Ministry of Green Economy and Environment
Zambia Integrated Forest Landscape Project
Improving Lives through Sustainable Management of Natural Resources

Support to farmer field schools aims at yielding results for both the farmer and the climate

Context

The Zambia Integrated Forest Landscape Project (ZIFLP) is a Government initiative in the Ministry of Green Economy & Environment, supported by the World Bank and partners. Its aim is to improve livelihoods of rural communities in Eastern Province while supporting them to sustainably manage land, forests and wildlife.

Working through the Ministry of Agriculture, the ZIFLP support to agriculture in the Eastern Province aims to sustainably increase crop production and productivity by promoting increased adoption of Climate Smart Agriculture (CSA) practices. These objectives were anchored within the first pillar of the Seventh National Development Plan that of economic diversification and job creation. The intention is that increased adoption of Climate Smart Agriculture activities leads to increased production and productivity resulting in better food security, good nutrition, increased income and improved livelihoods.

The farmer field school – Approach

Under Climate Smart Agriculture, ZIFLP supports a training of trainers methodology using the farmer field school approach. A farmer field school is a learning approach that is field oriented and participatory, emphasizing on learning by doing. The training takes place over an extended period such as a growing season and involves classroom and field work. Farmer field schools (FFS) can also be defined as a Platform or "School without walls" for improving decision making capacity of farmers and stimulating local innovation for sustainable agriculture.

The basic purpose of Farmer Field School is to enable small-scale farmers investigate and learn for themselves the practices and skills required for, and benefits to be obtained from, adopting CSA practices in their fields. The training is holistic and it follows the farming systems adopted by participating farmers.

Practices being promoted in the Farmer Field Schools include:

a.   Crop Production Management – where farmers learn; crop diversification, intercropping, crop rotation, crop production under climate smart agriculture, pest and disease management and post-harvest management and storage.

b.   Land preparation and soil management – where farmers learn the benefits of conservation agriculture, the principles of conservation agriculture, minimum tillage and soil health.

c.   Agro forestry – involves the usage of plants that have the ability to fix nitrogen in the soil and produce large quantity of vegetation known as biomass.

d.   Good crop post-harvest handling and management practices- involves drying and storing of grain at a required moisture content in appropriate storage facilities. Hermetic crop containers including PICS, plastic and metal silos are promoted.

The metal silo technology is a climate smart technology that provides a solid barrier to rodents, pests and reduces the Aflatoxin contamination as it thrives under the principle of air tightness (hermetic principle) to deprive the living organism of oxygen in storage thereby increasing the storage life of the produce.

Working at scale in Katete

The Project has established 40 Farmer Field Schools dotted in the 20 Agricultural Camps found in Katete District.

Over 900 (532 males and 368 females) Lead Farmers in Climate Smart Agriculture have been recruited and trained.

Each lead farmer has recruited and trained 10 follower farmers bringing to 9,900 the number of farmers supported by the project in the Katete district.

Each Farmer Field School has been supported with a ripper, sprayer, 2 Chaka holes and 1 metal silo to be used for demonstration purposes. Inputs including maize seed, soya beans, sunflower, fertilizers and chemicals are also provided yearly to sustain learning and existence of the farmer field schools.

In the 2020/21 farming season, the district managed to propagate over 500,000 seedlings (214,610 Musangu and 256,410 Gliricidia sepium) at the farmer training centre, of these, 300,000 were distributed to other districts while the rest were distributed to interested farmers within Katete. This has encouraged incorporation of trees within cropping systems.

Post-harvest handling – the Project fabricated and distributed 40 metal silos to the 40 famer field schools in the district. The silos are meant to encourage farmers to adopt improved storage practices through the established Farmer Field Schools

Project Impact

Through these efforts, ZIFLP has seen:

• 190,304 hectares of agriculture land being brought under sustainable management practices of which Katete has about 15,000 hectares

• 98,102 farmers adopting climate smart agriculture of which 5,304 are in Katete

Profile of one Katete farmer adopting CSA

Mr Wilson Banda, located in Zemba village, Mzime Agricultural Camp, specifically Luso Farmer Field School. Mr. Banda is one of the 900 Lead Farmers that were recruited and trained under the ZIFLP in Katete District. Since 2018, Mr. Banda has adopted and is practicing climate smart agriculture as a way to promote soil health and crop diversification. He practices;

i. Minimum tillage, plants certified crop seed varieties, retains crop residues for soil cover, crop rotation, early and timely planting, weed, pest and crop disease control

ii. Good post-harvest management practices and stores his grain in a metal silo which has improved his household food security.

Crops grown include Maize, Soyabeans and sunflower, mainly to promote crop diversification and soil health through crop rotation and CA ripping aimed at improving sustainable crop yields. The size of his field is six (6) hectares where the three stated crops are grown following CSA principles.

For the 2023/24 farming season, Mr. Banda has already started land preparation in readiness to plant the moment the rains start.

Protecting soils, increasing productivity, improving livelihoods

The intention is that increased adoption of Climate Smart Agriculture activities leads to increased production and productivity resulting in better food security, good nutrition, increased income and improved livelihoods.

Together these interventions will lead to reduced emissions of greenhouse gases from agricultural soils while promoting sustainable management of natural resources.

The **Zambia Integrated Forest Landscape Project** is a GRZ initiative which provides support to rural communities in the Eastern Province to allow them to better manage the resources of their landscapes so as to reduce deforestation and unsustainable agricultural expansion; enhance benefits they receive from forestry, agriculture, and wildlife; and reduce their vulnerability to climate change.

ZIFLP is a product of cooperation between the Government of Zambia, the World Bank & partners.

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