

REARING NATURAL ENEMIES TO CONTROL CROP PESTS IN PAKISTAN

Locations	Pakistan
Dates	21/01/2019 - 21/01/2021

Summary

Protecting crops from pests and diseases in Pakistan is still reliant on unsustainable pesticide practices. Between 1980 and 2004 the use of pesticide increased by over 6,600 percent, despite yields remaining stagnant over the same period. Since 2004, Integrated Pest Management (IPM) methods have proved successful for reducing pesticide use and protecting human health and the environment. This project aims to establish 50 Natural Enemies Field Reservoirs (NEFRs) to tackle crop pests directly and train over 31,500 farmers and extension staff on implementing IPM technologies in Sindh province.

The problem

As the second-largest consumer of pesticides in Asia, Pakistan’s use of these chemicals is a threat to human health and the natural environment. With cotton

and horticultural crops receiving more than 70% of pesticides used on all crops, insect pests are becoming increasingly resistant to the chemicals, while beneficial natural pest enemies are being destroyed by these same chemicals.

With current approaches to pest control in Pakistan neither environmentally or economically sustainable, alternative solutions are needed. In the last decade or so, the small scale adoption of IPM practices and maintaining natural enemy populations has proved successful in maximising crop yields while reducing pesticide use for certain crops. However, further capacity building and technological support for farmers is required to develop IPM practices in the country.

What we are doing

To address unnecessary and damaging pesticide use in Pakistan, the CABI team aims to implement a number of IPM activities designed to promote environmentally friendly biocontrol technologies and build capacity among farmers, extension staff and other key agricultural stakeholders in Sindh province.

Key to the success of the project will be the establishment and operation of 50 NEFRs providing long term sources of beneficial natural enemies to control 11 key pest species of guava, mango, cotton, sugarcane and okra crops. To support in the functioning of the NEFRs, plant clinics will run on the sites and four biological control laboratories in Sindh province will assist with sample sorting and monitoring the impact of biocontrol agents.

Additionally, 31,500 farmers and extension staff and 36 Project Implementation Unit staff from SIAPEP will receive training on NEFRs technologies and IPM. Complimentary to this will be the development and dissemination of crop wise information extension and communication materials for farmers and extension staff.

Donors

Productivity Enhancement Project (SIAPEP), Sindh Irrigated Agriculture






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