Certified organic cotton production contributes to less than 1% of global cotton cultivation. This is because access to organic cotton seed is so difficult. In Pakistan, the lack of policies, availability of non-Genetically Modified Organism (GMO) seed and weak links with input suppliers and supply chains makes organic cotton farming demotivating and uninteresting for farmers. This project will create a conducive ecosystem for organic cotton and contribute to the long-term availability of non-GM cotton seed and organic inputs for farmers with a self-sustaining approach.
The problem

The cultivation of GMO cotton seeds is widespread in Pakistan due to a number of reasons: the lack of any organic cotton policies, the unavailability of non-GMO cotton seed, the very weak to non-existent links with input suppliers and supply chain actors, and the lack of farmers’ interest in organic cotton.

In particular, because non-GMO seed is not available quickly or in the required quantities, farmers are demotivated. An explorative survey by Louis Bolk Institute in 2015 reported that 90% of respondents, from the countries where GMO cotton is predominant, felt it was “difficult” to “impossible” for them to access organic cotton seed.

The presence of pesticides is also creating problems. The toxic effects of chemicals are causing 25 million agricultural workers – including a significant number of women – to suffer from pesticide poisoning each year.

Women are important contributors to the cotton sector. There are certain tasks in cotton farming that are exclusively performed by the women including sowing, weeding and picking. Due to women having direct contact with the cotton plants, they are at risk of being affected by chemicals.
What we are doing

The aim of this project is to support the procurement, production and certification of non-GMO cotton seed and develop organic cotton policies in Pakistan. CABI will work in two main domains of change:

1. Sustainable availability of non-GMO seed and other organic inputs
2. Influence systems for better input supply and seed systems, and policies for non-GMO seeds

CABI will train farmers in Balochistan on how to multiply non-GMO seed on their farms. The organic seed products will be utilized at their own farm and then sold to other farmers in Balochistan and Pakistan (mainly Sindh and Punjab). Once the Balochistan farmers are able to produce their own non-GMO seed in bulk, they will use it for their own cultivation of organic cotton but also supply non-GMO cotton seeds to cotton growing hotspots of Sindh and Balochistan.

In this project, 181 organic cotton farmers in Balochistan, covering total 200 ha of the cotton crop, will be trained as lead or trained farmers. A key goal will be the Balochistan farmers being able to choose and multiply non-GM seed varieties, suitable for organic cotton farming, that have a good resistance to pests and diseases and produce satisfying yields.

Balochistan farmers will be connected with various input suppliers and seed marketers and the non-GMO cotton seed produced will be linked to the seed supply chain system of Pakistan, increasing demand and increasing the production of organic cotton in the country. Through the promotion of available organic cotton seed, the ultimate goal would be for farmers to transition to organic cotton, helping to also minimize the effects of chemicals and bringing health benefits for women and men involved in cotton farming.

CABI will initiate technical and policy interventions for the local availability of organic cotton seed and other non-chemical inputs.

Through our partnership with the C&A foundation, we will work towards a conducive policy at the provincial and national level for promoting organic cotton seed production in Balochistan. This will help organic cotton growers of Balochistan to become certified non-GM seed producers and suppliers of seeds to provinces where growing organic seed would be difficult. The proposed grant will set up a foundation for ensuring the availability of good quality non-GMO seed, initially for Balochistan province, and then for the remainder of Pakistan by identifying good seed varieties, setting up a conducive policy ecosystem to support non-GM seed availability, and engaging the right stakeholders.

More than 200 experts, including those from the Balochistan Agri. Research Institute, Department of Agriculture Extension Balochistan, and CABI staff will benefit from learning and transferring organic cotton knowledge in Pakistan.

The project will provide the foundation for scaling up and targeting 50,000 ha by 2024 in Sindh and Punjab (average landholding size in Pakistan is 5 acres per farmer) and also help to address challenges faced by the clothing industry by ensuring the availability of organic cotton.
Results so far

CABI has engaged key partners in government including the Balochistan Agricultural Research Institute (BARI), Balochistan Agricultural Extension Department, Pakistan Central Cotton Committee (PCCC) and the Ministry of National Food Security & Research (MNFS&R).

Stakeholders have met to discuss the procurement of non-GMO cotton seed varieties for use by farmers in Balochistan and farmers have been identified to take part in the project.

Related blogs:

- Empowering organic cotton growers through plant clinics in Balochistan
- Conservation of beneficial insects through NEFR installation in cotton crop
- Training of organic cotton farmers for seed multiplication

Donors

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Partners

Central Cotton Research Institute (CCRI) Sakrand, Pakistan Central Cotton Committee (PCCC), Balochistan Agriculture Extension Wing, Balochistan Agriculture Research Institute - BARI, Federal Seed Certification and Registration Department (FSC&RD), Pakistan Agricultural Research Council (PARC), Ministry of National Food Security & Research (MNFS&R)

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