UGANDA

OVERCOME CLIMATE CHANGE DAMAGES ON SUNFLOWER SEED PRODUCTION TO BOOST SUSTAINABILITY AND LOCAL FARMERS LIVELIHOODS

Presenter

Kule Yona by Kyempara Farmers Cooperative Society Limited

Description

In Uganda, most parts of the district have been adversely affected by the negative impacts of climate change, which brings a lot of uncertainty especially in the field of agriculture. Over the years, this has resulted in reduced crop production and to an extent is also affecting the livestock sector.

Rainfall is critical for crop production and its reduction leaves farmers vulnerable. In particular, moisture stress affects sunflowers, main promoted crop, and this has also led to food shortages throughout the district, increasing dependence on food assistance for survival and to meet daily food needs.

As a way of addressing climate issue of drought that has always hit Kasese and cause low yields, farmers have begun to

1. Promote recommended agronomic practices like early seed bed preparation, early planting that are key in avoiding climatic hazards.
2. Promote access and use of quality agricultural inputs including organic fertilizers (compost fertilizers and farmyard manure) through credible suppliers.
3. Observe soil and water conservation measures as a way of improving and/or maintaining soil fertility. Special attention will be put on agro-forestry and irrigation where applicable.
4. Promote of GAP such as Crop rotation like soya beans and ground nuts, mulching, compost manuring, crop waste recycling and use of cover crops.

Results

The efforts and practices adopted in the crop cultivation are ensuring that the sunflower enterprise is economically viable for the cooperative and the farmers. There is a demand for edible sunflower oil and derived products such as seed cake for animal feed. These services include access to quality inputs, extension services and timely payments for farmers' produce. The Kyempara Farmers Cooperative Society will provide affordable produce and ensure year-round availability of its products. Local farmers will also save the cost of delivering sunflower products to the factory.

Similarly, more local landowners will be able to grow sunflowers and KFACOS will be able to buy their produce. This will stimulate the local economy and improve the cash flow livelihoods of community members.

More than 30 job opportunities will be created directly and more than 5000 indirectly as farmers, distributors, sales agents and field mobilisers.

Target of 5,000 acres of minimum sunflower production/acre, 800kgs/1 acre, 1,000 tons per season and 2,000 tons per year will be respected. Note: The target has been divided into two seasons each year; in the first-year season A - 1030 farmers will produce 824 metric tonnes, season B - farmers will produce 1000 metric tonnes and in the second-year season A - 1335 farmers will produce 1080 metric tonnes and season B - 1370 farmers will produce 1096 metric tonnes. In two years, therefore, a total of 4,000 metric tonnes will be achieved to enable the processing machine to work at full capacity during the project implementation period.

Climate smartness

This story put into perspective how the association and joint effort towards a common purpose can trigger multiple opportunities across the different stages in the sunflower value chain. The input supply and on-farm production, considers the use of organic fertilizers as an environmentally responsible and healthy option for crop nutrition. This complemented by soil and water management practices such as mulching and crop rotation (and eventually agroforestry systems and irrigation), essential practices to maintain biodiversity, balanced water cycles in the agroecosystem and sustain soil formation and fertility in the long term, which minimizes moistures stress that limit sunflower yield. Early planting may also have a synergistic effect if it is linked with agroclimatic information advisory services. In the harvesting and storage stage, adequate warehousing conditions lead to reductions in postharvest losses, and where applicable make efficient use of energy and other resources. These practices may also represent co-benefits in terms of GHG mitigation, as atmospheric carbon has the potential to be stored in and above- and below-ground biomass including soil organic matter. Finally, in the marketing stage, the demand for by-products from sunflower production is a positive indicator not only about the potential market orientation and requirements, but also on the type of educational, technical and financial services required to fulfil the cooperative´s projections. Alliances with key stakeholders in the sector contribute to expand and consolidate reliable commercial networks increasing the resilience capacity of the cooperative, under fluctuating marketing conditions and especially those that can be affected by climate-related risks and hazards.