



Management Discussion and Analysis

GLOBAL ECONOMY

Overview

The year 2024 was notable for intense political activity, with over half the world's population participating in major elections, including in India and the US. At the same time, conflicts such as the Russia-Ukraine war and the Israel-Hamas clash amplified regional instability, impacting energy and food security and driving prices higher. Cyberattacks also intensified, resulting in growing financial costs. Broadly speaking, three megatrends are shaping the global economy- digitalisation, decarbonisation and deglobalisation.

Despite the challenges, global economic growth remained moderate in 2024, growing by 3.3% in 2024, as per the IMF's World Economic Outlook April 2025 (WEO April 2025). Considering the incipient challenges, global GDP growth has been forecasted at 2.8% in 2025 which is projected to recover to 3% in 2026, as per WEO April 2025.

Advanced economies sustained stable growth in early 2024 despite higher interest rates, thanks to moderating inflation and ongoing employment and consumer spending. US GDP growth remained relatively robust at 2.5% in 2024. However, US growth rate for 2025 is estimated to decelerate sharply to 1.5%, driven by tariff uncertainty imposed by the US government. Growth deceleration is also estimated in the Euro area, with GDP expected to drop to 0.7% in 2025, down from 1.2% in 2024.

Interestingly, growth outcomes within Europe are expected to vary, with countries like Spain, France, Poland and the UK benefitting from a strong services sector, while manufacturing-dependent nations such as Germany and Austria struggling due to weak demand and structural challenges. Germany's economy collapsed into the negative growth zone at -0.2% in 2024.

Overall, advanced economies grew by 1.9% in 2024, which is however anticipated to decline to 1.2% in 2025, considering the major geopolitical and geostrategic challenges facing the world.

Emerging market and developing economies (EMDEs) registered an economic growth of 4.3% in 2024, which is however expected to decline to 3.7% in 2025. Uncertainty due to geopolitical strife between Russia - Ukraine and Hamas - Isreal, together with significant ambiguity due to the US administration's focus on reshaping global trade through imposition of import tariffs are leading indicators signalling the economic growth decline in 2025. Though the US has since announced a 90-day tariff moratorium, still a baseline tariff of 10% remains.



Emerging market and developing Asia registered a 5.3% economic growth in 2024, which is expected to moderate to 4.5% in 2025. The two major economies of Asia – India and China are expected to register a growth slowdown from 5% in 2024 to 4% in 2025 in China's case, and from 6.5% to 6.2% in India's case. India will register a lower rate of degrowth relative to China.

Inflation

Improving supply chain networks and effects of stringent monetary policy with a contractionary stance led to global inflation continuing to decline in 2024. The effect of this was headline inflation being at or below target in more than 60% of economies and only marginally above target in the remaining economies.

As fuel prices dropped this past year and food prices stabilised, YoY inflation dropped below the target in many industrialised nations. Although it momentarily increased in several economies in H2 2024, headline inflation in EMDEs continued to fall and was expected to be within a percentage point of pre-pandemic levels by late 2024. The share of economies with above-target inflation is predicted to decline in 2025 to its lowest level since the peak in 2022, signalling further inflation moderation. This will provide fiscal space to central banks and policymakers to ease interest rates, thus giving an impetus to growth. In fact, policy rate easing has already been a factor in several economies, including India, which will give a boost to the credit markets and help to revive industry capex.

It is anticipated that worldwide headline inflation will decline to an average of 2.7% in 2020-25, which is roughly in line with the target levels in many developed and EMDE markets. Nevertheless, there are many possible directions for global inflation throughout the course of the forecast horizon, which partly reflects a high level of policy uncertainty amid significant potential changes in fiscal policy and rise in international tariffs.

According to baseline predictions, a further decrease in commodity prices will accompany the softening of core prices as labour markets loosen, wage growth slows and services demand moderates. Surveys of inflation expectations show that inflation will continue to moderate globally in 2025 and 2026, which is consistent with WTO estimates.

Global Trade

In 2024, global goods and services trade volumes grew by 3.8%, driven by a resurgence in the second half of the year. However, this is projected to decline sharply to 1.7% in 2025, primarily due to tariff-related uncertainties and protectionist



tendencies amongst many nations and governments. The April 2025 WEO expects a sharp decline in exports from EMDEs- from 6.7% in 2024 to 1.6% in 2025. This is attributed to an inability to drive exports amid higher trade and non-trade tariffs and other trade-restrictive measures.

Geopolitical Risks

Geopolitical risks continue to remain elevated due to ongoing conflicts, posing a threat to global growth, inflation, financial markets and supply chains. Conflicts in the Middle East and Eastern Europe could further disrupt energy markets and cause sovereign risk repricing. Although current oil supplies are sufficient, damage to infrastructure could tighten availability and increase uncertainty.

Middle East tensions have also disrupted key trade routes, including the Suez Canal, through which about 15% of global maritime trade passes. Shipping re-routing around the Cape of Good Hope has increased delivery times, raising freight costs and impacting global trade.

Prolonged uncertainty and the threat of trade barriers might lead to increased costs, reduced investment and slowing global growth.

Growth Forecast

Global economic growth is assessed at 2.8% in 2025 and 3% in 2026 due to the geopolitical uncertainties, trade protectionism and increasing tensions and strife.

The growth downgrade is relatively broad-based across countries and reflects the direct effects of the new trade measures and their indirect effects through trade linkage spillovers, heightened uncertainty and deteriorating sentiment. Fiscal support in some countries however, for e.g. China, Euro area, etc., will help offset some of the negative growth impact.

On balance, 2025 is expected to be a year that will witness heightened uncertainty, weak consumer sentiment, increased impacts of climate change and higher risk weights as policymakers grapple with a new trade order.



INDIAN ECONOMY

India is poised to lead the global economy once again, with the IMF projecting it to remain the fastest growing major economy over the next two years. According to the April 2025 WEO, India's economy is expected to grow by 6.2% in 2025 and 6.3% in 2026, maintaining a solid lead over global and regional peers. Tracing back in time, India's robust economic growth in the first quarter of FY2023 enabled it to surpass the UK as the world's fifth-largest economy, signalling a strong post-COVID recovery.

For FY2025, nominal GDP is expected to rise to US\$ 3.8 trillion, from US\$ 3.5 trillion in FY2024, reflecting a 9.9% increase driven by strong domestic demand and continued public capital investment. This growth is likely to push the country towards its vision of becoming a US\$ 5 trillion economy. Only recently, the NITI Aayog indicated that India has emerged as the fourth largest economy, overtaking Japan with the economy expected to have grown to the size of US\$ 4 trillion. Only the US, China and Germany are ahead of India.

India's real GDP for FY2025 is projected at US\$ 2.2 trillion, growing at 6.5%, compared to US\$ 2.06 trillion in FY2024. As of January 2025, India had 118 unicorns, collectively valued at over US\$ 354 billion.

Amid global headwinds, India has maintained its steady growth. According to government estimates, real GDP is expected to expand by 6.4% in FY2025. This growth has been supported by strong agri and service sector performance, aided by robust kharif crop output and favourable rural conditions with increasing farm wages putting more disposable income in households. The manufacturing sector however struggled due to weak global demand and seasonal domestic factors. Private consumption stayed firm, indicating stable internal demand. India's macroeconomic stability was bolstered by fiscal discipline, current account surplus driven by service exports and healthy remittances. On the trade front, India's exports in FY2025 totalled US\$ 433.56 billion, with engineering goods, petroleum products and electronics as top contributors.

Looking ahead to FY2026, India's growth outlook appears balanced. Risks include geopolitical and trade uncertainties and potential commodity price shocks. On the domestic front, revival in industrial capex, improving consumer sentiment and rising corporate wages will be crucial. A rebound in agriculture, easing food inflation and stable macroeconomic environment provide upside potential. Medium-term growth however will remain contingent on enhancing competitiveness through structural reforms and deregulation.

Sectoral Prospects, FY2025

The agriculture sector remained stable in H1 FY2025, supported by a strong kharif harvest, good rainfall and adequate water in reservoirs.

First advance estimates place FY2025 kharif food grain output at a record 1,647.05 LMT, 5.7% higher than last year and 8.2% above the five-year average, mainly due to higher rice, maize, coarse grains and oilseed production. A normal monsoon also improved rabi crop prospects.

As of January 2025, wheat and gram sowing rose by 1.4% and 0.8% YoY, respectively. This agricultural strength may help moderate food inflation that will further give an impetus to economic growth.

India maintains its lead in manufacturing PMI globally. PMI for December 2024 remained in the expansionary zone, supported by strong demand, marketing efforts and an uptick in new international orders. According to the RBI's Industrial Outlook Survey, manufacturers anticipate further improvements in demand, production, orders and overall business sentiment in Q4 FY2025 and Q1 FY2026.

Investment activity is expected to rebound. Central government capital expenditure rose 8.2% between July-November 2024. Capacity utilisation reached 74.7% in Q2 FY2025, above the long-term average. Capital goods companies saw order books grow by 23.6% in FY2024. In H1 FY2025, orders were up by 10.3%. The RBI noted a rise in private investment intentions to ₹2.45 lakh crore for FY2025, compared to ₹1.6 lakh crore in FY2024.

External Sector Performance

In H1 FY2025, exports of goods and non-factor services rose 5.6%, while imports rose by 0.7%. In Q2, imports declined by 2.9%, mainly due to falling commodity prices, leading to a positive net export contribution to GDP.

Between April-November 2024, key fiscal trends included:

- A temporary dip in capex during Q1 due to national elections, followed by a rebound
- A 10.7% YoY rise in gross tax revenue, though net receipts to the Union remained flat due to higher devolution to states
- A favourable deficit position, allowing room for further developmental spending

While merchandise exports grew a modest 1.6% YoY, non-oil and non-gold exports rose 7.1%, and, excluding petroleum and gems and jewellery, exports increased 9.1%. Imports grew by 5.2%, led by non-oil and non-gold items. Gold imports surged due to rising prices and festive demand.

Despite a wider trade deficit, strong services exports and remittance inflows kept the current account deficit at a manageable 1.2% of GDP in Q2 FY25. India retained its leadership in remittances.

The current account deficit has been comfortably financed via capital inflows. FDI inflows rose 17.9% YoY in April–November 2024. While net FDI declined due to higher repatriation via IPOs and secondary sales, this reflects investor confidence and vibrant equity markets.

Inflation Trends

CPI inflation fell from 5.4% in FY24 to 4.9% in April–December 2024, largely due to lower core inflation. However, volatile food prices kept CPI near the upper end of the RBI's target range.

Food inflation rose to 8.4% in FY25 (April–December) from 7.5% the previous year, primarily due to price spikes in vegetables and pulses, affected by weather and supply issues. Excluding tomato, onion and potato, inflation remained notably lower.

Recent Developments

India's economy continues to thrive on domestic demand, with consumption and investment making up 70% of its economic activity. According to the World Bank, India must maintain a dual focus: promoting economic growth while addressing inequality. Notable recent developments include:

- PE/VC investments totalled US\$ 13.7 billion across 284 deals in Q1 CY2025
- Domestic air travel grew by 10.35%, with 431.98 lakh passengers flying in FY2025
- Forex reserves stood at US\$ 686.7 billion as of April 18, 2025
- India ranked 39th out of 133 countries in the Global Innovation Index 2024, up from 81st in 2015, and is 3rd globally in scientific publications
- GST collections for February 2025 reached US\$ 21.57 billion
- In February 2025, the Index of Industrial Production (IIP) reached 151.3
- Inflation fell to 3.34% in March 2025, down from 4.85% in the prior year, as per the Ministry of Statistics and Programme Implementation
- FII inflows totalled US\$ 14.89 billion, and DII purchases amounted to US\$ 70.34 billion in FY2025.
- Wheat procurement rose 34% YoY, reaching 22.36 million tonnes by April 28, 2025

Government Initiatives

The government has consistently launched initiatives to boost the economy and improve citizens' financial well-being. Flagship programs like Make in India, Start-up India, Digital India, Smart City Mission and AMRUT have significantly contributed to economic expansion. Key recent initiatives include:

- As per Wood Mackenzie (Jan 2025), India, the US and West Asia are together expected to install 100 GW of solar capacity by 2025.
- The Union Budget 2024-25 projected total receipts (excluding borrowings) at US\$ 383.93 billion and expenditure at US\$ 577.16 billion
- In the Interim Budget 2024-25, total capital expenditure was US\$ 133.27 billion
- In June 2023, the government proposed the Draft Carbon Credit Trading Scheme
- In January 2023, the PMGKAY scheme was launched to provide free food grains to low-income households



The Road Ahead

India's economy recorded 6.2% growth in Q3 FY2025, with Q4 projections reaching 7.6%, indicating a strong rebound. The country's robust external sector and rising employment reflect continued confidence in economic progress. In Q1 FY23, India ranked 5th globally in FDI inflows among both developed and emerging economies.

The government's push on capex has been significant. FY2024 saw a 37.4% YoY rise, and in the FY2026 Union Budget, capex was further raised by 10% to US\$ 131.42 billion. This increase is supported by better tax compliance, higher corporate profits and strong economic activity.

The National Statistical Office (NSO) under MoSPI has projected India's real GDP to grow at 6.4% in FY2025, as per its first advance estimates. From the demand side, Private Final Consumption Expenditure (PFCE) at constant prices is forecast to rise by 7.3%, primarily due to rural demand recovery.

On the supply side, Gross Value Added (GVA) at constant prices is also expected to expand by 6.4%. The agri sector is set to rebound with a 3.8% growth in FY2025, while the industrial sector is projected to grow by 6.2%, supported by robust growth in construction and utility services. The services sector is likely to remain strong, growing at 7.2%, driven by steady performance in financial, real estate, professional services, public administration, defence, and other government services.

GLOBAL AGROCHEMICAL INDUSTRY

According to Precedence Research, the global agrochemicals market was valued at US\$ 235.86 billion in 2024 and is anticipated to reach US\$ 313.89 billion by 2034, growing at a CAGR of 2.90% through the forecast period.

Agrochemicals such as fertilizers and pesticides play a vital role in boosting crop yields and maintaining stable food supply. In addition, ongoing advancements in agrochemical products, including bio-based pesticides and enhanced fertilizer blends, are fuelling market growth. Precision farming techniques are further promoting the optimized use of agrochemicals.

Changing climate, which contributes to the emergence of new pests and crop diseases, is also heightening the need for effective pest control measures, thereby increasing the use of herbicides and pesticides. Growing focus on sustainable agriculture and integration of eco-friendly pest management practices is boosting demand for environmentally-responsible agrochemical solutions.

Agrochemical companies face rising input costs and growing pest resistance, which undermines global crop production by up to 40%. To respond, companies are investing in R&D to develop new and more effective formulations. Precision agriculture, powered by digital and "phygital" (physical-digital) technologies, is evolving to meet these challenges.

Growth is also being driven by strategic partnerships, sustainable practices, digital transformation and resilient supply chains. Notably, R&D investment accounts for 7–10% of industry revenue.

Global demand for agricultural commodities is expected to grow at an annual rate of 1.2% through 2030, driven by the need to feed an estimated population of 8.5 billion. Enhancing crop yields will be essential, with 87% of the required productivity gains coming from yield improvements, according to UN FAO (Food and Agriculture Organization). The agrochemical sector will be instrumental in supporting this growth and ensuring food security.

The agri sector contributed roughly 10% of US GHG emissions in 2022 and nearly one-third globally in 2023. Therefore, the agrochemical industry must balance growth with environmental responsibility.

Growth Drivers

1. Food Demand

Rising food demand driven by population growth, declining arable land and increased awareness of agrochemical benefits are major growth drivers. However, the negative environmental impact of synthetic pesticides pose ecosystem risks by contaminating surface water. These concerns are prompting a shift towards bio-based fertilizers and eco-friendly pesticides, creating new opportunities for agrochemical manufacturers.

The surge in global food consumption has intensified demand for agricultural products, thereby increasing the use of agrochemicals to maximize crop output. This demand

is also encouraging the adoption of advanced agricultural technologies. As land and water resources become scarcer, farmers are compelled to rely on agrochemicals to maximize production from a limited space. The growing use of such chemicals is significantly contributing to market expansion.

2. Urbanization

Urban development and industrial growth are increasingly shrinking the available farmland, making the effective application of agrochemicals essential. Advanced fertilizers and pesticides help improve crop resilience and optimize the use of resources, ensuring sustainable long-term food production.

3. Sustainable Farming

Sustainable farming is becoming a key priority in global agriculture, and advancements in agrochemical technologies are helping to facilitate this transition. For example, wheat, which covers 550 million acres globally, holds significant potential for strengthening food security while promoting environmental sustainability. The market for biopesticides and organic fertilizers, valued at US\$ 7.54 billion in 2023, plays a crucial role in supporting this sustainable shift.

In line with these efforts, governments are implementing policies to reduce reliance on synthetic chemicals. For reference, the EU's Green Deal aims to cut pesticide usage by 50% by 2030, creating new opportunities for eco-friendly agrochemical alternatives worldwide.

4. Precision Agriculture

Combining AI, IoT and big data, precision agriculture is transforming decision-making and innovation. Gen-AI accelerates chemical discovery and formulation. IoT sensors capture real-time field data on moisture, weather and pest activity, which AI uses to recommend precise interventions.

5. Sustainable Farming Practices

Sustainable agriculture aims to align productivity with environmental care. Technologies support practices such as Integrated Pest Management (IPM) that combine digital tools and real-time data, reducing reliance on broad-spectrum pesticides and even organic farming.

6. Outcome-Based Models

The industry is progressively shifting from product sales to performance-driven contracts. These models link payments to outcomes such as improved yields or healthier soil.

Adoption is more mature in developed markets with digital infrastructure, but emerging markets are catching up. Financial inclusion initiatives like fintech-driven farm loans and insurance are helping bridge capital gaps, supporting farm resilience.

Asia-Pacific Agrochemicals Market

Valued at US\$ 70.76 billion in 2024, the Asia-Pacific agrochemicals market is expected to grow to around US\$

95.74 billion by 2034, registering a 3% CAGR over the forecast period. Holding the largest revenue share of around 29% in 2024, the region stands out as a critical agrochemicals market due to its vast population and its position as the world's largest geographical region.

Key insights:

- In 2024, the Asia-Pacific region accounted for around 29% of the global agrochemicals market revenue
- Fertilizers emerged as the leading product category, contributing 68% to the total market revenue in 2024
- Cereals and grains application segment dominated with over 50% revenue share in 2024
- Oilseeds and pulses represented 19% of the market revenue in 2024

US Agrochemicals Market

In 2024, the US held a commanding 75% share of the North American agrochemicals market. This dominance is fuelled by advanced agricultural technologies and the growing need to boost crop yields.

As reported by the FAO, the total US agricultural output in 2023 amounted to US\$ 448 billion, with agrochemical use accounting for approximately 15%. The shift toward environmentally-friendly practices is accelerating, with increasing adoption of bio-based fertilizers and pesticides in line with sustainability goals and rising demand for organic produce.

Precision agriculture is gaining traction too, particularly among large-scale farms, with around 60% incorporating technologies that require customized agrochemical applications such as site-specific herbicides. Regulatory support from the US Environmental Protection Agency is pushing the industry towards safer, eco-friendly chemical usage. Substantial investments in R&D also supports innovation. Extreme weather conditions are also driving demand for climate-resilient agri solutions.

European Agrochemicals Market

The agrochemical sector in Europe is shaped by strict environmental regulations, most notably the Green Deal, which aims to halve pesticide use by 2030. This has accelerated the adoption of biopesticides and organic fertilizers.

Rise in organic farming, which saw a 20% increase in cultivated land in 2024, further fuelled the demand for natural agrochemical alternatives.

Product Segment Insights

In 2024, fertilizers emerged as the leading product segment, capturing the largest revenue share. Farmers increasingly



depend on fertilizers to rapidly improve crop yield due to rising food demand and limited agricultural land.

Meanwhile, the crop protection chemicals segment, which includes herbicides, insecticides, fungicides, rodenticides and bactericides, is projected to grow at the fastest pace in the coming years. Herbicides in particular are extensively used to protect crops from weed infestations.

Application Segment Insights

The cereals and grains segment led the market in 2024, accounting for the highest revenue share. These crops are staple foods globally, especially across Asia, and occupy a significant portion of cultivated land. Fertilizers have become virtually indispensable for their production.

The fruits and vegetables segments is expected to be the fastest-growing application area. Increasing consumer focus on health and wellness has led to higher demand for fresh produce, driving the need for effective agrochemical use in these crops.

INDIAN AGROCHEMICAL INDUSTRY

India's Agrochemicals Industry - Set for Robust Growth

India's agrochemicals sector is anticipated to grow at a strong CAGR of 9% between FY2025 and FY2028. This upward trajectory is being fuelled by several key factors: Increased government support, rising production capacity among manufacturers, growing demand in both domestic and international markets, and the launch of innovative new products. With this momentum, the Indian agrochemicals market is projected to expand from US\$ 10.3 billion currently to US\$ 14.5 billion by FY2028.

India's agrochemical exports has shown remarkable performance, growing at a 14% CAGR from FY2019 to FY2023, reaching a size of US\$ 5.4 billion. Meanwhile, imports grew at a slower pace of 6% CAGR during the same period, reinforcing India's role as a net exporter. Among all agrochemical categories, herbicides have emerged as the fastest-growing export segment, achieving a 23% CAGR (FY2019 – FY2023). Their share in total agrochemical exports rose from 31% to 41% over the period.

Agrochemical exports are becoming increasingly concentrated in a handful of countries. The top five export destinations, Brazil, USA, Vietnam, China and Japan, now account for nearly 65% of India's total agrochemical exports.

Despite this, the country's agrochemical usage remains relatively low at just 0.6 kg/hectare, compared to the Asian average of 3.6 kg/ha and the global average of 2.4 kg/ha. This suggests significant room for future growth in domestic usage.

However, several challenges remain, such as diminishing cultivable land and significant crop losses due to pest attacks and plant diseases. Agrochemicals play a critical role in countering these challenges by supporting pest control and weed management and improving crop yields. Currently, India

loses an estimated 15-25% agricultural output to pests, weeds and diseases. As a result, there is a growing emphasis on adopting effective pest and weed management techniques. Rising awareness among farmers about agrochemical benefits is also propelling market expansion.

Government policies and subsidies have further accelerated the sector's development. Programs promoting contract farming and financial support for fertilizers, such as special subsidies for Di-Ammonium Phosphate (DAP), enhance accessibility and affordability for farmers. For instance, due to global supply chain disruptions, the Indian government approved a one-time special package of US\$ 40.11 per MT in 2024-25 for DAP sold through PoS.

Recognising the sector's strategic value, the government has listed it among the top-12 industries with high potential for global leadership. According to the Federation of Indian Chambers of Commerce and Industry (FICCI), the industry is on track to achieve 8-10% growth by 2025. With increased adoption of modern farming practices, favourable policies and inherent need to boost agricultural productivity, India's agrochemicals sector is well-positioned for growth in the years ahead.

Market Trends

Pesticides Lead Market Growth

India ranks among the largest global agrochemical market, with pesticides being the dominant product segment. The country's dependence on agriculture, combined with frequent pest outbreaks and the growing need to maximise crop yields has solidified the importance of pesticides in Indian farms.

Farmers are increasingly using pesticides to prevent harvest losses due to infestations and plant diseases. According to data from the Directorate of Plant Protection, Quarantine & Storage, pesticide usage rose from 53.6 thousand metric tons in 2022-23 to 55,200 metric tons in 2023-24.

India's climatic conditions also contribute to this surge. Warm temperatures and high humidity provide ideal breeding grounds for pests, significantly impacting agricultural output. The Indian Council of Agricultural Research (ICAR) estimates that pests account for 30-35% of annual crop yield losses. As a result, the use of crop protection chemicals has become increasingly vital for farmers to improve yields.

Widely used across the agri sector, agrochemicals have become a cornerstone of farming practices in India due to their role in increasing productivity. Ongoing R&D efforts focus on developing high-quality products to meet the growing demand. Since food supply depends heavily on agriculture, the government is placing emphasis on supporting the sector. These factors are collectively fuelling the growth of the agrochemicals market.

Pesticides continue to be the backbone of the agrochemical sector. Their rising consumption, fuelled by climate variability, pest pressures and the need for food security, signals a strong and sustained demand.



As the global population grows and consumer purchasing behaviour evolves, fuelled by rising incomes, the demand for more and better-quality food increases. However, shrinking arable land and significant crop losses due to pests challenge food security. Agrochemicals, therefore are instrumental in reducing crop loss and improving agricultural efficiency, thereby playing a key role in food and nutritional security.

Rising Pest Pressure Fuels Agrochemical Use in India's Grain Sector

India's agrochemicals market is led by the grains and cereals segment. Unpredictable weather patterns, such as irregular rainfall and rising temperatures, have intensified pest threats, particularly in major grain-producing states.

Changing climatic conditions have created an ideal environment for pests and fungal outbreaks, putting cereal crops at risk. Experts have raised concerns that rising temperatures, along with possible rainfall and hailstorms driven by Western disturbances, could lead to severe pest invasions, especially fungal infections, that could jeopardise both the quality and quantity of grain yields. This concern is reflected in recent data showing a decline in wheat yields, from 3,537.3 kg/ha in 2022 to 3,520.7 kg/ha in 2023.

As a result, there has been a sharp rise in the use of agrochemicals to counter the threats. Farmers are increasingly turning to chemical solutions to protect crop yields and maintain food security. This growing reliance reinforces the dominance of the grains and cereals category as the primary driver of agrochemical demand in India.

Integrating Renewable Energy

In India, more than 90% of emissions from the agrochemical sector stem from fertilizer production, with urea being the largest contributor. While pesticides are more energy- and

emission-intensive per unit of weight compared to fertilizers, their overall impact on emissions and energy use is lower due to their relatively limited production and usage. As technologies such as green hydrogen and green ammonia mature, it is expected that more companies in the sector will adopt net-zero targets.

In the short-term, the agrochemical manufacturing sector is focusing on two main avenues to reduce emissions: use of renewable energy and green hydrogen. Industry estimates suggest that by 2030, 10% of the hydrogen used in fertilizer manufacturing could be sourced from renewable energy.

Beyond renewables and green hydrogen, technologies such as carbon capture and utilization and expansion of bio-based products like bio-fertilizers and bio-pesticides offer further decarbonization potential.

Growing Use of High-Yield Crop Varieties

As the global demand for agricultural output continues to climb, farmers are increasingly turning to high-yielding crop varieties (HYVs) to boost productivity. According to the American Council on Science and Health, HYVs contributed to a 40% increase in global crop output between 1965 and 2010. However, these varieties often have heightened vulnerability to pests and diseases.

Recently, Indian Prime Minister Modi unveiled 109 high-yielding, climate-resilient and biofortified crop varieties at the Indian Agricultural Research Institute. These included 61 different crops — 34 field crops such as cereals, oilseeds, pulses, sugarcane and cotton, along with 27 horticultural varieties like fruits, vegetables, spices, etc.



Agrochemicals are essential in protecting these crops from threats that could compromise their productivity. Over the past five decades, the use of nitrogen-based fertilizers has increased sevenfold, largely due to the rise in HYV cultivation. As more farmers adopt these high-yielding crops to achieve greater profitability and address food security concerns, the demand for agrochemicals is expected to grow over the long-term.

Outlook

Following a moderate 5-6% growth last fiscal, India's agrochemicals sector is expected to grow at a higher rate of 7-9% in the next fiscal. This growth will be driven by steady domestic demand and a rebound in export volumes. However, persistently low-price realisation, particularly compared to the pre-COVID era, will continue to constrain a return to double-digit growth levels.

According to CRISIL Ratings, export revenue, which accounts for half of the industry's total earnings, is undergoing a shift. Global buyers, having resolved their inventory surplus caused by low-cost Chinese imports, are now placing orders closer to crop seasons to improve working capital management. Overall export revenue growth may be limited due to continued pricing pressure, although volume growth is expected to remain healthy.

Additionally, the near-term outlook is influenced by the US imposing a ~54% additional tariff on pesticide imports from China. This move is expected to heighten competition in alternative global markets, keeping agrochemical prices subdued.

On the domestic front, revenue is projected to grow by 8-9% this fiscal year, supported by favourable monsoons and healthy reservoir levels, which are boosting agricultural activity. Although pricing pressure from Chinese oversupply persists, it is less intense than last year, helping reduce inventory write-offs., leading to improved volume and profitability.

Internal control systems and their adequacy

The Company has established a comprehensive internal control framework, which includes thoroughly documented policies and procedures. This proactive approach helps in early detection of any financial and operational issues. Internal financial controls have been documented, digitised and embedded in the business process and are continuously monitored through regular internal audits and management reviews.



Risks and concerns

High-cost inventory liquidation and pricing pressure from the influx of Chinese generics posed profitability challenges for domestic companies during 2024-25. De-stocking of inventories by companies across the globe resulted in lesser opportunities for exports. The Company countered these challenges by modifying its product profile to cater to the domestic market and strengthening cost position in existing products through process optimization and improved capacity utilization.

Type of Risks	Description	Mitigation
OPERATIONAL RISK		
Market risk	Fierce competition in the agrochemical industry may pose a threat to business growth.	The Company closely observes the strengths and weaknesses of its competitors as well as the dynamics of the overall market. Effective measures are continuously taken to lower the cost of production, including budgetary controls and other management control systems.
FINANCIAL RISK		
Credit risk	Risks in the settlement of dues by customers can have an impact on the Company's financial performance.	The Company has systems in place to assess the creditworthiness of customers. Realization of receivables is closely monitored and adequate provision for bad/doubtful debts is made in the books of accounts on a realistic basis, wherever required. A proper recovery management and follow-up mechanism are in place.
Foreign exchange risk	Foreign currency exposure for sales in other countries and purchases from overseas suppliers in USD exposes the Company to risks due to currency fluctuations in global forex markets, which can affect profitability.	The objective of the Company's risk management policy is to reduce risks from adverse currency fluctuations by managing foreign exchange uncertainty and volatility through a Board-approved forex hedging policy.
Talent acquisition and retention risk	To retain high-performing employees and implement business strategies effectively, talent retention and engagement are essential.	The Company has an appropriate recruitment strategy in place for employing people at all levels of the organization. It ensures that the right people are placed in the right positions to achieve excellence while also ensuring career growth.
Environmental risk	There is a risk of pollutants being released into the environment, endangering the ecosystem and harming the Company's reputation.	The Company operates its own Effluent Treatment Plant (ETP) comprising agitated thin film dryers, multiple effect evaporators, scrubbers, etc., besides a Sewage Treatment Plant (STP) and ensures zero liquid discharge. Green belt is developed all around the manufacturing plant to strictly comply with regulatory norms. Solid effluent is sent to government-approved agencies for incineration.

Company Overview

The agrochemical sector, like many other sectors, has encountered various setbacks during the year in review. Factors such as market volatility, adverse market conditions and uncertainties due to erratic monsoon have posed significant challenges to the industry's growth. Despite the setbacks, our Company has been steadfast in its efforts to adapt, innovate and uphold the high standards of operational excellence and governance. While we faced setbacks, we made strategic investments and laid the groundwork for future growth and sustainability. We acknowledge there is room for improvement and we remain dedicated to enhancing our performance, optimizing our operations and delivering value to our stakeholders.

Human Resources

At Bhagiradha, we are deeply invested in the well-being and growth of our employees. The Company regards its human and intellectual capital as pivotal to its success, recognising employee satisfaction as a fundamental element. The Company empowers its workforce, understanding that their development contributes significantly to organisational excellence. It cultivates a diverse and inclusive culture that nurtures personal growth and well-being. We actively engage our workforce through regular training programmes, skill development workshops and interactive activities, fostering an environment that encourages both personal and professional growth. By nurturing a goal-oriented mindset, we empower our employees to make meaningful contribution to the Company's success.

A performance-driven culture is at the heart of our workplace, where talent and merit receive due recognition through rewards. We remain equally committed to fostering a positive, inclusive



and safe work environment. In line with this commitment, we continuously implement initiatives and measures to promote safe work practices and ensure the well-being of our employees.

Collaboration and professional growth are integral to the Company's ethos. It invests in training and skill development to facilitate employee advancement. By promoting transparent communication, the organisation ensures an open dialogue between staff and leadership. These practices not only attract but also retain a talented workforce. As of 31st March 2025, the Company had 546 employees on its rolls.

Health and Safety Measures

Ensuring personnel safety remains our primary objective. Factory managers supervise safety initiatives and undertake regular evaluations to uphold occupational health and safety (OHS) standards. Dedicated teams at each location promptly identify and rectify safety concerns. The organisation rigorously adheres to health and safety protocols and implements wellness programs to promote the mental well-being of employees.



Financial/Operational overview

Description	FY 24-25	FY 23-24	% Variance	Explanation
Debtors' turnover	3.12	3.50	(10.86)	Owing to increased debtors' level, the ratio has come down.
Inventory turnover	8.60	8.69	(1.04)	The variance is not so significant.
Interest coverage ratio	7.03	4.78	47.05	Due to increase in total income, the interest coverage ratio improved.
Current ratio	4.10	2.59	58.58	The short-term liquidity in the system on account of preferential funds has resulted in improved ratio.
Debt-equity ratio	0.11	0.15	(25.20)	Owing to significant infusion of equity by way of preferential issue, the ratio has come down.
Operating profit margin (%)	7.33	9.16	(19.94)	Owing to fall in operating profit on account of low margins, the operating margin has come down.
Net profit margin (%)	6.00	4.93	21.62	Due to increase in total income, the net profit margin has improved.
Return on net worth (%)	3.92	4.86	(19.49)	Due to increase in the equity on account of preferential issue, the return on net worth is appearing low.

Company Outlook

The demand for agrochemicals in domestic market is expected to be robust, with seasonal rainfall across India expected to be above normal and sowing acreage for key crops expected to increase. With de-stocking of inventories in the previous year complete, demand is expected to re-emerge in H2 2025-26, which should open opportunities for exports too. The Company is strategically focusing on certain key products and chemistries for investment in backward integration based on market trends, export opportunities, import competition and domestic advantage. The Company expected to introduce at least 3 new generic products, going forward.

Cautionary Statement

The statements in the Management Discussion and Analysis regarding the Company's objectives, projections, estimates and expectations may constitute "forward-looking statements" under applicable securities laws and regulations. Actual results may differ materially from those anticipated due to various factors, including economic conditions impacting demand-supply dynamics and pricing in the Company's markets, changes in government regulations, tax laws and other relevant statutes, as well as other unforeseen factors.