



STRENGTHENING FOOD SECURITY POST COVID-19 AND LOCUST ATTACKS

Locations Pakistan

Dates 01/02/2021 - 31/12/2024

Summary

Thirty-seven percent of Pakistan's population is already vulnerable to food insecurity. This figure will soon exacerbate given the effect of recent external challenges including the rapid spread of COVID-19 and its subsequent Government restrictions, and Pakistan's largest locust infestation which devastated large areas of agricultural land, including cotton, wheat, maize, and other crops. Adding to this turmoil are recent extreme weather events which demonstrated that Pakistan's food security and agriculture are critically exposed to the adverse impacts of climate change. In this project, CABI will support the Ministry of National Food Security and Research (MNFSR) and four provincial agriculture departments in adopting technologies and advanced practices to manage these impacts, disseminating these to stakeholders and recommending measures for building long-term resilience and sustainable food security.

The problem

More than 20% of Pakistan's 212 million population is undernourished, 24% live below the national poverty line, and 39% are categorized as multidimensionally poor.

During 2019 and 2020, Pakistan's economy slowed dramatically. Its food supply chains faced hardship because of external factors beyond its control including COVID-19 and subsequent Government restrictions and the country's largest locust outbreak in 25 years. Locust swarms, migrating from neighbouring Iran, devastated large areas of agricultural land, ravaging cotton, wheat, maize, and other crops, prompting Pakistan to miss its production target for wheat by around two million tonnes, leading the country to import wheat for the first time since 2014.

Low yields resulted in wheat and other food grain prices increasing, pushing general inflation in September 2020 to 9.0% nationwide and 11.1% in rural areas. Loss of income and remittances reduced purchasing power and induced food security risks.

Furthermore, Pakistan is listed fifth in the world of countries that have remained most affected by climate change since the 2000s.

With recurrent catastrophes of extreme weather events, including floods, droughts, and heatwaves, Pakistan remains vulnerable to climate change which heightens the country's food insecurity and underperforming agricultural sector.

Agriculture in Pakistan is not performing to its full potential. To combat these problems and be ready for challenges, such as these, in the future, Pakistan needs to build resilience and put measures in place to help ensure food security.

What we are doing

The goal of this CABI-led project is to help to sustain national food security, increase resilience in agriculture and increase national food security.

This will be achieved by strengthening the institutional capacity to manage a sustainable food security system.

The upgrade of pest management and practices will address current ineffective strategies that will increase safety and sustain ecosystems while meeting international standards for pests and diseases, and in particular, locusts. The adoption of climate-adaptive crop protection and production practices will improve resilience in agriculture.

The project involves two main areas of activity:

Support the MNFSR through the Department of Plant Protection (DPP) and provincial agriculture departments by:

- demonstrating at least three technologies e.g. ICT-supported drones, calibration of spraying equipment, digitalization of pest surveillance data, remote sensing
- applying international best Integrated Pest Management (IPM) practices to ensure safe and environmentally-friendly management of the locust and other pests
- training at least 200 officials from DPP and four provincial agriculture departments to apply integrated pest management practices and training master trainers.

Support rural communities increase their capacity to combat the impacts of climate change and natural hazards

- provide at least 2,000 farmers and staff members of local non-government organizations (NGOs), 10% women, with best practices in sustainable

crop protection

- demonstrate at least three technologies for climate-adaptive seed development or crop production e.g. Direct Seeding of Rice, zero tillage and mechanical seed cleaning

Training agricultural staff to increase their capacity in the diagnosis of crop pests, Sanitary and Phytosanitary (SPS) requirements, IPM and safe use of pesticides is important. It is expected that after the adaption of the technologies, government staff will be able to support small landholders to manage the pest problems in a sustainable and environmentally-friendly way, which will ultimately benefit the livelihoods of the farmers.

Results so far

Since the project started, a project inception report has been developed and a two-year work plan prepared.

Research activities have been finalized with research institutes and research studies have been initiated with the Nuclear Institute of Agriculture and Biology (NIAB), National Institute for Biotechnology and Genetic Engineering (NIBGE), Wheat Research Institute (WRI) and Rice Research Institute (RRI) research institutes under the climate-adaptive and disaster-resilient agriculture research component.

Through a series of training programmes, the capacity of government officials from four provinces of Pakistan (Khyber Pakhtunkhwa, Punjab, Sindh and Balochistan) is being built.

So far, 386 agricultural officials (335 men and 51 women) have been trained in the identification of pests, SPS measures, IPM and the safe use of pesticides for enhanced food security and resilient agriculture in Pakistan.

A total of 3225 farmers (2622 men and 603 women) have been trained, 933 farmers (759 male, 174 female) from Khyber Pakhtunkhwa, 1041 farmers (897 male, 144 female) from Punjab, 957 farmers (712 men and 245 women) from Sindh and 294 farmers (254 men and 40 women) from Balochistan, in sustainable crop protection practices, IPM, safe and judicious use of pesticides and safe storage of food grains and by-products.

Donors

Asian Development Bank

Partners

Federal Department of Plant Protection (MNFS&R), Agriculture Department, Government of the Punjab, Agriculture Department, Government of Sindh, Agriculture Department, Government of Khyber Pakhtunkhwa, Agriculture Department-Government of Baluchistan

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