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Sri Lanka: Impact Assessment Study of 2021 Ban on Conventional Pesticides and Fertilizers

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

Crop	Province	Sample
Rice	Northwest, North Central, North, East, South	148
Maize	North Central, Uva	80
Tea	Central, Sabaragamuwa	38
Upcountry vegetables*	Central	49
Low-country vegetables*	Northwest, North Central, North, South	85
Floriculture*	Uva, Central, West	83

- * 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.



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







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



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