

Global crop protection chemicals market

Modern agriculture is a USD3 trillion industry and as the world population moves to a projected 9 billion people by 2050, investment in safe, effective agricultural chemicals will only continue to expand. The ever-increasing need to grow more food on less land, with minimal impact on human health and the environment, creates a vast market for effective synthetic crop protection chemicals and fertilisers. Crop protection chemicals, in terms of revenue, are expected to grow at a CAGR of 5.5% from 2017 to 2025 due to rising

occurrences of pest and rodent attacks damaging crops. On the production side, 90% of the growth in crop production globally (80% in developing countries) is expected to come from higher yields and increased cropping intensity, with the remainder coming from land expansion. Arable land would expand by ~70 million hectares (or <5%), with the expansion in developing countries by about 120 million hectares (or 12%) being offset by a decline of some 50 million hectares (or 8%) in the developed countries. Almost all of the

land expansion in developing countries would take place in sub-Saharan Africa and Latin America. (Source: Allied Market Research, FAO)

Outlook

Crop yields would continue to grow but at a slower rate. On average, annual crop yield growth rate over the projected period would be about half (0.8%) its historical growth rate (1.7%; 0.9 and 2.1% for the developing countries). To feed the rising population, production needs to be increased, creating a case for more agro-inputs.

Global crop protection chemicals market by value (USD million)

Year	Crop protection chemical usage	Non-crop chemical usage	Total crop protection chemicals usage
2010	45,462	5,715	51,177
2011	50,871	6,076	56,947
2012	53,869	6,264	60,133
2013	58,026	6,404	64,430
2014	60,940	6,491	67,431
2015	56,151	6,237	62,388
2016	55,089	6,458	61,547
2017P	55,330	6,568	61,898

Note: P= Preliminary value (Source: agropages.com)

Indian crop protection chemicals market overview

India is the fourth-largest global producer of crop protection chemicals after the US, Japan and China. The industry is set to grow at a significant pace led by an increasing population, decreasing per capita availability of arable land and focus on increasing agricultural yields. The industry is dominated by insecticides, accounting for 60% of the overall demand, followed by fungicides and herbicides contributing 18% and 16%, respectively. With 355 million

metric tonnes per annum of food grain requirement by 2030, efficient usage of crop protection products and solutions for Indian agriculture are the need of the hour. In India farmers are highly dependent on the monsoons and irrigation facilities. The situation becomes especially critical when one considers that ~15-25% of the potential crop production is lost to pests, weeds and diseases. In order to meet the growing demand borne out of increasing population,

the productivity of crops and efficient utilisation of arable land become essential factors. In order to enhance productivity, the usage of crop protection chemicals plays a vital role. Crop protection chemicals companies in India witnessed revenues grow at a CAGR of 10% till FY17. ~50% of this growth was based on exports. India's crop protection chemicals consumption is one of the lowest in the world with per hectare consumption of just 0.6