ZAMBIA: NAPA PROJECT PROFILE

ZAMBIA

NAPA PRIORITY PROJECT 1

APPENDIX II: NAPA OPTION 2

STRENGTHENING OF EARLY WARNING SYSTEMS TO IMPROVE SERVICES TO PREPAREDNESS AND ADAPTATION TO CLIMATE CHANGE

RATIONALE/JUSTIFICATION

Over the years climatic data has been provided to the Ministry of Agriculture and Cooperatives and Civil Aviation. The data provided to MACO has not been provided in a user friendly manner such that those that need this information do not get the full benefit of it at all. If Climatic data can be provided to all stakeholders in a manner that is easily usable by them a lot of the impact of climatic calamities that affect the country could be reduced.

It has also been shown that the health delivery system suffers from inadequate distribution of medical facilities, shortage of medical drugs and congestiomedical facilities during times of epidemics. In this country, epidemics are usually underway before the authorities are notified and epidemic control put in place. All these shortcomings translate into high morbidity and mortality amongst Zambians. It is, however, known that the early identification of epidemics permits adequate planning and implementation of effective interventions to control the disease and reducethe resulting morbidity and mortality in the human population. It has been demonstrated elsewhere (WHO, 2005) that climate information can be used to improve epidemic prediction and therefore has potential to improve disease control. In fact the Integrated Disease Surveillance and Response (ISDR) programme of Zambia under the Ministry of Health is intended to strengthen the country's capacity to conduct effective surveillance for both communicable and non-communicable diseases through integrated collection and improved monitoring systems. This project aims to complement the activities of ISDR with the purpose of ensuring timely and effective preventive measures (ITNs and insecticides) and medicines in the affected areas.

It is therefore important to strengthen early warning services and advance planning for periods of adverse climate variations in a form suited for practical application by users at all levels including local communities.

DESCRIPTION

Overall Objective

Develop the use of compatible standards and systems; encompassing relevant data and stations; including remote areas; use and disseminate modern technology for data collection, transmission and assessment.

Strengthening systematic observations of meteorological and hydrological services, and capacity building, education and public awareness.

Activities

1. Develop infrastructure for early warning advanced planning purposes;
2. Establishment of a National Climate Centre;
3. Collect the required climate, environmental and health data;
4. Conduct field surveys in representative localities to identify climatic and non climatic disease risk factors;
5. Establishment of an effective climate data management system;
6. Human capacity for regular monitoring of climate stations for data quality;

7. Devise an effective information dissemination process to all sectors that may be affected by climate change.

Inputs

Research personnel, filed survey maps, GIS software, satellite imageries, Digital camera

Short-Term Outputs

- Infrastructure made operational;
- Physical presence;
- Systems put in place;
- Monthly/Annual reports;
- Climate based early warning system for diseases.

PotentialLong-Term Outputs/Outcomes

- Infrastructure developed;
- National Centre constructed;
- Systems developed;
- Human capacity developed;
- Dissemination information system developed;
- Reductions in morbidity and mortality of the affected populations and timely supply of medical drugs.

IMPLEMENTATION

Institutional Arrangement

The lead organization will be the ZMD and will be supported by researchers and personnel from the Health, Disaster Management and Mitigation Unit (National and District levels), Central Statistical Office, Universities/Research Institutions and NGOs. The Ministry of Health can even integrate this project into its Integrated Disease Surveillance programme and use the Epidemic Preparedness Committees to spearhead this project at national, provincial, district and community levels The lead institution has to be the ZMD. Other collaborative institutions include MACO, MTENR, MOH, Research institutions.

Risks and Barriers

There are no major barriers and risks anticipated except for possibly the availability of financial resources and satellite imageries, as well as the usual coordination difficulties associated with multi-stakeholder/disciplinary projects.

Evaluation and Monitoring

The lead organization will establish monitoring and evaluation protocols based on indicators for assessing the performance and impact of the project. It is also important to evaluate the cost-effectiveness of this intervention.

COST

USD 1,800,000

ZAMBIA

NAPA PRIORITY PROJECT 2

APPENDIX II: NAPA OPTION 3

PROMOTION OF ALTERNATIVES SOURCES OF LIVELIHOODS TO REDUCE VULNERABILITY TO CLIMATE CHANGE/VARIABILITY TO COMMUNITIES LIVING AROUND GMAS

RATIONALE/JUSTIFICATION

Climate change will adversely affect the livelihoods of resource-poor rural communities. These are communities experiencing extreme poverty and constitute the most vulnerable groups. The promotion of alternative livelihood sources will contribute to improving community resilience to climate change on their livelihoods through the growth of diverse sources of alternative cash income.

DESCRIPTION

Overall Objective

To initiate alternative livelihood sources for communities in and around protected areas.

Activities

- Promotion of Income-Generating Activities (IGA) and other alternative livelihood sources;
- Setting up micro credit facilities targeting women beneficiaries;
- Establishment of household woodlots for firewood/poles/timbers.

Inputs

- Community based Organizations (CBOs), ZAWA and local communities will play the most important roles;
- Financial institutions, Cooperatives and women's clubs.

Potential Long-Term Outputs/Outcomes

Increased alternative sources of livelihood around national parks and GMAs

IMPLEMENTATION

Institutional Arrangement

MTENR in conjunction with ZAWA and CBO will have to again play a major in ensuring that communities are encouraged to participate.

Risks and Barriers

- If communities are not willing to engage in alternative livelihood sources;
- Government unwillingness to guarantee revolving credit fund and unwillingness of community of women to participate;
- Communities unwillingness to participate in the programme.

COST

USD 175,000

ZAMBIA

NAPA PRIORITY PROJECT 3

APPENDIX II: NAPA OPTION 1

ADAPTATION TO THE EFFECTS OF DROUGHT IN THE CONTEXT OF CLIMATE CHANGE IN AGRO-ECOLOGICAL REGION I OF ZAMBIA

RATIONALE/JUSTIFICATION

Assessments that were undertaken as part of the NAPA process indicate that climate change will increase vulnerability especially in arid regions, which typically correspond to Agro-Ecological Regions (AER) I and II in Zambia. The NAPA has highlighted that areas suitable for staple crops, such as maize production in these regions are likely to reduce by more than 80%. Within these regions, since the 1980s, there has also been a tendency for the later onset and earlier withdraw of rains, as well as an increased occurrence of drought years. At the national level, yield changes and other impacts under climate change scenarios suggest frequent shortages of grain. Vulnerability assessments on the economic costs of climate change on agriculture in Zambia undertaken by the World Bank, with support from FAO and the University of Pretoria, indicate that these regions will exhibit severe deficits at critical periods of the cropping calendars. Such deficits could result in severe yield decrease for specific crops such as maize. Based on a CO_2 doubling scenario in these regions, some estimates predict a yield reduction of approximately 66% under rain-fed conditions but only about 16% under irrigated conditions. Currently, less than 5% of arable land in Zambia is irrigated. With changes in rainfall patterns, the average length of the growing season length for maize is also likely to become shorter, with models predicting an approximate reduction in the length of the season of 20%. From an agro-climatic perspective, maize (the main national staple) is already somewhat marginal in AER I, as annual rainfall is commonly insufficient for the crops sown. While agricultural systems are already quite close to the limits of their coping ranges, simulations of future climate change in AEZ I show that maize yields are likely to fall even further under both rain-fed and irrigated conditions.

The proposed intervention "Adaptation of the agriculture sector to climate-induced water deficits in Zambia" will complement current agricultural policies and development support programmes. This NAPA follow-up project will contribute towards integrating climate-induced risk management of water resources within the agricultural sector. It will contribute towards improving adaptive capacities of key stakeholders (policy makers, and local communities) to overcome key water availability challenges under worsening climatic conditions.

DESCRIPTION

Overall Objective

To reduce the vulnerability of those depending on rainfed agriculture practices to anticipated rainfall shortages in the face of climate change including variability.

Activities

1. Pilot irrigation and water management systems introduced;
2. Training communities on how to maintain and manage irrigation systems in the context of climate change, including variability;
3. Capacity building of farmers on water management practices;
4. Provide extension support and marketing (supported with co-financing);
5. Provision of credit (supported with co-financing) for irrigation schemes.

Inputs

- Technical expertise throughout the lifecycle of the project;
- Office equipment, computers, and accessories;
- Vehicles;
- Irrigation equipment/system;
- Human (including consultants), and financial resources;
- Other small equipment.

Short-Term Outputs

- Efficient integrated climate forecasting information system;
- Capacity building, education and public awareness.

Potential Long-Term Outputs/Outcomes

Measures to reduce impact of climate change, including variability (e.g. drought/flood) on food supply introduced (e.g. irrigation, and risk spreading institutions). Improved communication and utilization of climate information ranging from seasonal forecasts to longer-term projections

IMPLEMENTATION

Institutional Arrangement

MACO is expected to be the lead agency to be involved in the proposed initiative and will be the executing agency. Other relevant stakeholders include MTENR, MEWD,ECZ, Water Development Board, Local government institutions at provincial and district level, NGOs, Research institutions, Cooperating partners in conjunction with ZAWA and CBO will have to again play a major role in ensuring that communities are encouraged to participate, Multilateral institutions, Current water users, in particular emergent and traditional farming households.

Risks and Barriers

Eroded soils in many regions, lack of capacity for improved agricultural techniques, and challenging baseline climatic conditions, the potential inadequate capacity on the part of the GRZ to implement (at least part of) the National Irrigation Plan in region I as part of a strong and committed development policy, and the inadequate financial capacity and political will on the part of the GRZ to invest in the rural sector in the target area for project continuation and replication.

Evaluation and Monitoring

The implementers will monitor the project with the participation of other stakeholders. The MTENR will assume the responsibility of evaluating the project to ensure that it conforms to terms and delivery of results on a regular basis.

COST

USD 3,000,000

ZAMBIA

NAPA PRIORITY PROJECT 4

APPENDIX II: NAPA OPTION 4

MANAGEMENT OF CRITICAL HABITATS

RATIONALE/JUSTIFICATION

Improving knowledge and understanding on critical habitats will contribute to timely interventions and their proper management in the event of climate induced droughts or floods. The major activity in this project is the study identifying these habitats and establishing the likely impacts of climate change and the required mitigation measures as part of a broad strategic framework of game management.

DESCRIPTION

Overall Objective

To manage critical habitats in National Parks

Activities

- Collect data to establish critical habitats in National Parks;
- To sink boreholes for watering points for animals in the parks;
- Dredging of watercourses and lagoons of sand to increase volume of available water to animals;
- To construct/improve tracks to act as firebreaks in parks.

Inputs

Scientists, financial and other logistical support will be required to accomplish the tasks.

Short-Term Outputs

- Study Reports;
- Number of sited functioning boreholes;
- Number of dredged channels and water bodies;
- Number of tracks constructed or repaired.

Potential Long-Term Outputs/Outcomes

- Availability of data indicating critical habitats;
- Maps giving coordinates of location of boreholes;
- Increased capacity of water bodies to hold more water for longer periods;
- Reduced incidents of wild fires in parks.

IMPLEMENTATION

Institutional Arrangement

ZAWA, MTENR Department of Water Affairs (DWA) communities

Risks and Barriers

- Study fits in strategic operational plans of institution;
- Easy mobilization of equipment from DWA;
- Water bodies will improve access to waterholes by many animals in times of drought;

- Existing fire management practices has not implemented such activities.

Evaluation and Monitoring

The Forestry department and ZAWA will carry out the monitoring of the project.

COST

USD 1,400,000

ZAMBIA

NAPA PRIORITY PROJECT 5

APPENDIX II: NAPA OPTION 5

PROMOTE NATURAL REGENERATION OF INDIGENOUS FORESTS

RATIONALE/JUSTIFICATION

Indigenous forests in Zambia have played a key role in providing timber and non-timber products for communities around forest reserves and the nation at large. The climate change impact on forests is the reduced capacity of the regeneration of Miombo due to temperature increases. The climate change adaptation measure is to lift some pressure on the Miombo forests (deriving from cutting for fuelwood), since with reduced regeneration capacity, Miombo will sustain the pressure. Without such intervention, there would be increased rate of Miombo degradation due to climate change and less natural resources for communities that rely on them for their livelihoods.

DESCRIPTION

Overall Objective

To promote regeneration of indigenous forests.

Activities

- Promotion of natural regeneration of indigenous woodlands;
- Prevention of wild fires by building fire barriers;
- Promotion of alternative sources of energy.

Inputs

Human and financial resources will be needed.

Short-Term Outputs

Number of hectares under protection for regeneration and monitoring.

Potential Long-Term Outputs/Outcomes

Hectares of regenerated forests under the project.

IMPLEMENTATION

Institutional Arrangement

Department of Forestry and Communities.

Risks and Barriers

Communities unwillingness to protect and monitor regeneration process.

Evaluation and Monitoring

MTENR through Forestry department.

COST

USD 1,000,000

ZAMBIA

NAPA PRIORITY PROJECT 6

APPENDIX II: NAPA OPTION 6

ADAPTATION OF LAND USE PRACTICES (CROPS, FISH, AND LIVESTOCK) IN LIGHT OF CLIMATE CHANGE

RATIONALE/JUSTIFICATION

Poverty in Zambia is wide spread, with 73% of the population living below poverty. Over 60% of Zambians live in rural areas, with the majority depending on subsistence rain-fed agriculture, and relying on a single maize harvest for their livelihoods. This makes them very vulnerable to climate related natural calamities and disasters, such as floods and droughts, which directly affect agricultural productivity. The current agricultural practices used are are no longer sustainable in the face of the limitations imposed by climate change, and there is urgent needfor adaptation to avoid food insecurity, malnutrition diseases and worsening of people living with HIV.

The integrated sustainable livelihood project would enhance people's capacity to cope with and adapt to these natural calamities in vulnerable areas. The major sustainable livelihood interventions for coping with these natural calamities include the promotion of the following; water management, crop and livestock production, growing of crop varieties and fruit trees and rearing of animal breeds that are drought tolerant, using agro-forestry practices, fish farming and processing, market access and cross cutting issues such HIV/AIDS, gender and the environment.

DESCRIPTION

Overall Objectives

To enhance awareness and training among stakeholders;
To enhance improved food security, income generation and business opportunities in all agricultural sectors;
To identify species best suitable for aquaculture under changing climatic conditions due to global warming.

Activities

- Development of dissemination and training materials on land use practices;
- Review of the National Agriculture Policy;
- Creating awareness about the new land use practices through workshops and seminars;
- Training on new land use practices;
- Introduction of sound Land Use Planning;
- Introduction of crops that are more suitable to the changing climate pattern;
- Conduct fish farming trials in each catchment area and agro-ecological zone;
- Identify species suitable for aquaculture in each area;
- Assess the impact of extreme variations in precipitation on aquaculture systems;
- Monitoring and evaluation.

Inputs

Research materials, human and financial resources will be required.

Short-Term Outputs

Training materials available, communities sensitized and talking about the new policy, communities sensitized and talking about the new practices, practice by communities, presence of executing personnel, Number of fish farming trials undertaken.
Number of areas, stations and agro ecological zones where species have been identified, Number of fish farming systems available and adopted.

Potential Long-Term Outputs/Outcomes

Achievement of food security through the adoption of agriculture practices and crop/livestock choices that are more suitable to the changing availability of natural resources.
Environmental benefit, with a sustainable natural resource management, adapted to new conditions imposed by climate change.

IMPLEMENTATION

Institutional Arrangement

The key institutions will be MACO, ZNFU, Traditional leaders, consultants and key informants in communities.

Risks and Barriers

- Information not readily available to be converted into appropriate agricultural materials;
- No Government support in terms of policy changes, and communities not responding positively.

COST

USD 1,200,000

ZAMBIA

NAPA PRIORITY PROJECT =7

APPENDIX II: NAPA OPTION 7

MAINTENANCE AND PROVISION OF WATER INFRASTRUCTURE TO COMMUNITIES TO REDUCE HUMAN-WILDLIFE CONFLICT

RATIONALE/JUSTIFICATION

It was noted that there was need for integrated land management to ensure that watershed areas were not at risk to tree felling (for charcoal or firewood), that rivers and fisheries resources were protected and landscapes were preserved to support wildlife habitats. In extreme drought situations, animals and people come head-to-head competing for available water resource. The maintenance and expansion of existing water infrastructures in communities around parks will ensure the provision of access to potable water for communities living in and around protected areas. This will contribute to the reduction of human-wildlife-conflicts.

Further discussions identified three sources of risk associated with land management and invariably to wildlife management, namely:

- Poverty and hunger – especially reflected in food insecurity of communities living in and around the Game Management Areas;
- Lack of wage income – or alternative sources of livelihoods to subsistence farming;
- Heightened potential for Human-Wildlife Conflict (HWC) when droughts/floods affect these regions and their communities.

DESCRIPTION

Overall Objective

To provide access to potable water for communities living in and around protected areas.

Activities

Sinking boreholes and repairing existing water infrastructures in communities around parks.

Short-Term Outputs

Number of communities having access to potable water supplies.

Potential Long-Term Outputs/Outcomes

Number of boreholes sunk and water facilities repaired.

IMPLEMENTATION

Institutional Arrangement

ZAWA, Department of Water Affairs - Communities.

Risks and Barriers

Access to water facilities at the moment is problematic.

COST

USD 75,000

ZAMBIA

NAPA PRIORITY PROJECT =7

APPENDIX II: NAPA OPTION 8

ERADICATION OF INVASIVE ALIEN SPECIES

RATIONALE/JUSTIFICATION

Invasive alien plant species compete and sometimes supplant indigenous plant species. Their removal is an important element in the management forests which are being depleted by deforestation. Engaging communities in these activities will also provide opportunities for alternative sources of livelihoods.

DESCRIPTION

Overall Objective

To eradicate invasive plant species.

Activities

Removal of alien species such as mimosa pigra, lantana camara etc.

Short-Term Outputs

Mapping of alien species in critical habitats.

Potential Long-Term Outputs/Outcomes

Number of hectares cleared of alien species.

IMPLEMENTATION

Institutional Arrangement

- Department of Forestry;
- Communities.

Risks and Barriers

Community willingness to participate in the programme.

COST

USD 1,000,000

ZAMBIA

NAPA PRIORITY PROJECT 9

APPENDIX II: NAPA OPTION 9

CAPACITY BUILDING FOR IMPROVED ENVIRONMENTAL HEALTH IN RURAL AREAS

RATIONALE/JUSTIFICATION

In rural Zambia today, the main health risk factors, responsible for the current heavy burden of disease, include inadequate safe water supply, poor sanitation and nutrition. According to the Fifth National Development Plan of Zambia (2006–2010), access to safe water supplies was estimated at 37% of the population in rural areas, while the sanitation coverage was only 4%. On the other hand, 70% of the population is food insecure. Shifts in temperature and precipitation regimes under climate change can influence the distribution and magnitude of the burden of climate-sensitive diseases in given localities. However, climate change affects human health through complex causal pathways which include water supply, sanitation and agricultural systems. Hot temperatures favour the multiplication of pathogens. Droughts reduce the quantity and quality of water supplies causing food shortages, reductions in personal and domestic hygiene for the people and reduction of the dilution capacity of raw water supply sources for pathogens. Sanitation facilities become sources of infection through reduced personal hygiene and proliferation of excreta-contaminated flies. On the other hand, floods wipe out food crops and wash away faecal matter from sanitation facilities into drinking water sources. Under-nutrition weakens the immune response system of the affected individuals and thus makes them susceptible to infectious diseases.

The NAPA vulnerability assessment revealed that hot and dry conditions were associated with increased clinical cases of diarrhoea, non-pneumonia respiratory infections and dysentery. Additionally, the report of the Zambia Vulnerability Assessment Committee revealed that a total population of 1,232,661 persons was in need of food assistance in the drought-hit districts during the 2004/05 drought, while 43 and 48.8% of the children in these areas suffered from diarrhoea and cough, respectively. On the other hand, the 2006/07 floods left over 400,000 persons in need of food aid for a period of over 8 months and in 78% of the affected areas with a population of 1,012,540 persons, there was water contamination from faecal matter because the floods had led to the collapse of toilets and flooding of unprotected domestic water sources. In the rural settings of Zambia, where rain-fed agriculture is the main source of income and food, extreme weather events result into a simultaneous deprivation of water, food and health, including income for the purchase of medicines and transportation to health facilities. The situation is further compounded by the fact that rural communities are currently devoid of any mechanisms for climate risk management and have to depend on government and other external agents for emergency assistance, which is usually short-lived.

The additionality costs due to this adaptation measure stem from the following:

- Developing community-based institutional mechanisms for the implementation of climate-resilient sanitation, water and food supply systems.
- Modification or replacement of existing sanitation, water and food supply practices with climate-resilient options.
- Simultaneous introduction and expansion of climate-resilient sanitation, water and food supply options into rural communities. This is because in the context of human health in Zambia, climate variability negatively impacts water, sanitation and food systems simultaneously and a single intervention in isolation may result in a negligible reduction in overall disease burden.

This NAPA project is intended to be a "no-regrets" adaptation option, implying that it has multiple benefits that can make the affected sectors more resilient to today's climatic conditions and thus can help in adapting to future changes in climate.

DESCRIPTION

Overall Objective

To improve the health, water and food security of rural populations.

Activities

- Assess the climate variability-health risk factor interactions with regard to health, food and water security;
- Develop strategies for improving health, water and food security under climatic extremes in the affected areas;
- Empower communities with knowledge, skills and technologies required for integrated and sustainable health, food and water security.

Inputs

Inputs include research personnel, water and agricultural engineers, technologists, medical personnel, community leaders, laptops, GIS software, training manuals, workshops, participatory research packages, water supply and food production technologies

Short-Term Outputs

- Develop and strengthen the organisational frameworks in the affected communities;
- Knowledgeable and skilled rural personnel and improved water supply and food production technologies.

Potential Long-Term Outputs/Outcomes

Reductions in morbidity and mortality of the affected populations, improved and sustainable access to water and food and increased resilience to climatic hazards.

IMPLEMENTATION

Institutional Arrangement

The lead organization will be the Ministry of Tourism, Environment and Natural Resources (MTENR) and the project can be incorporated into the ongoing Natural Resources Management activities either in the Natural Resources or Forestry Departments. However, the project is community-based and MTENR must coordinate and mobilize all the necessary resources and possibly introduce the project in one pilot area.

Risks and Barriers

The main barrier anticipated can be the difficulty of changing cultural beliefs and behaviours; however, this can be overcome with the necessary training and advocacy.

Evaluation and Monitoring

The lead organization will establish monitoring and evaluation protocols based on indicators for assessing the performance and impact of this multi-phased project

COST

To be sourced from donors, UNFCCC agencies and/or Government budget

USD 3,000,000

ZAMBIA

NAPA PRIORITY PROJECT 10

APPENDIX II: NAPA OPTION 10

CLIMATE PROOFING SANITATION IN URBAN AREAS

RATIONALE/JUSTIFICATION

The NAPA human health vulnerability assessment demonstrated that urban areas are the most vulnerable to diarrhoeal diseases as evidenced by comparing clinical cases of diarrhoea in Lusaka and the Copperbelt. Moreover, the 2005/06 heavy precipitation (floods) resulted in over 5,000 cases of cholera recorded in Lusaka. Cholera cases were also reported in the towns of Ndola, Mazabuka and Kafue. In all these towns of Zambia, cholera cases were in shanty-township areas. Historically, cholera epidemics have occurred in Zambia during years of heavy precipitation and flooding. According to the health authorities in Zambia, the transmission route for cholera and other diarrhoeal diseases involves the flooding of pit-latrines and aqua-privy toilets that are used in these shanty townships and flood waters then carry the faecal matter into unprotected water sources and to wherever they spread. In fact during floods of 2006/07, the main health threat emanated from the collapse of toilets in schools and communities and the spread of faecal waste into water sources.

This adaptation option, therefore, aims to introduce into slums latrine designs that are flood-proof. This should be accompanied by measures to regulate and control flood-water flows by constructing additional drainage channels, deepening and widening existing drainage, and improving management of solid waste to prevent blockages of drains.

DESCRIPTION

Overall Objective

To prevent outbreaks of water-borne diseases in urban shanty compounds by flood-proofing sanitation facilities.

Activities

- Conduct a situational analysis of sanitation and drainage systems in selected shanty compounds of Zambia.
- Conduct a technology assessment of suitable sanitation and drainage options for the selected areas.
- Produce designs for the selected sanitation and drainage technologies.
- Install the selected sanitation and drainage technologies in the affected localities
- Evaluate the impact of the improved sanitation and drainage technologies.

Inputs

The main inputs include research personnel, architects, engineers and town planners, building technologists, construction materials, and transport.

Short-Term Outputs

Improved sanitation technologies.

Potential Long-Term Outputs/Outcomes

Reductions in morbidity and mortality of the affected populations and creation of hygienic living conditions for slum dwellers as prescribed by the relevant MDG targets.

IMPLEMENTATION

Institutional Arrangement

The lead organization will be the Ministry of Local Government and Housing, including the relevant urban municipalities in the provinces of Lusaka, Southern, Eastern, Central and North-Western. The Ministry of Health must implement the health aspects of this project. In fact this project can be coupled to the ongoing Pre-paid Urban Water Supply Schemes currently being implemented by the Ministry of Local Government and Housing.

Risks and Barriers

The main barrier anticipated can be the difficulty of securing financial contributions from end-users due to the prevailing high poverty levels in these slums. This can be overcome if all the costs are covered by the project. Accordingly, the project can commence initially in one pilot area.

Evaluation and Monitoring

The lead organization will establish monitoring and evaluation protocols based on indicators for assessing the performance and impact of the project. It is also important to evaluate the cost-effectiveness and disease-prevention impact of this intervention.

COST

The estimated budget for this project is USD 2,000,000 and can be sourced from donors, UNFCCC agencies and/or government budget.

Estimated at USD 2,000,000