

CAPACITY BUILDING OF SMALL-SCALE POTATO GROWERS IN PUNJAB PAKISTAN

Locations	Pakistan
Dates	01/12/2020 - 31/05/2023

Summary

Potato is an important crop in Pakistan for both consumers and producers. It is nutritious, produces high returns and there is a potential to increase yields by using good potato cultivation practices. However, a lack of knowledge concerning these is inhibiting many smallholder farmers in their effort to raise productivity. Furthermore, unsuitable management of threats, such as pests and diseases, increases losses. In this project, CABI aims to mitigate challenges faced in the smallholder potato sector by building the capacity of small-scale potato growers, and in particular women, in good agricultural practices, including the sustainable and safe use of pesticides, in the Punjab province of Pakistan.

The problem

The Punjab province of Pakistan is one of the most important potato growing districts – over 95% of potato production originates from Punjab. The crop is significantly valuable as a commodity for both farmers and consumers.

However, the productivity of the small-scale potato grower is affected by farmers' approaches to farming practices and the way they tackle problems, such as pests and diseases.

Improper management and the cost of inputs, including fertilizers, for the potato crop are two reasons for low crop production. These lead to higher production costs and diminished incomes for farmers. For example, farmers typically apply more fertilizers without considering the fertility status and crop requirement, resulting in increased costs. Furthermore, the improper handling of harvested potatoes results in higher post-harvest losses.

The knowledge gap concerning the identification of insects and diseases of the potato crop cause the unjustified and unsafe use of pesticides – overusing pesticides, applying them too early or too late, and without protective measures – which increases the number of threats to the crop and negative impacts on human health.

One other major constraint is the lack of high-quality seed and the farmer's skill in selecting it, forcing farmers to rely on poor-quality seed or seeds they have produced themselves.

A lack of extension services and technical training for female farmers who are involved at various stages of the potato value chain is also an issue because it reduces their involvement in production and decision-making.

What we are doing

The overall aim of the project is to increase productivity and sustainability of the potato smallholder sector in Punjab, with particular attention given to supporting the role of women and good agricultural practices.

The project will deliver improved productivity and sustainability of potato production for 950 smallholder farmers in four core potato districts of Punjab through an intensive two-and-a-half-year potato training and extension programme.

This project will build the capacity of small-scale potato growers in selecting good quality seed while promoting the sustainable and safe use of pesticides. Knowledge and skills to farmers, particularly women, will be provided to help motivate them to become actively involved in the potato value chain.

The project will provide training to small-scale farmers so that they can obtain the necessary technical skills and overcome constraints. Technical knowledge related to post-harvest practices will be provided to the farmers to help reduce losses.

Training and extension will be achieved through Training of Trainers (TOT), practical demonstrations, farmer field training, provision of extension support to farmers, organization of field days combined with tailor-made manuals and extension materials translated into Urdu, for use by trainers and farmers in Punjab.

Results so far

Project activities are aimed at increasing the capacity of smallholder potato growers in Punjab through training and extension, with a particular focus on strengthening the role of women.

Intensive training on 'advanced potato production practices' is being carried out throughout the project and has included:

- Four CABI master trainers trained by Wageningen University & Research (WUR) on good production technology of potatoes
- Twenty-four project master trainers, including eight women, trained through a ToT session comprising seven modules, followed by three

refresher sessions
- ToT and farmer manuals developed with the technical support of WUR and disseminated; additional extension materials including flyers, videos, news and blogs have also been created and shared with farmers
- Approximately 500 farmers (100 women farmers) and labourers trained on seed and ware crop from 60 training sessions during 2021-2022
- Approximately 450 farmers (90 women farmers) in the targeted districts are due to be reached during 2022-2023
- Seven ‘Farmer Field Days’ (for registered and non-registered (300 non-registered) potato growers) organized to demonstrate recommended practices
    - Topics for these intensive training sessions and farmer field days included land preparation, seed planting techniques, fertilization and irrigation, plant health issues, harvest, post-harvest and storage methods
- Thirty-four demonstration plots for seed and ware crops have been established in four districts to show the distinction between production technology for seed and ware crops respectively.

Other activities include:

- A baseline survey to assess current production practices and to identify the constraints faced by farmers, especially women farmers
- A tool to identify the role of gender in the potato value chain has been developed and tested on farmers as part of the baseline survey
- Regular meetings with major stakeholders and input suppliers continue whereby updates on project progress and activities are given.

In addition to the advanced potato practice training, women farmers were trained on their role in the potato value chain. Women were also empowered with information on the nutritional benefits of potatoes, kitchen gardening, access to financial assistance and safety measures.

Donors	Netherlands Enterprise Agency (RVO)
Partners	Agriculture Extension Department, Punjab, University of Agriculture Faisalabad, Pakistan Agriculture and Research Council, Wageningen University & Research






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