BCI’s approach to Crop Protection

Damien Sanfilippo, Director, Standards and Assurance
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What is Better Cotton?

» Better Cotton exists to make global cotton production better for the people who produce it, for the environment it grows in, and for the sector’s future.
What is The Better Cotton Initiative

- The Better Cotton Initiative (BCI) is a not-for-profit, membership organisation stewarding the Better Cotton Standard System globally.

- BCI is multi-stakeholder in nature and brings together cotton’s complex supply chain, from the farmers to the retailers.

- The ultimate goal of BCI is to generate transformative, long-term and mainstream change in the cotton sector from field to store.

The Better Cotton Standard System

**Production Principles and Criteria**
- Global definition of Better Cotton - 6 key principles

**Capacity Building:**
- supporting and training farmers

**Assurance Program**
- Farm assessment - encouraging continuous improvement

**Chain of Custody**
- connecting supply and demand

**Claims framework**
- spreading the word about Better Cotton

**Results and Impact**
- measuring and reporting progress/change.
**Better Cotton Countries in 2014**

In 2014, Better Cotton represented approx. 7.6% of global production.

In 2015, Better Cotton is estimated to represent 12% of global production.

**We are growing**

- **1.3 million farmers reached**
- **1.2 million farmers licensed**
- **Grown on 2.5 million hectares**
- **2 million MT of Better Cotton lint**
- **7.6% of global cotton production**
- **20 countries 5 continents**
BCI’s *Theory of Change* and Crop protection

» Major sustainability issue that BCI seeks to address

» Strong focus on IPM
  - 5 components of an IPM plan, in line with FAO definition
  - Focus on:
    - Planning,
    - Continuous improvement,
    - Low level of prescription about specific “good” practices, tools, or technologies.

» Key objective – minimize chemical pesticide use as a result of IPM plan.
  - Minimises negative impact on environment
  - Minimises negative impact on health of farmers and communities
  - A key factor driving costs down → increased profitability of cotton farming.

Crop protection: BCI’s mission and challenge.

➢ Setting standards is “easy”

➢ All of the following exist:
  - Good practices / strategies in pest management,
  - Alternatives (chemical or non-chemical) with better environmental or human health safety profiles,
  - New technology can play a role,
  - State-of-the-art PPE as a last resort.

➢ The main challenge is farmer adoption
  - Over-dependency on chemical pest management is the norm
  - Identifying good practices and tools that are locally relevant
  - Capacity building – training and supporting millions of cotton smallholders.
  - Knowledge level as a baseline is very low
  - Changing mind-sets takes time
  - From calendar to threshold sprays → requires a leap-of-faith.
Pesticide Use Result Indicators:

- Better Cotton farmers systematically record their input use.
- Farmers record name, concentration, and volume used of each active ingredient.
- BCI also collected results from *comparison farmers*.
- BCI does not compare results:
  - from one season to the next
  - from one country to another

### 2014 Pesticide Use Result Indicators:
**BCI Farmers vs. Comparison Farmers**

<table>
<thead>
<tr>
<th>Country</th>
<th>Pesticide (kg/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
</tr>
<tr>
<td>Mali</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td></td>
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<tr>
<td>Tajikistan</td>
<td></td>
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</tbody>
</table>

**Note:** The graphs show the comparison between BCI farmers and comparison farmers in terms of pesticide usage per hectare for different countries.
**BCI Farmers vs. Comparison Farmers (2014)**

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>India</th>
<th>Pakistan</th>
<th>Tajikistan</th>
<th>Turkey</th>
<th>Mali</th>
<th>Mozambique</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yield</strong></td>
<td>11%</td>
<td>11%</td>
<td>9%</td>
<td>53%</td>
<td>3%</td>
<td>15%</td>
<td>57%</td>
</tr>
<tr>
<td><strong>Pesticide</strong></td>
<td>16%</td>
<td>20%</td>
<td>19%</td>
<td>73%</td>
<td>8%</td>
<td>51%</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Synthetic Fertiliser</strong></td>
<td>10%</td>
<td>33%</td>
<td>19%</td>
<td>28%</td>
<td>9%</td>
<td>8%</td>
<td>----</td>
</tr>
<tr>
<td><strong>Organic Fertiliser</strong></td>
<td>276%</td>
<td>68%</td>
<td>87%</td>
<td>230%</td>
<td>789%</td>
<td>12%</td>
<td>----</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>16%</td>
<td>4%</td>
<td>18%</td>
<td>11%</td>
<td>9%</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td><strong>Profit</strong></td>
<td>30%</td>
<td>32%</td>
<td>46%</td>
<td>----</td>
<td>28%</td>
<td>14%</td>
<td>65%</td>
</tr>
</tbody>
</table>

**Next Steps**

- **Move towards a Toxic Load Indicator**
  - Measures overall “toxicity”
  - Help farmers make informed decision

- **BCI Standards Revision**
  - Second round of public consultation in April
  - Pesticide restriction rules
  - Definition of “basic” or “minimum” PPE as a minimum requirement
  - Level or prescription or improved guidance appropriate IPM plan
  - How to address the benefits and risks on non-registered, natural crop protection substances.
Our aim is that by 2020 Better Cotton is:

- 5 million farmers
- 30% of global production

Be part of something Better