

ECOSYSTEM-BASED ADAPTATION THROUGH SOUTH-SOUTH COOPERATION

GOOD PRACTICE CASE STUDY

Building resilience to climate change impacts on the livelihoods of the fishing and fish farming communities in the Lower Shire River, Zambezi basin

Case study compiled by ACTS for EbA South, September 2016

Aquaculture is a water intensive activity. In the Lower Shire Basin, Malawi, fishing and fish farming are major sources of employment, income and food security for poor, rural households. However, in recent years, annual fish catches have declined by 65%. This decrease in fish catches is a concern both locally and nationally as demand for fish is on the rise.

Declining fish catches have a negative impact on livelihood and food security in the area. For example, reduced fish catches are projected to result in a direct loss of employment for more than 3,500 fisherfolk and an indirect loss of employment for an additional 10,000 people dependent on the fishing and fish farming value chain, such as processors and marketers. As a result of a reduced proportion of fish in local diets, protein intake in local communities is expected to decline, resulting in nutrition related illnesses. Exacerbating these anticipated trends is the limited capacity in local communities to implement efficient post harvest processing of fish.

To address the challenges of ecosystem degradation, unsustainable use of ecosystem goods and services, loss of livelihoods and food insecurity, project interventions target three thematic areas:

- I. ecosystems governance,
- II. value addition, and
- III. sustainable ecosystems management.

Key lessons

For effective policy integration, there is need for:

- broad based stakeholder involvement in project planning, design and implementation. When local community buys in to policies, there is a higher chance of effective implementation. Their involvement throughout the project cycle is critical for enhancing awareness on how vital policies are to their wellbeing and achieving community ownership hence willingness to implement them; and
- collaboration between key stakeholders in government, the private sector, nongovernmental organizations, local communities, and researchers. To effectively bridge the policy-implementation action gap, there is need to involve cross-cutting stakeholders in policy research, awareness raising and implementation.



GOOD PRACTICE DESCRIPTION

LOCATION: Malawi – Lower Shire River, Zambezi basin.

IMPLEMENTATION PERIOD: November 2014 - October 2015 (extended to 2016 due to late funds disbursement).

OPERATIONAL BUDGET: US\$ 55,000.

KEY STAKEHOLDERS: Donor: UNEP. Implementation / executing partners: senior local government officials, local government extension staff, academics and researchers, private sector organizations (including media representatives), NGOs, CSOs, CBOs, community leaders and women and youth groups.

Background information and climate change vulnerabilities

Aquaculture is a water intensive activity. In the Lower Shire Basin, Malawi, fishing and fish farming are major sources of employment, income and food security for poor, rural households. However, in recent years, annual fish catches have declined by 65%. This decrease in fish catches is a concern both locally and nationally as demand for fish is on the rise.

The primary causes of the decline in fish catches include:

- reduced water levels caused by competing water uses between crop farming and aquaculture;
- overfishing resulting from intensive fish farming practices and an increased number of fisherfolk;
- increased violation of fishing regulations, for example, by using mosquito nets for fishing;
- inadequate enforcement;
- gaps in policy and legislative frameworks; and
- variable rainfall patterns that result in frequent droughts and floods which affect the flow rate and volume of the Shire River.

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Tools and methods

- I. Ecosystem governance: policy is the biggest driver of change and functional institutions are critical to policy implementation towards good governance. Through policy and institutional strengthening, the project seeks to enhance governance around ecosystem goods to minimize unsustainable practices that degrade ecosystems.
- II. Value addition: increased technical capacity to implement traditional fish preservation



- approaches and hence avoid spoilage and minimize food waste. Specifically, the project is training stakeholders to make and deploy fish smoking kilns.
- III. Sustainable ecosystems management: this is accomplished through ecosystem restoration activities and livelihood diversification to reduce pressure on fisheries and hence conserve local river ecosystems.

Description of the results

To date, key achievements have been made in: i) ecosystem-based adaptation (EbA) policy and institutional strengthening; and ii) implementation of on the ground EbA interventions to build community climate resilience and conserve and enhance the functioning of local ecosystems.

Please see specific achievements below.

Policy upscaling and institutional strengthening:

- Formulated by-laws and a Participatory Fisheries Management Plan;
- Conducted a debriefing session with district authorities including District Commissioner, Councilors, Traditional Authorities on the project themes.

Enhancing ecosystem productivity and building climate resilience:

- Constructing fish ponds to facilitate alternative livelihoods and relieve pressure on aquatic ecosystems;
- Constructing smoking kilns to reduce wastage of fish;
- Capacity building on adaptation: Training of Trainers (ToT) course for community extension agents on Climate Change Adaptation in Fisheries.



GOOD PRACTICE ANALYSIS*

Community participation and inclusiveness

Has the project consulted with local communities in the formulation, implementation and decision making process? How were gender issues incorporated?

Explain how the project mobilized local interest and ownership in order to ensure its activities responded to the needs of local beneficiaries.

Project inclusivity

The project has fostered broad-based community and stakeholder engagement during its implementation. Key stakeholders involved included community leaders and women and youth groups. These stakeholders were mobilized through public information in form of distributing leaflets about the project and convening workshops, field days and meetings, where the project objectives, activities, expected results, and long term outcomes (i.e. how the communities will benefit in the near and long term) were discussed.

Gender issues

To address gender-specific vulnerability, the project includes a vulnerability assessment study that gathers gender-disaggregated data to provide relevant information on both the nature and levels of vulnerability and the various coping mechanisms employed by different social groups. Such information will feed into the policy and decision-making processes to enable a better understanding of how different categories of communities are affected and what kind of capacity and support is needed by each group.

Mobilization

500 leaflets/brochures were distributed within the project site at Lower Shire in Nsanje district targeting policy makers, local fisherfolk, as well as fish farmers in other areas of the country.

Political ownership, collaboration and approval

How has the project secured support from political-level stakeholders and aligned its activities with wider development agendas to trigger further collaboration opportunities?

The project has mobilized support of key policy makers at local level to facilitate implementation. This was achieved through various meetings, including a debriefing session with district authorities including the District Commissioner, Councilors and Traditional Authorities. During these meetings, project themes were discussed in addition to deciding on suitable institutional arrangements for the project's implementation.

* This analysis is based on the “principles of good practice” developed by the EU/FP7-funded project AfriCAN Climate (2011-2014). These principles represent critical cross cutting issues shared by the majority of climate change projects, regardless of focus, scope and scale. They are intended to encourage critical reflection and help project developers and decision-makers draw out relevant lessons. Source: <http://africanclimate.net/en/good-practice/8-principles-good-practice>



Building local capacities

How has the project ensured that local capacity was built during implementation phase? Explain how training programmes were integrated into core project activities and the measures taken to assure that built human capacity is maintained beyond the project's lifetime.

The project includes training activities for local fisherfolk on fish processing, integrated fish farming, and climate change adaptation. To ensure that the enhanced capacity catalyzed by the project is sustained, local trainers are being upskilled through a ToT course for community extension agents. This ToT course focuses on climate change adaptation in fisheries, aquaculture, participatory fisheries management, fish quality, planning and monitoring. Gender considerations have also taken centre stage with stakeholders promoting gender sensitive approaches.