Customized Learning

Knowledge Pack

Introduction to the Better Cotton Initiative

THE BETTER COTTON INITIATIVE

Problem Statement for the Better Cotton Innovation Challenge

How might we better enable customized learning for farmers for continuous improvement?

A farmer in the BCI program makes multiple decisions during a growing cycle, such as the selection of pesticides / seeds, time for harvest and duration of remedial measures, and ways of increasing efficiency of farming practices. We found that farmer needs and aspirations vary significantly depending on factors such as farm-holding size, previous experiences, skills, and attitudes. Each farmer requires a slightly different form of support and can benefit significantly from customization.

Innovations over the years have made it possible to provide customization in different ways that are intuitive and adaptive. These include 'adaptive customization' where algorithms provide unique advice to each farmer, 'emotion recognition analytics' where a facial recognition software to measures farmers' attention during trainings, democratizing content creation where local and applicable content is created through a participatory process, remote video-based engagement to drive adherence, voice / speech-based learning technologies to increase ease of use and many others.

BCI Learning Programme

How are farmer needs identified?

Implementing Partners (IPs) conduct annual or biennial baseline studies before the start of the crop cycle, across multiple Producer Units (PUs), based on geographical proximity. This assessment of needs is usually done through a discussion with select farmers.

How is content created?

The content is centrally determined at the IP level for constituent PUs, and mostly sourced from BCI, local agriculture universities, central govt. research institutes, etc. The modules include learnings to be executed during the pre-sowing season (e.g., on administering soil tests, tackling pink bollworm, preparing the land pre-sowing etc.) and agronomic training (e.g., what pesticides need to be used, in what quantity, how it must be administered, etc.).

How is content delivered?

Content is primarily delivered through FFs via in-person trainings conducted 5-6 times a year. There are two types of trainings that are conducted – (i) for farmers training are pre and post sowing season followed by refresher courses and (ii) for labor trainings are conducted during spraying and harvest seasons. Farmer trainings are conducted at a Learning Group (~40 farmers) level. The mode of this training is predominantly through trainer-led instruction, printed collateral, field visits and sometimes via videos sourced from central govt. agencies.

How is feedback collected?

FFs conduct follow-up meetings with farmers, to allow farmers to clarify any doubts or request for more information on a certain topic.