



MONITORING CBNRM PERFORMANCE AND IMPACT

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Community
Partnerships for
Sustainable
Resource
Management in
Malawi

Monitoring CBNRM Performance and Impact: a Framework & Baseline

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ACRONYMS

BMI	Business Monitor International
CBNRM	Community-based Natural Resource Management
COMPASS	Community Partnerships for Sustainable Resource Management
CURE	Coordination Unit for Rehabilitation of the Environment
DAI	Development Alternatives, Incorporated
DANIDA	Danish International Development Agency
DEAP	District Environmental Action Plan
DfID	Department for International Development (United Kingdom)
DNPW	Department of National Parks and Wildlife
EAD	Environmental Affairs Department
GTZ	Gesellschaft fur technische Zusammenarbeit
HIV/AIDS	Human Immuno-deficiency Virus/Acquired Immune Deficiency Syndrome
IMF	International Monetary Fund
M&E	Monitoring and Evaluation
MALDECO	Malawi Development Company (Fisheries)
MEET	Malawi Environmental Endowment Trust
MoNREA	Ministry of Natural Resources and Environmental Affairs
MP	Member of Parliament
NCE	National Council for the Environment
NEAP	National Environmental Action Plan
NGO	Non-Governmental Organization
NRBE	Natural Resource Based Enterprise
NRM	Natural Resource Management
PCANR	Parliamentary Committee on Agriculture and Natural Resources
SA	Strategic Action
SOER	State of the Environment Report
TA	Traditional Authority
TAMIS	Technical and Administrative Management Information System
TR	Targeted Result
UNDP	United Nations Development Program
USAID	United States Agency for International Development
US\$	United States dollars
WESM	Wildlife and Environmental Society of Malawi

Monitoring CBNRM Performance and Impact: a Framework

Introduction

The fundamental approach to managing natural resources in Malawi is undergoing a dramatic shift. Prior to the mid-1990s, the central government controlled natural resources through a strict regime of laws and regulations. Widespread environmental decline attests to the weakness of this command-and-control approach. Under the current democratically elected government, community-based natural resource management is being promoted. With assistance from donors and NGOs, Malawi is making a significant investment to turn CBNRM into a reality. New institutional structures and programs are being set up. Policies promoting decentralization are taking root. Local and national governments are being mobilized in a nationwide planning process for CBNRM. And communities are being trained in more environmentally sound management practices. How well the country adopts CBNRM will have profound implications for the citizens of Malawi and their ability to meet their basic needs well into the future.

The development of a strategic plan and performance monitoring system that allows communities and decision-makers to track their progress in achieving their objectives under CBNRM is an essential tool in this transition period and beyond. Monitoring permits resource managers and decision-makers to collect data and information to assess whether CBNRM projects and programs are achieving their desired result and impact.

With the approval of the CBNRM Strategic Plan by the National Council for the Environment in November 2001, it is now incumbent on the CBNRM Working Group to create the framework for regular monitoring of the performance and impact of CBNRM initiatives in Malawi. Amongst other responsibilities, the CBNRM Working Group is charged with the following:

- ◆ commission the development of a monitoring system for the CBNRM process in the country; and
- ◆ facilitate the annual assessment of CBNRM activities in Malawi.

The present document is a first step in accomplishing these goals. It represents a synthesis of the discussions and small group work undertaken on November 29th and 30th 2001 in Blantyre at which time, the CBNRM Working Group and several key advisory and partner organizations met to launch the process of establishing a CBNRM monitoring system for Malawi. Subsequent to this meeting the Working Group met again in April, June and October 2002 to finalize the CBNRM Monitoring Plan.

Background

In November 1999 the Environmental Affairs Department and COMPASS collaborated on organizing a workshop on principles and approaches for CBNRM in Malawi. Ten fundamental principles were established:

1. In CBNRM, communities should be the prime beneficiaries
2. Communities should take the leading role in identifying, planning and implementing CBNRM activities, and the roles and responsibilities of other participating stakeholders should be clearly defined
3. At the local level, CBNRM activities should be managed by democratically elected institutions or committees linked to Local Authority structures

4. Communities must develop clearly defined constitutions for their institutions or committees and establish by-laws for natural resource management
5. The competent authority must clearly define user groups and boundaries of the natural resources being managed
6. To ensure sustainability, natural resources should be treated as economic goods hence short and long-term benefits directly related to the use of the resources should be tangible and obvious to the communities
7. Arrangements for lease and ownership of resources and the right to use them should be clear
8. CBNRM activities must be gender sensitive or gender neutral
9. CBNRM programs must promote equitable sharing of benefits and distribution of costs
10. CBNRM service providers should be supportive of other community priorities and needs

The forum also paved the way for the creation of a body that would be charged with helping coordinate CBNRM activities in Malawi. Early in 2000, the National Council for the Environment approved the creation of the CBNRM Working Group, which met for the first time in March 2000. Subsequently, the Working Group commissioned a strategic planning framework that led to the preparation of a draft strategic plan for CBNRM following a national forum in May 2001¹. The National Council for the Environment approved a final draft of the strategy in November 2001. It is this strategy that forms the core instrument for coordinating the implementation of CBNRM in Malawi. As such it has been used to structure the proposed monitoring framework. Indeed, the monitoring system will largely focus on measuring progress toward achieving the goals and objectives that are inherent in the strategic plan.

Overarching CBNRM Impact Monitoring

Overarching impact indicators allow monitoring of CBNRM initiatives' impact on fundamental environmental and socioeconomic conditions. Indicators that are closely linked to strategic performance goals may be too narrowly focused to provide an assessment of these broader objectives. In effect, the CBNRM Working Group meeting in November 2001 recognized the imperative of establishing clear and succinct goals and objectives for CBNRM in Malawi. These were defined as follows:

- Goal:** **Responsible management and utilization of natural resources that maintain ecosystem functions and contribute to improved livelihoods**
- Objective:** **Strengthened institutional capacity for sustainable management of natural resources founded on legitimacy and the participation of all resource users**

The Strategic Plan for CBNRM in Malawi identifies six Strategic Actions that it is believed will help accomplish the stated objective.

- Strategic Actions:** **1 - Develop a commonly understood CBNRM concept and vision**
- 2 – Maintain a dynamic policy reform process**

¹ The first National Conference on CBNRM in Malawi. Over 80 delegates discussed and debated ways of “putting policies into practice” with regard to implementing CBNRM in the country.

3 – Develop coordinated CBNRM sectoral strategies and action plans

4 – Develop planning and implementation tools

5 – Provide strategic support to coordinated CBNRM implementation

6 – Invest in monitoring and evaluation

Ten overarching indicators were selected to help gauge the **impact** of CBNRM on rural incomes and natural resource management relative to the stated goal and objective. These were subdivided into biophysical impact indicators (Table 2A and B) and socio-economic impact indicators (Table 3A and B). In addition, four impact indicators were identified to help measure the impact of progress toward achieving the anticipated outcome of each strategic action (see Tables 4 to 15).

Monitoring Plan

An efficient monitoring system must be built around good indicators, cost-effective data collection, rigorous analysis, and efficient reporting procedures. The criteria for selection of good indicators include that they are pertinent and unequivocal; that they are objective and assist in decision making; and that they are readily understandable. Moreover, they should be based on parameters that are quantifiable, and readily measured at a reasonable cost. In most instances, the careful selection of a few pertinent indicators that are easily measured is preferable to having numerous indicators that require complex procedures for data acquisition. We feel that the following plan meets these criteria and provides an essential tool for decision-makers to ensure that CBNRM initiatives meet their goals over the coming five years and beyond.

TABLE 1 - MONITORING AND EVALUATION: CRITICAL ASSUMPTIONS

Critical assumptions						
Indicator	Government support for environmental management	Legislative support for CBNRM	Financial support for CBNRM	Support for CBNRM Working Group	Economic stability	Environmental stability and food security
Indicator Definition	Government of Malawi support for MoNREA remains strong: stable funding, staffing levels, and mandate	Government of Malawi implements laws and develops policies that are supportive of CBNRM	Financial support from the Government of Malawi and donors for CBNRM initiatives remains adequate	Government of Malawi and other support for the Working Group is maintained over the duration of the activity	Economic conditions in Malawi remain conducive to CBNRM with no significant deterioration in rural incomes	Environmental conditions in Malawi remain conducive to CBNRM with no significant deterioration in climatic trends and food security
Unit of Measurement	Various	Qualitative	Malawi Kwacha	Qualitative	Qualitative	Qualitative
Data Source	EAD	EAD	CBNRM coordinating body, Secretariat, donors	CBNRM coordinating body	Various	Various
Method/Approach of Data Collection	Review	Review	Review	Review	Review	Review
Schedule/Frequency	Annual	Annual	Annual	Annual	Annual	Annual
Data Collection: Responsible Office	CBNRM Working Group	CBNRM Working Group	CBNRM Working Group	CBNRM Working Group	CBNRM Working Group	CBNRM Working Group
Data Regularly Available?	Yes	Yes	Yes	Yes	Yes	Yes
Reporting	Annually by CBNRM Working Group	Annually by CBNRM Working Group	Annually by CBNRM Working Group	Annually by CBNRM Working Group	Annually by CBNRM Working Group	Annually by CBNRM Working Group
End-users	Government, NCE and donors	Government, NCE and donors	Government, NCE and donors	Government, NCE and donors,	Government, NCE and donors	Government, NCE and donors

TABLE 2A: CBNRM MONITORING: BIOPHYSICAL IMPACT INDICATORS

<p>GOAL: RESPONSIBLE MANAGEMENT AND UTILIZATION OF NATURAL RESOURCES THAT MAINTAIN ECOSYSTEM FUNCTIONS AND CONTRIBUTE TO IMPROVED LIVELIHOODS</p> <p>OBJECTIVE: STRENGTHENED INSTITUTIONAL CAPACITY FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES FOUNDED ON LEGITIMACY AND THE PARTICIPATION OF ALL RESOURCE USERS</p>					
	Forestry	Fisheries	Wildlife	Soil	Water
Indicator	Forest management improved	Fish catch maintained or improved	Populations of threatened wildlife species conserved	Soil conservation techniques implemented	Water quality supports human needs and maintains healthy ecosystems
Indicator Definition	1 – Area of forests on public and private land that have government approved management plans 2 – Number of Village Forest Areas	Total catch and catch per unit effort of key fish species from Lake Malawi: 1 – chambo; 2 – usipa; 3 – utaka	Populations of elephant, buffalo and rhinoceros	1 – Area under vetiver, and contour ridging 2 – Percentage of farm families practicing soil conservation and soil fertility improvement	1 – Number of cases of cholera 2 – Number of waterfowl reported during annual census July and January 3 – number of waterfowl species reported in July and January
Unit of Measurement	1 – Hectares 2 – Number	Total catch in tonnes and catch in kg per unit effort for key species	Number of animals of each species	1 – Hectares 2 – Percentage	1 – Number 2 – Number 3 – Number
Data Source	Forestry Department	Fisheries Department, MALDECO	DNPW and WESM	Ministry of Agriculture	1 – Ministry of Health 2 and 3 – Wetlands International
Method of Data Collection	Aerial Survey and District reports	Catch assessment surveys, Frame Survey	Aerial surveys and ground surveys	Field surveys	Field surveys

Frequency	Annual	Annual	Annual (ground surveys) and aerial surveys every 5 years	Annual	Annual
Reporting	Annual	Annual	Annual	Annual	Annual
End-users	Policy makers, donors, public	Policy makers, donors, public	Policy makers, donors, public	Policy makers, donors, public	Policy makers, donors, public

TABLE 2B: CBNRM MONITORING: BIOPHYSICAL IMPACT TARGETS

	Forestry	Fisheries	Wildlife	Soil	Water
Indicator Definition	1 - Area of forests on public and private land that are being managed sustainably 2 - Number of Village Forest Areas	Total catch and catch per unit effort of key fish species from Lake Malawi: 1 - chambo; 2 - usipa; 3 - utaka	Populations of 1 – elephant; 2 – buffalo; and 3 – rhinoceros	1 – Area under vetiver, and contour ridging 2 – Percentage of farm families practicing soil conservation and soil fertility improvement	1 – Number of cases of cholera 2 – Number of waterfowl reported during annual census July and January 3 – Number of waterfowl species reported in July and January
Target	1 – 250,000 2 – 5,000	1 – 3,000 (1) 2 – 10,000 (3.5) 3 – 10,000 (1)	1 – 1,000 2 – 2,000 3 – 15	1 – 400,000 2 – 25%	1 – < 1,000 2 – 2,668 and 9180 3 – 56 and 73
Baseline Data	1 – 7,750 2 – 100 est.	1 – 2,825 (0.73) 2 – 19,183 (3.52) 3 – 9,544 (0.55)	1 – 600 est. 2 – 1,500 est. 3 – 7	1 – 33,000 (2000) 2 – 10% (1999)	1 – 30,000 (2002) 2 – 2,500 and 9,000 3 – 50 and 70
2002 Target	1 – 8,000 2 – 200	1 – 3,000 (1) 2 – 10,000 (3.5) 3 – 10,000 (1)	1 – 650 2 – 1,600 3 – 9	1 – 50,000 2 – 12%	1 – <3,000 2 – 2,500 and 9,000 3 – 50 and 70
2002 Actual					
2003 Target	1 – 20,000 2 – 500	1 – 3,000 (1) 2 – 10,000 (3.5)	1 – 700 2 – 1,700	1 – 75,000 2 – 14%	1 – <2,500 2 – 2,500 and 9,000

		3 – 10,000 (1)	3 – 11		3 – 50 and 70
2003 Actual					
2004 Target	1 – 50,000 2 – 1,000	1 – 3,000 (1) 2 – 10,000 (3.5) 3 – 10,000 (1)	1 – 800 2 – 1,800 3 – 13	1 – 100,000 2 – 16%	1 – <2,000 2 – 2,500 and 9,000 3 – 50 and 70
2004 Actual					
2005 Target	1 – 100,000 2 – 2,500	1 – 3,000 (1) 2 – 10,000 (3.5) 3 – 10,000 (1)	1 – 900 2 – 1,900 3 – 15	1 – 200,000 2 – 20%	1 – <1,500 2 – 2,500 and 9,000 3 – 50 and 70
2005 Actual					
2006 Actual					

TABLE 3A: CBNRM MONITORING: SOCIO-ECONOMIC IMPACT INDICATORS

GOAL: RESPONSIBLE MANAGEMENT AND UTILIZATION OF NATURAL RESOURCES THAT MAINTAIN ECOSYSTEM FUNCTIONS AND CONTRIBUTE TO IMPROVED LIVELIHOODS					
OBJECTIVE: STRENGTHENED INSTITUTIONAL CAPACITY FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES FOUNDED ON LEGITIMACY AND THE PARTICIPATION OF ALL RESOURCE USERS					
Indicator	Adoption of CBNRM approaches	Gender representation and equitable decision-making in CBNRM groups	Financial self-reliance of CBNRM groups	Awareness of CBNRM approaches within law enforcement agencies	Support for CBNRM approaches among civic leaders
Indicator Definition	Number of legally constituted CBNRM groups that are actively engaged in NRM activities	Percentage of legally constituted CBNRM groups with at least half of the decision makers being women	Percentage of legally constituted CBNRM groups that are financially self-sustaining	Percentage of law enforcers that have been sensitized on CBNRM issues and enforce local and national laws	Percentage of leaders that are active in supporting CBNRM
Unit of Measurement	Number	Percentage	Percentage	Percentage	Percentage
Data Source	District authorities	District authorities	District authorities	Ministry of Justice, District authorities, TAs	Parliamentary Clerks, District Assemblies
Method of Data Collection	Survey	Survey	Survey	Survey	Survey
Frequency	Annual	Annual	Annual	Annual	Annual
Reporting	Annual	Annual	Annual	Annual	Annual
End-users	Policy makers, donors, public	Policy makers, donors, public	Policy makers, donors, public	Policy makers, donors, public	Policy makers, donors, public

TABLE 3B: CBNRM MONITORING: SOCIO-ECONOMIC IMPACT TARGETS²

Indicator	Adoption of CBNRM approaches	Gender representation and equitable decision-making in CBNRM groups	Financial self-reliance of CBNRM groups	Awareness of CBNRM approaches within law enforcement agencies	Support for CBNRM approaches among civic leaders
Indicator Definition	Number of legally constituted CBNRM groups that are actively engaged in NRM activities	Percentage of legally constituted CBNRM groups with at least half of the decision makers being women	Percentage of legally constituted CBNRM groups that are financially self-sustaining	Percentage of law enforcers that have been sensitized on CBNRM issues and enforce local and national laws	Percentage of leaders that are active in supporting CBNRM
Target	500	60	50	60	25
Baseline Data	114	0	0	0	< 5
2002 Target	120	60	5	20	5
2002 Actual					
2003 Target	150	60	10	30	10
2003 Actual					
2004 Target	200	60	20	40	15
2004 Actual					
2005 Target	350	60	35	50	20
2005 Actual					
2006 Actual					

² We anticipate disaggregating these data to provide sector-specific information that will enable comparison of performance across the key sectors.

Strategic Action: 1 - Develop a commonly understood CBNRM concept and vision

A CBNRM coordination mechanism needs to help develop a common vision and understanding of the need, benefits and possibilities for broad adoption of CBNRM in the context of Malawi. This process then could help the country, resource departments and NGOs develop a realistic pace for the envisioned change to occur and roles that are commensurate with the available personnel and financial resources. At the same time, it would help direct time and resources towards areas of highest need and likely maximum impact. This can be enhanced through analysis of the problems, examination of options, understanding risks and how to minimize them and dialogue to share experiences from within and outside the country.

TABLE 4: SA1 INDICATORS

STRATEGIC ACTION 1: DEVELOP A COMMONLY UNDERSTOOD CBNRM CONCEPT AND VISION			
SA 1: Develop a commonly understood CBNRM concept and vision	Overall Impact	Determine core values to form basis for CBNRM in Malawi	Disseminate CBNRM guiding principles, core values and strategy. Produce resource materials
Indicator	CBNRM principles and core values reflected in DEAPs	CBNRM Working Group elaborates core values in a participatory manner	Materials on CBNRM guiding principles, core values and strategy disseminated
Indicator Definition	Number of DEAPs with action items that clearly reflect adherence to CBNRM core values	CBNRM Working Group organizes a national forum to discuss CBNRM core values and develop a broad consensus on these	1 – Number of radio and TV programs 2 – Number of leaflets and posters circulated to and by District Assemblies
Unit of Measurement	Number	Yes/No	1 – Number 2 – Number
Data Source	EAD	CBNRM Working Group	District Assemblies
Method of Data Collection	Review of DEAPs	Review	Survey
Frequency	Annual	Annual	Annual
Reporting	Annual	Annual	Annual
End-users	NCE, MoNREA, other line Ministries, NGOs, donors	NCE, MoNREA, other line Ministries, NGOs, donors	NCE, MoNREA, other line Ministries, NGOs, donors

TABLE 5: SA1 TARGETS

STRATEGIC ACTION	Overall Impact	Action Step 1.5 Determine core values to form basis for CBNRM in Malawi	Action Step 1.6 Disseminate CBNRM guiding principles, core values and strategy. Produce resource materials
SA 1: Develop a commonly understood CBNRM concept and vision	CBNRM principles and core values reflected in DEAPs	CBNRM Working Group elaborates core values in a participatory manner	Materials on CBNRM guiding principles, core values and strategy disseminated
Target	27	Yes	1 – 10/week 2 – 500,000
Baseline Data	0	No	1 – 4/week 2 – 20,000 (?)
2002 Target	2	Yes	1 – 5/week 2 – 50,000
2002 Actual			
2003 Target	4	Yes	1 – 6/week 2 – 100,000
2003 Actual			
2004 Target	8	Yes	1 – 8/week 2 – 150,000
2004 Actual			

2005 Target	16	Yes	1 – 10/week 2 – 200,000
2005 Actual			
2006 Actual			

Strategic Action: 2 – Maintain a dynamic policy reform process

The CBNRM Working Group needs to help maintain a dynamic policy process. In particular, it should help sector policies to match the role of Government, NGO's, Traditional Authority, CBOs and the private sector with their appropriate capacities and strengths. Sectoral policies need to be coordinated and made cohesive with the more fundamental changes proposed under the land reform and decentralization policies. This requires the CBNRM coordinating body's membership to include high level decision makers from both the resource sectors and from these other crucial ministries, especially Local Government.

TABLE 6: SA2 INDICATORS

STRATEGIC ACTION 2: MAINTAIN A DYNAMIC POLICY REFORM PROCESS				
SA 2: Establish efficient liaison, communication and information exchange mechanisms among CBNRM Programs	Overall Impact	Harmonize all policies to incorporate CBNRM requirements	Review and update relevant legislation (Acts) for the Forestry, Fisheries, Wildlife, Land Conservation, Water and Energy sectors	Develop policy analysis and advocacy skills in key agencies to enable dynamic policy review and improvement process
Performance Indicator	Annual State of the Environment Report incorporates “regular” impact assessments from line Ministries and Departments	Policies relating to natural resources encourage and enable community-based management of the resources	Legislation relating to natural resources include clear provisions for community-based management of the resources	Number of NGOs that have advocated successfully for reform of policies relating to CBNRM
Indicator Definition	EAD uses clear statements of NRM policy impact from line Ministries and Departments and District Assemblies to prepare SOER	Percentage of sectoral policies that have thoroughly integrated the concepts of CBNRM in their provisions for enabling community participation in natural resource management	Percentage of sectors having legislation that thoroughly integrates provisions for enabling community participation in natural resource management	Number of NGOs that have developed advocacy campaigns that have led to policy reform in the CBNRM sectors
Unit of Measurement	% of sectors	Percentage	Percentage	Number
Data Source	EAD	CBNRM Working Group	CBNRM Working Group	NGOs, PCANR, CBNRM Working Group
Method/Approach of Data Collection	Review	Survey	Survey	Survey
Schedule/Frequency	Annual	Annual	Annual	Annual
Reporting	Annual	Annual	Annual	Annual
End-users	NCE, MoNREA, other line Ministries, NGOs, donors, private sector	NCE, MoNREA, other line Ministries, NGOs, donors, private sector	NCE, MoNREA, other line Ministries, NGOs, donors, private sector	NCE, MoNREA, other line Ministries, NGOs, donors, private sector

TABLE 7: SA2 TARGETS

STRATEGIC ACTION	Overall Impact	Action Step 2.2 Harmonize all policies to incorporate CBNRM requirements	Action Step 2.3 Review and update relevant legislation (Acts) for the Forestry, Fisheries, Wildlife, Land Conservation, Water and Energy sectors	Action Step 2.6 Develop policy analysis and advocacy skills in key agencies to enable dynamic policy review and improvement process
SA 2: Establish efficient liaison, communication and information exchange mechanisms among CBNRM Programs	Annual State of the Environment Report incorporates "regular" impact assessments from line Ministries and Departments	Policies relating to natural resources encourage and enable community-based management of the resources	Legislation relating to natural resources include clear provisions for community-based management of the resources	Number of NGOs that have advocated successfully for reform of policies relating to CBNRM
Target	Yes	100	100	10
Baseline Data	No	30	30	0
2002 Target	Yes	45	45	2
2002 Actual				
2003 Target	Yes	60	60	4
2003 Actual				
2004 Target	Yes	75	75	6
2004 Actual				
2005 Target	Yes	90	90	8
2005 Actual				
2006 Actual				

Strategic Action: 3 – Develop coordinated CBNRM sectoral strategies and action plans

Policies and legislation need to be taken one step further into CBNRM sectoral strategies and action plans. In this, the coordination effort should further the interest and progress made by various resource sectors, but play a critical role in providing technical support and making the different strategies and plans cohesive. Wherever possible these should be mutually re-enforcing. The process followed in the preparation of the National Forest Program and its inclusion and treatment of the CBNRM component could be insightful for other resource sectors. To provide support in formulating strategies and action plans, the CBNRM coordination body needs to include strong technical people.

TABLE 8: SA3 INDICATORS

STRATEGIC ACTION 3: DEVELOP COORDINATED CBNRM SECTORAL STRATEGIES AND ACTION PLANS					
SA 3: Develop coordinated CBNRM sectoral strategies and action plans	Overall Impact	Infuse CBNRM approaches into sector programming	Harmonize sector-wide approaches	Infuse CBNRM coordinated approaches into DEAPs and NEAP II	Infuse CBNRM coordinated approaches onto District sector plans
Performance Indicator	CBNRM principles and core values reflected in DEAPs	Percentage of sector programs that thoroughly integrate CBNRM approaches	Guidelines on incentives and approaches for promoting adoption of CBNRM in all key sectors developed	DEAPs and NEAP incorporate CBNRM as an integral component in promoting and designing NRM initiatives	District sector plans demonstrate that they have been developed and will be implemented in a way that is coordinated with other sectors
Indicator Definition	Number of DEAPs with action items that clearly reflect adherence to CBNRM core values	Percentage of key NRM sectors that have developed policies, legislation AND sector programs that enable, encourage and support CBNRM approaches	All key NRM sectors agree to and implement compatible approaches to encouraging communities to adopt CBNRM (Forestry, Fisheries, Wildlife, Land Conservation, Water and Energy)	1 - Percentage of DEAPs that have clearly established cross-sectoral coordination strategies, mechanisms and procedures that ensure thorough integration of NRM principles and approaches 2 – NEAP II	Percentage of District sector plans that clearly establish procedures for coordinating NRM implementation efforts with other sectors in the District
Unit of Measurement	Number	Percentage	Yes/No	1 – Percentage 2 – Yes/No	Percentage
Data Source	EAD	MoNREA, line Ministries, CBNRM Working Group	MoNREA, line Ministries, CBNRM Working Group	1 – EAD, District Assemblies, Local Govt. 2 – EAD, MoNREA	District Assemblies
Method/Approach of Data Collection	Review of DEAPs	Survey	Survey	1 – Survey	Survey

				2 – Review	
Schedule/Frequency	Annual	Annual	Annual	Annual (1 and 2)	Annual
Reporting	Annual	Annual	Annual	Annual (1 and 2)	Annual
End-users	NCE, MoNREA, other line Ministries, NGOs, donors				

TABLE 9: SA3 TARGETS

STRATEGIC ACTION	Overall Impact	Action Step 3.1 Infuse CBNRM approaches into sector programming	Action Step 3.2 Harmonize sector-wide approaches	Action Step 3.3 Infuse CBNRM coordinated approaches into DEAPs and NEAP II	Action Step 3.4 Infuse CBNRM coordinated approaches onto District sector plans
SA 3: Develop coordinated CBNRM sectoral strategies and action plans	CBNRM principles and core values reflected in DEAPs	Percentage of sector programs that thoroughly integrate CBNRM approaches	Guidelines on incentives and approaches for promoting adoption of CBNRM in all key sectors developed	DEAPs and NEAP incorporate CBNRM as an integral component in promoting and designing NRM initiatives	District sector plans demonstrate that they have been developed and will be implemented in a way that is coordinated with other sectors
Target	Yes	100 (6/6)	Yes	1 – 100 2 - Yes	100
Baseline Data	No	30 (2/6)	No	1 – 0 2 - No	0
2002 Target	Yes	45 (3/6)	Yes	1 – 25 2 - Yes	20
2002 Actual					
2003 Target	Yes	60 (4/6)	Yes	1 – 50 2 - Yes	40
2003 Actual					
2004 Target	Yes	75 (5/6)	Yes	1 – 75	60

				2 - Yes	
2004 Actual					
2005 Target	Yes	100 (6/6)	Yes	1 – 100 2 - Yes	80
2005 Actual					
2006 Actual					

Strategic Action: 4 – Develop planning and implementation tools

A national CBNRM coordination mechanism needs to help develop three types of CBNRM planning and implementation tools including:

- 1) guidelines on CBNRM principles and criteria for selecting and adopting various approaches to community level activities;
- 2) a CBNRM planning framework in the form of logical or results frameworks that identify linked goals, objectives, outputs (or results), inputs (or activities) and bench marks with a time frame; and
- 3) monitoring and evaluation tools mainly focusing on identifying indicators for each of the levels and activities of the logical framework, how to measure these indicators and the sources of information and data to measure them.

TABLE 10: SA4 INDICATORS

STRATEGIC ACTION: 4 – DEVELOP PLANNING AND IMPLEMENTATION TOOLS							
SA4: Develop planning and implementation tools	Overall Impact	Develop sustainable financing mechanisms	Develop guidelines for District by-laws and community natural resource management plans	Develop clear, legal mandates for community-level institutions and TAs in CBNRM	Develop awareness raising approaches and tools	Develop participatory monitoring and evaluation toolbox	Design conflict management and resolution mechanisms
Performance Indicator	Number of formal natural resource management agreements: 1 – approved 2 – under implementation	MEET endowment fund is capitalized	National guidelines used by all Districts	Procedures for legal recognition of CBOs established	Strategy for raising public awareness about CBNRM implemented	Improved PRA and other participatory development approaches widely used	Guidelines: 1 – Developed 2 – Distributed to Districts
Indicator Definition	Agreements between GOM line Ministries (or District Assemblies) and community groups that are under implementation	Amount of MEET endowment fund capitalization	Percentage of Districts applying national guidelines on District by-laws and community natural resource management plans	Number of legally constituted CBOs implementing in CBNRM initiatives	Percentage of Districts disseminating CBNRM awareness materials and messages in local languages	Percentage of Districts employing improved PRA and other participatory development approaches to community mobilization	1 – Guidelines developed by the CBNRM Working Group and approved by the NCE 2 – Percentage of Districts disseminating and using guidelines
Unit of Measurement	Number	US \$ (or other hard currency)	Percentage	Number	Percentage	Percentage	1 – Yes/No 2 – Percentage

Data Source	MoNREA (Forestry and Fisheries), DNPW, line Ministries/Departments and District Assemblies	MEET	District Assemblies	District Assemblies	District Assemblies	District Assemblies	1 – CBNRM Working Group 2 – District Assemblies
Method/Approach of Data Collection	Survey	Survey and MEET reports	Survey of District Assemblies	1 – Review 2 – Survey of District Assemblies			
Schedule/Frequency	Annual	Annual	Annual	Annual	Annual	Annual	1 and 2 – Annual
Reporting	Annual	Annual	Annual	Annual	Annual	Annual	1 and 2 – Annual
End-users	NCE, MoNREA, other line Ministries, NGOs, District Assemblies, donors	NCE, MoNREA, other line Ministries, NGOs, donors	NCE, MoNREA, other line Ministries, NGOs, donors	NCE, MoNREA, other line Ministries, NGOs, donors	NCE, MoNREA, other line Ministries, NGOs, donors	NCE, MoNREA, other line Ministries, NGOs, donors	NCE, MoNREA, other line Ministries, NGOs, donors

TABLE 11: SA4 TARGETS

STRATEGIC ACTION	Overall Impact	Action Step 4.1 Develop sustainable financing mechanisms	Action Step 4.4 Develop guidelines for District by-laws and community NRM plans	Action Step 4.5 Develop clear, legal mandates for community-level institutions and TAs in CBNRM	Action Step 4.7 Develop awareness raising approaches and tools	Action Step 4.10 Develop participatory monitoring and evaluation toolbox	Action Step 4.11 Design conflict management and resolution mechanisms
SA 4: Develop planning and implementation tools	Number of formal natural resource management agreements: 1 – approved 2 – under implementation	MEET endowment fund is capitalized	National guidelines used by all Districts	Procedures for legal recognition of CBOs established	Strategy for raising public awareness about CBNRM implemented	Improved PRA and other participatory development approaches widely used	Guidelines: 1 – Developed 2 – Distributed to Districts
Target	1 – 500 2 – 500	\$10 million	100	500	100	100	1 – Yes 2 - 100
Baseline Data	< 50	0	0	<5	0	0	1 – No 2 - 0
2002 Target	1 – 100 2 – 100	\$2 million	20	50	20	20	1 – Yes 2 - 20
2002 Actual							
2003 Target	1 – 200 2 – 200	\$4 million	40	100	40	40	1 – Yes 2 - 40
2003 Actual							

2004 Target	1 – 300 2 – 300	\$6 million	60	200	60	60	1 – Yes 2 - 60
2004 Actual							
2005 Target	1 – 400 2 – 400	\$8 million	80	400	80	80	1 – Yes 2 - 80
2005 Actual							
2006 Actual							

Strategic Action: 5 – Provide strategic support to coordinated CBNRM implementation

The CBNRM Working Group should provide strategic support to certain processes that critically constrain current implementation efforts including:

- 1) Revitalizing the stalled policy implementation process.
- 2) Developing CBNRM education, awareness and information systems.
- 3) Developing mechanisms and skills for grassroots advocacy.
- 4) Developing resources and socioeconomic data for planning, implementation and evaluation purposes.
- 5) Developing market data for enterprise development and involvement of the private sector.
- 6) Improving community mobilization methodologies to achieve replicability, independence and sustainability.
- 7) Identifying and supporting mechanisms for sustainable financial support to increase CBNRM coverage and improved services.
- 8) Identifying and supporting ways for developing alternative community incomes.

TABLE 12: SA5 INDICATORS

STRATEGIC ACTION: 5 – PROVIDE STRATEGIC SUPPORT TO COORDINATED CBNRM IMPLEMENTATION				
SA 5: Provide strategic support to coordinated CBNRM implementation	Overall Impact	Disseminate sectoral policies to clarify CBNRM tenure and ownership rights	Empower District authorities to approve community NRM plans ensuring cross-sectoral coordination	Formally integrate TAs into the process of NRM-planning at the District level by giving them a clear role in developing and implementing CBNRM initiatives
Performance Indicator	Number of communities receiving requested technical support services for CBNRM implementation	Key sectoral policy materials disseminated to all District Assemblies in key languages relevant to each District	District Assemblies have the authority to sign community-based NRM plans	District Assemblies have a formal process for integrating TAs into NRM planning and decision-making
Indicator Definition	Communities that rate NRM services provided by GOM, Districts and NGOs as good or better	Percentage of Districts that have received policy synopses for all key NRM sectors (Forestry, Fisheries and Wildlife) in key relevant languages for the District in question	Percentage of District Assemblies that have the authority to sign NRM plans	Percentage of Districts that involve all TAs (or their agreed representatives) in NRM planning and decision-making
Unit of Measurement	Number of communities	Percentage	Percentage	Percentage
Data Source	Assemblies, NGOs, others	District Assemblies, MoNREA, DNPW	District Assemblies, MoNREA	District Assemblies, MoNREA, DNPW
Method/Approach of Data Collection	Survey	Survey	Survey	Survey
Schedule/Frequency	Annual	Annual	Annual	Annual
Reporting	Annual	Annual	Annual	Annual
End-users	NCE, MoNREA, other line Ministries, NGOs, District Assemblies, donors	NCE, MoNREA, other line Ministries, NGOs, District Assemblies, donors	NCE, MoNREA, other line Ministries, NGOs, District Assemblies, donors	NCE, MoNREA, other line Ministries, NGOs, District Assemblies, donors, TAs

TABLE 13: SA5 TARGETS

STRATEGIC ACTION	Overall Impact	Action Step 5.2 Disseminate sectoral policies to clarify CBNRM tenure and ownership rights	Action Step 5.4 Empower District authorities to approve community NRM plans ensuring cross-sectoral coordination	Action Step 5.6 Formally integrate TAs into the process of NRM-planning at the District level by giving them a clear role in developing and implementing CBNRM initiatives
SA 5: Provide strategic support to coordinated CBNRM implementation	Number of communities receiving requested technical support services for CBNRM implementation	Key sectoral policy materials disseminated to all District Assemblies in key languages relevant to each District	District Assemblies have the authority to sign community-based NRM plans	District Assemblies have a formal process for integrating TAs into NRM planning and decision-making
Target	4,000	100	100	100
Baseline Data	<100	0	0	0
2002 Target	200	20	20	20
2002 Actual				
2003 Target	600	40	40	40
2003 Actual				
2004 Target	1,200	60	60	60
2004 Actual				
2005 Target	2,000	80	80	80
2005 Actual				
2006 Actual				

Strategic Action: 6 – Invest in monitoring and evaluation

Malawi needs to invest more on monitoring and evaluation of CBNRM activities and processes and to use that information to track progress and evaluate impact. It also needs a dynamic process for feed back into the policy and strategic planning process and for improving decisions about the most strategic implementation support.

The level of investment in M&E activities is best decided after examining the indicators that need to be measured and exactly how they will be measured. Then the coordination effort must help identify the most cost-effective way to get and use that data.

TABLE 14: SA6 INDICATORS

STRATEGIC ACTION: 6 – INVEST IN MONITORING AND EVALUATION			
SA 6: Invest in monitoring and evaluation	Overall Impact	Carry-out baseline surveys, monitoring and evaluation	Disseminate information and findings on CBNRM activities
Performance Indicator	Not applicable	CBNRM M&E plan implemented	Annual report on performance and impact of CBNRM initiatives distributed
Indicator Definition		CBNRM M&E plan is finalized by the CBNRM Working Group	Annual performance and impact report prepared by the CBNRM Working Group is formally presented to NCE
Unit of Measurement		Yes/No	Yes/No
Data Source		CBNRM Working Group	CBNRM Working Group
Method/Approach of Data Collection		1Working Group minutes	Review of Working Group and NCE minutes
Schedule/Frequency		Once (2002)	Annual
Reporting		Once (2002)	Annual
End-users		NCE, MoNREA, other line Ministries, NGOs, donors	NCE, MoNREA, other line Ministries, NGOs, donors

TABLE 15: SA6 TARGETS

STRATEGIC ACTION	Overall Impact	Action Step 6.2 Carry-out baseline surveys, monitoring and evaluation	Action Step 6.4 Disseminate information and findings on CBNRM activities
SA 6: Invest in monitoring and evaluation	Not applicable	CBNRM M&E plan implemented	Annual report on performance and impact of CBNRM initiatives distributed
Target		Yes	Yes
Baseline Data		No	No
2002 Target		Yes	Yes
2002 Actual			
2003 Target		Yes	Yes
2003 Actual			
2004 Target		Yes	Yes
2004 Actual			
2005 Target		Yes	Yes
2005 Actual			
2006 Actual			

Summary

The foregoing monitoring plan is designed to gauge the impact and performance of CBNRM initiatives in Malawi. The plan is structured around the established goals and objectives of CBNRM and the strategic plan that was approved by the National Council on the Environment in November 2001. The monitoring plan comprises 14 impact indicators, 10 of these focussing on overarching biophysical and socio-economic impact and 20 performance indicators that relate to specific actions identified in the strategic plan.

The CBNRM Working Group's Monitoring Task Force reviewed this draft in late January 2002 and it is hoped that it will be presented to the Working Group at the next meeting. This is tentatively scheduled for late February 2002. At that time, it will be incumbent on the Working Group to establish baselines where necessary and annual targets for each of the Strategic Action indicators. Whether the Working Group itself or the Task Force undertakes this has yet to be decided. A critical task will be to determine and ascribe responsibilities with regard to establishing the baselines and annual targets.

Finally, once the monitoring plan is finalized and approved by the Working Group and, presumably, the NCE, it will have to be implemented. Once again, it will be essential to determine and ascribe responsibilities with regard to regular data collection and reporting on an annual basis. Will the Working Group take on this responsibility, delegating the tasks to the institutional members, or will the Working Group's limited capacity require that these tasks are out-sourced?

Annex 1

Monitoring and Evaluation: Current Status and Assumptions

The fundamental approach to managing natural resources in Malawi is undergoing a dramatic shift. Prior to the mid-1990s, the central government controlled natural resources through a strict regime of laws and regulations. Widespread environmental decline attests to the weakness of this command-and-control approach. Under the current democratically elected government, community-based natural resource management is being promoted. With assistance from donors and NGOs, Malawi is making a significant investment to turn CBNRM into a reality. New institutional structures and programs are being set up. Policies promoting decentralization are taking root. Local and national governments are being mobilized in a nationwide planning process for CBNRM. And communities are being trained in more environmentally sound management practices. How well the country adopts CBNRM will have profound implications for the citizens of Malawi and their ability to meet their basic needs well into the future.

The development of a strategic plan and performance monitoring system that allows communities and decision-makers to track their progress in achieving their objectives under CBNRM will be an essential tool in this transition period and beyond. Monitoring permits resource managers and decision-makers to collect data and information to assess whether CBNRM projects and programs are achieving their desired result and impact. Throughout the world, countries are developing performance-monitoring systems for adaptive management. This means that management practices are continually being assessed and modified to enhance the achievement of objectives. Performance monitoring, therefore, is a valuable management tool.

Many different approaches are being adopted for performance monitoring. Each approach has its unique strengths and weaknesses. This section is designed to introduce one possible option that the CBNRM coordinating body³ within the government of Malawi may consider for monitoring the performance and impacts of CBNRM initiatives in the country. The approach is based on current best practice adopted by countries around the world for monitoring environmental programs, as developed by USAID. It relies on the development of a strategic plan that is depicted in a result framework and identifying indicators to gauge progress against these desired results. The approach is intended to provide a methodology to ensure that all the basic building blocks for CBNRM are monitored systematically.

An efficient monitoring system must be built around good indicators, cost-effective data collection, rigorous analysis, and efficient reporting procedures. The criteria for selection of good indicators include that they are pertinent and unequivocal; that they are objective and assist in decision making; and that they are readily understandable. Moreover, they should be based on parameters that are quantifiable, and readily measured at a reasonable cost. In most instances, the careful selection of a few pertinent indicators that are easily measured is preferable to having numerous indicators that require complex procedures for data acquisition.

Current Environmental Monitoring in Malawi

As a first step to assist in building a performance monitoring system for CBNRM, COMPASS conducted a rapid appraisal of current national-level environmental monitoring activities. This exercise was designed to identify existing monitoring systems upon which a CBNRM performance system could be built. As part of the appraisal, the COMPASS team spoke with government officials in the Departments of Environmental Affairs, Forestry, Parks & Wildlife and Fisheries; various NGO and university representatives; local government officials; and

³ We are working on the assumption that either the NCE's CBNRM Working Group or some other body will be mandated to play the role of a permanent CBNRM Secretariat.

donor agencies involved in CBNRM. Several key findings emerged from the assessment that have far-reaching implications for CBNRM performance monitoring:

- ***Confidence levels regarding the validity of current environmental data is uneven.*** For the Departments of Fisheries, National Parks and Wildlife, and Forestry, current monitoring relies on district environmental, fisheries, park, and forest specialists to compile and report monitoring data to Lilongwe headquarter offices. In theory, headquarter offices are responsible for compiling the district-level data into a national report. An earlier COMPASS assessment found that for certain environmental areas, such as fisheries, Malawi has a long and rich tradition of gathering data. The compilation and reporting of this data, however, is generally regarded as more problematic. Indeed, current bottlenecks to environmental monitoring include insufficient funding for field technicians to gather data in their districts, the use of inconsistent methodologies for collecting data that precludes aggregation of the data at the national level, and a lack of a clear use for the data once it is collected and analyzed.
- ***Recent national level data on environmental conditions do not exist.*** For several sectors, comprehensive nationwide environmental assessments exist, but they need to be updated. For example, deforestation rates and forest cover appearing in current environmental literature still refer to a study conducted in 1992 as the most recent source for forestry data. The *1999 Resource Report* by the Fisheries Department contains national data and analysis of fish stocks up to 1996. Nationwide data on fauna dates back to 1994, although the Parks Department does maintain more recent statistics on animal counts and management practices inside its parks and reserves. Furthermore, data do not exist for several important environment areas. According to the *1998 State of the Environment Report*, data for soil erosion, which is commonly ranked as the most serious environmental problem, “is very scanty and the little data [that is] available is inconsistent.” Similarly, a comprehensive baseline assessment of fish stocks in Lake Malawi has yet to be undertaken, despite the fact that the country’s largest water-body is its primary source of fish and is widely considered to be the most biodiverse freshwater lake in the world with more than 400 endemic species recorded.
- ***Current environmental monitoring conducted by the GOM is highly sectoral in focus,*** targeting individual sub-sectors within the environmental arena, such as fisheries, forests, and wildlife. No evidence exists to indicate that a broader, ecosystems-based approach is being adopted for monitoring that recognizes the inter-relatedness of ecological systems. For example, the Fisheries Department measures fish catch but does not maintain data on whether the habitat of vital nursery grounds are being maintained.

In general, environmental monitoring is regarded as a top-down bureaucratic requirement and as an end in-and-of-itself, rather than a tool to help make better decisions. It is reported that district environmental and technical specialists currently collect data as a job requirement, but often do not analyze or use the data to assist in promoting better environmental programs and practices. The dearth of environmental data hampers the ability of decision-makers at all levels to adopt policies and practices that are based on current and reliable information.

Fortunately, several steps are currently underway to begin to address several of these issues. For example, the Environmental Affairs Department (EAD) is now mandated under the 1996 Environmental Management Act to produce an annual state of the environment report for review by Parliament. The *1998 State of the Environment Report* provides a good overview of key environmental issues and trends in the country. Environmental information within individual sections of the current report, however, is often outdated or missing.

In addition, the establishment of the CBNRM Working Group to serve as a single focal point for CBNRM monitoring should enhance the prospect for improved environmental monitoring.

The growing recognition of the importance of collecting environmental information for decision making, in combination with the legal mandate to produce the state of the environment report, has resulted in several efforts to bolster environmental monitoring. For example, DANIDA and UNDP are providing technical assistance and equipment to help districts to produce environmental action plans that rely on baseline assessments of key natural resources. As part of the program, plans call for each district to produce their own state of the environment report, which will be compiled into the national level report each year. It is unclear, however, whether common national indicators will be employed to facilitate the collection and aggregation of data.

As additional attention is directed toward performance monitoring for CBNRM, several issues will need to be addressed to ensure that a monitoring system actually can translate into better environmental practices:

- The CBNRM monitoring plan must recognize that natural resource management requires a broader, ecosystem perspective that considers not only biophysical parameters, but also areas such as improvements in key enabling conditions for CBNRM and the adoption of CBNRM practices. Such areas would require measuring indicators for social and economic welfare, policy reform, financing, and other management information, which have yet to be integrated into current monitoring practice.
- The current policy and process of decentralization place greater emphasis on forging new partnerships with districts, traditional authorities, community organizations, and non-governmental organizations, which have little experience in collecting or using environmental information for decision making. Training these partners in performance monitoring for adaptive management will be required.
- Current CBNRM projects are not following any common or objective methodology for performance monitoring. The lack of a consistent or common approach for monitoring creates difficulties in assessing which CBNRM activities are the most successful and should be considered for replication. Any future CBNRM monitoring system should consider the adoption of a core set of common indicators that can be aggregated nationwide so that the development and environment community can identify more systematically what is working and what is not working in CBNRM. This knowledge will assist in targeting future programs and policies.
- With over 25% of Malawi's territory covered by water, a CBNRM performance-monitoring plan should consider using the watershed as the basic management unit for monitoring. Greater focus on a watershed-level monitoring plan would reflect recognition of natural boundaries and the strong interrelationships between terrestrial and aquatic ecosystems. Monitoring at a watershed level could also feed into an integrated system to improve coordination of current programs. In the case of Malawi, a watershed approach may require transboundary cooperation.

Monitoring Critical Assumptions

The attainment of project goals is usually conditional upon certain external factors remaining unchanged or any expected changes occurring as anticipated. These are regarded as assumptions critical to the timely and successful accomplishment of project goals. They must be monitored in order to ascertain whether any failure to achieve project objectives is the result of internal, manageable factors or uncontrollable, external forces. We have identified

six critical assumptions that relate to political, legislative and financial support for CBNRM in Malawi and COMPASS in particular, and two measures of economic and environmental stability (see Table 1). While these are largely qualitative indicators, they provide an overall framework for gauging responsiveness to the CBNRM agenda in Malawi.

We believe that in each of these categories the current situation is fairly conducive to meeting CBNRM objectives. Government support for the Ministry of Natural Resources and Environmental Affairs has strengthened. Legislation supportive of CBNRM is becoming stronger though we note with some concern that fisheries regulations and bylaws for Lake Chilwa still have not received departmental and ministerial approval despite being finalized in July 2001. Donor support for CBNRM has waned during the past 12 months. Several of the programs supported by the World Bank, DANIDA and GTZ have been scaled down at least temporarily or significantly modified, reducing opportunities for direct interventions with rural communities. The level of future support from the European Union and DfID remains unclear⁴. Nevertheless, support for CBNRM from USAID⁵ and the Government of Malawi has been very strong.

In terms of measures of economic and environmental stability, the current situation is mixed. A strengthening in the value of the kwacha has had some beneficial effects in reducing the price of imported goods including fuel and agricultural inputs. The strong kwacha appears to have been something of an aberration in the latter half of 2001 and current predictions suggest that its value relative to the dollar will decrease significantly in the first quarter of 2002. This is likely to once again exacerbate difficulties relating to high costs of imports.

At the same time, a decrease in total maize production relative to 2000 (owing to a short drought in January, at least in some areas, and then wet and cloudy conditions throughout the country in February and March) led to hoarding and price speculation that resulted in large price increases in September and October. This created severe economic hardship in many rural areas and people's need to exploit natural resources to generate income increase concomitantly. Circumstantial evidence in increased charcoal production and poaching of fish and wildlife may well have been a direct response to these pressures. The situation ameliorated with a decrease in maize prices in November when there were significant imports but prices rose again steeply in December demonstrating just how precarious the potential for CBNRM is in Malawi.

With regard to indicators of environmental stability, climatic conditions have been generally good though local aberrations in rainfall patterns have occurred. The 2000/2001 season again saw severe flooding from Karonga and the Lower Shire. The scourge of HIV/AIDS is worsening. Infection rates indicate that close to 40% of the sexually active population may be HIV-positive. Figures published in 2001 by the National AIDS Control Programme indicate that some 500,000 have died already and that another 1,000,000 are likely to die by 2012. Currently, some 70,000 deaths annually have been attributed to AIDS. The number of AIDS orphans is reported to be approaching two million: close to 20% of the population. This means that nuclear family sizes are increasing and, thereby, putting greater pressure on natural resources that are essential for poor rural households. Even more significantly, a large

⁴ Business Monitor International's *Africa Monitor* (January 2002) noted that "Donors are losing their patience with Malawi over the government's failure to resolve longstanding investigations into corruption, as well as foot-dragging on economic reforms. As a result, large amounts of aid have been lost, and the country's IMF programme looks at risk." This notwithstanding, BMI also notes that the IMF program may well remain in place because "the international community is loathe to inflict further hardship on Malawi's long-suffering population."

⁵ USAID's Contractor Performance Report on COMPASS dated November 9th 2000 provides a composite rating of 84% (excellent to outstanding).

percentage of the younger generation are growing up in households that cannot afford to provide children with the basic educational needs that could help them break free of the trap of rural poverty.

While the economic, social and environmental situation does appear to be worsening, it is unclear at this time whether this is having a direct detrimental impact on natural resources or whether it is increasing awareness of the need to improve management of those resources. Presumably both are occurring.

COMPASS Publications

Document Number	Title	Author(s)	Date
Document 1	COMPASS Year 1 Work Plan	COMPASS	Jul-99
Document 2	COMPASS Small Grants Management Manual	Umphawi, A., Clausen, R., Watson, A.	Sep-99
Document 3	Year 2 Annual Work Plan	COMPASS	Dec-99
Document 4	July 1 - September 30, 1999: Quarterly Report	COMPASS	Oct-99
Document 5	Training Needs Assessment: Responsive Modules & Training Approach	Mwakanema, G.	Nov-99
Document 6	Guidelines and Tools for Community-Based Monitoring	Svensden, D.	Nov-99
Document 7	Policy Framework for CBNRM in Malawi: A Review of Laws, Policies and Practices	Trick, P.	Dec-99
Document 8	Performance Monitoring for COMPASS and for CBNRM in Malawi	Zador, M.	Feb-00
Document 9	October 1 - December 31, 1999: Quarterly Report	COMPASS	Jan-00
Document 10	Workshop on Principles and Approaches for CBNRM in Malawi: An assessment of needs for effective implementation of CBNRM	Watson, A.	Mar-00
Document 11	January 1 - March 31, 2000: Quarterly Report	COMPASS	Apr-00
Document 12	Thandizo la Ndalama za Kasamalidwe ka Zachilengedwe (Small Grants Manual in Chichewa)	Mphaka, P.	Apr-00
Document 13	Njira Zomwe Gulu Lingatsate Powunikira Limodzi Momwe Ntchito Ikuyendera (Guidelines and Tools for Community-based Monitoring in Chichewa)	Svensden, D. - Translated by Mphaka, P. and Umphawi, A.	May-00
Document 14	Grass-roots Advocacy for Policy Reform: The Institutional Mechanisms, Sectoral Issues and Key Agenda Items	Lowore, J. and Wilson, J.	Jun-00
Document 15	A Strategic Framework for CBNRM Media Campaigns in Malawi	Sneed, T.	Jul-00
Document 16	Training Activities for Community-based Monitoring	Svensden, D.	Jul-00
Document 17	April 1 - June 30, 2000: Quarterly Report	COMPASS	Jul-00
Document 18	Crocodile and Hippopotamus Management in the Lower Shire	Kalowe kamo, F.	Sep-00
Document 19	Cost-Sharing Principles and Guidelines for CBNRM Activities	Moyo, N.	Sep-00
Document 20	Workplan: 2001	COMPASS	Nov-00
Document 21	July 1 - September 30, 2000: Quarterly Report	COMPASS	Oct-00
Document 22	Opportunities for Sustainable Financing of CBNRM in Malawi: A	Watson, A.	Nov-00

	Discussion		
Document 23	Framework for Strategic Planning for CBNRM in Malawi	Simons, G.	Nov-00
Document 24	Kabuku Kakwandula Ndongomeko ya Thumba Lapadera la Wupu wa COMPASS (Chitumbuka version of the COMPASS Small-grant Manual)	Umphawi, A., Clausen, R. & Watson, A. Translated by Chirwa, T.H. & Kapila, M.	Dec-00
Document 25	COMPASS Performance and Impact: 1999/2000	COMPASS	Nov-00
Document 26	October 1 - December 31, 2000: Quarterly Report	COMPASS	Jan-01
Document 27	COMPASS Grantee Performance Report	Umphawi, A.	Mar-01
Document 28	January 1 - March 31, 2001: Quarterly Report	COMPASS	Apr-01
Document 29	Natural Resource Based Enterprises in Malawi: Study on the contribution of NRBEs to economic development and community-based natural resource management in Machinga District	Lowore, J.	Apr-01
Document 30	Proceedings of the First National Conference on CBNRM in Malawi	Kapila, M., Shaba, T., Chadza, W., Yassin, B. and Mikuwa, M.	Jun-01
Document 31	Natural Resource Based Enterprises in Malawi: Action Plans	Watson, A.	Jun-01
Document 32	Examples of CBNRM Best Practices in Malawi (2 nd Edition)	Moyo, N. & Epulani, F.	May-02
Document 33	Media Training for CBNRM Public Awareness	Kapila, M.	Jun-01
Document 34	April 1 - June 30, 2001: Quarterly Report	COMPASS	Jul-01
Document 35	Strategic Plan for CBNRM in Malawi	CBNRM Working Group	Sep-01
Document 36	Workplan: 2002	COMPASS	Dec-01
Document 37	July 1 - September 30, 2001: Quarterly Report	COMPASS	Oct-01
Document 38	COMPASS Performance and Impact: 2000/2001	COMPASS	Dec-01
Document 39	Coordination of CBNRM in Malawi: Financing Options	Watson, A.	Jan-02
Document 40 (4 th draft)	Performance Monitoring for CBNRM in Malawi	CBNRM Working Group	Jun-02
Document 41	October 1 – December 31, 2001: Quarterly Report	COMPASS	Jan-02
Document 42	COMPASS Field Level Training Impact Evaluation	Moyo, N.	Feb-02
Document 43	COMPASS Grantee Performance Report: 2001	Umphawi, U.	Apr-02
Document 44 (draft)	COMPASS Assessment: 2001	Sambo, E., Carr, s., Omambia, D. & Moore, T.	Apr-02
Document 45	January 1 – March 31, 2002: Quarterly Report	COMPASS	Apr-02
Document 46	Community Tourism and Enterprise Training Manual	Kacal, S.	May-02

Internal Report 1	Building GIS Capabilities for the COMPASS Information System	Craven, D.	Nov-99
Internal Report 2	Reference Catalogue (2nd Edition)	COMPASS	Feb-01
Internal Report 3	Workshop on Strategic Planning for the Wildlife Society of Malawi	Quinlan, K.	Apr-00
Internal Report 4	Directory of CBNRM Organizations (2nd Edition)	COMPASS	Jan-01
Internal Report 5	Proceedings of Water Hyacinth Workshop for Mthunzi wa Malawi	Kapila, M. (editor)	Jun-00
Internal Report 6	COMPASS Grantee Performance Report	Umphawi, A.	Jun-00
Internal Report 7	Examples of CBNRM Best-Practices in Malawi	Moyo, N. and Epulani, F.	Jul-00
Internal Report 8	Software Application Training for COMPASS	Di Lorenzo, N.A.	Sep-00
Internal Report 9	Directory of COMPASS ListServ Members	Watson, A.	Jan-01
Internal Report 10	Introductory Training in Applications of Geographic Information Systems and Remote Sensing	Kapila, M.	Feb-01
Internal Report 11	COMPASS TAMIS Grants Manual	Exo, S.	Mar-01
Internal Report 12	Review of Recommendations of the Lake Chilwa and Mpoto Lagoon Fisheries By-Laws Review Meeting	Nyirenda, K.	May-01
Internal Report 13	End-of-Term Evaluation of the Co-Ordination Unit for the Rehabilitation of the Environment (CURE)	Sambo, E.Y.	Sep-01