



INTERNATIONAL COTTON ADVISORY COMMITTEE

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Minutes

Sixth Breakout Session: Developments in the Transfer of Technology

Chair: Dr. Abdul Najid, Country Manager, ICARDA, Pakistan

Speaker:

Dr. Muhammad Anjum Ali, Director General Agriculture (Extension and Agronomic Research), Punjab, Pakistan, "Latest Developments in Promotion of Cotton Technologies in Punjab."

Developments in the Transfer of Technology

Dr. Ali reported that, based on an agricultural census conducted in 2010, there are 5.2 million farm households in Punjab, including 1.6 million households growing cotton, of whom more than half have less than 5 hectares.

The major methods of extension of agricultural research include Farmer Training Programs, Farmer Mega Gatherings, Field Demonstrations, Plant Clinics, SMS messages to farmers on smart phones, and Call Centers. Web-based software, such as the AgriSmart Programme and the Fertilizer and Pesticide Price Monitoring Mechanism are available to assist extension agents in providing information to farmers.

Punjab operates a farmer training schedule with six phases during each season; appropriate focus topics are emphasized in each phase. For example, weed control is emphasized during April and May, while insect control is emphasized during June and July.

- Farmer Training Programmes are conducted separately for men and women.
- There are 24 districts in Punjab, and 256 plant clinics have been established across the districts, with 616 resident plant doctors to answer questions.
- Smartphone applications and phone call centers help to answer farmers' questions and to send technical information tailored to each district and time of year.
- Between 80% and 90% of farmers in Punjab attend at least one farmer meeting each year.

Dr. Ali reported that Punjab has an extensive system to train extension agents in latest technologies to assure current competence. Each of the 24 districts in Punjab has technical committees that refine latest research and prepare technology packages for delivery to farmers. In addition to technical information, the extension service provides soil testing and disease identification services to farmers.

Special outreach efforts are made to female farmers. Money from cotton-harvesting serves as an important source of income to many rural women in Punjab.

He noted that almost all farmers or members of their families had mobile phones, and that while farmers may speak a plethora of local languages, their children read and write one of the main languages and can translate extension information sent by text message.

In response to a question about mono-cropping, Dr. Ali noted that farmers are not foolish and all know that, like every other crop, cotton must be rotated to maintain soil fertility and reduce pest pressure. He noted that cotton is uniquely suited to the agronomic conditions of Punjab, and therefore serves as the backbone of the cropping system. However, this does not mean that any farmers are so foolish as to plant cotton year after year.

The main alternative cash crop to cotton in Punjab is sugar cane, which requires more water than cotton. Area planted to sugar cane has increased from 50,000 hectares to 400,000 hectares in the last five years.

All commercial crops face the risks of failure in extreme conditions of drought or flood, and cotton is grown in Punjab because of its heat tolerance and drought resistance. He said that suicides occur in all populations, but there were no suicides in Pakistan directly related to cotton failure.

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