

ECOSYSTEM-BASED ADAPTATION THROUGH SOUTH-SOUTH COOPERATION

GOOD PRACTICE CASE STUDY

Ecosystem-based adaptation and mitigation solutions for Farmers' Clubs in Zambezi basin, Mozambique

Case study compiled by ACTS for EbA South, July 2016

To address the nexus challenges of poverty, food insecurity, climate change and ecosystem degradation in Zambezi basin, Mozambique, this UN Environment-funded project promoted the ecosystem-based adaptation (EbA) approach of conservation agriculture (CA), with interventions such as; i) no tillage and minimum tillage farming; ii) mixed farming; iii) crop diversification and the introduction of drought resistant crops; iv) introduction of agroforestry systems; and v) reforestation of degraded areas.

Key lessons

- Participatory planning and decision-making is an effective strategy for capacity building. Involving local community members in the entire project cycle, from planning to execution of activities, provides apprenticeship learning thus the capacity of the community is built to ensure sustainability of project outcomes.
- Peer-to-peer learning is important for enhancing knowledge sharing and scaling up actions. The farmer clubs model allows for wide-scale knowledge sharing through peer learning techniques, especially field visits and joint implementation of activities. The farmer clubs spread across the country convene farmers in an area for joint engagements. These facilitate knowledge sharing, capacity building and skills transfer within a farmer club. Field visits between different clubs facilitate wide knowledge application to catalyze upscaling.



GOOD PRACTICE DESCRIPTION

LOCATION: Caia District, Sofala Province in the Zambezi basin in central Mozambique.

IMPLEMENTATION PERIOD: February 2015 - June 2016.

OPERATIONAL BUDGET: US\$ 55,000.

KEY STAKEHOLDERS: Donor: UNEP. Implementation / executing partners: farmer groups, CBOs, community leaders.

Background information and climate change vulnerabilities

The project was implemented in Caia District, Sofala Province, in the Zambezi basin in central Mozambique. Central Mozambique is reported by the World Bank as having the highest rural poverty headcount in the country at 71.2%, with Sofala, the project site, being higher at 76.7%. This is because historically, the area experienced the largest impacts of the country's 16-year civil war, which took a heavy toll on local forests and ecosystems; collapsed local agriculture; and increased poverty, food shortages, disease and malnutrition. In addition, the area is prone to extreme weather events leading to regular droughts and flooding. Communities also engage in charcoal burning for income generation, especially during droughts and due to poor agricultural productivity. Charcoal burning has resulted in an immense decline in tree cover.

This project addressed the nexus challenges of poverty, food insecurity, climate change and ecosystem degradation.

Activities included: i) training of farmers in conservation agriculture (CA) techniques; ii) capacity building through participatory planning and decision-making; iii) establishment of agroforestry systems and reforestation campaigns; and iv) value-chain analysis, undertaken to establish the most marketable value chains, which will then guide the crops that farmers will be trained to grow to promote high earnings.

To support vertical upscaling of project results, the project emphasized close engagement with the Government, including through the Ministry of Agriculture and the Ministry of Coordination and Environmental Action.

Tools and methods

To address the nexus challenges of poverty, food insecurity, climate change and ecosystem degradation, this project promoted the ecosystem-based adaptation (EbA) approach of CA, with interventions such as; i) no tillage and minimum tillage farming; ii) mixed farming; iii) crop diversification and the introduction of drought resistant crops; iv) introduction of agroforestry systems; and v) reforestation of degraded areas.

Description of the results

As of June 2016, key achievements in building community climate resilience through restoration of the ecosystems and entrenching sustainable practices included the following:

- A total of 1350 farmers mobilized, organized into 30 farmer clubs through which EbA techniques of CA and reforestation were implemented.
- Farmers adopted CA on their fields, especially agroforestry which is improving soil fertility and sustainably, and increasing productivity of the small-holder farmers. The



increased adoption of agroforestry systems could potentially provide benefits of decreased erosion, carbon sequestration and more sustainable agricultural ecosystems. Agroforestry also leads to rehabilitation of degraded forest areas to further strengthen biodiversity.

- A total of 30 demonstration fields (half a hectare in size) for dry land crops were established, one in each club.
- 1350 farmers were trained in new CA technologies, with emphasis on the economic, social and environmental benefits of agroforestry.
- Reforestation efforts to strengthen biodiversity. The project established 30 tree nurseries, each with 1200 planting bags, from which 35,000 seedlings of fruit trees and agroforestry trees were planted.



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.

The project involved communities in planning and decision making to enhance project sustainability after handover.

Through the network of small-scale farmers in Mozambique, the project mobilized 1350 farmers, organized into 30 farmer clubs participating in project activities.

On gender-specific themes, the project delivered components of the Agriculture Sector Gender Strategy of 2005. At the operational level, the farmer clubs program prioritized gender equity in delivery of its mandate. For instance, it advocated for gender equity in extension services. This was done by mobilizing women through the farmer clubs. A total of 757 women farmers were mobilized, representing 59% of participating farmers.

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?

To secure high-level support, the project entry point was through the government-endorsed farmer clubs. Government officials were also involved in the project. The project was managed by a steering committee that included government workers – specifically provincial Directors of Agriculture and Directors of the District Services of Economic Activity from all the districts involved in the project. Besides the steering committee, the project was overseen by a High Level Consultative Board, where a representative of the Ministry of Agriculture was a member. The project also built on key Mozambique government policies and strategies. It supported two key policies on agricultural productivity, infrastructure and markets, and land and natural resources. It was also in line with the National Strategy on Food and Nutritional Security, Extension Master Plan of 2007.

Going forward, the project also aims to influence relevant country and regional policies. For vertical upscaling, project results, outcomes and experiences were shared with policy makers at the Ministry of Agriculture and the Ministry of Coordination of Environmental Action through the farmer club program's high level consultative board. This will ensure the project informs both current and future policy.

* 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.

Training was a core project activity. The project trained farmers on three CA principles, namely: i) minimal soil disturbance (no tillage and direct seeding); ii) mulching (maintenance of mulch or carbon-rich organic matter covering the soil); and iii) crop rotations, including using nitrogen-fixing legumes.

Capacity building was achieved through involving communities in planning and decision making to build their management capacity.

To ensure built capacity is maintained beyond the project, trained farmers will be involved in the project operation after handover. Most importantly, policy makers were also involved to ensure CA is integrated into mainstream policies to facilitate wide-scale dissemination.