

# 'Indian farmers need effective, environment-friendly, safer crop protection products'

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Protecting crops from pests and diseases is a major concern for Indian farmers. However, the crop protection industry, which includes manufacturers of pesticides, insecticides and fungicides, has seen strong opposition from those working against the use of insecticides and fungicides owing to the poisonous effect of these chemicals.

As calls for non-chemical agriculture grows, Asitava Sen, chief executive officer of CropLife India, spoke to [The Indian Express](#) about various aspects of the industry.

**What would be the research and development (R&D) budget for the development of new molecules for the sector? With pest attacks and diseases becoming more the norm than the exception, is it a race against time for R&D for the companies?**

India has only 280 registered crop protection molecules (active ingredients) vis a vis a global portfolio of over 1,175 molecules. One of the reasons for lower agriculture productivity is the low use of crop protection. Indian farmers need newer products that are safer (with lower A.I. doses/ha), environment-friendly and more effective.

The solution is to promote a science-based policy and regulatory ecosystem which incentivises innovation and R&D. A new product/molecule takes over Rs 2,000 crore of investment in R&D over 10-12 years. CropLife India Member companies deal in cutting edge technologies and have an annual global R&D spend of US \$ 6 billion (nearly 7.5 per cent of their revenues) that lead to newer and safer innovations for the farmers worldwide.

One of the key missing elements in India is the lack of legal provisions to support innovation and new products registrations – such as Protection of Regulatory Data (PRD). Without this provision, it will be challenging for the Indian farmers to get new products and more choices to fight pests/diseases and weeds. The availability of new crop protection brings in healthy competition and far greater choices to the farmers for fighting the pests.

**Plant protection has always been blamed for making agriculture unsustainable. Given the usage of chemicals the risk factor many say increases. With growing awareness or noise about this, how do you address this issue?**

India has vast agro-climatic diversity and limited farmland. It needs a wide range of crop protection products. Changes in climate and cropping patterns cause new pests and diseases. According to government sources, 15-25 per cent of Indian agriculture production is lost annually due to pests.

One of the reasons for lower agriculture productivity is the low use of crop protection. India has one of the lowest usages of crop protection per hectare (307 g/ha), compared to up to 13 kg/ha in the USA, Japan, China or other countries.

Crop protection, therefore, is a key enabler of the government's objectives of food security, doubling farmer incomes and safer food through the introduction of newer and better products.

The Indian crop protection industry is also a net exporter and has the potential to become a major global supply hub, supporting the government's objectives for 'Atmanirbhar Bharat', 'Make in India' and 'Go Global'.

Looking at the potential of the sector, the government has also declared the agrochemical sector as one of the 12 champion sectors, where India can be a critical player in the global supply chain.

The industry is also well-regulated by both central and state governments and checks and balances exist to regulate product quality, movement and usage. Bio-pesticides and bio-stimulants are also being promoted and have great prospects going forward.

There is no alternative but to continue with safe and judicious use of newer, safer and better chemical and non-chemical products, integrated pest management and promotion of better application technologies such as drones.

**India has taken a stance against GM crops (barring cotton). Would the introduction of GM variants reduce the need for chemicals for crop protection?**

New technology and innovation lead to enhanced productivity, improved quality and farmer income; GM is no exception. New technologies can co-exist and complement each other rather than cannibalise. For example, herbicide-tolerant (HT) cotton can actually aid the application of certain categories of highly effective and popular herbicides to kill weeds in a labour efficient manner.

**How strong are the extension services when it comes to reaching out to farmers to educate them about safety features? What kind of initiatives do the companies take in India?**

CropLife India and the responsible industry as such, have been demonstrating their sustained commitment to promoting stewardship as the key driver for a resilient, sustainable and profitable (for farmers) food and agribusiness sector in India through multiple initiatives.

We have a long history of creating awareness and building capacity on sustainable practices among various stakeholders including farmers, agriculture input retailers, agricultural extension staff, customs officials, key stakeholders and several NGOs.

The Covid-19 crisis has exposed the vulnerability of rural India and agricultural food systems, emphasising the need for spreading awareness for Covid-appropriate behaviour, and digital solutions to connect farmers to markets.

CropLife India digitise all the efforts towards farmers' education on safe and judicious use of crop protection products, which has been our motto. Farmer education poster on 'safety points in farming during Covid-19 pandemic' was designed and shared digitally. We created a CropLife farmers' training film, an educational video featuring both stewardship and anti-counterfeiting messages for the farmers' welfare; available in eight languages — English, Hindi, Punjabi, Gujarati, Bangla, Marathi, Kannada and Telugu.

### **What is the total size of the market and at what pace is it growing?**

As per CropLife India estimates, the domestic market size of crop protection products in India is estimated at Rs 232.2 billion by sales in the year 2020. It has registered an annual growth of 10.3 per cent over 2019 when the market was valued at Rs 210.5 billion. In the last five years, the crop protection market in India has grown at a CAGR of 6.1 per cent.