



ADPP'S MODEL FOR DEVELOPMENT OF SUSTAINABLE AGRICULTURE AND AGRICULTURE VALUE CHAINS FOR SMALL SCALE FARMERS

CHALLENGES FACING SMALL SCALE FARMERS IN MOZAMBIQUE

In Mozambique 3.8 million small scale farmers supporting around 25 million family members (comprising 80% of the country's population) depend on rain-fed crops. The majority of these farmers apply traditional and manual farming techniques, have insufficient technical assistance and basic infrastructure, and have limited access to markets to sell their crops. In recent years, their situation has been further exacerbated by climate change impacts, including draught and flooding, as well as extreme weather events such as tropical cyclones. Their productivity is low, post-harvest losses are high and food security is not assured.

A VISION FOR THE FUTURE

ADPP Mozambique (ADPP) is a Mozambican non governmental organization working in the areas of Education, Health, Sustainable Agriculture and Environment. ADPP programs are designed to empower individuals, families and communities to make positive changes in their lives, through local capacity building and an integrated approach to development that links education, health and community development. ADPP recognizes government as a keyplayer in promoting long-term sustainable development and fosters close working partnerships with local, provincial and national government officials.

ADPP programs supporting farmer communities aim to contribute to the achievement of the Sustainable Development Goals, especially:



THE FARMERS' CLUB MODEL

ADPP's Farmers' Clubs model is a holistic and nature-based approach to address the challenges faced by small scale farmers. The model - which is being successfully used in many countries in sub Saharan Africa¹ - builds the capacity of farmers and guides them to develop plans to build their resilience as individuals and organized farmers and producers, impacting families and entire communities. The model adopts a farmer-centered approach where the farmer is the main driving force and the leader in the planning and development of all actions at individual, household and community level.

The model promotes improved management of natural resources, while at the same time offering economic strengthening to farmer households. Since 2004, ADPP has trained 34,000 small-scale farmers in 9 provinces of Mozambique through projects lasting 3-6 year. Farmers participating in Farmers' Clubs generally increase their income by 100% over a period of 2-3 years, while also diversifying their food production. Farmers' Clubs typically address a wide range of issues as part of a comprehensive plan to improve production and income for farmers, including: improving the organization of the farmers, building sustainable production methods, facilitating improvement in soil, increasing sustainable use of water resources, improving irrigation systems, increasing tree planting, improving storage, building agro-processing, improving market access, building value chains and providing financing.

¹ For more about the Humana People to People Federation and the Farmers' Clubs model, please see: <https://www.humana.org/what-we-do#sustainable-agriculture-and-environment>

SELF-ORGANIZATION

Improving self-organization among farmers is critical to facilitating learning, knowledge exchange, product aggregation, improved access to markets and continuous collaboration among farmers. Farmers are organized into Farmers' Clubs with up to 50 members per club. Typically, women make up about 55 per cent of Farmers' Club members. The Farmers' Club concept supports farmers to shift from traditional farming methods towards more climate-resilient agriculture practices, increasing productivity, improving food security and increasing income and profit. The Farmers' Club approach gives farmers a forum where they can exchange experiences, hone best practices, discuss small and big challenges, and discuss and test solutions. Through improved organization, Farmers' Club members can come together to invest in quality storage facilities to secure their harvest, organize joint selling of produce in bulk to negotiate for increased prices, and many other actions to improve their farming practices and outcomes.

SUSTAINABLE PRODUCTION WITH SOIL IMPROVEMENT

One of the fundamental elements in climate resilient agriculture is soil improvement with organic matter. Improved soil management also offers carbon sequestration benefits supporting climate change mitigation efforts. On demonstration fields, farmers in Farmers' Clubs learn, in theory and practice, about soil improvement and conservation farming methods such as crop rotation, intercropping, no tillage, mulching, compost production, use of green cover crops, organic-based pest control, introduction of new crops and creation of seed banks. The farmers then replicate these techniques on their own fields.

WATER RESOURCE MANAGEMENT AND IRRIGATION

One of the main challenges is to give farmers access to decentralized water and irrigation systems enabling them to produce all year around. Water sources used by Farmers' Clubs have included small rivers and lakes, water wells, boreholes drilled with manual or mechanical drilling equipment and small water dams constructed for accumulation of rainwater. Different pumps can be introduced such as manual rope water pumps, treadle pumps and solar powered pumps combined with irrigation systems. Farmers and water committees can be trained in operating and maintaining the equipment and ensuring that water is used efficiently.

TREE PLANTING

Agro-forestry offers an attractive solution to creating climate resilient agriculture or agro-pastoral systems. Trees combined with crop production helps to store carbon, provide soil improvement and protection, increase shade, decrease water evaporation, and create a humid atmosphere. Trees can also provide many additional benefits to households such as fruits, firewood, construction materials, fodder for animals, fencing, and ornamentation. Farmers' Clubs can be mobilized to establish local tree nurseries and to plant trees in and around farm fields and around households.

STORAGE AND AGRO-PROCESSING

To decrease post-harvest losses and increase farming income, storing and processing of crops are essential. Proper storage and processing can help improve overall food security and economic strengthening of farmer families. Household and smaller storage facilities can be constructed, enabling farmers to store and sell their crops in bulk, obtaining a better price. Pro-



cessing equipment like maize mills, oil presses and fruit/vegetable dryers can be introduced by Club members to provide new business opportunities, jobs and to improve the local economy.

MARKET ACCESS

Farmers' access to markets is often limited due to remote location, poor road infrastructure, limited negotiation skills and untapped aggregation capacity of the farmers. The Farmers' Club model can be used to train farmers in production planning and marketing, to establish improved connections with local markets, to identify opportunities within key value chains, to promote the production of products aligned with market demand, and to facilitate the creation of market linkages to big buyers.

FINANCING

In Mozambique, production of small scale farmers has, for decades, been characterized by low yields and modest returns with limited possibility to create a surplus to fund investments. Credit services have been difficult for the farmers to tap into, due to high interest rates and lack of collateral. Farmers' Club members have been able to organize saving and rotational credit groups enabling them to build savings and obtain credit for small investments to make improvements in production and livelihoods.

ADAPTING THE FARMER'S CLUB MODEL

The Farmers' Club model can be adapted to fit the needs of people and their particular production circumstances. For example, Farmers' Clubs can be used to organize people involved in agri-processing, agri-services, animal husbandry, sustainable fishery and processing, non-timber forest products, and more. Different components can be developed and added to the Club concept, depending on the objective of specific programs, funding, local conditions, and market needs.

Following this principle, ADPP has used the model to establish Producers' Clubs, Animal Husbandry Clubs, Fishermen/Women Clubs, and Livelihood Clubs. Whenever possible, ADPP also includes training in financial literacy, improved nutrition, hygiene, health and prevention of most common diseases, construction of firewood saving stoves, gender, legal awareness, farmers and human rights, and much more.



KEY RESULTS OF THE FARMERS' CLUB MODEL IN MOZAMBIQUE

700 Farmers' Clubs established;

34,000 small-scale farmers trained in sustainable agricultural practices, 54% of them women;

3,500 Farmers' Club Committee members trained in managing the clubs;

170,000 family members benefitted from improved food security;

1,123 demonstration fields established;

618 wells constructed and rope water pumps installed;

113 solar powered irrigation systems established;

8,965 farmers benefitted from seed multiplication plots;

2 million trees planted in farmers' fields and household gardens;

4,305 household storerooms built;

22 small warehouses constructed and managed;

83 processing units, mills, presses and dryers established;

4,641 small animals handed over to farmers in pass on systems;

925 beehives established for honey production;

2,250 farmers trained in sesame production, resulting in increased production of 67% per ha (from 390 kg/ha to 650 kg/ha);

15,815 farmers, men and women, supported to develop business plans;

4,282 farmers linked to buyers of sesame;

324 saving clubs established;

6,166 farmers completed literacy courses;

13,206 farmers received title deeds (DUATS) for their land;

8,748 firewood saving stoves constructed;

11,877 latrines constructed.

