THE SCANNER

MULTI-ACT
Built by investors for investors

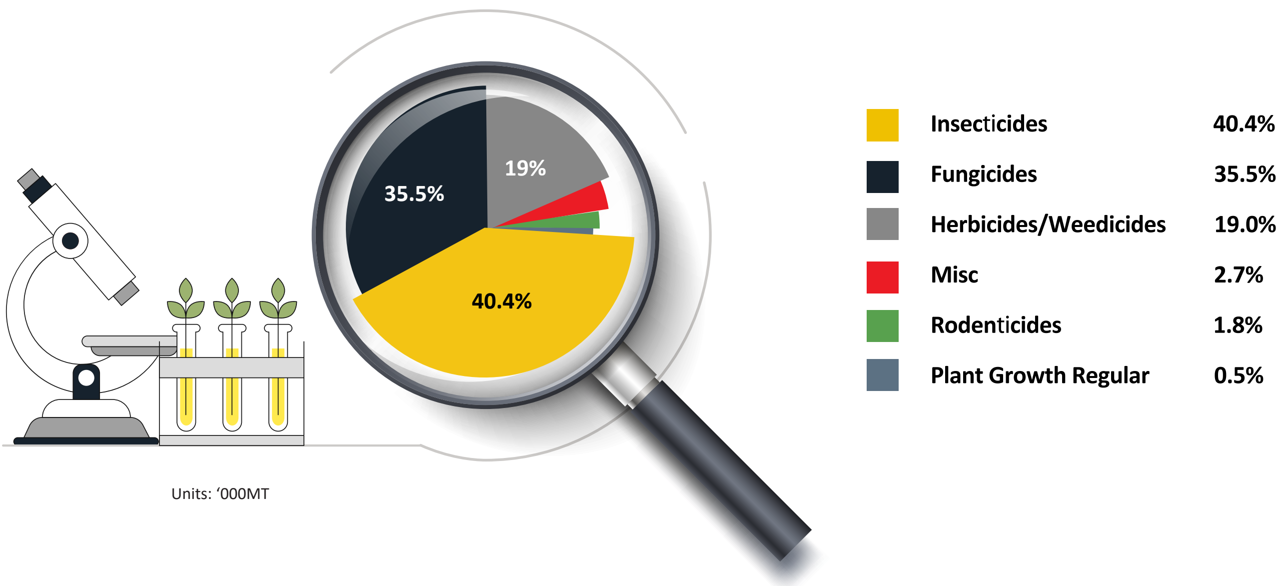
Crop Science Chronicles: Sowing Seeds of Success in India's Agrochemical Market

Agriculture plays an integral role in the growth of the Indian economy with most of its regions heavily dependent on the vagaries of nature, i.e., monsoons, for not only irrigation, but also to attain food security and thrive and flourish. However, it is important to note that, on average, pests and diseases eat away around 20%-25% of the total food produced in India. Overall, food crops compete with around 30,000 species of weeds, 3,000 species of nematodes, and 10,000 species of plant-eating insects. Hence, agrochemicals (crop protection products/pesticides) play a significant role in protecting crops from insects, diseases, and weeds and enhancing agricultural productivity.

The Indian agrochemical market, valued at $ 7.9 bn (~Rs 65,000 crore) is competitive with multinationals and domestic companies leveraging proprietary molecules and low-cost generics, respectively. The country is the world's 4th largest producer of agrochemicals after the United States, Japan, and China and has emerged as the 13th largest exporter of pesticides globally.

Despite India's 12% share in global agricultural output, it only uses about 1% of global pesticides – it uses over 400 agrochemical formulations with insecticides, herbicides, and fungicides being prominent.

Exhibit: Category mix of consumption (FY23)

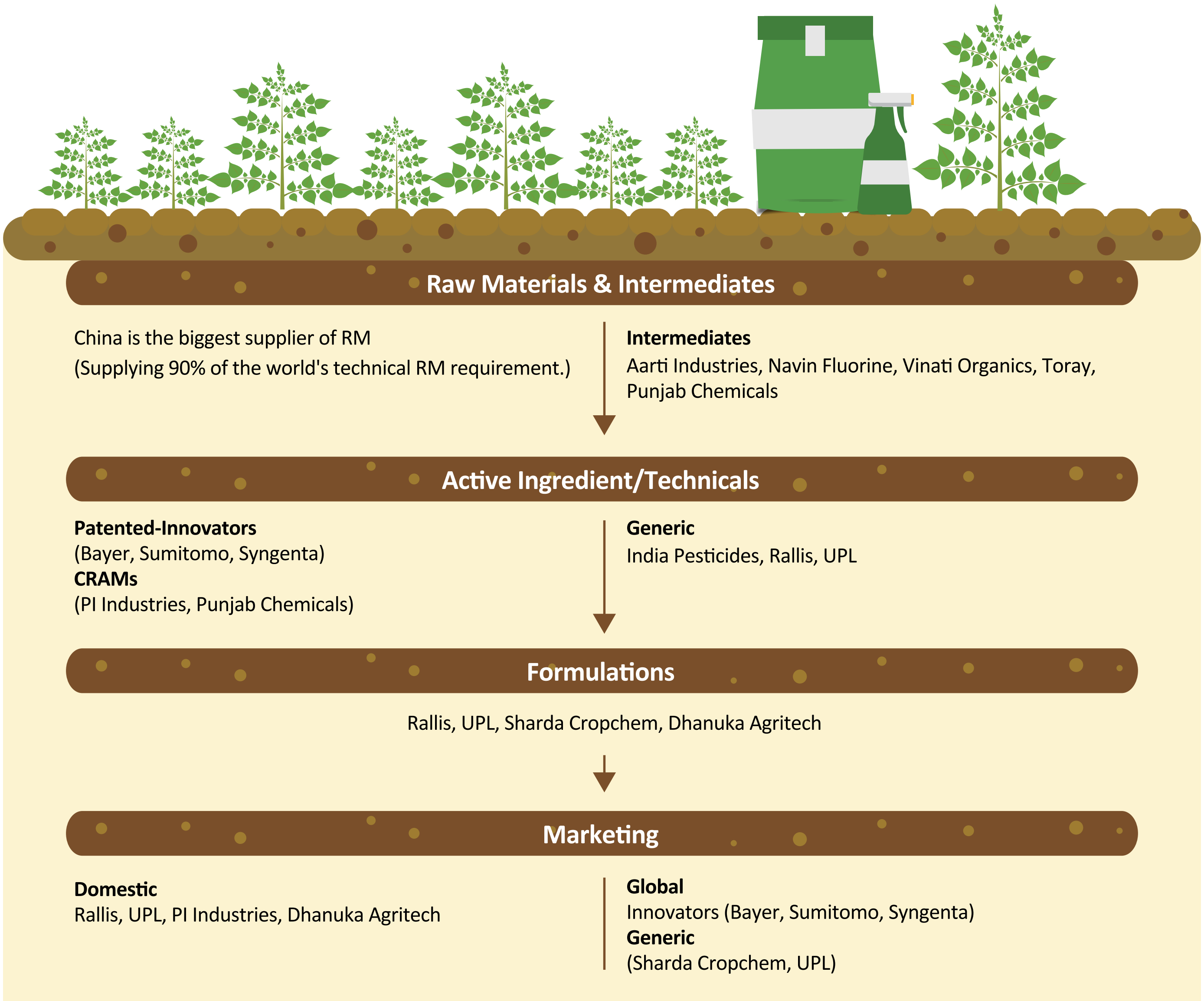


In the background of this landscape, the Indian agrochemicals industry as a whole, and select companies specifically, offer a compelling investment opportunity.

Industry structure and value chain

Players in the agrochemical industry can be categorised primarily into two categories, i.e., innovators and generics. Innovators are research & development (R&D) patented product-based players like Bayer, Sumitomo chemical company, Syngenta, BASF, etc., while the off-patented product-based players are termed generic players. Generic players have a key strength of low-cost manufacturing and a wide distribution network.

Exhibit: Industry value chain



In order to truly understand the strength of a company in the agrochemicals space, a deeper understanding of the industry value chain and the corresponding business models along this value chain, becomes essential.

Technicals:

The companies present in this segment have strong in-house R&D capabilities. From an industry jargon perspective, 'technicals' refers to the pure active ingredient in a pesticide or herbicide. Technical ingredients are made for a specific crop/plant. The segment is characterised by a need for expertise in deep R&D, necessary environmental clearances, and regulatory hurdles – to an extent, this creates high entry barriers for new entrants while also increasing capital intensity. Companies operating in this segment have the advantage of higher profit, strong export demand, high entry barriers, and dominance over the supply chain.

Formulators:

These companies source the basic product from the technical manufacturers and convert them into ready to use products by adding solvents, carriers, stabilisers, and additives that improve the product's effectiveness, thereby making it easier and safer to handle. Players in this segment are characterised by a diverse product portfolio and strong distribution network. Such companies benefit from lower capital requirement, flexibility, and ease of brand building. On the other hand, they have to contend with high working capital intensity, moderate profitability, higher competition, and dependency on suppliers, i.e., Technicals players.

Integrated players:

These companies maintain a presence across the value chain. They manufacture products based on their own R&D capabilities and sell the products through their own distribution network. As a result, they have control over the entire supply chain, are more agile in terms of responding to market opportunities, can maintain higher margins, and can benefit from the high entry barriers. However, they do need to worry about both higher working capital intensity and higher capital requirement.

Exhibit: Comparison summary of leading agrochemicals companies

Name of the Company	PI Industries	Sumitomo Chemicals	Bayer Crop Science	Dhanuka Agritech	Rallis India	Sharda Cropchem
Business model	Integrated (CSM & Inlicensing)	Integrated business	Integrated business	Formulation & Distribution	Formulation & Distribution (Crop care) and Seeds segment	Asset light business model (outsources manufacturing and focuses on product registrations)
Distribution	Good	Good	Good	Strong	Strong	Widespread global distribution
Presence in export markets	Strong presence through CSM business	Focused on increasing exports	Low	No exports currently	Low to medium	Completely export focused
Working capital	One of the best in the industry	High	Very High	High	High	High
New product launches	Good	Very Good	Very Good	Good	Very Good	Very Good
Product concentration risk	High	Low to medium	High	Low to medium	Low to medium	Low to medium
Valuations	Moderate	Expensive	Slighly Expensive	Expensive	Expensive	Moderate
Earning momentum	Positive	Neutral	Neutral	Neutral	Neutral	Negative
Technical status	Strong	Strong	Strong	Strong	Strong	Strong
Grade & Moat	B & Advantage	B & Advantage	B & Advantage	B	B	B
Multi-Act preference (Overall rank)	1	2	3	4	4	5

Q&A

Sarvajeet Bodas
CFA Advisor, Client Servicing
Multi-Act

What are the tailwinds for India's agrochemicals sector?

- **Off-patent molecules**: The share of post-patent products is increasing, presenting opportunities for Indian companies with expertise in the generic segment. Over the next decade (2021-2030), 22 pesticide active ingredients are expected to lose their IPR protection, creating significant export potential.
- **Demand for food grains**: India's growing population (17% of the world's population) and focus on food security are driving the demand for crop protection chemicals as the country aims for self-sufficiency in food grains.
- **Growth of horticulture**: India has become the 2nd largest producer of fruits and vegetables, dominating in crops such as mango, banana, and okra. The shift from food grains to horticulture is increasing the demand for agrochemicals, particularly fungicides, driven by diverse climate conditions favouring horticultural production.
- **Pest attacks**: Pests are causing 15%-20% yield losses in major crops, with rising attacks due to India's hot and humid climate. This emphasises the need for crop protection chemicals.
- **Changing climatic conditions**: Erratic weather, irregular monsoons, and a lack of irrigation (60% of farmland is non-irrigated) are lowering agricultural yield. Damp conditions also encourage weed growth, increasing the need for protective agrochemical inputs.
- **Limited farmland availability**: Urbanisation is reducing farmland, putting pressure on increasing yield per hectare. This can be managed through higher use of productivity-enhancing inputs like agrochemicals.

What are the key challenges that agrochemicals' companies face?

- **Stringent regulations**: Developing new agrochemical products has become costlier due to various national and international regulations. Different countries have variable regulatory requirements, which has slowed the introduction of new products as companies must submit technical-grade registrations with comprehensive documentation.
- **Rising popularity of pest-resistant GM crops**: Advances in genetic science have led to the development of pest-resistant GM crops, such as BT crops. These crops reduce the need for pesticides and agrochemicals, posing a potential threat to the growth of the global agrochemicals market.
- **Working capital intensive business**: The agrochemicals business requires significant working capital due to the need for high inventory and large trade receivables. Pesticide demand is seasonal and uncertain, leading companies to stockpile products, risking unsold inventory in case of unfavourable weather conditions or lower crop sowing.
- **Fluctuating raw material prices**: Many raw materials for agrochemical production are crude oil derivatives. As a result, agrochemical companies face cost fluctuations driven by volatile crude oil prices.
- **Seasonality and uncertainty in demand**: Pesticide consumption depends on the sowing of specific crops, which is highly seasonal. Demand also fluctuates based on factors like rainfall, pest attacks, and pest resistance. Even with full inventory, companies face uncertain demand due to changing weather patterns and crop conditions.

What are the factors that influence success in the Indian agrochemicals market?

- **Backward integration**: Companies need backward integration of technical ingredients to improve profit margins and cost control.
- **Business segment integration**: Diversified business segments help reduce risks and improve competitiveness by ensuring better cost control and product quality.
- **Strong distribution network**: A broad distribution network helps reach fragmented farmers, manage regional uncertainties, and strengthen market position.
- **Export focus**: Indian agrochemical exports focus on fungicides and herbicides, driven by global demand, better prices, and tax benefits.
- **Comprehensive product offering**: Offering a full range of agrochemical products boosts a company's competitiveness.
- **Efficient working capital management**: Efficient management of working capital through strategies like credit insurance and supply chain optimisation is essential in the pesticide industry.

What is your view on valuations in the sector?

In terms of valuations, all the players have seen a significant stock price run-up on the back of an expected recovery in domestic sales as well as exports. As a result, the margin of safety on these stocks has reduced. However, it is important to note that companies such as Sumitomo Chemicals and Bayer CropScience continue to get MNC parentage premium (due to access to innovative products, R&D capabilities, etc.)

Statutory Disclosure and Disclaimer:

MULTI-ACT
Built by investors for investors

Multi-Act Trade and Investments Private Limited (MATI) is a SEBI Registered Investment Advisor having Registration No. INA000008589. It provides investment advisory and affiliated research services to its clients. Research data and reports shared with clients and public at large through electronic medium are for information and general reading purpose only and neither does it constitute any guidelines or recommendations on any course of action to be followed by the reader/receiver nor does it solicit buying or selling of any securities or financial product. The information in this newsletter is prepared on the basis of publicly available information, internally developed data and other sources believed to be reliable. The information prepared by MATI does not contain and is not based on any non-public, material information considered price sensitive or otherwise. The recipient of information is advised to exercise independent judgment and act upon the same based on their sole discretion, own investigations, and risk-reward preferences.

The opinions (if any) expressed in the newsletter by MATI are personal opinion and the same are relevant to the date of the report, which, with reasonable passing of time and based on market conditions, are subject to change without notice.

Any direct or indirect reproduction or duplication or distribution of the newsletter, without the written consent of MATI, will be considered an infringement.

MATI, its associates or any of their respective directors, employees, affiliates or representatives do not assume any responsibility for, or warrant the accuracy, completeness, adequacy and reliability of such information and consequently are not liable for (a) any decisions taken based on the same or (b) any direct, indirect, special, incidental, consequential, punitive or exemplary damages, including lost profits arising in any way from the information.

It is stated that, as permitted by SEBI Regulations and the Company's Employee Dealing Policy, MATI and/or its associates, affiliates and/or individuals thereof may have interests in securities, if any, referred to in the information provided and may make purchases or sale thereof while the information is in circulation.

Investment in securities market is subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI, membership of BASL and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

RIA Name: Multi-Act Trade and Investments Private Limited

RIA Registration number: INA000008589 (Validity: Perpetual)

BASL Membership ID: 1398

Type of Registration: Non-Individual

CIN: U65920MH1997PTC109513

Regd. Office: Ground Floor, ICC Chambers I, Saki Vihar Road, Powai, Mumbai – 400 072, Maharashtra. 022-61408989

Visit our website https://multi-act.com/ for additional disclosures and disclaimer.