

CONSERVATION ACTION PLAN WORKSHOP

MULOBEZI GAME MANAGEMENT AREA

**MOOMBA CHIEFDOM, KAZUNGULA DISTRICT
ZAMBIA**

19 – 20 June 2012

*PROTEA HOTEL - LIVINGSTONE
KAZUNGULA DISTRICT, ZAMBIA*



Table of Contents

| | |
|--|----|
| Executive Summary..... | 5 |
| Introduction | 8 |
| The Community-Based Natural Resource Management (CBNRM) Program | 9 |
| The Mulobezi Community Development and Sustainable Natural Resource Management Project | 10 |
| The Mulobezi Conservation Action Planning Workshop: | 10 |
| Conservation Action Planning (CAP) Methodology | 10 |
| Objectives of the Mulobezi CAP Workshop..... | 11 |
| Project Scope and Team | 12 |
| Targets | 13 |
| Step 1 –Target Nomination..... | 13 |
| Step 2 - Workshop Target Selection | 14 |
| Target Condition | 14 |
| Assessing Threats to Targets..... | 16 |
| Threat Rating | 16 |
| Situation Analysis - Conceptual Diagram of the System..... | 19 |
| Strategies | 21 |
| Determining Strategies to Reduce Threats to Targets | 21 |
| Strategy 1 – Reduce Poverty by Increasing Alternative Livelihoods | 22 |
| Goal..... | 22 |
| Objectives and Outcomes | 22 |
| Capacity requirements for key strategy implementation | 24 |
| People Involved | 25 |
| Strategy 2 – Improve Food Security..... | 25 |
| Goal..... | 25 |
| Objectives and Outcomes | 25 |
| Capacity requirements for key strategy implementation: | 26 |
| People Involved: | 27 |
| Strategy 3 – Strengthen Local Governance | 27 |
| Goal..... | 27 |
| Objectives and Outcomes | 28 |
| Capacity requirements for key strategy implementation | 29 |
| People Involved | 29 |
| Strategy 4 – Increase Local Capacity to Improve Natural Resource Management | 30 |
| Goal..... | 30 |
| Objectives and Outcomes | 30 |
| Capacity requirements for key strategy implementation | 31 |
| People Involved | 32 |
| Strategy 5 – Improve Enabling Conditions for Devolved CBNRM | 32 |
| Goal..... | 32 |
| Objectives and Outcomes | 32 |
| Capacity requirements for key strategy implementation | 33 |
| People Involved | 33 |
| Strategy 6 – Increase Primary School Attendance..... | 34 |
| Goal..... | 34 |
| Objectives and Outcomes | 34 |

| | |
|---|----|
| Capacity requirements for key strategy implementation | 35 |
| People Involved | 35 |
| Strategy 7 – Improve Access to and Quality of Health Care | 36 |
| Goal | 36 |
| Objectives and Outcomes | 36 |
| Capacity requirements for key strategy implementation | 36 |
| People Involved | 37 |
| Monitoring and Evaluation - Strategy Effectiveness and Status Measures..... | 38 |
| Adaptive Management - Purposeful Learning and Improvement over Time | 39 |
| Conclusion:..... | 40 |
| Appendix 1. Conservation Action Planning Process | 41 |
| Appendix 2: Workshop Agenda | 44 |
| Appendix 3: Workshop Participant List | 47 |
| Appendix 4: Detailed situation diagram of Mulobezi GMA..... | 49 |

Table of Figures

| | |
|--|----|
| Figure 1. Conservation Action Planning | 10 |
| Figure 2. Mulobezi GMA..... | 12 |
| Figure 3: Situation Analysis - Conceptual Diagram | 19 |
| Figure 4: Situation diagram of Mulobezi GMA | 20 |
| Figure 5: Theory of change diagram for increasing alternative livelihoods strategy | 24 |
| Figure 6: Theory of Change diagram for improving food security strategy | 26 |
| Figure 7: Theory of Change diagram for strengthening Local Governance | 29 |
| Figure 8: Theory of change diagram for increasing local capacity to improve natural resource management | 31 |
| Figure 9: Theory of change diagram for the strategy to increase enabling conditions for devolved CBNRM | 33 |
| Figure 10: Theory of change diagram for the strategy to increase primary school attendance..... | 35 |
| Figure 11: Theory of change diagram for the strategy to improve access to and the quality of health care | 36 |

Table of Tables

| | |
|--|----|
| Table 1. Target Condition Rating Categories..... | 14 |
| Table 2: Times for assessing target condition..... | 15 |

Mulobezi GMA Conservation Action Plan Workshop Report – July 2012

| | |
|---|----|
| Table 3: Status assessment of Mulobezi targets | 15 |
| Table 4: Threat Rating Categories..... | 17 |
| Table 5: Final ratings for major threats or barriers to achieving desired status of targets | 18 |
| Table 6: Objectives and outcomes for reducing poverty and increase alternative livelihoods | 23 |
| Table 7: Improve Food Security..... | 25 |
| Table 8: Strengthening Local Governance..... | 28 |
| Table 9: Increase Local Capacity to improve NRM | 30 |
| Table 10: Increasing Enabling Conditions for Devolved NRM..... | 32 |
| Table 11: Increase Primary School Attendance | 34 |
| Table 12: Improve access to and quality of health | 36 |
| Table 13: Strategy Facilitation Responsibility Matrix..... | 37 |

Executive Summary

The Nature Conservancy (TNC) hosted a Conservation Action Planning Workshop focused on Mulobezi Game Management Area (GMA) in order to design a program of work to increase benefit flow to local communities from improved and sustainable natural resource management. Stakeholders attending the workshop represented the five Village Action Groups (VAGs) (Moomba Central, Mulanga, Kalobe, Mabwe and Choonzo) in Mulobezi Game Management Area (GMA), Kazungula District Commissioner and Council Secretary's office, Kazungula District Forestry Department, Zambia Wildlife Authority (ZAWA), the Kavango-Zambezi Trans-Frontier Conservation Association (KAZA TFCA), and the Zambia Community Based Natural Resource Management Forum (WWF).

Mulobezi GMA is one of nine GMAs surrounding the 22,000-km² Kafue National Park. The Kafue complex, including the nine GMAs is a massive 46,000 km² – providing habitat and resources for a vast assemblage of people and diverse human communities. Mulobezi GMA itself is 3,430 km² located in the southwest corner of Kafue National Park in the Kazungula District.

Mulobezi GMA was selected for this project because it has comparatively intact natural resources, is under a single traditional authority (Moomba chiefdom), under a single ward council (Moomba ward), has a relatively low human population, an ethnically homogeneous community and has the potential to increase benefits to communities from sustainable harvests and management of natural resources. We believe that Mulobezi is one of the better GMAs in the Kafue ecosystem to pilot a new phase of CBNRM in Zambia.

The overall goal of this project is to reduce the threats to the natural environment by increasing the benefits to those who are threatening it. Our theory of change is simple. **IF** local communities view themselves as shareholders benefiting from the natural capital that is paying dividends to them in the form of sustainable harvested timber revenue, sustainably harvested wildlife, sustainably produced agriculture, **THEN** they will reduce threats to those wildlife, teak, soil, water and vegetation and become better stewards over the long term.

The participants identified six focal targets of concern in Mulobezi: **Natural resource management; Local governance institutions; Primary and secondary education; Cultural heritage practices; Human health services; Economic benefits and Enabling conditions for natural resource management.** These targets each contribute to making natural, political, economic and social systems of Mulobezi GMA more efficient. They were defined as the human and natural systems that support or provide services to human well-being. Historic, current and future desired conditions of each target were identified in order to define project goals. Participants also identified threats and the projected impact of these threats by rating their scope and severity on each target. Through

the assessment, the participants were able to prioritize the resources for action (with those most threatened given top priority) and to develop strategies for reducing those threats.

Project interventions (also referred to as strategies) were designed to reduce the most critical threats to the targets. This follows the assumption that working on the most highly rated threats increases our chances of achieving our goals for improving the status of the targets as opposed to working on threats with a lower rating. As a consequence of this approach, workshop participants defined seven critical strategies in Mulobezi GMA in order to improve natural resource management and increase benefit flow to local communities. In no particular order these are:

1. Reduce Poverty by Increasing Alternative Livelihoods
2. Improve Food Security
3. Strengthen Local Governance
4. Increase Local Capacity to Improve Resource Management
5. Increase Enabling Conditions for Devolved Natural Resource Management
6. Increase Primary School Attendance
7. Improve Access to and Quality of Health Care

While all these strategies are important for whole-system success, the workshop participants refined the first five strategies based on expertise in the workshop. These strategies address the highest rated threats to the resources of most importance for the next 10 years. Clearly, new threats may emerge and macro issues like climate change will take additional planning efforts. For example, increasing protection of the river and existing water sources will help reduce mid-term threats of water shortages, but additional research should define the potential impact of longer-term threats from droughts and climate change.

In order for these strategies to move forward, measurable objective statements were defined for each. Workshop participants also decided that partner and stakeholder relationships should be formalized via a collective Memorandum of Understanding (MOU). TNC may have additional specific MOUs with KAZA TFCA, ZAWA and others, but a collective project scale MOU is required to formalize commitments, roles, responsibilities, and communication protocols.

The larger vision of TNC is to increase scale and leverage of CBNRM activities across the Kafue Ecosystem and beyond. Zambia currently has 72 registered Community Resource Boards (CRBs) in 37 GMAs. Participants identified two key strategies to address scale and leverage questions.

1. Link our project objectives and interventions to national development programs and agendas.
2. Ensure there is good baseline information so that we can clearly measure and quantify the impact of our efforts. This evidence-based approach will test our model that assumes if we improve the economic livelihoods by increasing benefit flows of Mulobezi residents and invest in local, regional and national governance institutions; the threats to natural resources in Mulobezi GMA will reduce. Replication and the ability to influence policy will be greatly improved if we take an evidence-based approach.

In summary, this project believes that to improve natural resource management we must increase the ecosystem service benefits that residents of Mulobezi GMA receive – both community services like primary and secondary education, access to health care and roads, but also increased revenue and jobs at the household level. In order to increase ecosystem benefits we must work at two distinctly different levels:

1. Local Level – we must improve governance and increase capacity of the Community Resource Boards (CRBs) and Village Action Groups (VAGs). To do so we must also identify and support sustainable natural resource financing mechanisms that help improve household incomes and reduce food insecurity.
2. National and District Level – we must increase enabling conditions for devolved natural resource management. We will accomplish this by working with the Zambia CBNRM Forum, the Natural Resources Consultative Forum (NRCF) and KAZA TFCA, facilitate improved coordination of natural resource planning by the District Development Coordinating Committee and by improving Wildlife and Forestry legislation.

Introduction

Mulobezi GMA in the southwest of Kafue National Park (KNP) is one of the GMAs experiencing a rapid degradation of its natural resources, as well as high levels of rural poverty. It is the fifth largest buffer zone in the Kafue ecosystem, with an area of approximately 3,430 square kilometers. It boasts an ecological landscape dominated by miombo woodlands interspersed with dambos, grassy plains and teak forests. Prior to 1990, this GMA had high wildlife populations and recorded some of the best buffalo hunting in the region (Lyons, 2003).

Since 2000, Mulobezi community has experienced rapid decline in its natural resources, in particular its wildlife and teak forests. This is believed to have been caused primarily by rampant poaching that occurred during the restructuring of the National Parks and Wildlife Services (NPWS), now the Zambia Wildlife Authority (ZAWA) (Lyons, 2003). A significant factor is that law enforcement in the area has been poorly maintained, with only 16 village scouts and 7 ZAWA scouts patrolling a vast landscape. According to a 2003 CONASA/USAID study on the bush meat trade, Mulobezi is a major source of bush meat sold to urban markets such as Livingstone, Lusaka, and even the Copper belt province. The study showed that 77.8% of those interviewed obtained their bush meat from the Mulobezi GMA, while 2.4% hunted it from the KNP. The study further showed that local illegal hunters were largely responsible for the game found on the market (CONASA/USAID, 2003). Decline in wildlife populations has also been attributed to habitat fragmentation, excessive burning and competition with people around the dry season water points (Lyons, 2004).

Prior to privatization in the early 1990's, Mulobezi community had sound a local economy based on the harvesting/exploitation of the Zambezi Teak (*Baikaea plurijuga*). Due to poor natural resource management, these teak forests are now threatened by rapid deforestation from unsustainable harvesting and charcoal production.

Food security for residents in Mulobezi GMA is a major socio-economic challenge. Poor soils and relatively low rainfall (600 – 700 mm) make crop production risky and difficult. Over the past 50 years, the area has experienced declines in precipitation, which has had an impact on the food security of households (LFSP/USAID, 1996). Due to low yields from agricultural production, most community members depend on the unsustainable harvesting of natural resource products (e.g., fuel wood, meat, fish, honey) for their livelihoods. This small-scale natural resource use is more important than agriculture, and is secondary to crop production (MCC/ Chemonics, 2011).

Employment opportunities that contribute to household incomes in Mulobezi are few. A very small percentage of people are employed in the safari hunting industry. Revenue earned from tourism is minimal, and households do not see tourism as a competitive land use that contributes to household incomes.

The majority are subsistence farmers who rely on poor yields of maize, cassava, millet, sorghum and sweet potatoes. Other sources of income include timber supply to two local companies (Zambezi and Machita Saw mills), bee keeping, fishing, hunting, mining and cross border trading (MCC/ Chemonics, 2011).

The impact of HIV/ AIDS on the most productive members of households is another socio-economic challenge the community is facing (CONASA/ USAID, 2003). This impact includes increased burden of caring for orphans, reduced income and expenditure, lowered labor availability, reduced agriculture production, and reduced access to education (DHS, 2003).

The Community-Based Natural Resource Management (CBNRM) Program

Residents of Mulobezi GMA were among the first communities in Zambia to participate in Zambia's pioneer CBNRM programs. In the early 1990's the United States Agency for International Development (USAID) funded the first national CBNRM program - the Administrative Management Design (ADMAGE). In 2001, USAID funded the Community Based Natural Resource Management and Sustainable Agriculture (CONASA) project, a regional program that was focused in GMAs south of the KNP. Both these programs were developed for the purpose of improving the rural livelihoods of local residents through improved natural resource management. While these projects scored some successes in terms of addressing issues of food security and improved resource management, the time frames for project funding constrained their ability to build strong sustainable community governance structures. In addition, the two CBNRM programs were implemented within wider national strategies that used a 'one-size' fit all approach to CBNRM. This approach was heavily reliant on wildlife hunting revenues as the major source of income, and intended to be the panacea to solving community and natural resource problems in Zambia's GMAs.

Two decades later, communities in Mulobezi GMA continue to face a myriad of issues related to poor natural resource governance and management, high poverty levels, and poor implementation of a viable CBNRM program. Despite the GMA earning a total of US\$ 403, 730 from hunting between 2005 and 2010 (ZAWA Financial records, 2010), very little of this money has translated to improving the welfare of residents and ensuring that resources are managed and protected. Due to erratic flows of wildlife hunting revenues and reliance on one natural resource as a source of income, community leaders and their constituents have not been able to implement an effective CBNRM program. Programs that address natural resource protection currently only include the village scout program. The challenge remains to increase the number of scouts properly patrolling this large ecosystem, and manage threats such as fire and human encroachment that are destructive to habitat. As a consequence of poor remittance of wildlife revenue from ZAWA to the communities, CRB leaders have used this as an excuse not to implement community

projects. Community leaders have further undermined decision-making democratic institutions such as the Annual General Meetings and the Quarterly General Meetings where village constituents, in theory, are able to hold their leaders accountable. Finally, due to poor strategies to address the socio-economic challenges faced by households in the GMA, CBNRM has not translated to diversifying and improving the livelihoods of the residents. Wildlife hunting has failed to sustain livelihoods and therefore is perceived as a benefit reserved for a few elite members of the society.

The Mulobezi Community Development and Sustainable Natural Resource Management Project

Initiating the Mulobezi community development and sustainable natural resource project is timely and crucial to addressing the above litany of concerns. Our approach is to learn from previous programs in the southern and east African region where CBNRM is showing results - slowly becoming recognized as a successful approach to conserving some of Africa’s vast communal lands. Some of the lessons learned show that significant investment in sustainable local governance is imperative, and transparent institutions are necessary to drive the success of a community conservation program. In addition, an investment in diversifying the resource base from wildlife to other natural resources is also important. Countries such as Botswana and Namibia have devolved resource rights to communities that include land, veld products, forest and fisheries. In Zambia, communities are still largely constrained within the safari hunting industry.

The Mulobezi Conservation Action Planning Workshop:

A workshop to better define specific project objectives and gain collection action was conducted using TNC’s Conservation Action Planning (CAP) methodology.

Conservation Action Planning (CAP) Methodology

The Nature Conservancy achieves conservation results by designing and implementing conservation projects at multiple scales. Over the past two decades, TNC has developed an integrated process for planning, implementing, and measuring conservation success for its conservation projects. This process is called the “Conservation Action Planning (CAP)” process. The CAP process has been tested with a wide



10
Figure 1. Conservation Action Planning

range of projects from different parts of the world and is supported by a network of trained CAP professionals.

The CAP process guides project teams to identify effective conservation strategies. It provides an objective, consistent and transparent accounting of conservation actions and the intended and actual outcomes of conservation projects. It enables project staff to adapt their actions to improve strategy effectiveness and achieve greater conservation impact.

A more detailed description of the 10 steps of CAP is provided in Appendix 1 of this document. For more information on the CAP process and to download tools, please visit www.conserveonline.org/workspaces/cap/.

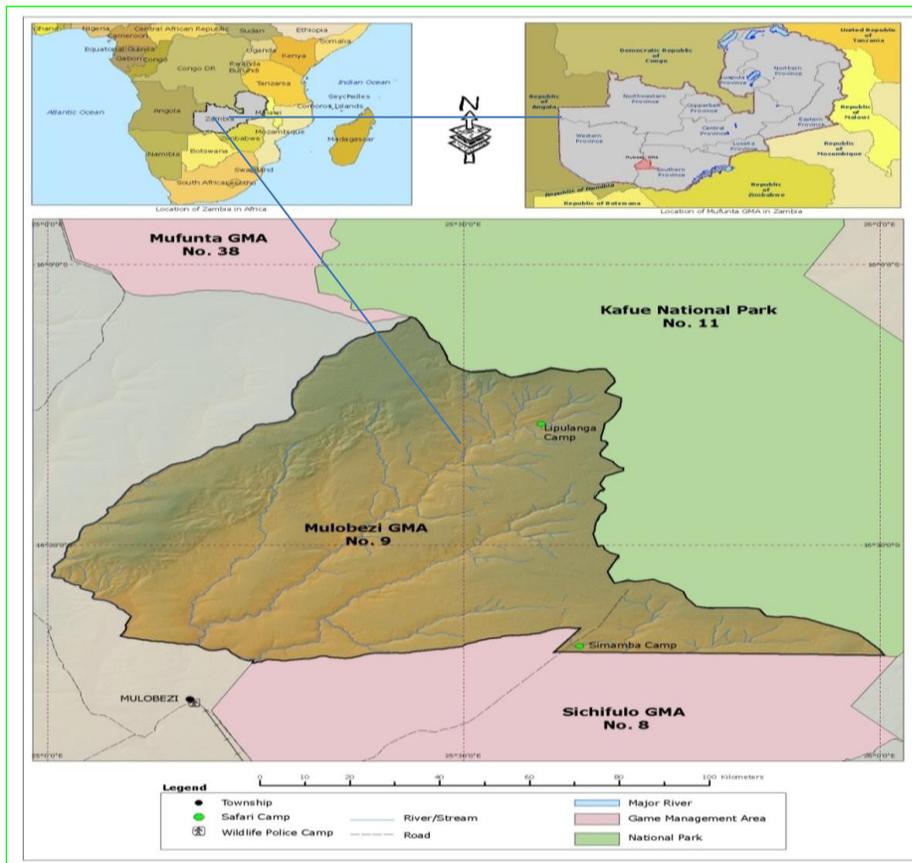
Objectives of the Mulobezi CAP Workshop

1. Introduce stakeholders working in the Mulobezi GMA, Kazungula District and Livingstone provincial office to TNC Africa and Zambia program's objectives.
2. Present Kafue GMA dashboard – tool for scoring GMAs on conservation, economic value and local institutional capacity.
3. Present Mulobezi General Management Plan (GMP) by ZAWA Planning Unit.
4. Conduct conservation action planning process for Mulobezi GMA.
 - a. Define project: people, project scope
 - b. Identify long-term outcomes: focal targets and their goals
 - c. Determine threats
 - d. Develop project strategies to reduce threats
 - e. Define implementation of strategies: work plans and action plans.
 - f. Discuss mechanisms for evaluation: measures of progress including short and longer-term indicators, and measures for ultimate outcomes.
 - g. Unite stakeholders into a common vision of success and define specific activities to formalize these relationships in order to implement the project.

Project Scope and Team

The geographic scope of the project used in this workshop was the Mulobezi GMA. Mulobezi GMA is located in the Kazungula and Sesheke districts of Southern and Western province of Zambia respectively. It is the fifth largest GMA in Kafue National Park and has a total surface area of 3,430 km². It forms the southwestern buffer to the park and is home to a diversity of wildlife and habitats such as miombo and mopane woodlands.

The GMA is within the boundaries of the traditional chief His Royal Highness Moomba of the Nkoya people. It is managed through a joint co-management agreement between local communities in five VAGs (Moomba, Mulanga, Choonzo, Kalobe and Mabwe) and the Zambia Wildlife Authority (ZAWA). This partnership has been in existence since



2000 when Moomba Community Resource Board was established. Through this co-management arrangement, communities are supposed to sustainably manage and benefit from the natural resources in the Mulobezi GMA.

Figure 2. Mulobezi GMA

Stakeholders attending the workshop represented the five VAGs in Mulobezi GMA, Kazungula District Commissioner and Council Secretary's office, Kazungula District Forestry Department, Zambia Wildlife Authority (ZAWA), the Kavango-Zambezi Trans-Frontier Conservation Association (KAZA TFCA), and the Zambia Community Based Natural Resource Management Forum (WWF). A full list of participants is listed in Appendix 3.

Targets

Targets are broadly defined as what the community cares about. These targets are identified by the workshop participants as critical to achieving the goal of the project. Targets should include some specific natural resources but also include important social, cultural, economic or religious aspects of the community that, if properly managed, will result in the sustainable use of the critical resources for long-term community and environmental health. The participants followed a two-step process to select a small set of targets for the project.

Step 1 –Target Nomination

The workshop was divided into two breakout groups. Each group brainstormed recorded list of targets that were important in Mulobezi – with the only restriction that there could be no more than eight targets per group. There was a great deal of discussion regarding the resources considered most critical to the livelihoods of the community members during the development of the initial list. Resources or targets noted by community members included natural resource targets, political targets (local governance institutions and enabling conditions for natural resource management), social targets (education, health and enabling infrastructure), economic targets (livelihoods and economic benefits) and socio-cultural aspects of the community (cultural heritage).

As a result of these discussions, an overall theme for this project emerged: ***targets are those systems*** that require the greatest attention in order to establish sustainable natural resource use necessary to ultimately support both healthy people and natural resources in the Mulobezi GMA. The workshop identified seven targets:

- 1) Natural Resource Management
- 2) Local Governance Institutions
- 3) Primary and Secondary Education
- 4) Cultural Heritage Practices
- 5) Human Health Services
- 6) Economic Livelihoods and Benefits

7) Enabling Conditions for Natural Resource Management

Step 2 - Workshop Target Selection

Participants selected from this list which targets they knew the most about, and felt they had some form of control and ability to influence the target’s condition. Three targets were identified for more in-depth assessment *during the workshop*: local governance institutions, economic livelihoods and benefits, and natural resource management. It was assumed that over time, similar assessments would be necessary for the remaining four targets that were not discussed in-depth during the workshop.

Target Condition

A key step in managing any system is to develop a good understanding of what the project is trying to accomplish. In particular, it is important to define the goals of the project, assess the status of the systems today, and measure progress towards project goals via a series of milestones or measurable objectives.

Setting measurable objectives is particularly challenging for targets used by community development and biodiversity projects. Most resource targets are themselves very complex systems that vary naturally over time. It is thus not easy to define or measure the “health” of water catchments, grasslands or the educational system in a systematic and repeatable fashion. In order to assess a targets’ ability to persist over the long term (referred to as “target viability”), The Nature Conservancy has developed a system to help teams define what they consider a “healthy” state or condition for each target. It provides a consistent framework for defining the historic status, current state, and desired future condition of focal conservation targets.

We used a simple assessment to classify condition into four simple categories (Very Good, Good, Fair and Poor). Definitions of these categories are listed below.

Table 1. Target Condition Rating Categories

| Condition | Description |
|-----------|---|
| Very Good | <ul style="list-style-type: none"> - Optimal Status - No management is needed to persist for a long time |
| Good | <ul style="list-style-type: none"> - Within acceptable range of variation - Some management is needed |
| Fair | <ul style="list-style-type: none"> - Outside acceptable variation - Management is needed to persist |
| Poor | <ul style="list-style-type: none"> - Requires significant investment and management to persist - Survival doubtful even with management |

Table 2: Times for assessing target condition

| Time Period | Definition |
|--------------------|--|
| Historic | The historic condition was estimated as the perceived status of the target approximately 30 years ago, estimated by averaging several attributes that elders may know (e.g., availability, access, quality and abundance of a resource). |
| Current | The current “health” of a target as expressed through the most recent measurement or rating of the condition of the target. Trends in condition were roughly estimated based on perceived changes in the condition/status of the target over the past five years, and categorized according to three levels: increasing, remaining stable, or decreasing. |
| Future | An estimate of the desired status ten years from now. This is generally equivalent to a project goal. |

In the workshop, all participants reviewed and ultimately agreed upon a final assessment of target condition based on the definitions above. This assessment of target condition (Table 3) served as the foundation from which threats were rated and strategies were identified and implemented.

Table 3: Status assessment of Mulobezi targets

| | Historic Condition | Current Condition | | Desired Future Condition |
|--|----------------------------|--------------------------|--------------------------------|---------------------------------|
| Target | Status 30 years ago | Status Today | Trend over last 5 years | Status in next 10 years |
| Natural Resource Management | Good | Fair | Declining | Good |
| Economic Livelihoods and Benefits | Good | Fair | Declining | Good |
| Local Governance Institutions | Good | Fair | Declining | Good |
| Human Health Services | Poor | Good | Improving | Very Good |

| | | | | |
|--|-----------|------|-----------|------|
| Primary and Secondary Education | Poor | Fair | Improving | Good |
| Enabling Conditions for NRM | Fair | Poor | Declining | Fair |
| Cultural Heritage Practices | Very Good | Fair | Declining | Good |

Assessing Threats to Targets

In many resource management situations, the resource that we care about has either already been depleted or is facing a series of threats that need to be countered by management actions. Threat rating is a process that identifies direct threats to targets and prioritizes these threats in order to direct management actions to critical areas. Criteria-based threat rating provides a transparent method to determine which threats are truly critical. It also helps a team to recognize and document assumptions. This has proven very important as over the past few decades it has been shown in many projects that threats change much more quickly than target condition. Given that strategies are primarily designed to reduce threats, it is imperative that threat assessments are frequently or at least periodically revisited in order to make sure that a project is investing in the most important strategies to achieve its ultimate outcomes.

Threat Rating

During the workshop, we looked at factors that put our resource targets at risk in the next ten years. The participants broke into three small groups to list threats for the resource targets they worked on the previous day. Each breakout group listed critical threats to their targets and then categorized the threats into four categories (Low, Medium, High and Very High) in order to assess relative severity (Table 4).

When determining the threat category each breakout group discussed the scope, severity and irreversibility of the threat in order to reach a final rating. Scope is the geographic area where the threat occurs, usually described as a percentage of the project area (for example, low may be less than 25%, very high may be 90%). Severity is the impact or level of damage to the resource management target in those places the threat occurs. For example, low severity may be little damage, while very high severity may indicate total depletion of the resource in the area. Finally, irreversibility is the effort required to reverse (or reduce) the threat (low = easy to reduce, very high = cannot reduce or reverse the threat).

Table 4: Threat Rating Categories

| Threat | Description |
|-----------|--|
| Low | <ul style="list-style-type: none"> - Small in scope (<25%) - Small in severity (<25%) - Able to reverse |
| Medium | <ul style="list-style-type: none"> - Restricted in scope (25-50%) - Restricted in severity (25-50%) - Able to reverse, but not easy |
| High | <ul style="list-style-type: none"> - Widespread in scope (50-75%) - Widespread in severity (50-75%) - Difficult to reverse |
| Very High | <ul style="list-style-type: none"> - Pervasive in scope (75-100%) - Moderate in severity (75-100%) - Almost impossible to reverse |

In groups, participants rated the scope, severity, and irreversibility of each direct threat-to-target combination. Target and threat ratings were entered into a conservation project software program called Miradi; a user-friendly program that facilitates the design, management, and monitoring of a project to meet conservation goals efficiently (www.miradi.org). It calculates combined threats both on individual targets as well as for the project as a whole (Table 5).

Table 5: Final ratings for major threats or barriers to achieving desired status of targets

| Threats \ Targets | Natural Resources | Governance | Education | Enabling Infrastructure | Cultural Heritage | Livelihoods | Human Health | Summary Threat Rating |
|--|-------------------|----------------|------------|-------------------------|-------------------|----------------|---------------|--|
| HIV+ Rate and TB | Not Specified | Not Specifi... | Not Spe... | Not Specified | Not Specified | Not Specifi... | Very High | High |
| Fire | High | Not Specifi... | Not Spe... | Not Specified | Not Specified | High | Not Specified | High |
| Logging and Wood Harvesting | High | Not Specifi... | Not Spe... | Not Specified | Not Specified | High | Not Specified | High |
| Inadequate Agricultural Practices | Very High | Not Specifi... | Medium | Not Specified | Not Specified | High | Not Specified | High |
| Inadequate Livelihood Alternatives | High | Not Specifi... | Not Spe... | Not Specified | Not Specified | High | Not Specified | High |
| Food Insecurity | High | Not Specifi... | Medium | Not Specified | Not Specified | High | Not Specified | High |
| Inadequate natural resource benefit flow to communities | High | Not Specifi... | Not Spe... | Not Specified | Not Specified | High | Not Specified | High |
| Natural Habitat Destruction from conversion to agriculture | Very High | Not Specifi... | Not Spe... | Not Specified | Not Specified | Not Specifi... | Not Specified | High |
| Malaria | Not Specified | Not Specifi... | Not Spe... | Not Specified | Not Specified | Not Specifi... | High | Medium |
| Drugs and Staff Inadequate | Not Specified | Not Specifi... | Not Spe... | Not Specified | Not Specified | Not Specifi... | High | Medium |
| Inadequate Health Centers | Not Specified | Not Specifi... | Not Spe... | Not Specified | Not Specified | Not Specifi... | High | Medium |
| Roads and Railroads | Medium | Not Specifi... | Not Spe... | High | Not Specified | Not Specifi... | Not Specified | Medium |
| Lack of Interest and Lack of Value | | | | | High | | | Medium |
| Hunting | High | Not Specifi... | Not Spe... | Not Specified | Not Specified | Medium | Not Specified | Medium |
| Lack of Capacity | Not Specified | Not Specifi... | High | Not Specified | Not Specified | Not Specifi... | Not Specified | Medium |
| Limited Access to Markets | Not Specified | Not Specifi... | Not Spe... | Not Specified | Not Specified | High | Not Specified | Medium |
| Low Human Capacity | High | Medium | Not Spe... | Not Specified | Not Specified | Not Specifi... | Not Specified | Medium |
| Low school attendance | Not Specified | Not Specifi... | Low | Not Specified | Not Specified | Not Specifi... | Not Specified | Low |
| Fishing and Harvesting of Aquatic Resources | Medium | Not Specifi... | Not Spe... | Not Specified | Not Specified | Not Specifi... | Not Specified | Low |
| Low Awareness | | | | | Medium | | | Low |
| Summary Target Ratings: | Very High | Low | Medium | Medium | Medium | Very High | Very High | Overall Project Rating Very High |

Situation Analysis - Conceptual Diagram of the System

The next step was to build on the threat analysis by developing a situation analysis or conceptual model of the indirect threats and contributing factors behind each critical direct threat. This process helps teams understand how threats are linked and how they contribute to each other. The general concept here is that there can be many contributing factors to a direct threat. For example, a contributing factor like population growth may contribute to more than one (and sometimes all) the direct threats to resource management targets. Additionally, multiple contributing factors may lead to a direct threat.

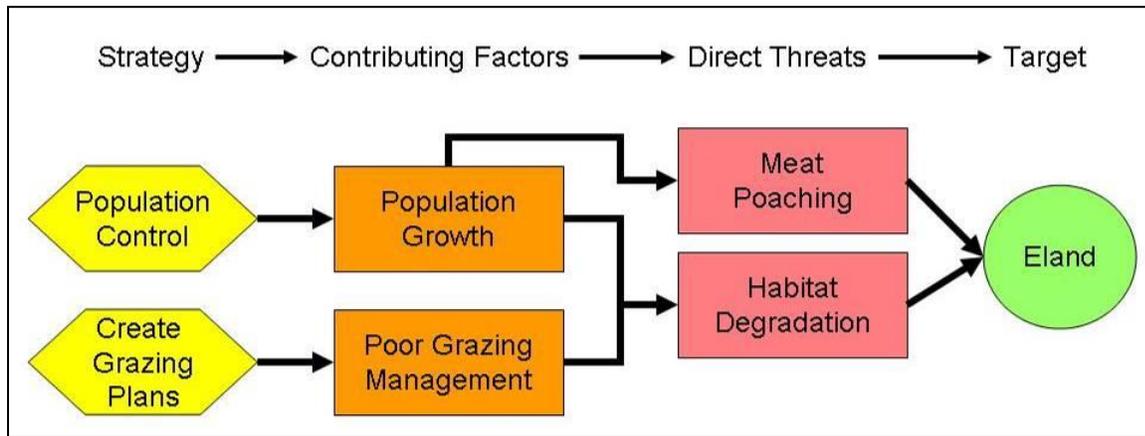
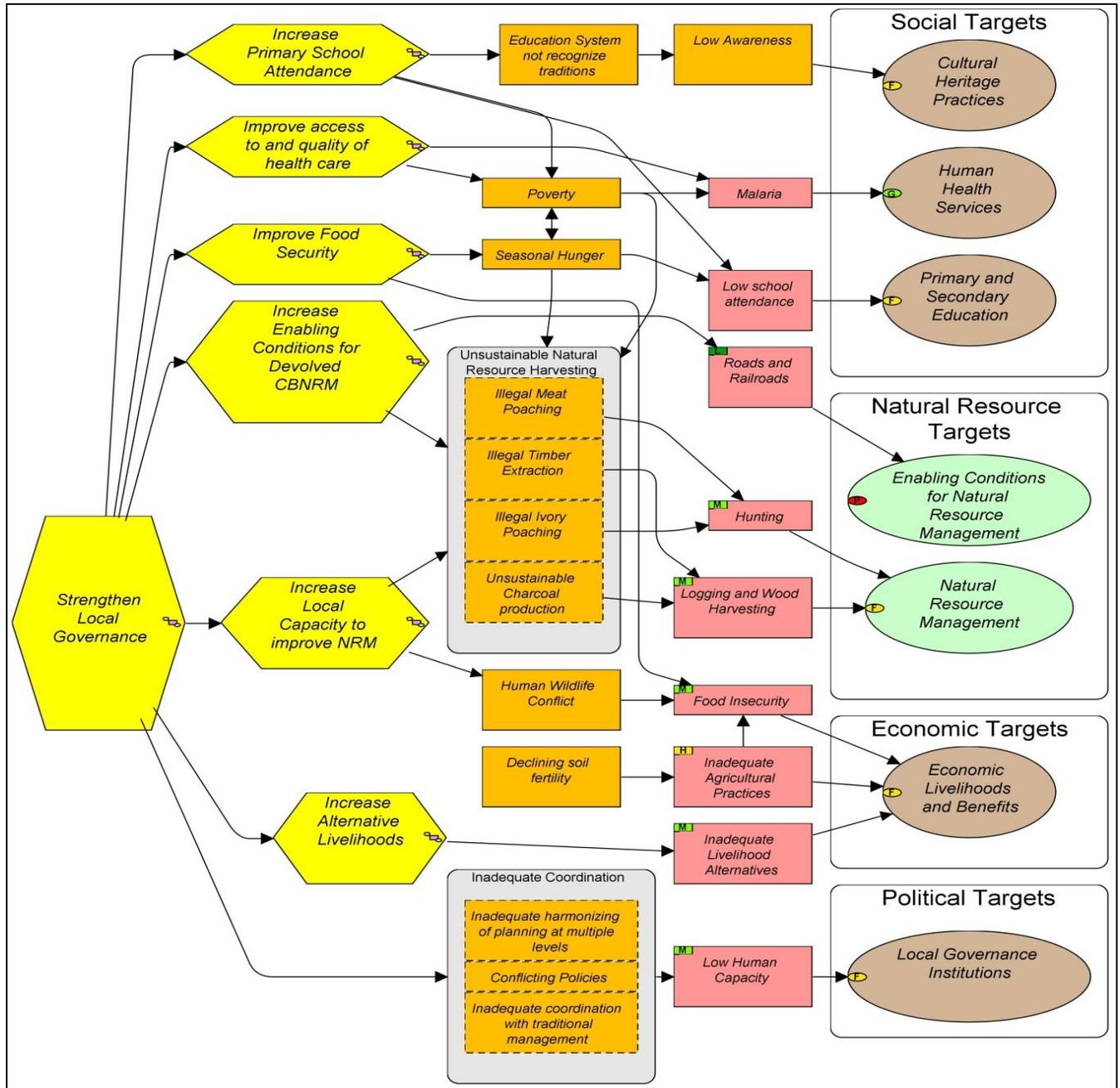


Figure 3: Situation Analysis - Conceptual Diagram

We started by presenting an overview of the concept and the procedure. The team returned to the same breakout groups to develop the situation diagram for their targets and threats. The first task was to post the very high and highly ranked threats and to begin to unravel the sequence of contributing factors. Each breakout group did this for their targets and associated threats.



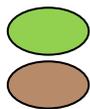
KEY:



: Major Strategies



: Direct Threats



: Project Targets



: Contributing Factors

Figure 4: Situation diagram of Mulobezi GMA

The situation diagram combining work from all breakout groups is above. Workshop participants identified strategies (yellow hexagons) contributing factors (orange rectangles) that lead to direct threats (pink rectangles) that reduce the condition of our targets (green and brown ovals). For a detailed situation diagram, see appendix 4.

Strategies

The Nature Conservancy defines a strategy as a set of strategic actions and actions steps that focus on achieving a measurable objective. Strategies are the same as interventions. In reality, sound strategies include both short and long-term objectives. Gathering evidence on progress towards achieving these objectives is intended to improve the learning process to inform management. A strategy also defines the theory of change or logic that binds the strategy together.

Determining Strategies to Reduce Threats to Targets

The effective development of strategies from an initial idea to a well-planned and implemented series of discrete actions is a crucial aspect to creating a resource management plan. Useful instruction helped participants to identify and design the strategies they would use to deal with the threats to the targets. The overall concept is to devote minimal resources to addressing “small” threats (e.g., with low overall rating, not only for scope), and emphasize strategies that focus on “large” threats (e.g., with high overall rating, especially for scope and severity).

Participants were then encouraged to shift the discussion from identifying and rating targets and threats to finding solutions. These solutions – or strategies - were likely to require multiple actions (e.g., establish effective bylaws *and* enforcement of those new bylaws). For example, when fixing dams, we will not be able to change that under current conditions heavy rains come and break dam structures. However, it is possible to manage the vegetation surrounding the dams, which can reduce the rate of water flow during storms that might reduce or eliminate damage to the dams.

For each of these actions, participants were asked to focus on the results or products of those actions – and describe them as intermediate outcomes. The basic concept is that a series of intermediate outcomes eventually lead to a final or ultimate intended outcome – which represents a goal of the project. Participants were advised to consider the following criteria when coming up with objective statements for intermediate outcomes: each objective should be **S**pecific, **M**easurable, **A**chievable, **R**ealistic and has to have **T**ime specific aspects to it (SMART).

The participants went through a two-stage process for strategy development. First, participants broke into two groups to come up with a list of strategies and steps toward achieving the desired outcomes of those strategies. After small group discussions,

participants returned to report back to the whole group - to discuss the strategies and agree on which strategies would be best for implementation in Mulobezi.

The following seven strategies were selected to reduce the dominant threats on the selected targets:

1. Reduce Poverty by Increase Alternative Livelihoods
2. Improve Food Security
3. Strengthen Local Governance
4. Increase Local Capacity to Improve Resource Management
5. Increase Enabling Conditions for Devolved Natural Resource Management
6. Increase primary school attendance
7. Improve Access to and Quality of Health Care

Strategy 1 – Reduce Poverty by Increasing Alternative Livelihoods

Since the inception of the CBNRM program in Mulobezi, the community has heavily relied on revenues from safari hunting. This has not translated to diversifying livelihoods of residents, as there a few benefits from safari hunting that have trickled down to households. This strategy focuses on increasing the potential of other forms of livelihoods, diversifying the benefits to communities from other natural resource-based options such as timber harvesting, game ranching and REDD+ options.

Goal

To ensure poverty levels of residents in Mulobezi GMA are reduced in line with national poverty reduction levels.

Objectives and Outcomes

Seven objectives and intermediate outcomes were identified to achieve this long-term goal (Table 6).

Table 6: Objectives and outcomes for reducing poverty and increase alternative livelihoods

| OBJECTIVE | | OUTCOME |
|-----------|--|---|
| 1.1 | By 2014, influence revisions to the Forestry Act to maximize some revenue from teak timber production flows to CRBs. | Devolved natural resources policies enacted that stipulate a percentage of revenue from timber extracted in GMAs should flow to the CRBs much like with trophy hunting. |
| 1.2 | By 2017, ensure Mulobezi GMA is accessible by road all year round by working with district and national government institutions. | Feeder roads rehabilitated for access throughout the year. |
| 1.3 | By 2017, increase communications through partnership with a cellular network provider. | A partnership with a cellular network provider established and Moomba community receive improved cell phone communication. |
| 1.4 | By 2017, increase employment of local GMA residents in tourism related industry by 50% from 2012 levels (e.g. crafts, lodge employment, guides). | Number of households benefiting from tourism activities and employment increased. |
| 1.5 | By 2017, in partnership with local banks, develop microfinance systems for funding small business ventures. | Micro financing systems for small business ventures for Moomba residents established. |
| 1.6 | By 2013, identify natural resources that can be sustainably utilized to increase household incomes in all 5 VAGs. (CSEF) | Enhanced knowledge on status of Mulobezi GMAs natural resource base. |
| 1.7 | By 2014 assess the feasibility of game ranching options that contribute to alternative income sources for households in the Mulobezi GMA (CSEF) | Enhanced knowledge on feasibility of game ranching options for increasing options for alternative household livelihoods. |
| 1.8 | By 2014, the potential for a carbon project in the Teak forest of Mulobezi is assessed. (CSEF) | Initial feasibility of a REDD+ pilot project understood. |

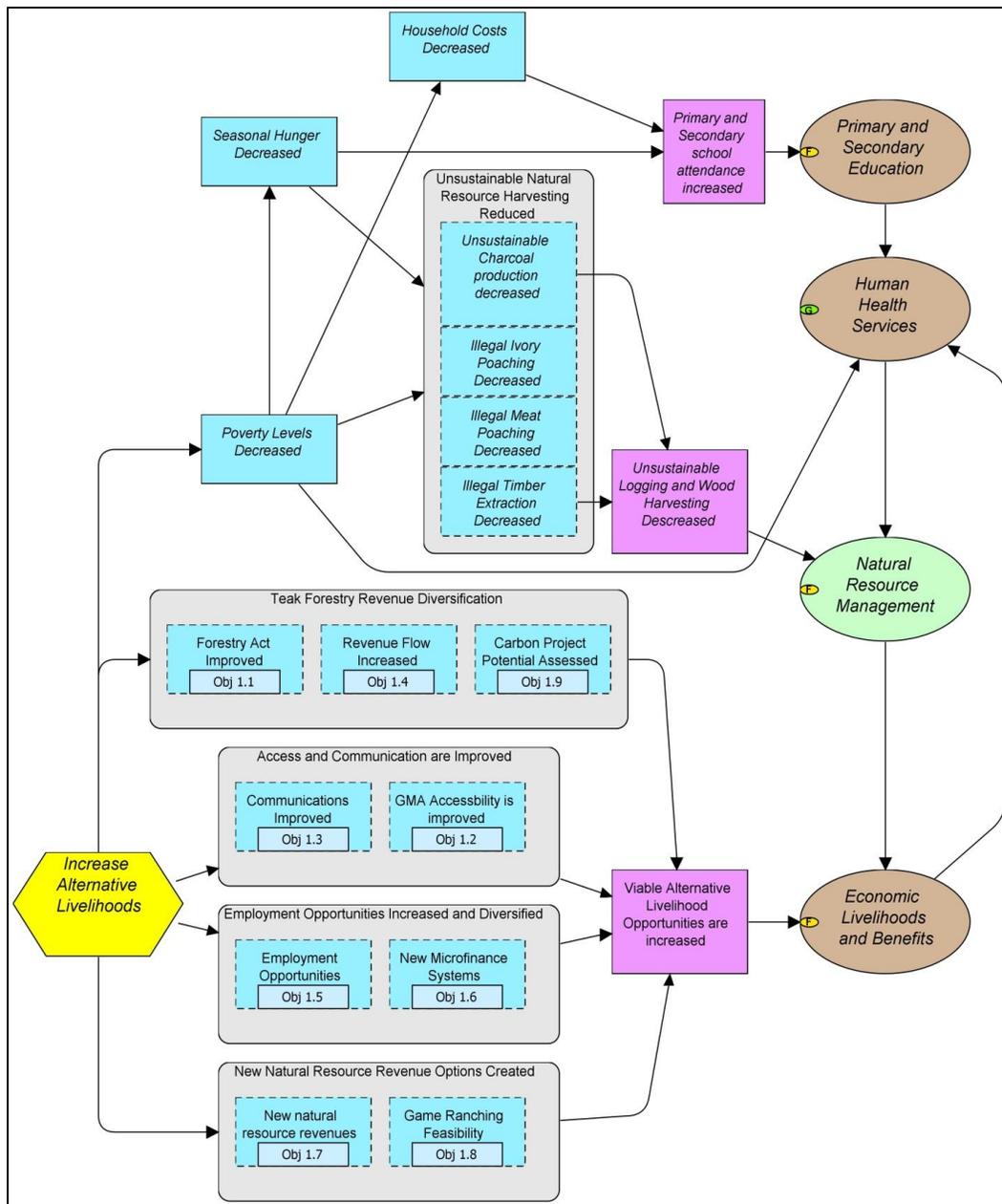


Figure 5: Theory of change diagram for increasing alternative livelihoods strategy

Capacity requirements for key strategy implementation

Capacity skills to implement this strategy will initially be provided by TNC- with funds from the Civil Society Environment Fund (CSEF). As first steps, TNC will be undertaking several studies that will include an audit of potential natural resources that could be harvested to increase household incomes and identification of potential markets for these products. Other studies will be to assess the feasibility of exploring a REDD+ project in Mulobezi GMA. Lastly, a study will be commissioned to explore the possibility of developing a game ranch in outskirts of Mulobezi GMA.

In the near future, capacity requirements for increasing alternative livelihoods will be sort from potential private sector partners that would contribute to exploring sustainable natural resource harvesting and linking these products to the markets.

Partnership with the Kazungula District and local banks will be necessary to improve road condition and micro financing respectively.

People Involved

The first year of implementation will involve TNC staff, consultants hired under the CSEF grant, Moomba community leaders and ZAWA Mulobezi command staff. Upon completion of the initial studies, the plan will be to identify private sector companies and other partners that will contribute to increasing alternative livelihoods for the Moomba residents.

Strategy 2 – Improve Food Security

The most dominant soil type in Mulobezi GMA is the Kalahari soils, which are prone to poor agricultural yields (Moss, 1976). The GMA falls within a region that is semi arid where average rainfalls are between 600 – 700mm. This area is particularly prone to drought and experienced two of the worst drought in 1991/ 92 and 2001/ 02. Agriculture productivity in Mulobezi GMA has continued to decline, (CONASA, 2003). The majority of households face high levels of food insecurity and therefore rely heavily on the unsustainable harvesting of resources such as wildlife. Food insecurity also directly affects the ability of children to attend school. Additionally, many of the governance and resource abuse issues stem from food insecurity. The workshop participants felt therefore, that addressing food security was a strategy that had multiple positive impacts on the focal targets and threats needing to be reduced. In order to address threats both to households and reduce the pressure on the natural resources, a strategy to improve food security was identified.

Goal

To guarantee that the majority of households in Mulobezi GMA have food security throughout most of the year while simultaneously reducing the need for people to poach and unsustainably extract natural resources.

Objectives and Outcomes

Table 7: Improve Food Security

| OBJECTIVE | | OUTCOMES |
|-----------|--|--|
| 2.1 | By 2017, increase food production in 30% of households using sustainable agricultural practices. | 30% of households in Moomba community are food secure. |

| | | |
|-----|---|--|
| 2.2 | By 2014, have a full time agriculture extension officer based in Mulobezi | Increased technical capacity in agriculture practices to help train community farmers. |
|-----|---|--|

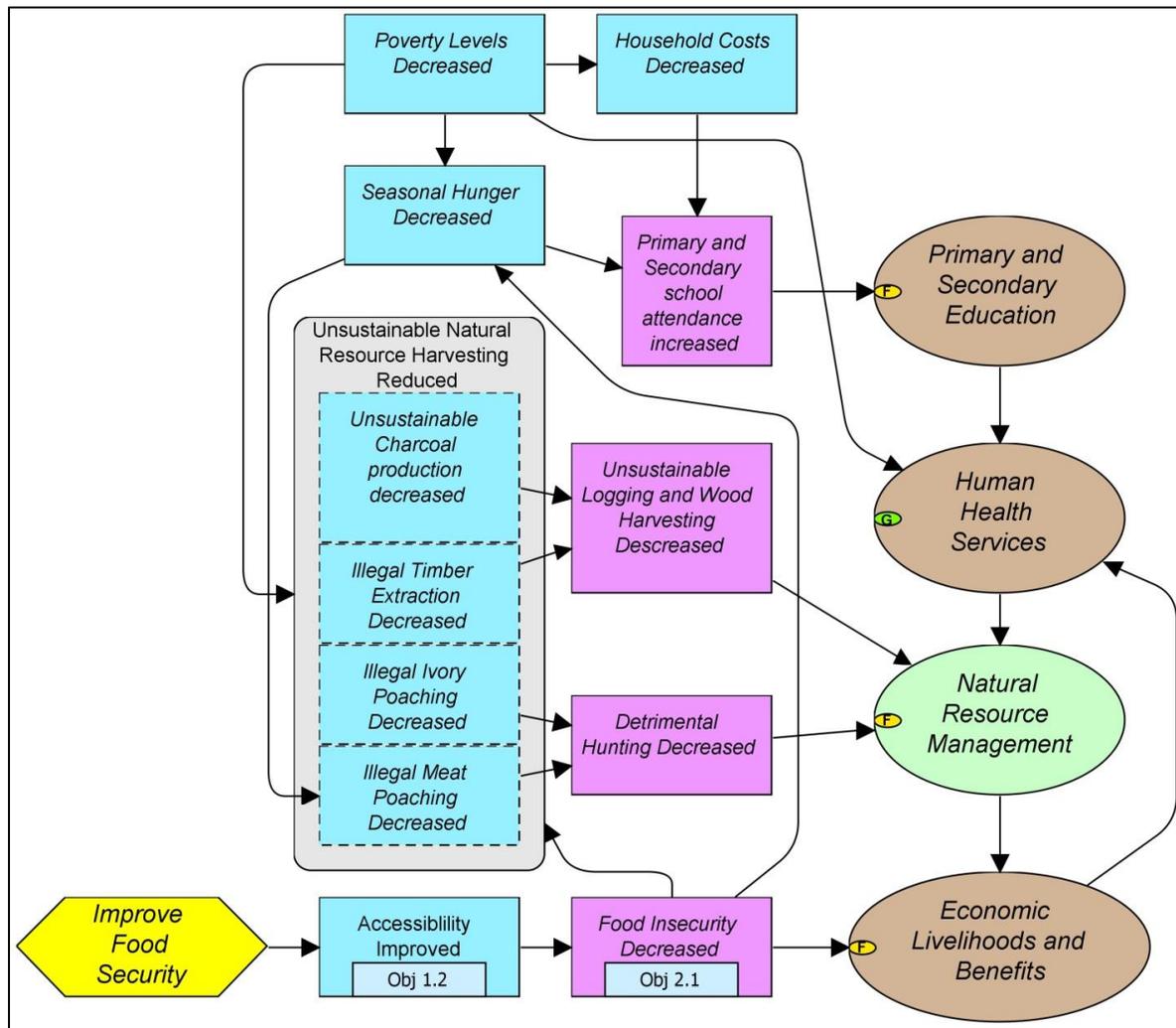


Figure 6: Theory of Change diagram for improving food security strategy

Capacity requirements for key strategy implementation:

Implementing the strategy on improving food security will require strong partnerships. Identifying partners such as NGOs working on sustainable intensification, storage, value chains and access to markets will be key initial steps. This will also require engaging the Government through the Ministry of Agriculture and Cooperatives (MACO) district and provincial offices. We may need to have at least one full time agriculture extension officer based in Mulobezi and the project may need to facilitate his movements for a few years.

People Involved:

An initial step is to work with the Agriculture department at the Kazungula district council. This will provide an entry point into understanding what programs are currently targeted at reducing poverty in the district through support to agriculture productivity.

Strategy 3 – Strengthen Local Governance

The residents of Mulobezi GMA were among the first communities in Zambia to practice the concept of CBNRM. Governance and management of the CBNRM program is through two democratically elected institutions i.e. the CRBs (Community Resource Boards at the GMA level) and VAGs (Village Action Groups at village level). The past decade has seen a decline of these two institutions with minimal household participation and high turnover rates of community leaders. This strategy is designed to strengthen participation of households in community programs; to build the capacity of CRB and VAG leaders and overall to promote good governance as a prerequisite to improved natural resource management. Improving capacity, demand and transparency will require significant training of both elected leaders and the community as a whole.

We view this strategy as a kind of “master strategy” as it influences the successfulness of all other strategies in the project.

Goal

To strengthen CRBs and VAGs capacity to govern and manage natural resources in a sustainable manner and to ensure household participation in governance of natural resources is improved.

Objectives and Outcomes

Table 8: Strengthening Local Governance

| OBJECTIVES | | OUTCOMES |
|------------|---|--|
| 3.1 | By 2013, a training curriculum is established to train CRBs and VAGs members repeatedly over time to address high turnover rates. (CSEF) | CRB and VAG leaders improved understanding of their roles and responsibilities; constitutions and importance of elections. |
| 3.2 | By 2015, all CRB board, 50 VAG leaders and Bookkeeper are trained in Community based resource management best practices (CSEF). | CRB and VAG leaders' improved understanding of CBNRM best practices and principles. Improved financial management. |
| 3.3 | By 2017, 30% of Board and VAG members are female. | Greater gender diversity in local governance. |
| 3.4 | By 2014, construction of CRB office block and communications network are completed. (CSEF) | Moomba CRB offices are renovated and provide an adequate workspace for CRB functions. |
| 3.5 | By 2014 Moomba institutional audit conducted and results shared with community in order to facilitate increased awareness and behavior change. | Institutional audit leads to improved information flow to the community on CRB leadership activities, improved community governance, and improved accountability of community leaders to their constituents. |
| 3.6 | By 2014, democratic institutions such as Annual General meetings occur regularly; constitutions and elections are established and supported by general membership. (CSEF) | Increased participation of general membership in CRB decision-making forums and democratic institutions. |
| 3.7 | By 2014, 50% of households participate in making decisions on community projects and budgeting. (CSEF) | Increased participation of households in community projects and budgeting leads to increased support and commitment of community members. |

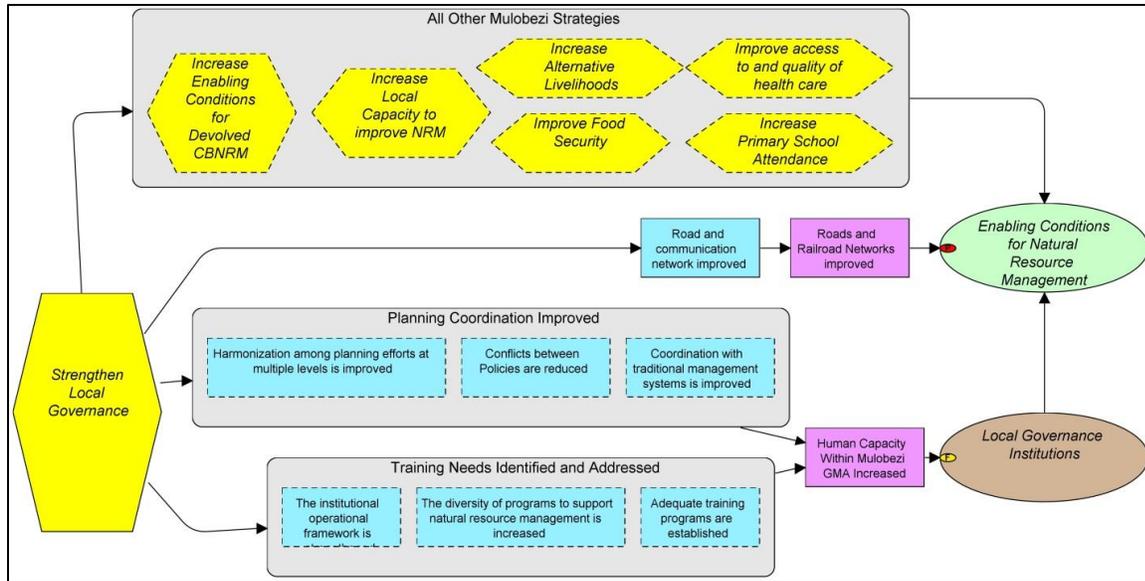


Figure 7: Theory of Change diagram for strengthening Local Governance

Capacity requirements for key strategy implementation

Skills sets required for this strategy will require various skills in CBNRM governance and management. The core focus will be capacity building of CRB and VAG leaders to better govern and manage issues on natural resource and community development. Leaders will be trained using both WWF CBNRM manuals and CRB training manuals developed during the ADMADE and SLAMU community projects.

People Involved

This strategy will be implemented by TNC with close collaboration with the ZAWA GMA department and the Extension team at Ngoma Command in southern Kafue National Park. TNC will engage the expertise of ZAWA staff at the Nyamaluma CBNRM training college to undertake the training of the community bookkeeper.

Strategy 4 – Increase Local Capacity to Improve Natural Resource Management

ZAWA and the Mulobezi community currently have a co-management arrangement that stipulates management of natural resources in the GMA. In recent years, funding for resource protection has declined. This is evident in low recruitment levels of both ZAWA and village scouts, reduction in patrols in particular during the rainy season, insufficient funding for patrol rations and scout equipment. It is also evident that very little monitoring of both resources and enforcement efforts are taking place. A strategy was therefore identified to ensure an increase in local capacity to improve natural resource protection.

Goal

To ensure ZAWA, district forest officers and CRB resource management staff’s capacity to manage natural resources in Mulobezi GMA is improved by 2017.

Objectives and Outcomes

Table 9: Increase Local Capacity to improve NRM

| OBJECTIVE | | OUTCOMES |
|-----------|--|---|
| 4.1 | By 2013, all equipment is acquired for game scouts to complete high-quality patrols and off-season patrolling occurs. (CSEF) | Game scouts are equipped and deployed for greater effectiveness. |
| 4.2 | By 2017, 20% reduction (against the 2012 baseline) in poaching and illegal timber extraction. | Greater control is exerted and illegal activities are reduced within the GMA. |
| 4.3 | By 2014, 20% reduction (against the 2012 baseline) in unmanaged fires (i.e. fires started outside ZAWA fire management regime). (CSEF) | Improved fire management and monitoring leads to higher quality habitat for wildlife. |
| 4.4 | By 2017, 1 new main camp and 2 new patrol camps are constructed to better facilitate scouts patrols. (Note: This is an increase from 3 camps that currently exist where scouts stayed with their families, but these camps are far from schools, and the families moved back to the village and the camps have not been maintained). | Infrastructure to support law enforcement efforts is improved. |
| 4.5 | By 2015, all village scouts are trained in basic NRM techniques (improved harmonization – currently training is just focused on wildlife, and this needs expanding to include forestry, | Improved monitoring and management of natural resources. |

| OBJECTIVE | | OUTCOMES |
|-----------|---|--|
| | woodlands, fishery etc.) (CSEF). | |
| 4.6 | By 2017, the Mulobezi General Management Plan (GMP) and all, land use plans (LUPs) and by laws are enacted and being implemented. (CSEF) | Improved NRM as via Mulobezi GMA zoned and by-laws implemented in accordance with GMP and LUPs |
| 4.7 | By 2013, at least 5 new village scouts are employed, trained and deployed for increase support to law enforcement in Mulobezi GMA. (CSEF) | Improved law enforcement and reduced poaching in Mulobezi GMA. |

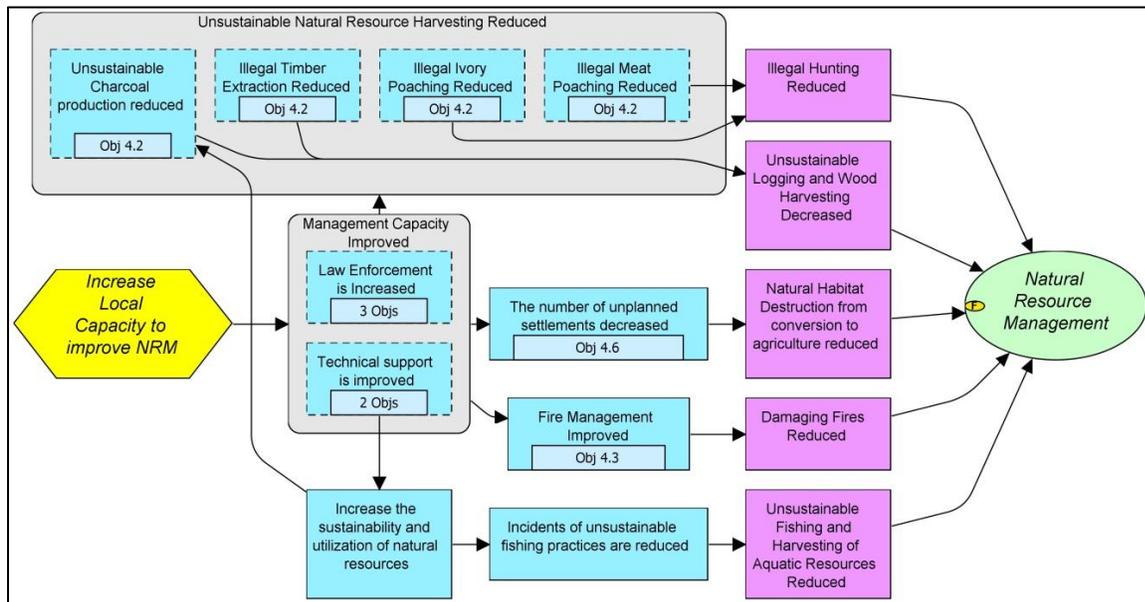


Figure 8: Theory of change diagram for increasing local capacity to improve natural resource management

Capacity requirements for key strategy implementation

Overall capacity requirements to implement the strategy on improving resource protection will primarily be sought from ZAWA. These efforts will be supplemented by technical and financial support from TNC. ZAWA’s expertise on law enforcement and natural resource monitoring and management will contribute to improving management in the GMA. TNC will provide technical support on aspects of fire management, land use planning and zoning and development and enactment of by laws for reducing unplanned settlements in the GMA.

People Involved

Staff from the ZAWA southern command of the KNP will implement this strategy together with TNC staff from both the Zambia office and from TNC chapters where the necessary technical expertise can be sought.

Strategy 5 – Improve Enabling Conditions for Devolved CBNRM

At the broader national level, natural resource management faces various challenges. In particular, having strong institutional arrangements that decentralize management to allow communities effectively manage their natural resources is important. The participants identified a strategy to improve enabling conditions for natural resource management. The broader objective of this strategy is to influence national level policies that devolve power of natural resource management to local communities. In addition, this strategy focuses on improving coordination at the district level among stakeholders managing natural resources in the Kazungula District.

Goal

To guarantee institutional arrangements at national, provincial and district level that enable local level improved natural resource management.

Objectives and Outcomes

Table 10: Increasing Enabling Conditions for Devolved NRM

| | OBJECTIVE | OUTCOMES |
|-----|--|---|
| 5.1 | By 2017, understand and influence revisions to the Forestry and other natural resources related Acts to maximize community benefit sharing, including a) devolved management to the community, and b) a percentage of concession fees flow to the community. | Forestry Act that maximizes community benefit sharing and devolved management enacted and enforced. |
| 5.2 | By 2013, define, formalize and operationalize stakeholder relationships (trans-frontier/ KAZA, district and local levels) via completion of formal Memorandum of Understanding. | Memorandum of understanding (MOU) among KAZA stakeholders established. |
| 5.3 | By 2013, annual synchronization of stakeholder project and activity plans at district levels implemented | Improved coordination and planning of departments (ZAWA, Forestry, Agriculture) managing natural resources at the district level. |
| 5.4 | By 2013, Revisions to the Wildlife Act support increased devolution to the CRBs. | Policy support for increased devolution in place. |

| | OBJECTIVE | OUTCOMES |
|-----|---|--|
| 5.5 | By 2013, participation of Moomba CRB at the Zambia CBNRM Forum meetings has increased. (CSEF) | Increased participation of Moomba CRB in national dialogues on CBNRM leads to better integration of traditional culture and current government programs. |

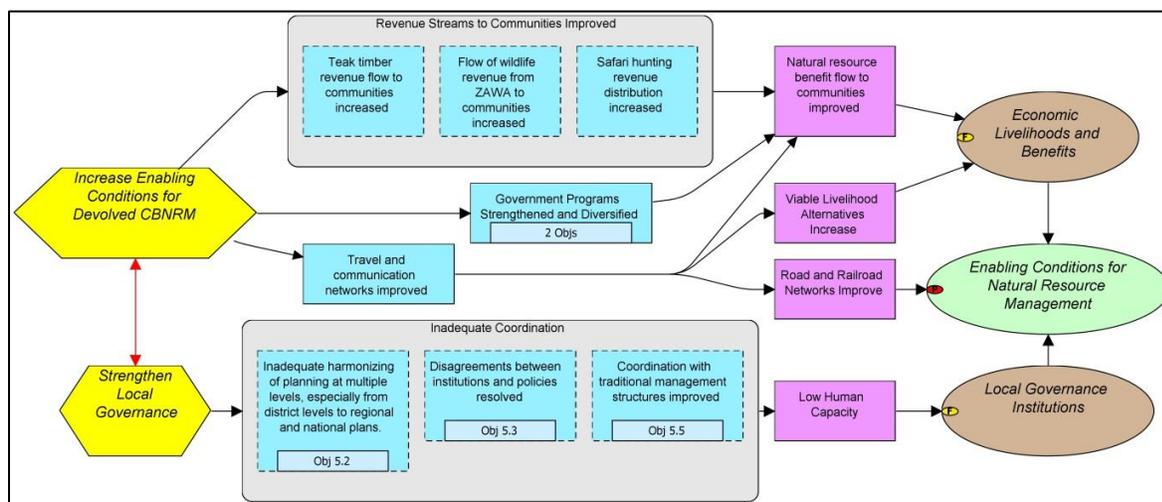


Figure 9: Theory of change diagram for the strategy to increase enabling conditions for devolved CBNRM

Capacity requirements for key strategy implementation

Capacity requirements to implement this strategy will be required from district level leadership. Planning on all development and natural resources in Kazungula district is coordinated through the District Development Coordinating Committee (DDCC) chaired by the District Commissioner. Efforts to create an enabling environment for devolved management in Mulobezi GMA will be facilitated through the DDCC.

At the national level, advocacy efforts and development of policy briefs that support an enabling environment for improved natural resource management will be implemented through the Natural Resources Consultative Forum (NRCF) and the Zambia CBNRM.

People Involved

The District Commissioner and her district staff will oversee this strategy at the district level. Staff managing natural resources such as ZAWA Mulobezi command unit and the Forestry department will also be among the key implementers of this strategy.

Strategy 6 – Increase Primary School Attendance

Moomba community has very low literacy levels with the chiefdom having only primary school facilities. Secondary education can only be accessed in Livingstone (255km from Mulobezi) or Sesheke (150km) away. The facilities include one Government school in Moomba central and three community schools that are poorly staffed and equipped. Performance of schoolchildren is among the many challenges facing this community. A strategy to increase primary school attendance was identified. Implementing this strategy will require strategic partnerships with Government, in particular the office of the District Commissioner.

Goal

Primary school attendance in Moomba community increases 20% by 2017.

Objectives and Outcomes

Table 11: Increase Primary School Attendance

| OBJECTIVE | | OUTCOMES |
|-----------|--|---|
| 6.1 | By 2017, access to primary school education is improved by building at least one new schoolroom, and providing the materials and teachers to appropriately accommodate the expected increase in primary school students. | Opportunity and capacity for primary education are improved. |
| 6.2 | By 2017, the number of students attending primary schools within the GMA increased by 20% over 2012 levels. | Attendance improves as a result of increased opportunity and capacity. |
| 6.3 | By 2017, at least one Secondary School is established in Mulobezi GMA. | Working in partnership with education institutions, secondary education becomes possible for the first time within the GMA. |

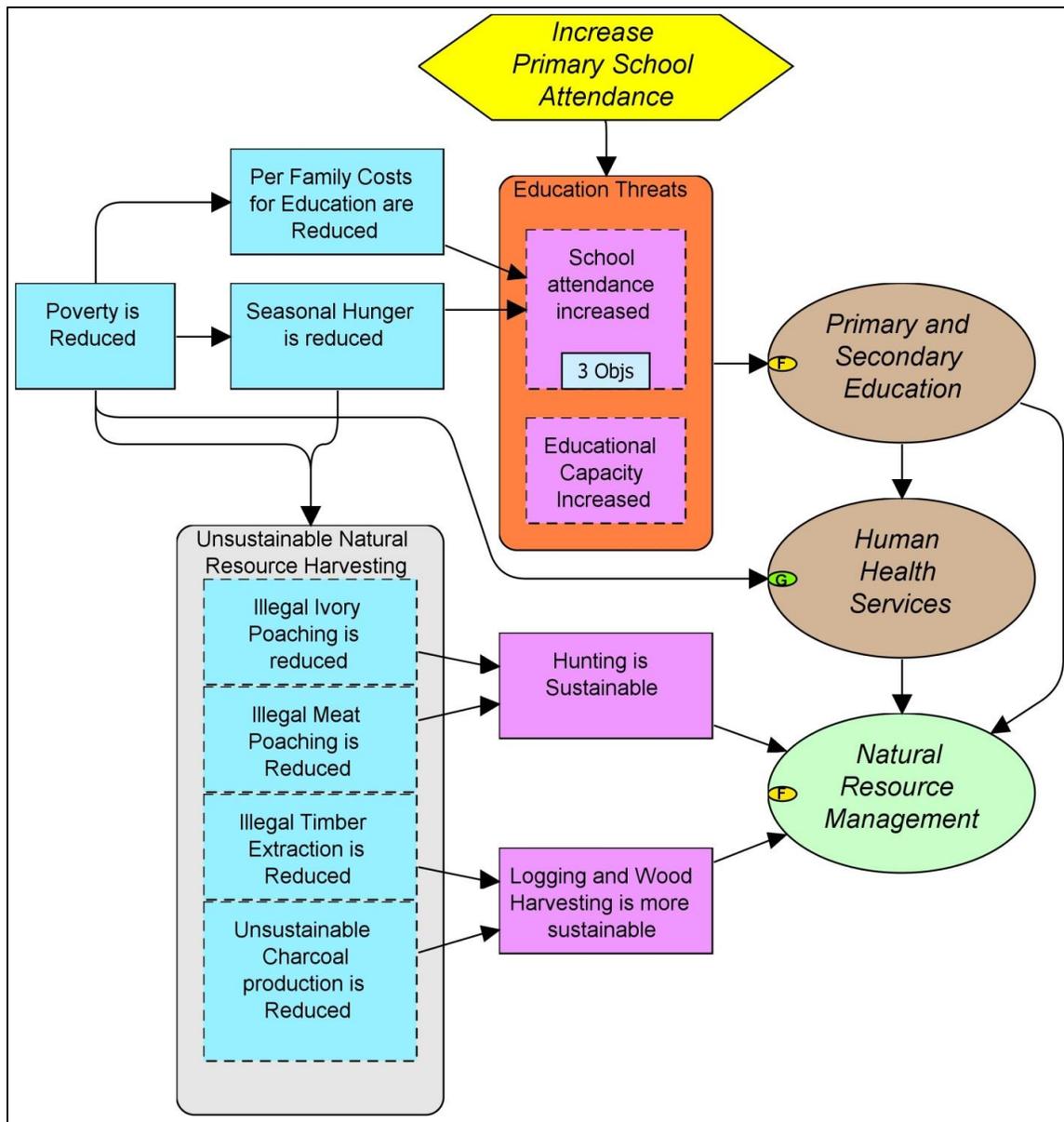


Figure 10: Theory of change diagram for the strategy to increase primary school attendance

Capacity requirements for key strategy implementation

This strategy will require both technical and financial support from the Ministry of Education through their Kazungula District office. Other capacity will be sort from NGOs that are working on improving quality of education in the district through the DDCC.

People Involved

Staff from the District Planning Education officer in Kazungula will be required. In addition, local level support will be required from the Head Teachers in the existing primary schools in Mulobezi GMA.

Strategy 7 – Improve Access to and Quality of Health Care

Moomba community currently has one health care clinic that services over 700 households. This Health facility is centrally located in Moomba Central near the Chief’s palace. Current challenges include inadequate health care providers, and poor quality of health care services. Improving access to and quality of health care was identified as the last strategy. Implementing this strategy will require partnerships with the District Health Planning Medical team in Kazungula district.

Goal

To make certain that access to quality health care for Moomba residents is improved by 2017.

Objectives and Outcomes

Table 12: Improve access to and quality of health

| OBJECTIVE | | OUTCOMES |
|-----------|--|--|
| 7.1 | By 2017, 80% of GMA residents have received information from “certified” reproductive health services. | Certified reproductive health services available and are being accessed. |
| 7.2 | By 2017, all residents of Mulobezi GMA will live within half a day’s transit to “certified” primary health care. | Health care center built in Mulobezi GMA that is strategically located to improve access to the majority of the community. |

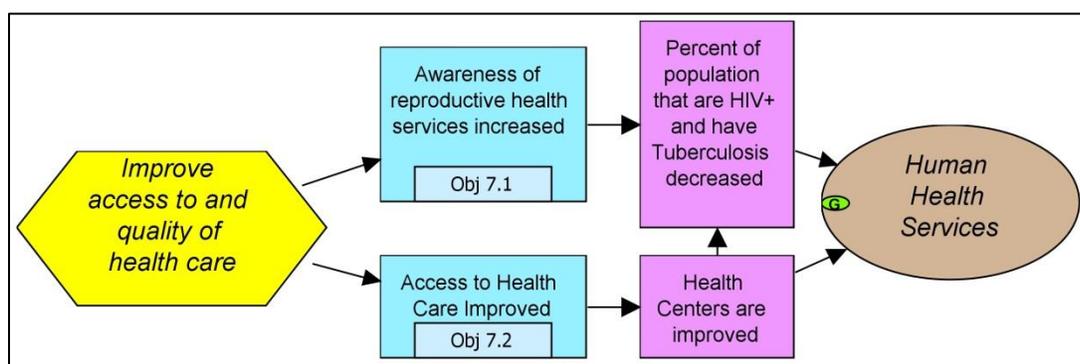


Figure 11: Theory of change diagram for the strategy to improve access to and the quality of health care

Capacity requirements for key strategy implementation

Capacity for this strategy will require support from the national level through the Ministry of Health, and the District Health planning unit of Kazungula. Infrastructural support for the Health care centers will potentially be developed by these two institutions.

Support from NGOs working on health related issues will further be required once this infrastructure is in place.

People Involved

Health care providers from the Ministry of Health at the district level will be required to implement this strategy. Health care providers will be instrumental in ensuring reproductive health care is provided to the residents of Mulobezi. Support from the District Health Planner for Kazungula will be further required. His particular role will be to ensure that residents of Mulobezi are included in district health planning initiatives and services. Staff from NGOs working on health related issues such as HIV/ AIDS and reproductive health will be important to identify.

Strategy Facilitation Responsibility Matrix:

Table 13, illustrates an overview of institutions that will potentially take lead roles in facilitating the strategies and objectives and those that will be offering support to ensure this is achieved.

Table 13: Strategy Facilitation Responsibility Matrix

| Strategy | TNC | District or other Govt. Departs. | Other NGOs | CRB & VAGs | Private Sector | Academic Institutions |
|--|-----|----------------------------------|------------|------------|----------------|-----------------------|
| 1. Reduce Poverty by Increase Alternative Livelihoods | ❖ | ✓ | | ✓ | ✓ | |
| 2. Improve Food Security | ✓ | ❖ | ✓ | ✓ | | ✓ |
| 3. Strengthen Local Governance | ❖ | ✓ | ✓ | ✓ | | ✓ |
| 4. Increase Local Capacity to Improve Resource Management | ❖ | ✓ | | ✓ | ✓ | |
| 5. Increase Enabling Conditions for Devolved Natural Resource Management | ✓ | ❖ | | ✓ | | |

| Strategy | TNC | District or other Govt. Departs. | Other NGOs | CRB & VAGs | Private Sector | Academic Institutions |
|---|-----|----------------------------------|------------|------------|----------------|-----------------------|
| 6. Increase primary school attendance | | ❖ | ✓ | | | ✓ |
| 7. Improve Access to and Quality of Health Care | | ❖ | ✓ | | | |

❖ : Lead Institution

✓ :Support Institutions

Monitoring and Evaluation - Strategy Effectiveness and Status Measures

For each of the priority strategies, objectives, initial steps and outcomes were identified, even if specific measurable objectives were not always defined. These initial steps (shorter-term milestones) are critical to tracking the progress of strategy implementation. They help gauge if the strategy is on track to achieving the desired outcome. In most cases, the shorter-term milestones do not require a great deal of effort to track – such as documenting that a plan was completed or an education seminar was conducted by a particular date. However, it is important that a mind-set emerges within the Reto-o-Reto committee emphasizing the importance of adhering to this schedule and that collecting this data is important. The committee must feel empowered and recognize that they are in control of whether various steps are taken. The committee should develop a work plan that identifies small groups responsible for implementing various strategies/initial steps and who will track this information.

The longer-term objectives of each strategy will require a greater investment in monitoring resources. These require information about threat reduction or the improvement in the status of a species or habitat. It will be important to link this information to the strategies, and show specifically how the strategy will cause an increase or decrease in the status.

Adaptive Management - Purposeful Learning and Improvement over Time

Once information is gathered, project teams must also commit to a periodic review of this information, in order to incorporate it explicitly into decision-making. The purpose of such a review is to evaluate periodically how well the strategies are progressing and to assess if some corrections are needed. We suggest that once a year the committee should review where they are in relation to the objectives that have been set. We recommend that in the next two years, an evaluation be conducted to check on the progress of these strategies.

For example, each of the strategies identified short-term milestones that must happen in order for the strategy to progress. If these strategies are reviewed two years from now, and these milestones have not been achieved, then either there was a problem in implementing the strategy, or the idea behind the strategy was wrong. The purpose of the results chain is to make it very clear what the project team was thinking when it started in on the strategy, and returning to that original idea to make sure it is still appropriate is an important part of sound project management. In this way, the short-term milestones are critical to effective management alterations. They enable a quicker learning process than if we waited to see change in the longer-term outcomes. However, if we do not also check if progress is being made on the long-term objections, we run the risk of projects that have much activity, but little productivity.

Overall, the purpose behind this process is to make sure that the committee does a better job in resource management. We believe this happens if project teams adopt this formal, adaptive management cycle, which relies on gathering data – or evidence – rather than intuition or opinion – to know that actions are working.

Leverage

The larger vision of TNC is to increase scale and leverage of CBNRM activities across the Kafue Ecosystem and beyond. There are 72 Community Resource Boards (CRBs) in 37 GMAs. A discussion on leverage was held after the workshop formally closed the following three questions were asked:

1. How do we scale our CBNRM work from the Mulobezi GMA to the broader Kafue ecosystem?
2. Which strategies might help transform Zambian CBNRM nationally?
3. What should we do more intentionally or could we do to get leverage (to help Zambia CBNRM success)?

Participants identified two key strategies to address scale and leverage questions.

1. Link our project objectives and interventions to National Development programs and agendas.
2. Ensure there is good baseline information so that we can clearly measure and quantify our impact of this model – replication and the ability to influence policy will both be greatly improved if we take an evidence-based approach.

Next steps:

Item 1 – Link to National Projects

- Need to map all of our strategies to existing programs in Zambia where possible. A table that clearly describes the association of what we are doing to both existing policies and national programs should be developed.
- Deliberately inform those projects and national programs that we are advancing their objectives in Mulobezi in order to help build an enabling framework for our work that helps us scale and leverage our outcomes.

Item 2 – Baseline Data

- Need to collect all existing data for Mulobezi from ZAWA, MCC and other sources and compile it all.
- Need to conduct a GAP analysis on this data to see what is missing

For critical information gaps, gather necessary baseline data by field collection or surveys.

Conclusion:

The Mulobezi GMA Conservation Planning meeting was an initial step in bringing stakeholders working on issues of natural resources management and rural development together. The two-day meeting, achieved this objective, and participants identified seven strategies that will be implemented as a road map to reduce threats to natural resources in Mulobezi GMA and improve the livelihoods of Moomba community residents. The participants agreed to formalize the relationships by signing a memorandum of understanding that will be shared with all stakeholders with their identified roles and responsibilities. TNC would take the lead in facilitating this process and agreed to continue follow-ups with stakeholders at the two-day meeting.

Appendix 1. Conservation Action Planning Process

The Nature Conservancy achieves conservation results by designing and implementing conservation projects at multiple scales. Over the past 20 years, TNC has developed an integrated process for planning, implementing, and measuring conservation success for its conservation projects. This process is called the “Conservation Action Planning (CAP)” process. The CAP process has been tested with a wide range of projects from different parts of the world and is supported by a network of trained CAP professionals.

The CAP process guides project teams to identify effective conservation strategies. It provides an objective, consistent and transparent accounting of conservation actions and the intended and actual outcomes of conservation projects. It enables project staff to adapt their actions to improve strategy effectiveness and achieve greater conservation impact. A brief summary of the CAP Process is provided below. For a full set of CAP tools, training opportunities, examples, and guidance documents, visit

www.conserveonline.org/workspaces/cap/.

THE 10 STEPS OF THE CAP PROCESS

1. Identify People Involved In Your Project

This step asks you to identify your most valuable resource – the people who will be involved in designing and implementing your project. Addresses questions like: ♦*“Who will design our project?, ♦“Who will be responsible for ensuring the plan goes forward?, ” ♦“Who can give us advice?, ♦“Who will help us through this process?”*

2. Define Project Scope & Focal Conservation Targets

With this step, you define the extent of your project and select the specific species and natural systems that your project will focus on as being representative of the overall biodiversity of the project area. This step helps your project team come to consensus on the overall goal and scale of the project and your ultimate measures of success. Addresses questions like: ♦*“Where is our project?” ♦“What are we trying to conserve or restore?”*

3. Assess Viability of Focal Conservation Targets



This step asks you to look at each of your focal targets carefully to determine how to measure its “health” over time. Then to identify how the target is doing today and what a “healthy state” might look like. This step is the key to knowing which of your targets are most in need of immediate attention, and for measuring success over time. Addresses questions like: ♦*“How do we define ‘health’ (viability) for each of our targets?”*, ♦*“What is the current status of each of our targets?”*, ♦*“What is our desired status for each of our targets?”*

4. Identify Critical Threats

This step helps you to identify the various factors that immediately affect your project’s focal targets and then rank them so that you can concentrate your conservation actions where they are most needed. Addresses questions like: ♦*“What threats are affecting our targets?”*, ♦*“Which threats are more of a problem?”*

5. Conduct Situation Analysis

This step asks you to describe your current understanding of your project situation – both the biological issues and the human context in which your project occurs. This step is not meant to be an unbounded analysis, but instead probes more deeply into the conditions surrounding your critical threats and degraded targets to bring explicit attention/consideration to causal factors, key actors, and opportunities for successful action. Addresses questions like: ♦*“What factors positively & negatively affect our targets?”*, ♦*“Who are the key stakeholders linked to each of these factors?”*

6. Develop Strategies: Objectives and Actions

This step asks you to specifically and measurably describe what success looks like and to develop practical and *strategic* actions you and your partners will undertake to achieve it. In particular, you want to try to find the actions that will enable you to get the most impact for the resources you have. Addresses questions like: ♦*“What do we need to accomplish?”*, ♦*“What is the most effective way to achieve these results?”*

7. Establish Measures

This step involves deciding how your project team will measure your results. This step is needed to help your team see whether its strategies are working as planned and thus whether adjustments will be needed. It is also needed to keep an eye on those targets and threats that you are not acting on at the moment, but may need to consider in the future. Addresses questions like: ♦*“What do we need to measure to see if we are making progress towards our objectives and whether our actions are making a difference?”*, ♦*“Are there other targets or threats that we need to pay attention to?”*

8. Develop Work Plans

This step asks you to take your strategic actions and measures and develop specific plans for doing this work as your project goes forward. Addresses questions like: ♦ *“What do we specifically need to do?”*, ♦ *“Who will be responsible for each task?”*, ♦ *“What resources do we need?”*

9. Implement

Action and monitoring plans will not do any good sitting on the shelf – your challenge here is to trust the hard work you have done and implement your plans to the best of your ability. Implementation is the most important step in this entire process; however, given the diversity of project needs and situations, the only requirement is: ♦ *Put your plans into action*

10. Analyze, Learn, Adapt, & Share

This step first asks you to systematically take the time to evaluate the actions you have implemented, to update and refine your knowledge of your targets, and to review the results available from your monitoring data. This reflection provides insight on how your actions are working, what may need to change, and what to emphasize next. This step then asks you to document what you have learned and to share it with other people so they can benefit from your successes and failures. Addresses questions like: ♦ *“What are our monitoring data telling us about our project?”*, ♦ *“What should we be doing differently?”*, ♦ *“How will we capture what we have learned?”*, ♦ *“How can we make sure other people benefit from what we have learned?”*

Appendix 2: Workshop Agenda

| <u>TIME</u> | <u>AGENDA ITEM</u> | <u>OUTCOME</u> | <u>LEAD</u> |
|------------------|---|---|---|
| DAY 1 | | | |
| 08:30 | Opening Prayer | | Moomba CRB Chairman |
| 08:30 – 08:45 | Welcome and Self Introductions | | Patricia Mupeta- Muyamwa |
| 08:45 – 09:00 | Opening & Welcome Remarks | | District Commissioner - Kazungula District |
| 09:00 – 09:15 | Overview of TNC and the Zambia Program | Complete Objective 1 | Matt Brown |
| 09:15 – 09:30 | Meeting objectives, agenda review and CAP process | Overview of the workshop in the context of the CAP process | Tim Tear |
| 09:30 – 10:00 | Overview: Current status of Zambia's GMA's and community programs | Set Context for Workshop | Andrew Phiri |
| 10:00 – 10:30 | Kafue GMA dashboard – status of KNP -GMAs | Complete Objective 2 | Patricia Mupeta |
| 10:30 – 10:45 | TEA | | |
| 10:45 – 11:45 | Mulobezi GMA – Project Scope: Geographic sope, the people, history of CBNRM | Continue to set context and Objective 3a | Patricia Mupeta |
| 12:00 – 13:00 | CAP: Defining the long- term outcomes | Objective 3b | Tim Tear |

| <u>TIME</u> | <u>AGENDA ITEM</u> | <u>OUTCOME</u> | <u>LEAD</u> |
|------------------|--|---|--------------|
| 13:00 – 14:00 | LUNCH | | |
| 14:00 – 15:00 | CAP: Define Targets | Objective 3b. List of targets and goal statements. | Tim Tear |
| 15:00 - 15:15 | TEA | | Tim Tear |
| 15:15 – 16:15 | Threat Assessment | | Tim Tear |
| 16:15- 16:45 | Threat Assessment Discussion | | Tim Tear |
| 16:45 – 17:15 | CAP: Situation diagram | | Tim Tear |
| 17:15- 17:30 | Summary | | Tim Tear |
| 17:30 | Adjourn for Day | | |
| DAY 2 | | | |
| 08:30 – 08:45 | Recap & Program for day 2 | | Mathew Brown |
| 08:45 – 10:45 | Developing Strategies | Objective 3d | Tim Tear |
| 10:45 – 11:00 | TEA | | |
| 11:00 – 11:30 | Prioritize and select top 5 strategies | | Tim Tear |
| 11:30- 12:00 | Review and agree upon top 5 | | |

Mulobezi GMA Conservation Action Plan Workshop Report – July 2012

| <u>TIME</u> | <u>AGENDA ITEM</u> | <u>OUTCOME</u> | <u>LEAD</u> |
|------------------|--|----------------|-----------------------------|
| 12:00 – 13:00 | Action steps required to accomplish each of the priority strategies. | Objective 3e | Tim Tear |
| 13:00 – 14:00 | LUNCH | | |
| 14:00 – 14:45 | Strategy Needs: resources needed | | Tim Tear |
| 14:45 – 15:00 | TEA | | |
| 15:00 – 16:00 | Strategy Opportunities and Needs: | | Tim Tear |
| 16:00 – 17:00 | Next steps Workshop Evaluation | | Patricia Mupeta- Muyamwa |
| 17:00 | Adjourn | | |

Appendix 3: Workshop Participant List

| NO | NAME | SUB - VILLAGE/AFFILIATION/ POSITION | CONTACT DETAILS |
|-----------|-------------------------|--|--|
| 1 | Pascalina Musokotwane | District Commissioner Kazungula | 0979960445 0965960445 0955960445 |
| 2 | Muleya Siachinji | District Administrator Kazungula | 0979221698 Charles.muleya@ yahoo.com |
| 3 | Patricia Mupeta-Muyamwa | Community Conservation Officer - TNC | 0974153551 |
| 4 | Prince Gabriel | Chief's representative - Moomba | 0965415581 |
| 5 | Davidson Sikasili | Councilor - Moomba | 0979628403 |
| 6 | Bernard Mulemwa | Moomba CRB board member | 0978814353 |
| 7 | Progress Makwasha | Moomba CRB chairperson | 097898416 |
| 8 | Jimmy Makando | Moomba CRB secretary | 097882635 |
| 9 | Gabriel Mufaya | Moomba FMC secretary | |
| 10 | Canaan Ntinga | Officer in charge ZAWA Mulobezi | 0977153118 |
| 11 | Florence Moomba | Book keeper - Moomba | 0977245195 |
| 12 | Hellen Mayumbelo | Resource Management committee - Moomba | |
| 13 | Austin Mwakifwambo | Extension Officer - southern KNP | 0979340635 |
| 14 | James Milanzi | Regional Manager - Western ZAWA region | 0977106559 |
| 15 | Mbewe Josephine | District Forestry Officer - Kazungula | 0977632565 |
| 16 | Greg Overton | TNC | 0773882380 |
| 17 | Brian Makare | TNC | 0013035799362 |
| 18 | Andrew Nambota | KAZA Coordinator Zambia | 0977763200 |
| 19 | Jeremy Pope | TNC | 0955919530 |
| 20 | Vincent Ziba | Zambia CBNRM Forum | 0977210382 |
| 21 | Kristin Mullen | TNC | 013038859836 |
| 22 | Mathew Brown | TNC | +255758012834 |
| 23 | Tim Tear | TNC | ttear@tnc.org |
| 24 | Happy James | Advisor Kazungula Council | Happyjames2015 |

Mulobezi GMA Conservation Action Plan Workshop Report – July 2012

| | | | |
|-----------|-------------------|-------------------------|--|
| | | Sec. | @yahoo.co.uk 0974410225 |
| 25 | Likukela Simasiku | Planning Officer - ZAWA | 0977533364 |
| 26 | Regina Zyele | TNC | |

Appendix 4: Detailed situation diagram of Mulobezi GMA.

Yellow hexagons indicate major strategies. Green ovals are natural resource targets, and brown ovals are human welfare targets of the project. Red boxes are direct threats, and orange boxes are contributing factors. Red lines indicate important feedback loops.

