

AGROCHEMICALS

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Agrochem Summit 2023: Policy support holds the key

- Summit largely focused on improving crop yields through efficient use of land and water, right crop selection and mechanisation
- Industry sought policy support, including easing of approval process and environmental clearances for formulations and active ingredients
- Concerns raised over negative news flow that cast the industry in bad light as well as the flood of spurious products from neighbouring countries

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We attended a summit on the agrochemical sector themed "Making India A Manufacturing Hub", organised by India Chemical News in Delhi. Key takeaways:

Growth opportunities: India ranks second in global agricultural production after China. It is the world's largest producer of various cereals, pulses, fruits, milk, tea, cotton and many more agricultural commodities. The sector has significant potential for growth given the country's vast arable land, large population involved in farming and current low productivity. India's agrochemical exports are growing faster (14%) than China (8%). Its capital cost is the same as that of China while its operating cost is better.

Responsible use of agrochemicals: Indian agriculture is moving towards collectivisation, mechanisation and digitisation in a bid to become more sustainable. Experts at the summit emphasised the importance of sustainable agriculture. Farmer education about optimal agrochemical usage is essential to recast the negative perception surrounding the industry. A key constraint is the shortage of resources available with farmers, making agricultural extension activities critical in terms of providing support and training to cultivators.

Hurdles to growth: While the agrochemical industry has grown in the last decade, there remains a gap between research labs and farmers' fields. To bridge this gap, experts believe the government must increase its budget for agriculture extension and training services. Indian farmers currently earn only a third of the income of their Chinese counterparts. The sector's growth is constrained by various hurdles such as a lack of modern equipment, paucity of credit flow and scanty investment.

Busting myths: The industry believes there is a pressing need to dispel the widespread misconceptions among consumers around the use of agrochemicals. CCFI indicated that agri-commodities in India do not carry a high quantity of pesticides. It also explained that Indian farmers use far less agrochemicals per hectare compared to the world's other large food producers.

Recommendation snapshot

Ticker	Price	Target	Rating
PI IN	3,100	3,800	BUY

Price & Target in Rupees | Price as of 28 Feb 2023



Agrochem Summit 2023: Highlights

Demand drivers for India's agrochemical sector

- **Opportunity for India to feed the world:** The world's population is expected to reach 9.8bn in 2050 from the current 8bn. India with its vast arable land, cheap energy and sizeable workforce is a formidable force in agriculture and can step up by becoming the food bowl of the world.
- **Large workforce:** Agriculture is the largest sector in India employing ~58% of the general population and 70% of the rural population. Close to 80% of farmers are small and marginal in nature. Increasing their productivity through modern technology can aid growth of the sector as well as farmer incomes.
- **Growing exports:** India's agrochemical exports are growing faster (14%) than China (8%). The sector's capital cost is the same as that of China while operating cost is lower.

Policy support necessary to unlock growth

Experts at the summit highlighted a series of policy measures that are needed to facilitate growth of India's agriculture and agrochemicals sectors:

- Improve feedstock availability, backward integration, commissioning timelines and market access to make Indian exports more competitive
- Bolster agricultural productivity through the efficient use of land and water, right crop selection and mechanisation
- Introduce enabling policies such as production linked incentives (PLI) to expand agricultural production, along with digital technologies
- Expand agricultural extension services (technical aid to farmers) as well as the number of officers carrying out these duties
- Formulate a better pricing mechanism for agricultural produce in the open market, and withdraw tax on agricultural inputs
- Provide subsidy to farmers to procure drones for spraying fertilisers/pesticides and conducting field surveys
- Nano technology is promising as it increases efficacy while being cheaper than traditional options.
- Bring about greater collaboration between corporates and academia, with on-ground implementation of research
- Ramp up registrations of active ingredients for agrochemical products, reduce approval timelines, and improve product testing infrastructure

- Relax registration and residue guidelines for the agrochem sector – Current guidelines are overly stringent, even for fuel crops. Agrochemicals should be treated in line with the pharmaceuticals sector, and the focus should be on compliance rather than stricter regulation
- Extend deep-sea discharge regulations for petrochemicals to agrochemicals as well
- Provide infrastructure, and not just designated areas and parks, to make Indian agriculture more efficient and competitive in global markets (India loses 20% of its agri-output due to logistics and supply chain limitations, which must be urgently remedied)

Busting myths

Crop Care Federation of India (CCFI) highlighted several popular misconceptions that continue to cast a bad light on the Indian agrochemicals sector and charted out its rebuttal of the same. These include:

- **Indian farmers make excessive use of pesticides:** India ranks #2 in agricultural production after China, but #12 in terms of pesticide use. On a per hectare basis, India's use of pesticides is the lowest in the world at 0.4kg/ha. This is well below many developed countries such as the US (11kg/ha), Japan (10.9kg/ha), Brazil (5.7kg/ha), France (3.7kg/ha), and the UK (2.8kg/ha).
- **Agri commodities in India carry high pesticide residues:** Government body AINP-PR (All India Network Project on Pesticide Residues) routinely checks samples of all types of agricultural commodities. Its study of data over the last 14 years suggests that, on average, 98% of India's agricultural commodities have maximum residue limit (MRL) values within the prescribed levels. These findings are in line or better than that for most developed nations.
- **Pesticide use has led to high cancer cases in India:** Globally, India ranks #172 in cancer rates as against developed countries such as the US (362) and Singapore (233), with the world average also higher (201). Singapore, which has no agricultural land, has a cancer rate more than double that of India. The WHO's group-1 list of substances considered to be carcinogenic to humans does not include a single agrochemical. Punjab, with the highest use of pesticides in the country, has among the lowest cancer rates in India.
- **Accidental exposure to pesticide spray drift affects farmers:** Pesticides are diluted before spraying with the water content as high as 99%. Accidental short exposure to such pesticide spray drift is unlikely to deliver a lethal dose. Even mild exposure such as this can be avoided by using PPE safety kits and following good agricultural practices.

- **India is full of spurious pesticides:** All state governments across the country regularly check and analyse pesticide samples being sold in the market. Over 338,000+ pesticide samples have been analysed across India in the last five years alone. Over 98.8% of samples were found to meet the requisite standards and specifications. Made-in-India agrochemicals are competitive in terms of pricing as compared to imported products.
- **Indian water bodies are being polluted:** Fish species are highly sensitive to water quality and toxins and cannot survive in polluted water bodies. Notably, India is the second-largest fish producer in the world today. About two-thirds of India's fish production comes from inland sources. If these water sources were indeed polluted, large-scale aquaculture wouldn't be possible. The states of Andhra Pradesh and Punjab have the highest pesticide consumption, yet Andhra Pradesh has the highest inland fish production while Punjab has the highest inland fish productivity.
- **India uses pesticides banned in other countries:** The Food and Agricultural Organisation (FAO) advises that the use of pesticides depends on climate, crops grown, and the occurrence of pests and diseases. Pesticide registration and use, therefore, varies from one country to another. There are many pesticides that are banned in India but still used in several leading countries the world over. In fact, India (290) has the least number of registered pesticides among all leading nations such as China (681), Japan (583), Australia (561), US (481), and Brazil (477).
- **Organic or bio pesticides are safer than chemical pesticides:** All substances used as pesticides, whether organic, bio or synthetic, undergo the same toxicity, safety and efficacy assessments before being allowed for commercial sale. A study by Stanford University, US, found no evidence of differences in nutritional quantum between conventional and organic produce.
- **Made-in-India pesticides do not meet global quality standards:** In 2021, Indian manufacturers exported Indian made agrochemicals worth over Rs 300bn to over 130 countries across the globe. Indian products have a high purity profile and efficacy levels, besides being 50-70% cheaper, making them competitive globally.

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BUY – Expected return >+15%

HOLD – Expected return from -6% to +15%

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Note: Recommendation structure changed with effect from 21 June 2021

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