Sri Lanka: Impact Assessment Study of 2021 Ban on Conventional Pesticides and Fertilizers
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In April 2021, the Sri Lankan government imposed a ban on the import and use of conventional agricultural chemicals (both fertilizers & pesticides) and actively promoted the use of organic inputs in national agriculture. The move contributed to a reduction in yield and led to a surge in food prices across the country. This, compounded by other challenges such as the COVID-19 pandemic, further worsened Sri Lanka’s economy in mid-2021.

Later that year (November 2021), the government partially reversed the policy and allowed for the import of chemical inputs for critical export crops. However, subsidies for chemical fertilizers were not reinstated, hence the price of food remained high (and in short supply) as the yield of major crops such as rice had not recovered. Given these dire circumstances, there was also concern that developments would lead to an increase in the usage of illegal pesticides.

As the result of this, CropLife Asia contracted with Kynetec to conduct an independent assessment of the impact of the lack of chemical pesticides and fertilizers nationally on the farming communities, the production of key crops, and changes in the extent of illegal pesticide usage in view of the shifting regulatory and policy landscape.
Methodology, farmers’ profile, and sampling plan

Fieldwork period: May-July 2022

Approach: Computer-assisted face-to-face interviewing (CAPI)

Focus season: Maha season 2021 (ending Feb/March)

Sample size: 483 farmers
- A mix of small & mid-size farm enterprises, and commercially viable farmers
- Main decision maker on farm management and farm inputs (seeds, agrochemicals, fertilizers, labour, water, etc.) selection
- ≥ 3 years of planting experience and want to plant the same crop(s) in the next 3 years

<table>
<thead>
<tr>
<th>Crop</th>
<th>Province</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>Northwest, North Central, North, East, South</td>
<td>148</td>
</tr>
<tr>
<td>Maize</td>
<td>North Central, Uva</td>
<td>80</td>
</tr>
<tr>
<td>Tea</td>
<td>Central, Sabaragamuwa</td>
<td>38</td>
</tr>
<tr>
<td>Upcountry vegetables*</td>
<td>Central</td>
<td>49</td>
</tr>
<tr>
<td>Low-country vegetables*</td>
<td>Northwest, North Central, North, South</td>
<td>85</td>
</tr>
<tr>
<td>Floriculture*</td>
<td>Uva, Central, West</td>
<td>83</td>
</tr>
</tbody>
</table>

483

* Upcountry vegetables: Cabbage, carrot, cauliflower, tomato, capsicum
* Low-country vegetables: Brinjal, gourd, pumpkin, chilli, cucumber, okra, tomato
* Floriculture: Decorative foliage, young plants, indoor pot plants & landscaping plants

This research was conducted at the request of and through the funding of CropLife Asia
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1. Notable Insights: Farmer Impact

According to the research conducted among Sri Lankan farmers, almost all claimed it was **challenging to purchase conventional inputs** after the chemical ban imposed by the government in 2021 (falling within the MAHA season in Sri Lanka).

This scarcity of inputs yielded a number of logistical as well as economic impacts on farmers. Specifically:

- **50%** of farmers had to purchase conventional inputs from **multiple retail stores**
- **79%** of farmers **could not purchase products** they needed due to a lack of availability
- **80%** of farmers had to pay **higher prices** for conventional pesticides

While Sri Lankan farmers who were able to produce crops commanded a higher selling price (an increase of 45%) due to national food shortages, this was not enough to offset the adverse impact of higher input costs and lower yields. Farmers in Sri Lanka noted **an increase in spending** on conventional pesticides (+67%). Furthermore, over half (51%) registered a **reduction** in their usual **dose rate** of conventional pesticides; while 39% shared that they had **reduced application frequency** with pesticides.

As a result, Sri Lankan farmers noted that they ‘**lost’ more than half** of their normal **crop yield** (-54%) during the 2021 MAHA season. A staggering 95% or higher yield reduction was registered by Sri Lankan rice, maize, tea and Upcountry as well as Low-country vegetable farmers.

Perhaps most notable, **25%** of Sri Lankan farmers would have **considered quitting farming** if the ban on conventional pesticides had continued into the 2022 season.

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2. Notable Insights: Environmental Impact

As a result of the limited availability and reduction in the use of conventional pesticides, a number of impacts came to light with direct or indirect implications to the farm and land environment in Sri Lanka.

Specifically:

• **81%** of farmers experienced higher **weed** infestation
  - 94% Upcountry and 91% Low-country vegetable farmers as well as 84% tea farmers particularly noted higher weed infestation

• **73%** of farmers experienced higher **insect** infestation
  - 94% Upcountry and 91% Low country vegetable farmers as well as 68% maize farmers particularly noted higher insect infestation

• **77%** of farmers experienced higher **disease** infestation
  - 96% Upcountry and 92% Low-country vegetable farmers as well as 70% maize and rice farmers particularly noted higher disease infestation

Also of note, one in five Sri Lankan farmers considered using illegal pesticides if the ban would have persisted.
Farmer Perspectives & the Future

Given a choice, 75% of Sri Lankan farmers want to use conventional pesticides in the future.

The top three reasons driving this preference, in comparison to organic solutions, are:

- High control level
- Better speed of control
- Ease of usage

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If you have any questions about this report, please contact:

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