

The Beginning



The first step in the cotton growing process is Land Preparation & Sowing. An important and integral part of farming, it aims to provide a healthy and disease free environment for the seeds to grow. Like a mother's womb it is crucial for this environment to provide enrichment to the seed through balanced and adequate nutrients ensuring successful germination and establishment of the plant through suitable root penetration.

In our soil sampling studies, we find that while the soil in Gujarat is suitable for cotton growing, it remains poor in nutrients, owing largely to the lack of knowledge and small land holdings of the farmers. Unavailability of farmyard manure, erratic and scanty rainfall and poor farming practices all add to the problem and eventually result in lower yield and losses.

Training - Land Preparation & Sowing



Spectrum International along with its local partners equip the farmers through a combination of class room trainings and demonstration plots to meet these challenges. Field Facilitators trained by Spectrum International and a group of field experts conduct training in villages in groups known either as Learning Groups (LGs) within the BCI system or ICS within the Organic system. To ensure that the trainings do not hamper the daily farmer routine, they are conducted either during early morning or late night.

The field facilitators employ various methods such as pictorial depictions of best practices and methods on charts, pamphlets, slide shows and wall paintings. Written content is also provided to the farmers in local languages for easy reference during the process of farming. The following training areas are focused upon for Land Preparation & Sowing:

Farm Yard Manure (FYM): The availability of farm yard manure with most of the farmers is not properly decomposed, is in small quantities, and is not sufficient when spread in large area thereby making it ineffective. Therefore, the soil has to be enriched with nutrients through approved fertilisers (by BCI and Organic) in balanced quantities and at appropriate time as per the stage and growth of the crop.

Spacing: Traditionally, sowing is done with wider spacing of 5 ft x 1.5 ft by most of the farmers to facilitate ease of weeding, inter-culturing operations and spraying approved pesticides using tractors, which leads to reduced plant population, more vegetative growth and a prolonged harvest season.



Intercrops/border crops: Farmers do not sow intercrops, border crops or refuge crops, due to the problem of wild animals, ease of weeding and other operations using tractors which influences more irrigation due to open land, high use of pesticides and cause resurgence and resistance build-up of insect pests which increases the cost of production of the farmers.

Demo Plots: Land Preparation & Sowing

Seeing is believing and this applies most to the marginal farmers for whom everything hangs in the balance with their farming's success or failure. We realised over a period of time that the farmers are hesitant on applying the classroom knowledge on fields due to lack of confidence and enough proof of concept on the field in practicality. Hence Spectrum International brought in the concept of Demo Plots.



Recognising it as one of the best tools to demonstrate best practices, Spectrum International develops a number of demonstration or demo plots in every village. Demo plots are essentially operated on by hand-picked, forward thinking farmers, however, in strict adherence to and constant supervision of the program's recommendation of best practices and the project team.



Each set of demo plots is viewed as a real time experiment in one or more intervention practice, with a clear baseline and a solid impact objective. Ideal demo plots are designed by the company's agronomist and operational teams, keeping in mind the latest farming techniques that are recommended by experts around the world.

Demo plots are kept at a convenient distance for all the farmers to visit and witness the adopted methods in real time and evaluate for themselves the difference between the practices traditionally followed by most of the farmers and the methods and practices recommended by Spectrum International. The practices are then adopted by other farmers in the following year to get the desired results.



PRISM/0818/002