

## **Better Cotton Large Farm Symposium**

## August 11, 2021 - Summary Report

For the first time, the Better Cotton Initiative brought together 100 farmers and partners from six continents to talk about how Better Cotton's principles are being put into action on large-scale farms. We heard from Cotton Australia about taking the lead to transform the cotton industry in the country and from a panel of farmers and researchers on how they have implemented IPM practices and biodiversity improvements to reduce pesticide use. Participants then gathered in smaller groups to discuss the needs of Better Cotton's large farm community and identify next steps.

Participants welcomed this unique opportunity to share across teams, regions, countries, and organisations. This report shares the highlights of this event.

Prior to the meeting, farmers and implementing partners were surveyed on the most pressing topics to discuss at the first symposium. While Integrated Pest Management and biodiversity topped the list, other priorities included soil health, alternatives to Highly Hazardous Pesticides, and irrigation water management.

ntegrated Pest Management strategies	72.7%
Biodiversity management on large farms	63.6%
Pesticide resistance and alternatives to Highly Hazardous Pesticides	59.1%
Soil health	59.1%
rrigation water management	54.5%
Continuous Improvement Planning	54.5%
Enhancing habitat for beneficial species and wildlife	50.0%
Measuring sustainability impacts	50.0%
Climate change, adaptation and mitigation	45.5%
Collective action on water stewardship	45.5%
Worker management	45.5%
Worker health and safety	45.5%
Data collection tools and technology	36.4%
Whole farm systems – understanding the complexity of multiple crops and habitats	31.8%
Collective action and partnerships	31.8%
Understanding decent work concerns	22.7%
Gender	9.1%





Participants joined from large farm countries including Australia, the United States, Brazil, Turkey, Israel, Pakistan, Uzbekistan, Kazakhstan, and South Africa as well as Mozambique, England, and Switzerland.

Better Cotton works with in-country strategic partners in Australia, Brazil, Greece, and Israel to license Better Cotton. These benchmarked partners

ensure that their programs meet Better Cotton standards and are responsible for ensuring farm compliance. Better Cotton's strategic partners are Cotton Australia, ABRAPA, ELGO-DOV, and the Israel Cotton Board.

### **Keynote**

### Cotton Australia's myBMP - an industry-led vision for improving farming systems

### **Nicole Scott, Cotton Australia**

Our keynote speaker, Nicole Scott, described the evolution of Cotton Australia's myBMP program, an industryled initiative to promote best management practices. After growing public pressure concerning pesticide use in cotton, Cotton Australia developed a program to help growers assess, document, and monitor their operations. Modules have been developed on ten key areas that focus on environmental stewardship, worker management and safety, and fiber quality.



You may find presentations from the Large Farm Symposium at this link as they become available in English, Hebrew, Portuguese, Russian, Turkish, and Urdu.



#### **Panel**

### Improving pest management and reducing pesticide use through IPM and enhanced biodiversity

As a cotton grower in Pakistan that has worked with Better Cotton for almost a decade, Raja Khan Rajper had many experiences to share. He described his IPM strategy to manage whitefly and pink bollworm, including practices that support healthy crop growth, prevention of build-up of pest populations, and resistance



management. This approach has improved yields, profitability, worker health, and the environment with regular field visits and targeted pesticide use.

Dr. Seher Tanyolac, an entomologist at the Directorate of Plant Protection Research



Institute in Turkey, discussed the use of physical traps combined with attractants to reduce thrips populations in early cotton plantings. Her project with Better Cotton evaluated combining a pheromone as an attractant with blue sticky traps strategically placed in the field. The mass trapping was so effective that it eliminated the need to use pesticides for thrips control.

Licio Pena, agronomist and Executive Director of AMIPA, a state-wide organization of

cotton growers in Minas Gerais-Brazil, described its work on natural pest enemy populations. Using a holistic approach, they introduced disruptive technologies by releasing natural pests in large areas of agricultural production and pioneering the distribution of eggs of biological agents via drones. The adoption of these practices reduced agrochemical use and



fuel consumption, improved species balance, increased natural pollination, reduced pest pressure and improved efficiency.



**Dr. Bill Robertson**, cotton extension agronomist at the University of Arkansas Division of Agriculture, spoke about cultural strategies for managing pesticide-resistant weeds and the increasing adoption of these practices in the US. Palmer amaranth has developed resistance to multiple herbicides and is pervasive throughout the US Cotton Belt. Dr. Robertson highlighted the use of reduced tillage and cover crops to prevent



seed germination by limiting light and moderating nitrate levels and soil temperature.



The Israeli Cotton Board was represented by Jonathan Spenser, who discussed four biodiversity pilot projects that are evaluating practices to reduce soil erosion and enhance habitats in and adjacent to fields. The project is the first step in the development of protocols and guidelines for field cropping systems. Practices include preservation of field margins and ditch banks with diversified plantings, perennial plantings to reduce infield erosion, and introduction of endangered

plant species. The team will develop and promote recommendations for best practices based on these test sites.

## **Breakouts**

Participants broke into smaller groups online based on language. We asked:

- 1. What are the biggest challenges in your country/ region on implementing IPM practices and responsible pesticide use like the ones highlighted by the panel?
- 2. How can Better Cotton help cotton growers on large farms implement IPM and biodiversity enhancement?
- 3. What information or additional research is needed to understand best practices in your region?
- 4. What follow-up would you like after this meeting?



### **Challenges Identified**

- Soil health affected by aggressive pesticide use
- Ecosystem changes and extreme weather due to climate change: drought, flooding, excessive heat
- Pesticide resistance
- Technical challenges such as overcultivation, boll weevil
- Training farm managers
- Changing farmers' mindset and risk involved in transitioning away from pesticide use

### **How can Better Cotton help?**

- Understand existing practices in the field by collecting evidence of success from growers and conducting peer comparisons
- Support improving communication in and between partner countries and programmes
- Work more closely with country partners such as Embrapa Algodão and US Department of Agriculture
- Organise face-to-face trainings and field visits
- Share international best practices among partners
- Research and disseminate alternative pest management strategies
- Support improving approvals of biological controls
- Improve technical support through the establishment of technical committees/ working groups
- Support improvement of forecasting of pest populations, irrigation, and planting recommendations based on climate data especially related to changes due to climate change
- Elevate grower awareness of environmental stewardship concepts and issues
- Work with consultants on recommendations



# **Next Steps**

Better Cotton will continue to provide networking opportunities to our partners to exchange and learn from each other. If you are interested in sharing and joining our emerging community of practice, or with any other questions or comments, please reach out to our team.

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