Federal Ministry of Food and Agriculture

Food and Agriculture Organization of the United Nations

SCALING UP CLIMATE-SMART CROP AND MECHINIZATION SYSTEMS IN SRI LANKA AND ZAMBIA

This project complemented GCP/INT/259/GER, which focuses on the implementation of Save and Grow practices in rice- and maize-based crop production systems. The Save and Grow approach, promoted by FAO, is a means of intensifying sustainable crop production and comprises agronomic practices that leverage ecosystem services, resulting in increased crop yields while simultaneously preserving financial and natural resources.
Under project GCP/INT/259/GER, the following were identified as challenges to the adoption of sustainable crop production practices: (i) inadequate knowledge of sustainable agronomy and of its benefits; (ii) inadequate market linkages, limiting the availability of sustainable agronomic inputs and mechanization services; and (iii) inadequate market linkages for the sale of crop yields.
This project was therefore designed to assist small-scale farmers in Sri Lanka and Zambia to overcome the above-mentioned constraints and foster the adoption of Save and Grow practices in targeted communities in both countries.

WHAT DID THE PROJECT DO?

Under this project, business plans for Save and Grow hubs were developed. Three such hubs were established in Zambia, and one was established in Sri Lanka. Building capacities of government staff and farmers on climate-smart crop and mechanization systems through training sessions and hands-on learning experiences was another of the project's major achievements. To support the implementation of the practices promoted by the project, the agronomic inputs and mechanization services required for sustainable cropping systems were provided.
The cropping systems demonstrated under the project were tailored specifically to the contexts of the targeted countries. The systems were deemed superior to the existing ones based on farmer, agronomic and economic assessments.

IMPACT

Under this project, business plans for Save and Grow hubs were developed. Three such hubs were established in Zambia, and one was established in Sri Lanka.
Building capacities of government staff and farmers on climate-smart crop and mechanization systems through training sessions and hands-on learning experiences was another of the project's major achievements. Throughout both countries, television and radio programmes disseminated awareness of the project activities.
The cropping systems demonstrated under the project were tailored specifically to the contexts (farming systems) of the targeted countries. The demonstrated farming practices were deemed superior to the existing ones based on farmer, agronomic and economic assessments.

KEY FACTS

Latest Approved Budget
USD 1 000 000

Duration
June 2019 – December 2021

Resource Partners
Bundesministerium für Ernährung und Landwirtschaft (German Federal Ministry of Food and Agriculture [BMEL])

Beneficiaries
Staff of relevant line ministries and departments and small scale farmers

ACTIVITIES

In Zambia:

- Farmers aggregated, negotiated prices for and marketed their produce through the hubs.
- A total of 70 Farmer Field School (FFS) demonstration sites were established, where beneficiaries participated in hands-on learning activities.
- Technical support and services were provided through the hubs to promote the adoption of the demonstrated crop production intensification practices, benefiting 750 hub members and more than 1 500 farmers.
- Five field days were conducted to share lessons and disseminate sustainable crop production intensification practices.
- One Training of Trainers (ToT) session on sustainable crop production intensification practices was carried out for lead farmers and selected staff.
- Training sessions on farming as a business were conducted for hub members.
- One residential training session on mechanization operation was conducted at the AKTC in Chisamba for selected FFS lead farmers and extension staff.
- Technical support was provided to the District Agriculture Coordinating Officers and hub managers to develop business models to guide the operation of the respective hub businesses.
- Provision models for mechanization services were tested in three hubs (Chongwe, Kasama, and Mumbwa districts), and they were subjected to a validation process through stakeholder consultations in the three districts and at national level.

In Sri Lanka:

- A hub-centred machinery hiring concept was co-developed with the Department of Agriculture (DoA).
- Baseline information was analysed for the development of hub-specific business plans.
- 500 farmers were trained on machinery use, 250 agricultural extension officers received training on modern technologies for agricultural mechanization, and 20 farmers were trained on seed paddy production and seed certification systems.
- Plots were established to demonstrate the use of farm machinery and agronomic practices were adopted on 40 ha of maize and paddy farms.
- Extension officers and officers from the Ministry of Agriculture (MoA) were trained in RuralInvest.
- A video guide on the concept of the hub, and three video guides on sustainable intensification practices were developed and disseminated.

In both countries:

- Agronomy curricula were developed with DoAs, and the curricula were published for nationwide use.
- The planting of well-adapted varieties of seeds was promoted through the distribution of inputs and training, and machinery was procured for the hubs.

SUSTAINABLE DEVELOPMENT GOALS

Partners

Sri Lanka: Department of Agriculture (DoA); Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI); Rice Research and Development Institute (RRDI); Field Crop Research and Development Institute (FCRDI); Department of Agrarian Development; Provincial Agriculture Department; Farm Mechanization Research Centre (FMRC); Farm Mechanization Training Centre (FMTC).
Zambia: Zambia Agriculture Research Institute (ZARI); Grassroots Trust Limited; Department of Agriculture; Agriculture Knowledge and Training Centre (AKTC); Conservation Farming Unit (CFU); Evergreen Multi Purpose Cooperative Society; Lwabwe Multi Purpose Cooperative Society; Nakamu Multi Purpose Cooperative Society Ltd

Project Title
Climate-Smart Crop and mechanization systems Scaling-up (CSCS)

Project Code
FAO: GCP/INT/398/GER
Donor ID: GER-FAO-2019-8

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CC0767EN/1/06.22