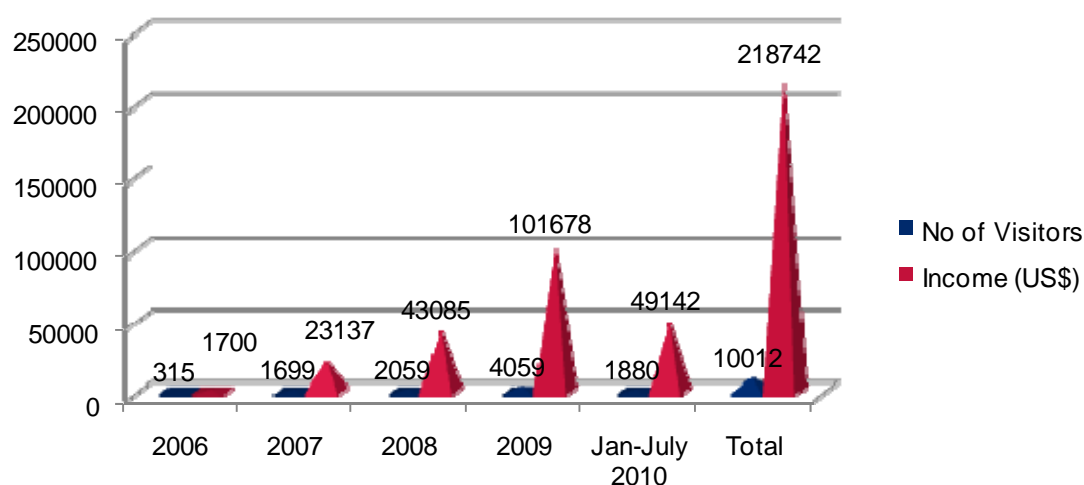
Name of BVC	Period of Catch	Fish Species	Quantity (kg)	Income Value (MK)
Mapira	Data for July, August, September 2009, and January 2010	Matemba	7,282	688,569
		Makumba	19,170	348,411
		Mlamba	8,782	238,024
		Kasawala	1,983	1,986
		<i>Total</i>	<i>37,218</i>	<i>1,276,991</i>
Ntira	Data for March and April 2010	Matemba	3,012	208,331
		Makumba	3,924	1,014,400
		Mlamba	543	116,270
		Kasawala	1,361	291,205
		<i>Total</i>	<i>8,840</i>	<i>1,630,206</i>
Mtumbura	Data for March and April 2010	Matemba	941	464,430
		Makumba	417	86,900
		Mlamba	556	61,340
		Kasawala	735	48,590
		<i>Total</i>	<i>2,649</i>	<i>661,260</i>

Source: MOMS Data, Machinga Fisheries Office, 2010

4.4.1.4 African Parks (Majete) Limited, Tourism

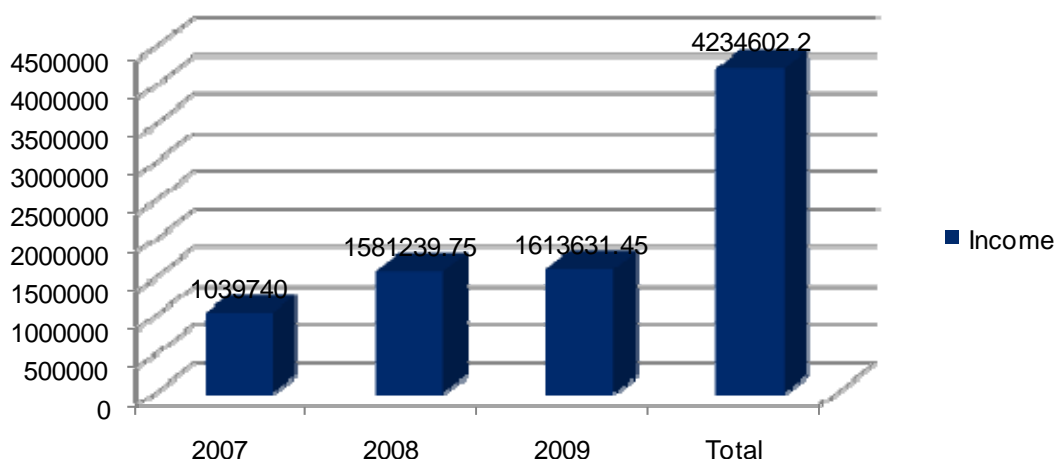
Increased animal populations, good management, and availability of tourism infrastructure in Majete Wildlife Reserve has resulted in a sharp increase in tourism numbers and associated revenue. When African Parks (Majete) Limited took over from Malawi National Parks in 2003, only 20 visitors were recorded. By July 2010, this number had jumped to slightly more than 10,000, generating US \$218,742 in revenue for Majete Wildlife Reserve for the period 2006-2010. At the same time, income generated by CBOs has increased sharply from MK 1,039,740 in 2007 to MK1,613,631 in 2009 (from about US \$7,000 to \$10,800). See Figures 16 and 17 below for a graphic representation of some of this information.

FIGURE 16: NUMBER OF VISITORS AND INCOME FOR AFRICAN PARKS (MAJETE) LIMITED



Source: African Parks (Majete) Ltd.

FIGURE 17: CBO INCOME, MAJETE WILDLIFE RESERVE 2007-2009



Source: African Parks (Majete) Ltd.

4.4.1.5 Income Generating Public Works Program

Since 1998 when the IGPWP program started, an estimated MK 329,545,998 (about US \$2,211,700) was spent on communities in the impact districts. However, it is anticipated that by the end of the program in 2010, MK 471,356,323 (about US \$3,163,450) will have been spent on communities. The IGPWP pays communities to do public work in their own localities.

4.4.1.6 Adam Village, Traditional Authority Kuntaja, Blantyre

In Adam Village – part of the Kuntaja Traditional Authority area – villagers are managing a forest plantation (42.5 ha) whose management has been devolved to them by the Forestry Department. The revenue generated from firewood sales from this plantation is available to members as a loan. For example, in December, 2009, the village had MK 39,500 (about US \$250) in the bank from firewood sales and they withdrew MK16,000 (about US \$100) which was loaned to members at an interest rate of 30% per annum (pers. comm., DFO Blantyre).

4.4.2 CASH INCOME AT THE INDIVIDUAL LEVEL

One of the key challenges of CBNRM is the expectation that participating individuals should benefit before the group benefits. To deal with this challenge, beekeepers sell their honey as a group and then distribute the money afterwards to individuals (after these individuals pay a management fee to the association). Conversely, at Nyika-Vwaza, the money realized from entry fees to the park, as well as the concession agreement, is used for development activities in the villages around the two national parks, such as school construction, borehole drilling, road construction, and others. This demonstrates that, if the CBNRM institution has a clear benefit-sharing mechanism at the group level, the problem of individuals benefits versus group benefits does not arise unless corrupt activities occur amongst the leadership of the committees.

Despite working as a group, it was evident that beekeepers are individually making a living at their business. In NkhataBay, Rumphu, Neno, Chikhwawa, Nsanje, and Mulanje, it was noted that a number of beekeepers have built permanent housing structures with iron roofs and have bought motorcycles, bicycles, and livestock, such as goats, pigs, chickens, ducks, and pigeons. They also have food throughout

the year and their children are going to schools. Other beekeepers have invested in other businesses such as groceries. The household income level of many beekeepers throughout Malawi has increased. Available data from Nkhata Bay District, Vwaza Wildlife Reserve and Nyika National Park, Kasungu National Park, Mulanje Forest Reserve, and Sendwe Hill Community Forest show that income levels in these areas have improved. Some sampled individuals provided the following details.

4.4.2.1 Mr. Mavuto Phulupulu of SABA

The Chairman of SABA, Mr. Mavuto Phulupulu who also belongs to the Likhubula zone, has 135 beehives of which 95 are colonized, and harvests more than a ton of honey every year. Using funds from honey sales, he has managed to build two planned houses, bought a Yamaha YB 100 motorcycle, 5 pigs, goats, two cellphones, one landline phone, fertilizer bags, and has sent his children to secondary schools and colleges.



4.4.2.2 Mr. Saikonde of Likhubula Zone, SABA

The Chairman of Likhubula Beekeeping Zone, Mr. Saikonde, also attributes his success in life to beekeeping. He has built two houses, has bought three pigs, five goats, ducks, chickens, pigeons, and a cellphone, and operates a grocery shop in the village. He has also recently bought a color television set because he would like to see and learn from what is happening elsewhere in Malawi and abroad.



4.4.2.3 Mr. Mwale of Khomola Beekeepers, Kasungu

Mr. Mwale of Khomola Beekeepers and Environmental Trust in Kasungu said that, in his area, some farmers bought fertilizers from honey sales in the 2009/2010 growing season. In turn, the fertilizer has boosted their crop production. Mr. Mwale, one of the members, earned MK 55,000 (about US \$350) from honey sales which he used to buy fertilizer and pay school fees for his children.

4.4.2.4 Individuals from Beekeepers Development and Research Association, Nkhata Bay

In Nkhata Bay, under the Beekeepers Development and Research Association, one farmer has been able to place 100 beehives in a forest reserve from which he harvests 20 kg of honey per beehive which is sold at MK 250/kg (about US \$2/kg). This translates to MK 500,000 (about US \$3,350) from the 100 beehives in six months as honey harvesting is done twice annually. However, the beekeepers sell their products as a group and the association leadership distributes the money to the individual beekeepers after paying a fee to the association for administration and other operating costs.

4.4.2.5 Mbenje Island, Salima

At Mbenje Island, fishermen have bought vehicles and grinding mills, and have constructed permanent houses from fishing revenue. A good number of fishermen have invested their income from fishing in cash crop farming. As noted above, fish catches have greatly increased and the communities are able to sustain production at the fish landing at Mbenje Island as a result of enforced by-laws.

4.4.2.6 CBNRM Curriculum Development

Other positive CBNRM benefits relate to the reshaping of the curricula in training institutions such as universities and colleges. For example, Mzuzu University and Bunda College under the University of Malawi, College of Natural Resources, both offer full-fledged courses on CBNRM. Overall, the promotion of CBNRM has also increased the need for qualified CBNRM practitioners.

4.4.2.7 Contribution of CBNRM to the National GDP

CBNRM as an approach to natural resource management is making important contributions to the national economy even though these contributions have not been quantified. For example, the revised MGDS strategy places climate change, and environment and natural resource management among its top priorities. Sustainable management of the environment and natural resources is a prerequisite to the effective implementation of the MGDS as well as to mitigating the impacts of climate change. The government believes that effective implementation of the MGDS will help to spur economic growth in the country and that the people's participation is very critical. In short, The President of Malawi believes that sustainable environmental and natural resource management will ensure achievement of economic growth in the country; therefore, he decided to make the environment and natural resource management top priorities in the MGDS.

Various other initiatives related to the environment are also being implemented by the government including the Green Belt Irrigation Initiative which intends to develop areas suitable for irrigation opportunities. CBNRM will help this initiative, especially in the sustainable management of the wetlands which are targeted for irrigation activities. The Green Belt Irrigation Initiative will also spur economic activities in areas where opportunities for ecotourism present themselves. For example, improved development activities in the Nyika-Vwaza area will stimulate ecotourism activities. Similarly, improved management of the Chambo through effective implementation of the Chambo Restoration Management

Plan in the southern parts of Lake Malawi and Lake Malombe will improve the fish catch. Overall, implementation of the management plan will promote community participation, enabling co-management agreements with the fishermen in and around the target area.

MRS TRADITIONAL AUTHORITY MASUMBAKHUNDA, LILONGWE SHOWING OFF A MAIZE GRANARY ©DAULOS MAUAMBETA, 2010



4.5 NEGATIVE IMPACTS OF CBNRM

While CBNRM has been praised in many quarters, this approach to natural resource management has its own limitations. In Malawi, the following negative impacts have been noted:

- (a) Formation of democratic local organizations, such as VNRMCs, has created negative conflicts with established institutions, such as traditional leadership, regarding the control of natural resources; it is difficult to reach a compromise in many of these conflicts. This is more of a perception problem due to the lack of awareness of the roles and responsibilities of the VNRMCs in relation to traditional leaders.
- (b) There has been duplication in the creation of local natural resource organizations, each serving a particular sector within the same village. For example, Malawi has created the following structures: VNRMC for forestry, BVC for fisheries, and VNRC for wildlife. This has created confusion and points to the need for sectoral harmonization.
- (c) In some cases, revenue sharing among CBO or village members creates conflicts, especially when resources are limited and decision-making processes are variable. Based on this observation, many scholars advocate individual rather than communal benefits. In the local Malawian language, it is recognized that it is difficult to control and benefit from communal wealth: “zanthu salowa m’khola.”
- (d) Sometimes, the local natural resource organizations have been reported to be unaccountable to members in terms of revenue sharing; this has created conflicts and resentment amongst and between CBO members and the village communities.

CATTLE GRAZING ALONG LENGWE NATIONAL PARK FENCE, CHINKHWAWA; THIS LEADS TO FOOT AND MOUTH DISEASE ATTACKING CATTLE ©DAULOS MAUAMBETA, 2010



5.0 LESSONS LEARNED

5.1 POLICY AND LEGAL FRAMEWORKS

- (a) Malawi has an enabling policy framework for CBNRM but the implementation process is slow and weak which, in turn, affects progress and benefits from CBNRM.
- (b) Even though the policy implementation is weak, people's interest is very high regarding continuation of participation in the implementation and decision-making processes with respect to the natural resources upon which their livelihoods depend.
- (c) Policy harmonization between natural resource sectors is vital in order to minimize conflicts when implementing CBNRM programs.

5.2 NATURAL RESOURCE MANAGEMENT AND MONITORING

- (a) The contribution of CBNRM to the economy of the country is grossly undervalued because of a lack of a strong monitoring and evaluation system.
- (b) There is evidence to suggest that CBNRM has contributed to improved natural resource management in the country, even though the economic and ecological or environmental benefits cannot easily be quantified.
- (c) Increased economic gains from natural resource management stimulate people's willingness to invest more of their energy in CBNRM efforts. For example, the beekeepers in the Nkhata Bay District, and in the Mulanje and Sendwe areas are keen to manage the forest reserves sustainably because their business relies heavily on the existence of these reserves.
- (d) Participatory monitoring and evaluation involving the communities themselves is needed in order to track the contribution of CBNRM to natural resource management in Malawi.

5.3 NATURAL RESOURCE GOVERNANCE

- (a) Organic CBNRM initiatives that are based on traditional beliefs, values and systems have high potential for success. The Mbenje Island and the Sendwe VFA cases provide good evidence for this claim. The Mbenje Island Management Committee developed its own by-laws which are enforced, with any delinquents being punished traditionally. These types of CBNRM initiatives need to be identified and promoted.
- (b) Inorganic or imposed CBNRM models, if implemented with clear exit strategies and capacity building plans, also have good potential in the country. If well planned and soundly implemented, imposed or inorganic initiatives have the potential of mirroring organic models as they become self-supporting, requiring limited or no external support.
- (c) Strong leadership at community, local government, and central government levels is important for the success of CBNRM in the country. The traditional leader at Mbenje Island has demonstrated that

sustainable natural resource management can easily be achieved if the leadership is focused and is able to share its vision of natural resource management with its constituents.

- (d) Increased levels of awareness and understanding of the importance of sustainable natural resource management amongst people, and especially local leadership, is critical for successful CBNRM.
- (e) Multidisciplinary approaches with respect to professional staff are necessary (there is a need for economists, anthropologists, sociologists, natural science specialists, and public administrators to be involved) in order to avoid competition, to share resources and knowledge, and to avoid duplication of efforts.

5.4 GENERATION AND MANAGEMENT OF BENEFITS

- (a) Tangible economic benefits sustain the commitment of communities and equitable sharing of benefits is vital. Communities are always keen to participate in natural resource management if their involvement leads to tangible benefits at the household and community levels. The beekeepers in Nyika and Vwaza, Mulanje, and elsewhere believe that it is important to manage natural resources soundly because the income generated from beekeeping is improving the livelihoods of their families and the community as a whole.
- (b) Clarity of benefit sharing mechanisms between the government and communities and amongst the community groups themselves is a recipe for success in CBNRM. The resource sharing mechanisms stipulated in the amended Wildlife Conservation and Management Act, and the various forest regulations and rules, have provided adequate stimulus for communities to participate in collaborative management of protected areas in Malawi.

HONEY IN JERRY CANS AND BOTTLES READY FOR SALE; ©DAULOS MAUAMBETA, 2010



6.0 CHALLENGES AND OPPORTUNITIES FOR SCALING UP

6.1 CHALLENGES AND BARRIERS FOR CBNRM

6.1.1 SLOW POLICY IMPLEMENTATION

Malawi has a good policy environment for CBNRM. The biggest challenge is the implementation process which is slow and weak. For example, while the Forestry, Fisheries, and Parks and Wildlife Acts have made provisions for co-management, few management agreements have been approved and signed by the government. Since the Forestry Act was approved in 1997, less than 10 management agreements have been signed. Despite the Fisheries Conservation and Management Act authorizing the Director of Fisheries to enter into management agreements with Fisheries Associations or BVCs that have attained the status of a legal personality, none of the associations have been able to attain this status. In addition, local assemblies have not provided an enabling legal framework to allow and promote BVC operations. There are no by-laws, constitutions, fishery management authorities, fishery management plans, and fishery management agreements at the District level as stipulated by the Fisheries Conservation and Management Act.

The slow policy implementation processes is also exacerbated by limited government investments to support policy implementation, especially related to natural resource management. For example, the District Forestry Officer in Nkhotakota District indicated that they receive less than MK 70,000 (about US \$450) per month for their monthly activities and administration of the office. The limited financial resources make it difficult for the Forestry Office to provide adequate and continuous support to the various community groups that are implementing CBNRM activities in the District. The situation is similar in the other natural resource sectors.

6.1.2 POLICY AND LEGAL FRAMEWORKS NOT FULLY HARMONIZED

Policies and legal frameworks within the various natural resource sectors, though conducive for CBNRM, are not fully harmonized. For example the Wildlife Management and Conservation Act recognizes VNRCs, while the Forestry Act recognizes VNRMCs, and the fisheries policy recognizes BVCs. It was noted in Mangochi at Cape Maclear that all these institutions exist in the same area and each of them operates in isolation without regard for the others. Moreover, the local assemblies are unsure how to recognize these structures and how they fit in the decentralized local government structure. It is expected that these structures should be sub-committees under the VDCs, but in some instances they are operating independent of the VDCs. In addition, the Water Resources Management Act recognizes catchment management committees and yet in the Forestry Act, VNRMCs are responsible for the management of catchments as well. The disharmonized policies and legal frameworks are contributing to a disjointed and uncoordinated CBNRM implementation process in the overarching natural resource management sector.

Each sector is implementing CBNRM in isolation and therefore making it more difficult to truly quantify the contributions of the natural resource management sector to the economic growth of the country.

6.1.3 PROJECT NATURE OF CBNRM AND DONOR DEPENDENCY

Various projects have been implemented in Malawi to support CBNRM. Table 3 above summarizes some of the projects that have been implemented in the country. In general, the CBNRM stocktaking assessment noted that activities worked well during the project period but generally stopped after the project closed. For example, the GTZ Border Zone Project supported the formation of close to 100 VNRCs around Nyika National Park and Vwaza Game Reserve. Similarly, with support from GTZ, the Fisheries Department facilitated formation of BVCs along the shores of Lakes Malawi and Malombe. WESM, with support from GTZ, supported the SMIF Project in Mwanza/Neno. The Forestry Department, through various projects, also facilitated formation of VNRMCs, but currently very few are functional. Decentralized natural resource management is being considered as one way of reducing government expenditures and allocations for natural resource management. However, once the projects are over, there is either no plan by the government to allocate resources or there are limited resources to continue the project activities. This problem occurs because, usually, exit strategies are only seriously pondered towards the end of the project or program, even though they are stipulated in the project design documents.

6.1.4 WEAK DATA COLLECTION, AND MONITORING AND EVALUATION SYSTEMS FOR CBNRM

Malawi has no strong data collection or monitoring and evaluation framework to track implementation of CBNRM as well as its impacts on natural resources and livelihoods. The country has a national monitoring and evaluation (M&E) framework but the indicators for CBNRM are not clearly articulated. Because there are no indicators in the national monitoring and evaluation framework that clearly focus on CBNRM, it is very difficult to quantify CBNRM's contribution to the national economy.

In order to resolve this problem, the government, through the Environmental Affairs Department, has developed an environmental sustainability criteria framework and an M&E framework for the environment and natural resource management sector. The government aims to guide organizations in the sector to align their M&E frameworks with the national M&E framework as well as to strengthen their monitoring and evaluation systems.

6.1.5 NO INSTITUTIONAL MECHANISM TO COORDINATE CBNRM INITIATIVES IN MALAWI

The overall responsibility for coordinating environment and natural resource management in Malawi lies with the Environmental Affairs Department, but the department is poorly funded to handle such a responsibility, among others that it is expected to handle as part of the Environmental Management Act. Being a department within a ministry also puts the department in an inferior position for coordinating activities among other departments and ministries. At the NGO level, CURE has been given the coordination responsibility, but it too has financial and technical capacity challenges. However, the Environmental Affairs Department and CURE are well positioned to champion coordination of CBNRM in the country.

6.1.6 WEAK PARTICIPATION OF COMMUNITIES IN THE VALUE CHAIN

CBNRM in Malawi, especially in the forestry sector, is characterized by meager economic benefits from the raw products. People directly involved in CBNRM activities are not involved in value addition to the various products they harvest or gain from their initiatives. For example, villagers are not involved in processing honey into various products in order to make more money. There is also limited support from the value chain actors, such as the private sector, to promote value addition within the communities that are involved in CBNRM activities.

6.1.7 PRIVATE SECTOR PARTICIPATION IS WEAK

Since the 1990s when the government decided to promote stakeholder participation in natural resource management, the influx of private sector organizations to the natural resource management sector has been limited. This may be partly attributed to the fact that private sector organizations focus on making immediate profits and natural resource management takes time to yield such profits. Few private sector organizations are involved in ecotourism and those that are usually have limited interest in promoting community participation. Few private sector organizations are involved in, or have entered into co-management agreements with local communities to manage a particular resource even though the policy and legal frameworks in the country are supportive of such arrangements.

6.1.8 LACK OF LAND USE PLANS AND IMPLEMENTATION OF LAND USE RELATED ACTIVITIES

Multiple land use activities are common in most rural areas in Malawi. The major concern comes from areas with high livestock population levels, especially in the north and the Lower Shire (Chikhwawa and Nsanje). Uncontrolled, large herds of livestock such as goats and cattle are threatening improved natural resource management and the positive impacts of CBNRM.

6.2 OPPORTUNITIES FOR SCALING UP CBNRM

6.2.1 WILLINGNESS BY VARIOUS DEVELOPMENT PARTNERS AND STAKEHOLDERS TO SCALE UP CBNRM

A number of development partner organizations such as donors, government departments, civil society organizations, private sector organizations (such as those involved in ecotourism), natural resource-based enterprises, and others, are ready and willing to promote CBNRM. For example, there are new programs which will utilize the CBNRM approach. These include the Millennium Challenge Account-Malawi, which intends to work in the Upper Shire basin, and is in the process of developing an Environmental and Natural Resources Management plan for this area.

6.2.2 POLITICAL LEADERSHIP COMMITTED TO NATURAL RESOURCE MANAGEMENT

The current political leadership in Malawi has included the environment and natural resource management as one of nine priorities in the MGDS of 2006. This is an opportunity that needs to be seized by CBNRM implementing stakeholders and development partners and proponents. The government has also initiated the Green Belt Irrigation Initiative throughout Malawi along major rivers and Lake Malawi; this initiative is being implemented within the framework of the MGDS and provides an enabling mechanism for scaling up CBNRM in Malawi. The initiative is an integrated program that will develop irrigation and drainage infrastructure to facilitate irrigated agriculture in the country. The initiative targets

wetlands, riparian, and lake shore areas. Scaling up CBNRM to the proposed areas of the Green Belt Irrigation Initiative will help in a number of ways. CBNRM activities which are supportive of this initiative will easily be funded, at the same time ensuring that the target areas are managed sustainably.

Similarly, the success of the Shire-Zambezi Water Way project will depend on proper management of the entire Shire River catchment basin. Without proper management of this ecosystem, the Shire-Zambezi project will be threatened by continuous siltation. Communities living in the Shire River catchment are critical to the success of this project because they are responsible for the management of the natural resources in this vast area. This is another opportunity to scale up CBNRM initiatives in Malawi.

6.2.3 ENABLING POLICY ENVIRONMENT

Despite having limited wildlife, upon which CBNRM has been based in many countries in the southern Africa region, the Malawian government is keen to promote CBNRM as part of the ongoing decentralization process. CBNRM is helping and strengthening implementation of this process as it emphasizes building capacity of local-level institutions which are also instrumental in facilitating other development initiatives at the village or local level.

Overall, there are many opportunities for expanding CBNRM in line with the decentralization framework in Malawi. Since the decentralization process is countrywide, CBNRM as an approach to natural resource management should not be selective but should target all the natural resources in the country. However, CBNRM needs to be mainstreamed or integrated into the local government agenda to ensure that it receives adequate technical and financial support. Once mainstreamed, CBNRM will be included in budgets at the local assembly level and the issue of funding will be minimized.

6.2.4 CLIMATE CHANGE AND CBNRM

CBNRM in Malawi also has the potential to expand if it is carefully mainstreamed into implementation plans for climate change interventions via the National Adaptation Program of Action (NAPA). The NAPA outlines various adaptation mechanisms that will be implemented by vulnerable communities. The NAPA implementation process relies on the participation of various stakeholders, including local communities, who are vulnerable to climate change impacts.

6.2.5 PARTNERSHIPS, NETWORKING AND INFORMATION SHARING

Partnership opportunities for CBNRM facilitation exist in Malawi. For example, training institutions are able to partner with international organizations to develop human resources for improved natural resource management. It is expected that, with more trained human resources in the sector, CBNRM can easily be scaled up throughout the country. There is also political will to promote ecotourism and community participation in natural resource management at present. The President, during one of his recent meetings, called on all the people in the country to seriously consider sustainable environmental and natural resource management in order to achieve food security.

6.2.6 TRADITIONAL LEADERSHIP WILLING TO EMBARK ON CBNRM

The use of committees in CBNRM assists the government in reducing management costs. However, most committees are successful only if there is a good working relationship with strong traditional leadership. Most of the traditional leaders interviewed are willing to scale up CBNRM initiatives if they are involved from the start, but not if they are only involved during settlement of disputes.

7.0 RECOMMENDATIONS

CBNRM is still very young in Malawi. CBNRM needs to be given time to mature and graduate, and it needs sufficient resources to consolidate the gains made to date. The following recommendations are proposed for this to be achieved:

7.1 HARMONIZATION OF SECTORAL POLICIES

Government needs to harmonize sectoral policies related to natural resource management in Malawi in order to facilitate implementation of CBNRM.

7.2 SCALING UP CBNRM EFFORTS

Government and partners should implement more CBNRM programs, capitalizing on the current government commitment demonstrated by placing the environment and natural resource sector among the nine priorities of the MGDS. There are many new programs which have CBNRM components that must be recognized and utilized by CBNRM proponents:

- (a) Millennium Challenge Account-Malawi
- (b) World Bank Lower Shire Project
- (c) United Nations Development Program (UNDP) Small Grants Program and Global Environment Facility (GEF) Land Management Project
- (d) KULERA Project supported by USAID covering Nyika-Vwaza, Mkuwadzi Forest Reserve, and Nkhotakota Wildlife Reserve
- (e) Mountain Biodiversity Increasing Livelihood Security project implemented by MMCT, WESM, and Concern Universal worth US \$3 million with support from USAID

7.3 INCREASE VALUE ADDITION IN CBNRM

Stakeholders should do more to encourage communities to produce more natural products, such as juices, through value addition. In this way, communities will realize increased benefits from CBNRM efforts.

7.4 PROMOTE SUSTAINABLE CBNRM INITIATIVES

Traditional natural resource management systems have a very important role in CBNRM and therefore they must be identified and promoted. In addition, CBNRM initiatives should have clear exit strategies which are cognizant of the long-term nature of the initiative and the need to generate tangible benefits for participating communities.

7.5 BUILD CAPACITY IN CBNRM

In order to develop sustainable CBNRM institutions, there is a need for more capacity building in the areas of organizational development and change management. The organizations need to be strengthened

so that they become perennial institutions by developing sound systems and procedure, policies, and fundraising strategies.

7.6 PROVIDE INCENTIVES AND RECOGNIZE STRONG TRADITIONAL LEADERSHIP

Where CBNRM is effective, it is a result of strong local leadership. Therefore, the government, the private sector, and civil society organizations need to promote and strengthen local leadership for improved natural resource governance. Such strong leadership needs to be recognized in order to encourage them and others to follow the best examples.

7.7 ESTABLISH A NATIONAL INSTITUTION FOR CBNRM COORDINATION AND IMPLEMENTATION

There is a need for reorganization and realignment of institutions for proper implementation of CBNRM from the community level to the national level in line with the decentralization policy framework. At the same time, there is a need for the Environmental Affairs Department on the government side to take a leading role in coordinating CBNRM in the country while CURE, as the coordinating organization in the environment sector under the civil society umbrella, should also play a leading role as it is currently doing under the regional CBNRM program.

7.8 DISTRICT LEVEL BY-LAWS

Currently, there are too many by-laws in each district to be implemented by each CBO. There is a need for local assemblies in the country to harmonize and develop the necessary by-laws to recognize and enable the various decentralized natural resource management structures such as BVCs, VNRMCs, VNRCs, and others.

7.9 DATA COLLECTION AND MONITORING AND EVALUATION SYSTEMS FOR CBNRM PROGRAMS

There is a need to develop a strong monitoring and evaluation system with clear indicators in the CBNRM sector that is linked to the overall national monitoring and evaluation system of the government. Apart from the national-level monitoring and evaluation systems, there is also a need to develop and link CBNRM monitoring and evaluation systems to the overall district-level monitoring and evaluation system which is linked to the national M&E framework.

8.0 CONCLUSION

To date, many stakeholders believe that CBNRM is an approach that will help improve natural resource management in Malawi. Though its direct economic benefits to participating households and the national economy cannot easily be quantified, as they are scattered in many sectors, CBNRM provides opportunities for all stakeholders to participate in the management of natural resources. Some positive results have been achieved in terms of recovery of fishery resources in Lake Malawi, increased and stabilized wildlife and game populations in protected areas, improved management of catchment areas, and strengthening of natural resource management governance structures. Despite the achievements, CBNRM implementation faces a number of challenges which include poor leadership, limited human and financial resources, disharmonized policies, and short support periods for implementation of interventions. The study concludes that promotion of CBNRM will help the nation manage its natural resources sustainably and at the same time contribute to the development of the country.

NABOMBA WOMEN'S CBO, CHINKWAWA, DANCING FOR CBNRM ©DAULOS MAUAMBETA, 2010



Nabomba Women's CBO, Chikhwawa

Copy right: Daulos Mauambeta, August

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ANNEX 1 CBNRM PROFILE QUESTIONNAIRE FOR MALAWI

1. Impacts on Natural Resources (Nature)

- 1.1. In general, what has been the impact of CBNRM on the natural resources base in Malawi?
- 1.2. Do you have or know of any data (especially numerical) that can demonstrate these impacts? If so, please specify.
- 1.3. More specifically, what has been the impact of CBNRM on the following resources, please quantify whenever possible:
 - 1.3.1. Wildlife (terrestrial and aquatic [fish])?
 - 1.3.2. Forests & woodlands?
 - 1.3.3. Dambo (cattle grazing areas) areas?
 - 1.3.4. Water?
 - 1.3.5. Soil?
- 1.4. Has CBNRM had any related impact on agriculture? If so, please specify.
- 1.5. Are you aware of any negative impacts of CBNRM on the natural resources base? If so, what are they?

2. Economic and livelihoods impacts (Wealth)

- 2.1. In general, what has been the impact of CBNRM on the livelihoods of local communities and on local, rural economies?
- 2.2. Do you have or know of any data (especially numerical)
- 2.3. More specifically, what has been the impact of CBNRM on (please quantify whenever possible):
 - 2.3.1. Revenue for CBOs? {obtain quantitative data}
 - 2.3.2. Revenue for CBO members?
 - 2.3.3. In-kind benefits to CBOs and CBO members (e.g. materials for infrastructure, ecotourism)?
 - 2.3.4. Indirect or trickle down contributions to the local economy?
 - 2.3.5. Creation of community enterprises (please specify scope and kind of enterprise)?
- 2.4. How have CBOs and CBO members used the revenue or in-kind benefits from CBNRM?

- 2.5. What is the scope of CBNRM economic or livelihoods impacts, i.e., how many people have benefited from/been supported by CBNRM?
- 2.6. Are you aware of any negative impacts of CBNRM on local community livelihoods or on local rural economies? If so, what are they?
- 2.7. How many jobs have been created through CBNRM enterprises and/or activities? Please specify types of jobs.

3. Impacts on governance and rights (Power)

- 3.1. In general, what has been the impact of CBNRM on local governance and rights to natural resources?
- 3.2. Do you have or know of any data (especially numerical) that can demonstrate these impacts? If so, please specify.
- 3.3. More specifically, what has been the impact of CBNRM on the following (quantify whenever possible):
 - 3.3.1. Specific rights to manage natural resources (please specify the kind of rights and natural resources)?
 - 3.3.2. Specific rights to use natural resources (please specify the kind of use and natural resources)?
 - 3.3.3. Specific rights to benefit from natural resources (please specify the kind of use and natural resources)?
 - 3.3.4. The ability or capacity of CBOs to organize themselves and govern natural resources?
 - 3.3.5. The ability or capacity of CBOs to develop and apply rules regarding use and management of natural resources?
 - 3.3.6 The ability or capacity of CBOs to distribute or share income/revenue?
- 3.4. What is the scope of involvement in CBNRM, i.e., how many CBOs exist? How many people are members of the CBOs (if possible, please disaggregate by gender and social class)? What has been the impact on marginalized people/groups/classes?
- 3.5. Are you aware of any negative impacts of CBNRM on governance of and rights to the natural resources base? If so, what are they?
- 3.6. Have there been attitudinal changes by communities towards their natural resources as a result of the CBNRM Program? If yes, please specify these changes.

4. Enabling Conditions

- 4.1. Think back on the history of CBNRM in Malawi and your area.. What were the conditions or changes that enabled or led to the impacts of CBNRM on natural resources?
- 4.2. Please discuss on why these enabling conditions or the enabling environment occurred or were established.

- 4.3. Did the CBNRM concept or paradigm replace a former, concept, paradigm or policy? If yes, please explain. If yes, how did the CBNRM paradigm shift change natural resources, livelihoods and governance compared to the old paradigm?

5. Lessons

- 5.1. During implementation of CBNRM in Malawi and your area, what lessons did you learn? (What worked and what didn't work?)
- 5.2. Were there actions or ways of doing things that one learned to avoid?
- 5.3. Were there actions or ways of doing things that one learned to repeat?
- 5.4. What changes were made in implementing approaches or strategies that led to better or increased impacts?

6. Best practices

- 6.1. In Malawi and your area, what are the best ways or the best methods to implement CBNRM in order to achieve the best results or maximum impact?
 - 6.1.1. For example, what are the best ways of implementing CBNRM that will lead to a healthy wildlife population and habitat?
 - 6.1.2. For example, what are the best ways of implementing CBNRM that will lead to increased revenue for CBOs?
 - 6.1.3. For example, what are the best ways of implementing CBNRM that will lead to improved governance of the natural resources?

7. Scaling up

- 7.1. Is there scope or opportunities for scaling up or expanding CBNRM in Malawi? If so, what areas or zones should be targeted for this expansion?
- 7.2. If so, what, in your opinion is needed to scale up or expand CBNRM?
- 7.3. If so, what is the best way or method for implementing expansion efforts?

8. Challenges, barriers & threats

- 8.1. What are the present challenges with respect to achieving the maximum CBNRM impacts or best CBNRM results? Do you have any suggestions regarding how to meet or eliminate these challenges?
- 8.2. Are there barriers that exist with respect to achieving the maximum impact or best results in CBNRM? If so, what are they and do you have any suggestions regarding how to eliminate these barriers? Please rank the barriers in order of importance.
- 8.3. Do you see or know of any threats to the continuation or expansion of CBNRM in your country/area? If so, what are they? Do you have any suggestions or recommendations for addressing these threats? Please rank the threats in order of importance.

8.4. How can the impacts and lessons of CBNRM be used to overcome critical challenges, barriers and threats?

9. Opportunities & national priorities, programs

9.1. In general, has CBNRM contributed to national sustainable development priorities? If yes, please specify the contributions and the national priorities.

9.2. If no, do you think CBNRM has the potential to contribute to these priorities? If so, how?

9.3. More specifically, has or can CBNRM contribute to the following priorities:

9.3.1. Poverty alleviation or the Millennium Development Goals (MDGs)?

9.3.2. Food security?

9.3.3. Climate change adaptation and mitigation?

9.3.3. Desertification?

9.3.4. Economic growth?

9.4 In your opinion, how can CBNRM improve or enhance contributions to the national priorities mentioned above? What are the best opportunities in the near future for improving CBNRM's contributions?

10. Additional observations & questions

10.1 In your opinion, has CBNRM contributed to community and/or environmental resiliency, i.e., has it allowed communities to respond to opportunities and to weather crises? If yes, please specify or elaborate.

10.2 In your opinion, will CBNRM assist in the mitigation of, or adaptation to anticipated climate change for your country? Please provide reasons for this opinion.

10.3 Do you have any additional observations on CBNRM that you would like to share (especially those that you think should be part of the country profile)?

ANNEX 2 INDIVIDUALS CONTACTED

Name	Institution
Senior Chief Chapananga	Traditional Authority, Chikhwawa District
Patricio Ndadzera	African Parks (Majete), Chikhwawa
Stella Mzumara	African Parks (Majete), Chikhwawa
Anthony	African Parks (Majete), Chikhwawa
Reginald Mumba	CURE, Blantyre
Karen Price	MEET, Blantyre
Paramount Chief Mkhumba	Traditional Authority, Phalombe
Moffat Kayembe	MMCT, Mulanje
Senior Chief Mabuka	Traditional Authority, Mulanje
Mr. Phulupulu	Chairman, SABA, Mulanje
Mr. & Mrs. Saikonde	Likhubula Zone Chairman, SABA, Mulanje
David Zuzanani	Village Hands Limited, Neno
Robert Madengu	Kam'mwamba Natural Resources Management Trust, Neno
Cosmas Ndau	Kam'mwamba Natural Resources Management Trust, Neno
Village Headwoman Kam'mwamba	Kam'mwamba Natural Resources Management Trust, neno
Jenifa Davide	Sendwe Beekeeping Club, Lilongwe
Shadreck Manda	Sendwe Beekeeping Club, Lilongwe
Severiano Sikenera	Sendwe Beekeeping Club, Lilongwe
Ezala Tsinde	Sendwe VNRMC, Lilongwe
Felex Tomasi	Sendwe VNRMC, Lilongwe
Francisco Chadza	Sendwe VNRMC, Lilongwe
Binalisoni Lipoti	Sendwe VNRMC, Lilongwe
David Chitedze	Greenline Movement, Machinga
Brighton Kumchedwa	Department of National Parks and Wildlife (Hq)
Wisely Kawaye	Liwonde National Park and USACOL, Liwonde
Emma Banda	Kasungu National Park
Mercy Milambe	Lengwe National Park now in Kasungu National Park
Gregory Mtemanyama	WESM / Danish Hunters Association, Zomba
Jamestone Kamwendo	National Herbarium and Botanical Gardens, Zomba
Joseph Kasuzweni	Fisheries Department, Machinga
Daniel Phiri	District Commissioner, Zomba
Suzgo Gondwe	Environmental District Officer, Zomba
Henry Khusa	Bird Hunters Association, Zomba
John Matenganya	Bird Hunters Association, Zomba
Harold Kasulo	Chindenga Forest Block, Machinga
Dickson Kamwendo	Chindenga Forest Block, Machinga
Ireen Banda	WESM, Balaka
Duncan Mapwesera	WESM, Balaka
Blackson Mwale	WESM, Balaka
Village Headman Chiputura and his people	Chiputura Village, Balaka

Name	Institution
Village Headman Joshua and his people	Joshua Village, Balaka
Mr. Njoka	BERDO, Ntcheu
Mrs. Ruth Zalira	BERDO, Ntcheu
Mr. Faton Lasmon	BERDO, Ntcheu
Mr. F.S. Mwale & Trust Members	Khomola Beekeepers & Environmental Trust, Kasungu
Abel Mindozo & BVC Members	Mapira BVC, Lake Chilwa, Machinga
Austin Nsalapata & BVC Members	Mposa BVC, Lake Chilwa, Machinga
Mr. Ralph Kabwaza	Millennium Challenge Account, Malawi
Ms. Madalitso Chisale	USAID, Lilongwe
Dr. Friday Njaya	Fisheries Department Headquarters, Lilongwe
Mr. Makhuwira	Fisheries Department, Lilongwe
Emmanuel Bambe	District Commissioner, Phalombe
Mr. R. Jiah	Department of Parks and Wildlife- Lilongwe
Ms Stella Gama	Department of Forestry- Lilongwe
Mr John Ngalande	Department of Forestry- Lilongwe
Mr Kamanga and Association Members	Small Bee Keepers Development and Research Association- Nkhata bay
Mr Dalo Njera	Mzuzu University- Mzuzu
Mr Benet Mataya	Mzuzu University- Mzuzu
Mr Jando Nkhwazi	Rural Foundation for Afforestation- Mzuzu
Mr Manda	Total Land Care- Nkhotakota
Mr Chamveka	District Forestry Office- Nkhotakota
T.A Msosa	Traditional Authority- Salima
GVH Mpingidzo	Mbenje Island- Salima
Mr. John Bvumbwe	Village headman Mbenje-Mbenje Island Management Committee- Salima
Mr Harry Mhango	Mbenje Island Management Committee- salima
Mr Nanthambwe	Individual capacity as a Land and Natural Resource Management consultant
Mr Johns Kamangira	Monitoring and Evaluation Specialist- individual consultant
Mr Kataya	Department of Parks and Wildlife and Vwaza Wildlife Reserve- Rumphu
Mrs Kataya	Department of Parks and Wildlife- Vwaza Wildlife Reserve- Rumphu
Mr Mkandawire	Nyika Vwaza Association- Rumphu
Sandy Ngwira	Chigwere cultural Village- Rumphu
Village Headman NKhalikari	Chigwere Cultural Village
Chigwere Cultural Group	Chigwere cultural village

ANNEX 3 INFORMATION ON NATIONAL PARKS, GAME RESERVES AND FOREST RESERVES

FOREST RESERVES

Name	Year declared	Est. Area (ha)
Matipa	1948	1,055
Mughesse	1948	771
Wilindi	1948	937
Mafinga Hills	1976	4,734
Musisi	1948	7,037
Vinthukutu	1948	1,957
Uzumara	1948	754
Bunganya	1948	3,447
Kaning'ina	1935	14,007
Lunyangwa	1935	374
South Viphya	1958	156,102
Kalwe	1951	159
Mkuwazi	1927	1,608
Mtangatanga	1935	8,099
Ruvuo	1935	4,781
Chisasira	1935	2,484
Perekezi	1933	14,482
Kuwilwi	1934	134
Chimaliro	1926	15,205
Ntchisi	1924	8,758
Ngara	1958	2,272
Mchinji	1924	20,885
Kongwe	1926	1,948
Dowa Hills	1964	3,142
Namizimu	1924	88,966
North Senga	1958	1,207
South Senga	1958	532
Thuma	1926	15,767

Name	Year declared	Est. Area (ha)
Nalikule	1948	57
Dedza-Salima Escarpment	1972	30,965
Dzalanyama	1911	98,827
Dzenza	1940	779
Bunda	1948	426
Msitolengwe	1968	98
Chongoni	1924	12,353
Mua-Livulezi	1924	12,673
Mua-Tsanya	1924	933
Dedza Mountain	1926	2,917
Nkopola	0	86
Mangochi	1924	40,853
Bangwe	1930	4,205
Phirilongwe	1924	16,385
Mangochi Palm	1977	501
Chirobwe	1960	1,314
Mvai	1924	4,140
Dzonze	1924	4,494
Liwonde	1924	27,407
Zomba-Malosa	1913	19,018
Tsamba	1927	2,806
Thambani	1927	4,680
Chiradzulu	1924	774
Michiru	1960	3,004
Ndirande	1922	1,433
Sambani	1938	149
Michese	1929	8,764
Mudi	1922	39
Kanjedza	1922	159
Soche	1922	388
Malabvi	1927	300
Mulanje Mountain	1927	47,550
Chigumula	1925	525
Mirare	1943	59
Amalika	1959	370
Thyolo Mountain	1924	1,347
Litchenya	1948	316
Thuchila	1925	1,843
Masambanjati	1952	93
Thyolomwani	1930	965

Name	Year declared	Est. Area (ha)
Kalulu Hills	1958	2,892
Masenjere	1930	276
Matandwe	1931	31,053

GAME RESERVES

Name	Year declared	Est. Area (ha)
Vwaza Marsh	1956	98,214
Nkhotakota	1938	178,568
Mwabvi	1951	35,193
Majete	1951	77,754

NATIONAL PARKS

Name	Year declared	Est. Area (ha)
Nyika	1952	320,078
Kasungu	1922	228,147
Lake Malawi	1980	391
Lake Malawi	1980	12
Lake Malawi	1980	6,219
Lake Malawi	1980	72
Lake Malawi	1980	400
Lake Malawi	1980	149
Lake Malawi	1980	82
Lake Malawi	1980	39
Lengwe	1928	100,198
Liwonde	1969	54,633

PROPOSED FOREST RESERVES

Name	Est. Area (ha)
Chipala	1,227
Mbula	1,115
Nabatata	345
Kapembe Hill	810
Karonga North Escarpment	7,908
Ighembe	455

Name	Est. Area (ha)
Muwanga	749
Kalembo Hill	1,446
Karonga South Escarpment	13,050
Jembya	13,764
Mahowe	5,917
Kampyongo	635
Chikhang'ombe	592
Chanthasha	498
Therere	2,097
Chombe	5,599
Choma	7,131
Sonjo	997
Mzumangazi	7,890
Chisasira	2,473
Kawiya	644
Dwambazi	76,584
Kaombe	1,454
Nkhoma hill	604
Chilenje	633
Phirilongwe	48,328
Neno Eastern Escarpment	7,206
Chingale Hills/Namatunu	6,834
Mlindi hill	4,791
Mkanya hill	275
Wamkurumadzi	1,674
Nkula	5,335
North masatwe	471
South masatwe	6,758
Michiru	2,411