MANAGEMENT DISCUSSION AND ANALYSIS

This section of the report presents a comprehensive analysis encompassing our strategic advantages and competitive strengths. Additionally, the discussion covers the business environment we operate in and how we are well-poised for growth.

INSIDE THIS SECTION

Cautionary Statement

This report contains projections, estimates, etc. which are 'forward-looking statements' within the meaning of applicable securities, laws, and regulations. Although the projections, estimates, etc. are based on reasonable expectations, actual results could materially differ from those expressed or implied in this report. Important factors that may have an impact on the Company's operations include economic conditions affecting demand/supply, price conditions in the domestic and overseas markets, changes in government regulations/policies, tax laws and other identical factors. The Company assumes no responsibility to publicly modify or revise any forward-looking statements on the basis of any future events or new information.

ECONOMIC REVIEW

Global Economic Review

Amidst a year marked by overlapping challenges such as the Russia-Ukraine conflict, lockdowns in China due to COVID-19, high inflation, and monetary policy tightening, the global economy demonstrated remarkable resilience and positive signs of recovery. In 2022, global real GDP experienced robust growth of 3.4%, surpassing expectations. Notably, growth in several major economies was stronger than anticipated, with the reopening of the economy in China and resilient consumption in the US.

On the supply side, the easing of supply chain bottlenecks, the fall in transportation costs, and the reopening of China's economy created favourable conditions for key sectors of the global economy to rebound. The supply chain shocks in energy and food markets caused by the Russia-Ukraine conflict are receding. Simultaneously, the synchronous tightening of monetary policy by most central banks is starting to bear fruit, with inflation moving back toward targeted levels. Inflation has already reached its peak in the United States and Europe in early 2023, and it has started to decline.

Outlook

According to the latest report by IMF, the global economy is anticipated to experience a slowdown in output growth, declining from 3.4% in 2022 to 2.8% in 2023, followed by a rebound to 3.0% in 2024. Advanced economies are expected to witness a decrease, with growth projected to reach 1.3% in 2023 before recovering to 1.4% in 2024.

China's Economic Reopening

China's economic reopening in early 2023 has generated positive spillover effects, evident in the early recovery of retail sales. Given China's significant role as a consumer of Asia's exports (25%) and exports from other regions (5-10%), its recovering economy is expected to contribute substantially to the global GDP increase in 2023 (~50%).

Emerging markets and developing economies, on the other hand, are forecasted to have stronger growth, with an average of 3.9% in 2023 and 4.2% in 2024. However, these prospects vary across regions. Low-income developing countries are expected to grow at an average rate of 5.1% over 2023-24, although per capita income growth may be slower compared to middle-income economies.

Global Growth Forecast (%)

Particulars	2022	2023(E)	2024 (P)
World Output	3.4	2.8	3.0
Advanced Economies	2.7	1.3	1.4
US	2.1	1.6	1.1
Eurozone	3.5	0.8	1.4
Japan	5.5	1.5	2.0
UK	4.0	-0.3	1.0
Other Advanced Economies	2.6	1.8	2.2
Emerging Market and Developing Economies	4.0	3.9	4.2
China	3.0	5.2	4.5
India	6.8	5.9	6.3

Source: World Economic Outlook, IMF, April 2023

Note: E stands for estimated and P stands for projections

Indian Economic Review

2022-23 was a landmark year for the Indian economy, as it become the fifth-largest economy in the world. Amidst an uncertain global economic scenario, the Indian economy is estimated to have grown by 7.2%, beating expectations of the RBI (which had estimated India's growth at 7.0%) in 2022-23.

Unlike other emerging and developed economies, India's resilience was not entirely dependent on fiscal stimulus but led by structural interventions by the Government of India such as the PLI scheme, and stronger than anticipated private consumption. High-frequency indicators such as the Index of Industrial Production (IIP), GST collection, and the RBI's most recent survey of consumer confidence reflect the resilience and growth of the Indian economy, which has made a swift recovery from the pandemic.

During the year, India faced the challenge of managing inflation, exacerbated by the Russia-Ukraine conflict. The government and Reserve Bank of India (RBI) have taken measures to address this issue, aided by the easing of global commodity prices. As a result, retail inflation was effectively reduced below the RBI's upper tolerance target by November 2022.

Outlook

Looking ahead, despite inflation and supply chain disruptions, the Indian economy is projected to achieve a growth rate of 6.5% in 2023-24. This optimistic projection is supported by a range of factors, including supportive government policies aimed at promoting investment, robust macroeconomic fundamentals, a decrease in non-performing loans within the banking sector, and significant corporate deleveraging.

The government is actively in infrastructure and encouraging private investment to stimulate the economy. The manufacturing and services sectors are expected to recover, along with improved consumer and business confidence indicated by strong Purchasing Managers' Index (PMI) figures in early 2023. The government's widespread vaccination campaign has boosted consumer confidence, leading to increased spending on services and a rise in production activity and capacity utilisation across sectors. This sustained increase in private capital expenditure is expected to continue, supported by improved corporate balance sheets and increased credit financing.

India's Growth Forecast

(%)

Source: CSO/RBI

Note: E stands for estimated and P stands for projections.

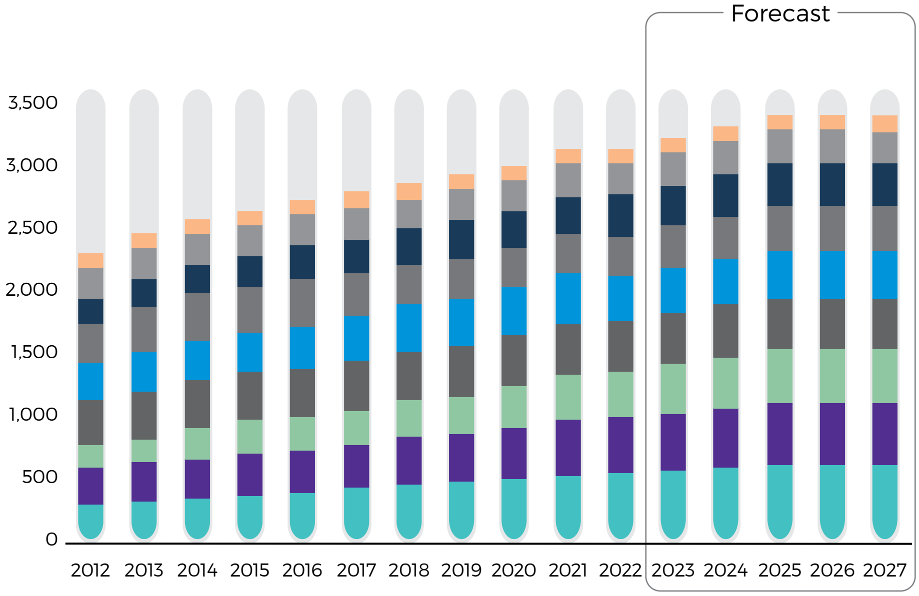
INDUSTRY AND BUSINESS REVIEW

Global Pharmaceutical Industry

According to a recent report by the IQVIA Institute for human data science, the global expenditure on medicines has been steadily increasing over the past decade, reaching a size of $1.5 trillion in 2022. However, in 2022, the global use of medicines experienced a plateau after a significant rebound in 2021, as markets began to recover from the impacts of the pandemic.

Looking ahead, the report projects that the global medicine market, based on invoice price levels, will continue to grow at a CAGR of 3%+ until 2027 to reach ~$1.9 trillion. It is worth noting that spending and volume growth in the market will exhibit diverging trends based on different regions. Established markets with larger economies are expected to experience slower growth rates while emerging growth markets in Eastern Europe, Asia, and Latin America are anticipated to see growth in both volume and spending.

Historical and Projected Use of Medicine by Region, 2012–2027, Defined Daily Doses (DDD)
(in $ bn)



	CAGR % 2023-2027
Global	1.6
Japan	0.4
North America	0.1
China	1.7
Africa and Middle East	2.3
Eastern Europe	0.5
Western Europe	0.4
Latin America	2.4
India	2.4
Asia-Pacific	2.5

Source: IQVIA Market Prognosis, Sep 2022; IQVIA Institute, Dec 2022.

Megatrends

Boom in Generics Medicine
According to Precedence Research, the global market for generic is projected to reach $574.6 billion by 2030, exhibiting a CAGR of 5.6%. This expansion is propelled by the expiration of patents for numerous branded drugs, rising demand for cost-effective medications, and an increasing prevalence of chronic diseases.

Digital Health
According to a recent report by the IQVIA Institute for human data science, biotech is projected to account for 35% of global spending, encompassing several domains with significant advancements in novel medicines.

Focus on Sustainability
The pharmaceutical industry is facing growing accountability for its environmental impact and social responsibility. Furthermore, due to the intricate supply chains prevalent in this sector, sustainability has evolved into a crucial business imperative.

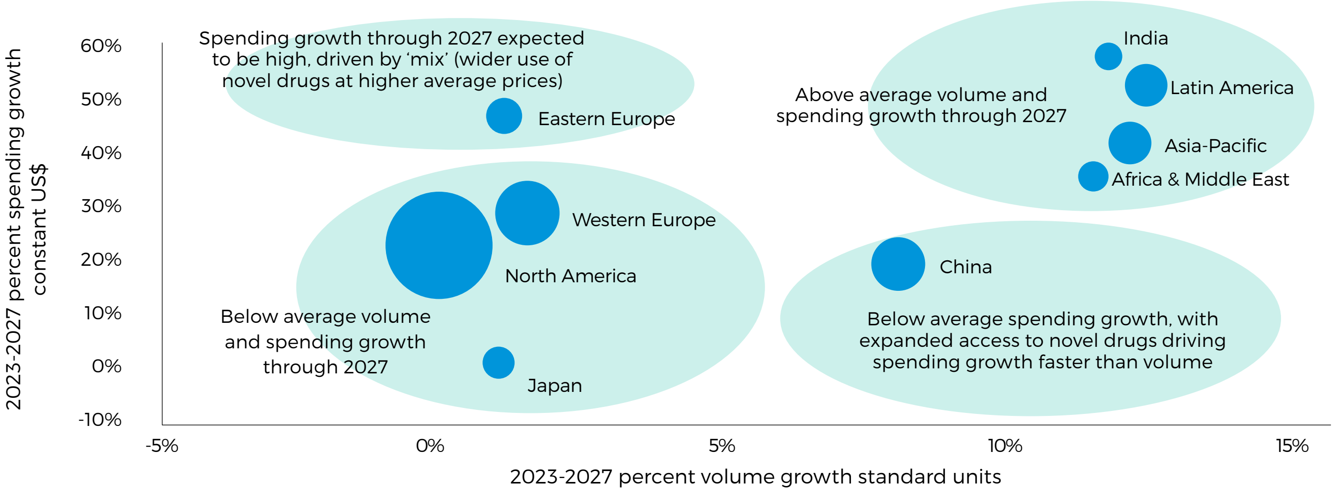
Growth by Region

In 2022, according to a recent report by the IQVIA Institute for human data science, the US market, on a net price, is forecasted to experience a positive CAGR over the next five years. This includes the projected effects of the Inflation Reduction Act (IRA). Additionally, Europe is expected to witness an increase in spending by $59 billion through 2027, with a focus on generics and biosimilars. Spending growth in China is expected to slow, with positives driven by greater uptake and use of new original medicines and offset by pressures placed on off-patent and generic pricing.

The growth in developed economies is anticipated to maintain a relatively steady pace, as the introduction of new products is counterbalanced by patent expires. On the other hand, Latin America, Eastern Europe, and certain regions in Asia are projected to experience robust growth driven by increased volume and adoption of novel medicines.

Spending and Volume Growth by Region

(%)



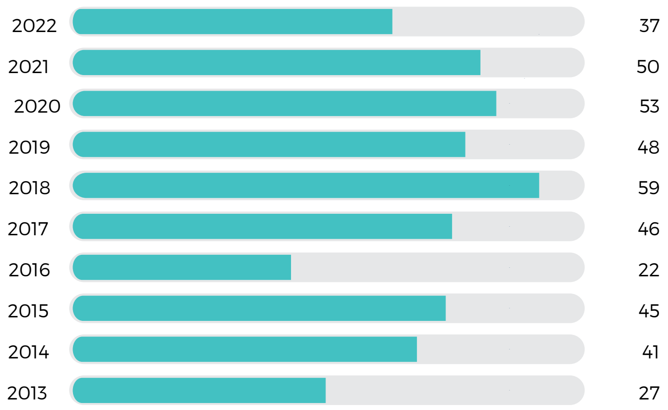
Source: IQVIA Market Prognosis, Sep 2022; IQVIA Institute, November 2022.

FDA Drug Approvals

In 2022, Centre for Drug Evaluation and Research (CDER) approved 59 new drugs, including novel therapies for cancer, rare diseases, and infectious diseases. This was higher than the count of 50 approvals in 2021 and the average 10-year count of 43 approvals.

CDER's Novel Drug Approvals By Year

(Nos.)



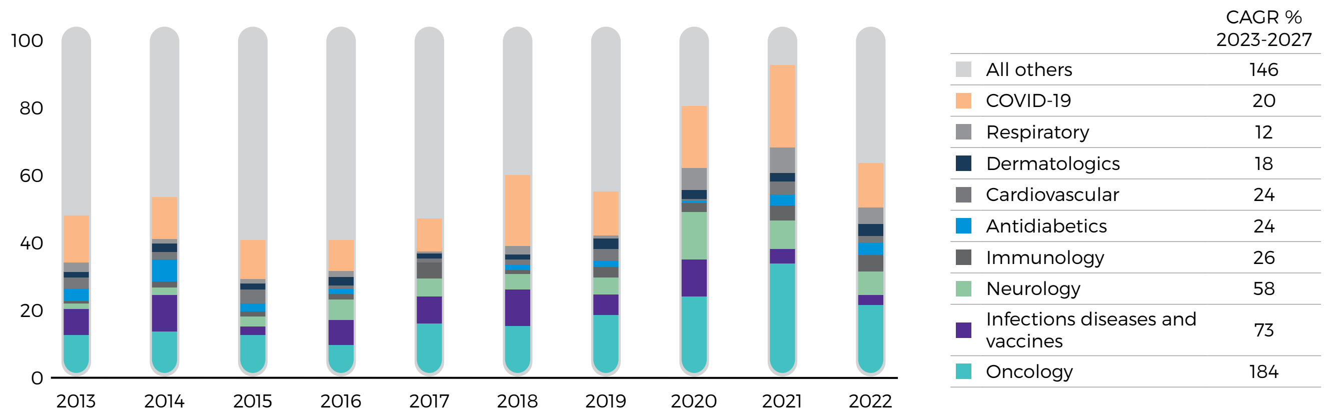
Source: USFDA

New Drug Launches

According to a recent report from the IQVIA Institute for Human Data Science, there was a total of 585 global New Active Substance (NAS) launches in 2022. Out of these, 184 oncology launches were seen, including treatments for rare cancers and ground-breaking new treatments in immuno-oncology. Neurology includes 58 drugs in the past decade, with recent launches for rare neuromuscular diseases and a new CGRP mechanism for migraine treatment.

Additionally, it is projected that the contribution from new brands in the pharmaceutical industry will see a significant increase over the next five years, reaching an estimated value of $110 billion. This surge in value is attributed to the anticipated launch of over 250 new active substances (NASs) during this period.

Novel Active Substances (NASs), 2013-2022, by Therapy Area



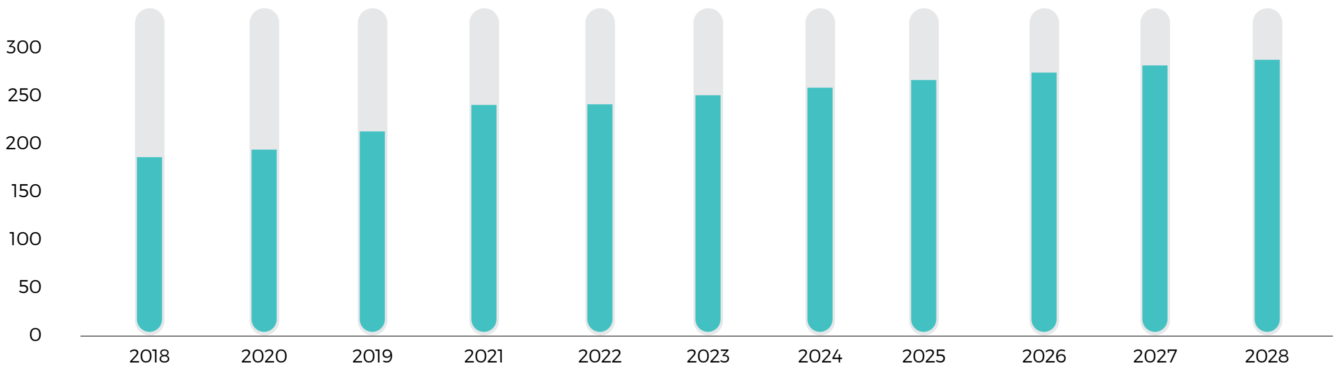
Source: IQVIA Institute, January 2023.

Pharmaceutical R&D

The year 2022 saw $42.1 billion in investments in US biopharma companies, which is 25% above 2019. In the past five years, deal activity has shifted geographically with more companies headquartered in China and Korea, while fewer Europe-based companies are included.

The number of deals between pharma companies decreased by 25% from 2021 to 2022, but the R&D funding from the large pharmaceutical sector remained high, with a record $138 billion invested in R&D by the 15 largest pharmaceutical companies in 2022.

Pharmaceutical R&D Spending, 2018-2028 (in $ bn)



Indian Pharmaceutical Industry

The Indian pharmaceutical industry has emerged as a major player in the global market, offering affordable drugs and vaccines to millions of people worldwide. The industry's expertise in generic drugs, biosimilars, and biologics has helped it grow at a CAGR of 9.4% over the past nine years as per IBEF, making it the third-largest pharmaceutical producer by volume.

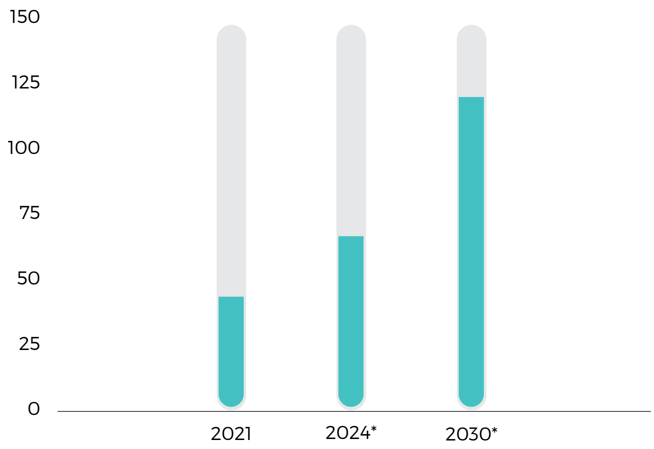
According to the latest economic survey, the Indian pharmaceutical market is expected to grow exponentially, reaching $65 billion by 2024 and $130 billion by 2030. Indian pharma companies have a significant share in the US and EU prescription market. The government is committed to improving healthcare and is expected to increase expenditure on healthcare, which is likely to boost the industry's growth further. Moreover, the Indian government aims to boost healthcare accessibility by increasing the penetration of health insurance. This strategic move is anticipated to have a significant positive impact on the pharmaceutical industry, fostering even greater growth opportunities.

India's Prescence in the Global Industry

India holds a prominent position in the global Active Pharmaceutical Ingredient (API) market, capturing ~8% of the market share Setting an exemplary standard, the country boasts the largest number of FDA-approved plants outside the US and an extensive array of pharmaceutical manufacturing facilities that comply with rigorous USFDA standards.

Notably, India's influence extends to the global exports of generic drugs, meeting nearly 20% of the global demand. This further solidifies India's stature as a major player in the international pharmaceutical landscape, emphasising its ability to supply affordable and high-quality medications on a global scale.

India Pharmaceutical Market (in $ bn)

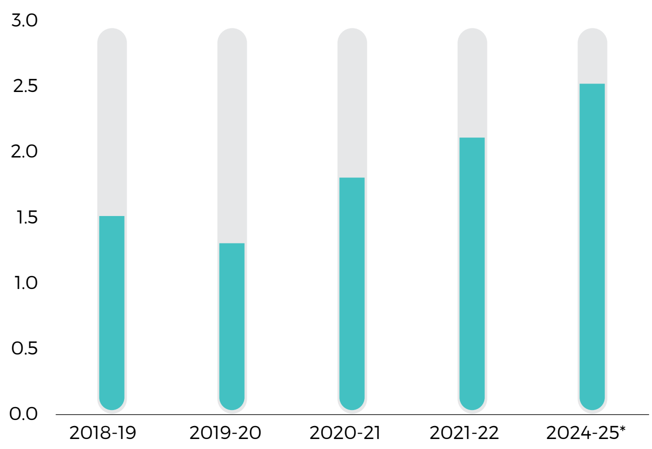


Source: Statista

* Estimated

Government Healthcare Expenditure as a share of GDP in India, 2019-2025

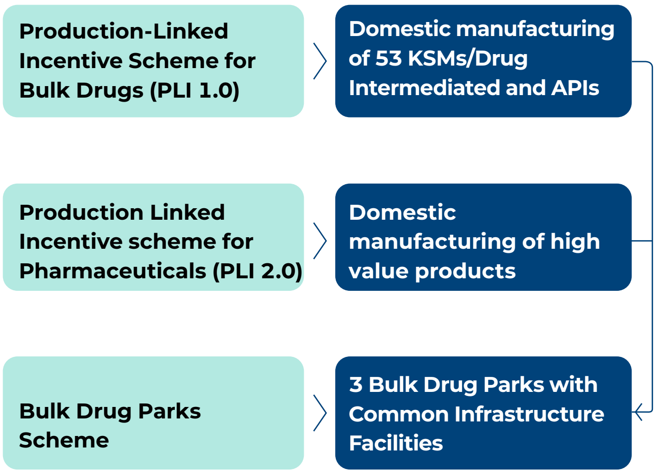
(%)



Source: Statista

* Projected

Snapshot of Government Policies

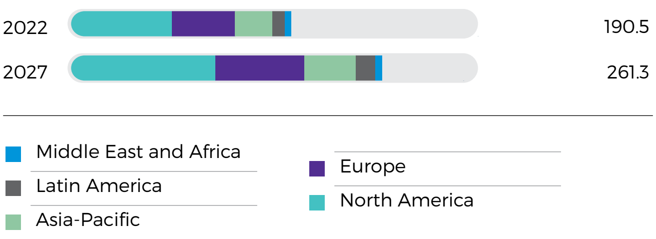


Global Active Pharmaceutical Ingredients (API) Industry

The global API market, which was valued at $190.5 billion in 2022, is projected to grow at a CAGR of 6.5% from 2022 to 2027, reaching $261.3 billion by 2027. This is driven by the increasing demand for specialty medicines and the high adoption rate of generic drugs. The expansion of the biopharmaceutical sector and the development of new drugs is also expected to fuel market growth. Additionally, the rising prevalence of chronic and infectious diseases is further expected to increase the demand for APIs.

Growth by Region

(in $ bn)



Source: Polaris Market Research Analysis

Megatrends

High Potency API growing across the globe

Active Pharmaceutical Ingredients (APIs) are used in the production of high potency API that address a range of chronic diseases.

Ageing Population

Ageing population is another key factor driving the demand for medications as they are more likely to suffer from chronic diseases.

Technological Advancements

Advancements in technology have led to the development of innovative APIs and drug delivery systems, which are more effective and have fewer side effects.

Indian Pharmaceutical (API) Industry

According to IBEF, the Indian API market is estimated to reach $27.9 billion by 2023. This growth reflects the critical role that APIs play in the Indian pharmaceutical sector, which accounts for over half of the country's pharmaceutical exports. Recognising the significance of a robust API industry, the Indian government has introduced the PLI scheme. Under this scheme, a dedicated program has been implemented to foster domestic production of essential Key Starting Materials (KSMs) and APIs. These initiatives are aimed at reducing dependency on imports and fostering a thriving API ecosystem within the country.

Hikal's Opportunity Landscape

The increasingly stringent environmental regulations and rising labour costs in China have resulted in a significant escalation in business expenses for Chinese companies. This has created an opportunity for Indian players to strengthen their competitive position. Additionally, the 'China-Plus One' strategy adopted by global companies is an opportunity for countries like India to boost their exports of API products.

Due to these megatrends, we are well-positioned to experience growth in our API segment.

Global Contract Development and Manufacturing Organisation (CDMO) Industry

According to a report by Mordor Intelligence, the global CDMO market is expected to grow at a CAGR of 7.2% through 2026, driven by factors such as the increasing demand for specialised treatments, the growing biopharmaceutical industry, and the rising need for advanced manufacturing technologies. The market is segmented by service type, which includes contract development and contract manufacturing services, and by end-user, which includes pharmaceutical and biotechnology companies.

Indian Contract Development and Manufacturing Organisation (CDMO) Industry

The Indian Contract Development and Manufacturing Organisation (CDMO) industry has seen significant growth in recent years due to increasing demand for outsourcing pharmaceutical manufacturing and development services. According to a report by CareEdge Ratings Indian CDMO industry is expected to reach $30 billion by 2025, growing at a CAGR of 12%. This growth can be attributed to several factors such as the increasing number of US FDA-approved facilities, rising demand for generic drugs, and favourable government initiatives.

Hikal's Opportunity Landscape

Recent disruptions in the global supply chains have further prompted companies to reconsider their value chains. To mitigate risks, companies are actively reducing their reliance on import from China due to geopolitical tensions. The combination of recent geopolitical tensions and India's emergence as a reliable alternative to China has fostered partnerships between global firms and Indian companies, especially in the CDMO. We, benefiting from robust macroeconomic trends and advantageous firm-level factors, are strategically positioned to leverage this trend and achieve significant growth in our CDMO segment.

Megatrends

Increasing Demand for High-Value Services

Services such as drug discovery and development, which require specialised skills and expertise.

As a result, CDMOs are investing in R&D capabilities and building partnerships to offer end-to-end solutions for drug development.

Increasing Focus on Technology and Innovation

Adoption of advanced technologies such as continuous manufacturing, automation, and artificial intelligence to optimise production processes, reduce costs, and improve quality control.

Integrated Services

The shift towards offering end-to-end solutions allows CDMOs to provide a more comprehensive service to their clients and create long-term partnerships.

HIKAL – BUSINESS REVIEW OF THE PHARMACEUTICAL DIVISION

Our pharmaceutical division has remained steady in recent years, thanks to strong demand from both domestic and international markets. The division's manufacturing capabilities have also been expanding, and it has received several regulatory approvals for its facilities, enabling it to serve global markets. During the year, our revenues stood at ₹11,150 million against the previous year's revenues of ₹11,297 million. The EBIT for the division stood at ₹650 million, achieving a 6% margin. During the year, our API facility in Panoli, Gujarat, successfully faced a US FDA audit in 2022-23. The audit yielded exceptional results, and we received a compliance status of 'No Action Indicated' (NAI), commonly known as 'Zero 483' observations from the US FDA.

API

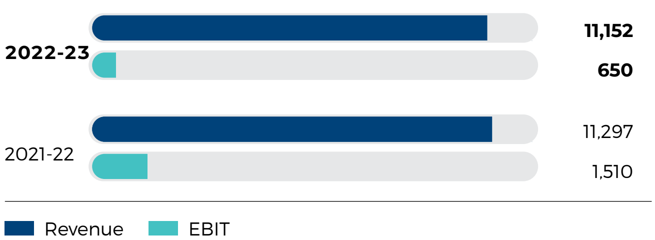
During the year, our API facility in Panoli, Gujarat, successfully faced a US FDA audit In May 2023. The audit yielded exceptional results, and we received a compliance status of 'No Action Indicated' (NAI), commonly known as 'Zero 483' observations from the US FDA.

Looking ahead, our primary focus will be maximising active pharmaceutical ingredient (API) sales by increasing our share of customers' wallets. To achieve this, we will explore new markets and actively work towards expanding our market share in specific APIs where we possess distinct advantages in terms of backward integration, scale, and technology. We have a healthy portfolio of new products in the development pipeline and a robust plan for their launch in the near future.

CDMO

During the year, despite facing business headwinds, we experienced increased traction among our existing innovator customers allowing us to expand our share of their business. Our robust pipeline of projects in the CDMO space continues to grow, and we remain committed to fostering strong partnerships and capitalising on emerging opportunities in the CDMO industry. The division is well-positioned to benefit from the increasing outsourcing trend in the pharmaceutical industry.

Performance Snapshot (in ₹ mn)

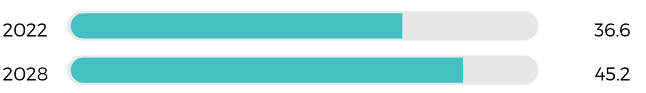


Global Animal Health Industry

According to a report by IMARC Group, the global animal health market size was valued at $ 36.6 billion in 2022 and is expected to grow to $45.2 billion by 2028, exhibiting a CAGR of 3.58% through 2028. The increasing demand for animal-derived food products, the rising prevalence of zoonotic diseases, and growing awareness about animal health is driving the growth of the animal health industry. The market is segmented based on animal type, product, and distribution channel. The major products in the animal health industry includes pharmaceuticals, vaccines, feed additives, and diagnostics.

Animal Health Market forecast

(in $ bn)



Source: IMARC

Growth by Regional Market Segment

North America and Europe are major markets for animal healthcare products due to the large number of companion animals and livestock in the region. Europe held the largest market share of over 34% in 2022, followed by North America, with a market share of 29%.

The Asia-Pacific region is expected to witness significant growth during the forecast period due to the increasing demand for animal products and the growing pet ownership in emerging economies such as China and India. A report by Grand View Research also predicts significant growth in the Middle East and Africa's animal health market due to the increasing demand for animal protein and the growing awareness of animal welfare in the region.

Indian Animal Health Industry

The Indian animal health market is expected to reach ₹233.9 billion by 2026, growing at a CAGR of 8.2%, according to a report by IMARC Group. This rapid growth rate is driven by factors such as rising demand for animal-based products, increasing pet ownership, and government initiatives on animal healthcare. Presently, the market is dominated by vaccines and pharmaceuticals, with a focus on livestock health. However, there is a growing trend toward natural and organic products in the pet segment.

The government of India has implemented several policies and initiatives to promote the growth of the animal health industry, including the National Livestock Mission, the National Programme for Bovine Breeding and Dairy Development, and the Rashtriya Krishi Vikas Yojana. These policies aim to improve animal health, increase livestock productivity, and promote sustainable agriculture.

Megatrends

Government Support and Initiatives

The Indian government has been introducing various initiatives and policies to support the growth of the animal health industry, such as the National Livestock Mission and the Livestock Health and Disease Control Scheme.

Increasing Awareness about Animal Health

There is a growing awareness among Indian farmers and pet owners about the importance of animal health and welfare, which is driving the adoption of animal healthcare products and services.

Rising Pet Ownership

With increasing disposable income and changing lifestyles, there is a rising trend of pet ownership in India, which is boosting the demand for animal healthcare products and services.

HIKAL – BUSINESS REVIEW OF THE ANIMAL HEALTH DIVISION

We are dedicated to the development and manufacturing of high-quality veterinary products for both domestic and international markets. Our strong regulatory track record and manufacturing capabilities have fostered enduring partnerships with leading animal health companies. With a strong focus on quality, we are expanding our global presence in recent years, particularly in Europe and Latin America.

To sustain the growth momentum, our Animal Health business aims to further diversify our product portfolio, with a specific emphasis on the Anti-parasiticide segment. Over the next couple years, we will supply validation batches of products to our customers. Additionally, we seek to explore new geographical markets to capitalise on emerging opportunities. Thus, investment in R&D is an important area of focus, as we strive to create innovative products that address unmet needs in the animal health industry. With the increasing global demand for veterinary products, Hikal is well-positioned to seize opportunities and solidify its position in the market.

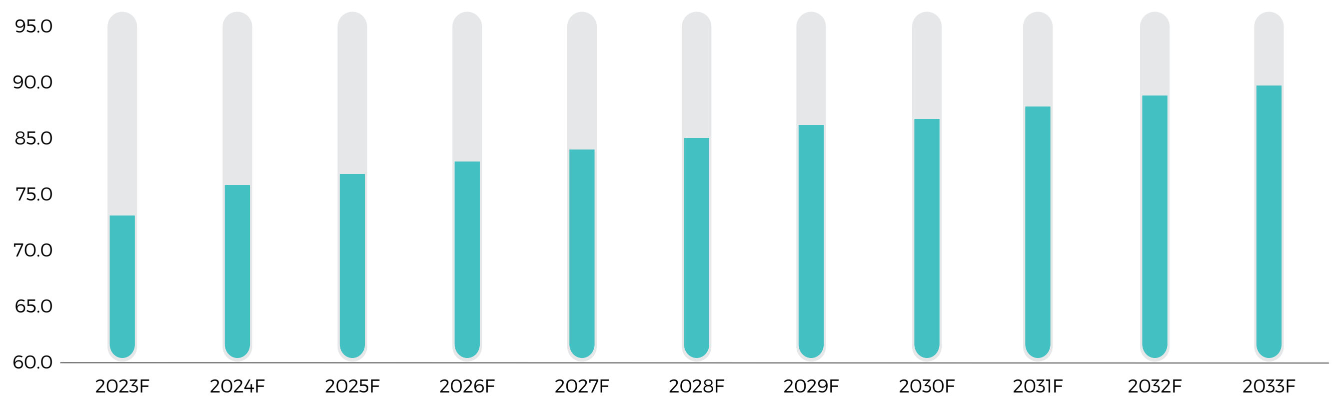
Global Crop Protection Industry

According to the latest report from S&P Global, the global market for crop protection products, excluding sales of herbicide tolerant and insect-resistant seed, as well as non-crop agrochemicals, experienced significant growth in 2022. The market size is estimated to have increased by 9.9%, reaching a value of $78.7 billion. When measured in constant currency terms, the overall market witnessed a substantial rise of 16.7% compared to the previous year.

Additionally, the favourable weather conditions in key country markets played a crucial role in driving the market's positive momentum. However, it is worth noting that currency headwinds emerged as a limiting factor, as several major currencies weakened against the USD throughout the year, ultimately impacting the market's overall potential for growth.

Forecasted Agrochemical Market Performance, 2022-2032

(in $ bn)



Source: S&P Global F: Forecasted

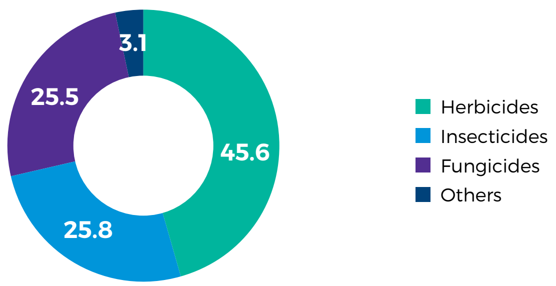
Growth by Product

As on 2022, the crop protection industry is dominated by herbicides, with a market share of 45.6%.

Herbicide sales were valued 13.9% higher than last year at $37.1 billion. Similarly, fungicide sales increased by 7.4% and crossed the $19 billion mark, representing a 45.6% share of the global crop protection market. Insecticides experienced a similar growth, rising by 6.3% to reach a market size of $19 billion.

Crop Protection Industry, Split by Market Type

(%)



Source: S&P Global

Growth by Region

Overall, the Asia-Pacific market demonstrated a growth rate of ~5.0% and reached nearly $25.1 billion during the year. The two largest markets in the region, China and India performed well in 2022, driven by the high pricing of active ingredients observed in 2021 and continuing into 2022.

Data published by China Crop Protection Industry Associated (CCPIA), indicates that representative prices of major molecules such as glyphosate, the largest molecule globally, witnessed a double-digit increase (+11.0%) in 2022 compared to the previous year. This surge in prices can be attributed to the Chinese government's pursuit of carbon neutrality goals, resulting in intermittent power outages in various provinces and subsequent production curtailment orders for energy-consuming industries.

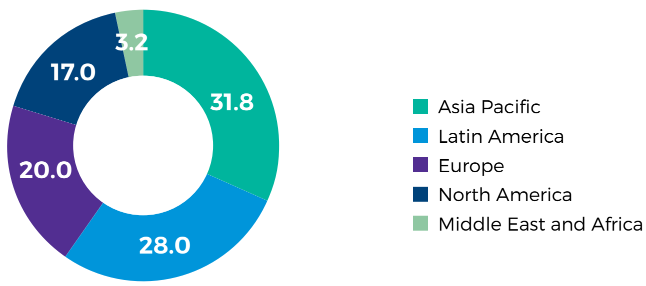
However, the growth in the Asia-Pacific market has been partly offset by weakness in Japan. Limited demand for pesticides, coupled with a significant depreciation in the Yen, has resulted in a decline of 8.7% in the Japanese market, which is estimated to have reached $3,238 million.

Additionally, Latin America has shown a significant rebound in 2022 and is estimated to grow by 16.8% to reach $22,069 million. This is attributed to the resilience of the currencies of various countries in the region coupled with a return to more favourable weather.

The North American market shows promise, particularly in the US, where high active ingredient prices and modest increases in the soybean area, along with favourable yield prospects, have resulted in reaching a substantial size of $13,366 million in 2022. Conversely, the European market had experienced a declining trend due to stringent regulations and unfavourable weather events in recent years. However, a noteworthy turnaround occurred in 2022, witnessing a growth of 6.3% to approximately $15.7 billion.

Crop Protection Industry, Split by Region

(%)



Source: S&P Global

Indian Crop Protection Industry

According to the latest report from S&P Global, Indian crop protection market was valued at $3,665 million in 2022. It performed well during the year driven by the high active ingredient price environment that has been experienced through 2021 and coming into 2022. Additionally, high product prices are a driver behind growth in the Indian rice market with such factors offsetting severe heatwaves and reduced planting of the kharif crop in the northeast region due to inadequate rainfall during the first half of the 2022 summer monsoon season, as well as currency headwinds.

Going forward, the market will be primarily driven by factors such as increasing awareness among farmers regarding crop protection chemicals, the adoption of modern farming practices, and the growing demand for food security.

Size of Indian Crop Protection Market

(in $ mn)

Source: S&P Global

Hikal Opportunity Landscape

The China+1 strategy, which involves diversifying investments away from China to mitigate risks, has gained significant attention in recent years. The China+1 strategy presents a significant opportunity for the Indian crop protection industry to flourish.

By attracting investments and strengthening domestic production capabilities, India can enhance its self-reliance in crop protection, promote agricultural sustainability, and drive economic growth. This creates an opportunity for Indian companies such as Hikal to capitalise on this trend and thrive.

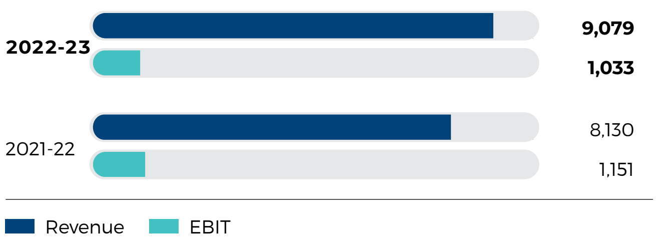
HIKAL — BUSINESS REVIEW OF CROP PROTECTION DIVISION

The Crop Protection division achieved a 12% annual revenue growth with ₹9,079 million in total revenues for 2022-23 compared to ₹8,130 million recorded in the previous year. The EBIT of the division was at ₹1,033 million, representing a margin of 11%. The revenue growth is primarily attributable to higher demand from existing and new customers. Moreover, we commercialised two new advanced intermediates for a global innovator company.

During the year, we focused on capitalising on new opportunities, strengthening our position among global innovator companies, and enhancing operational efficiencies through strategic vendor development and supply chain optimisation. These measures ensure a reliable supply of essential raw materials and contribute to stable pricing. By implementing these initiatives, we are fortifying our operations, streamlining costs, and reinforcing our ability to meet customer demands efficiently and consistently.

We are currently stablising the process and expect to start the revenue accrual subsequently. We are also exploring new product opportunities in the business. The CDMO business has continued to receive new inquiries from existing as well as new customers, and there are several new inquiries in the pipeline. On the crop side, there has been some channel inventory build-up, and we expect a correction in inventory demand for one to two quarters in the crop business.

Performance Snapshot (in ₹ mn)



RESEARCH & TECHNOLOGY REVIEW

Pioneering Excellence in Meeting Customer Demands

We have excelled in continually cultivating distinctive commercial capabilities to cater to diverse customer requirements. Our efficient and economical lab-to-pilot stage operations employ cutting-edge techniques to showcase the viability of scaling up a novel product.

We are technology-driven supplier of active ingredients and advanced intermediates in the pharmaceutical and crop protection industries. With a strong focus on Research and Technology (R&T), we invest 3-4% of our annual sales to develop environmentally friendly, efficient, and cost-competitive processes. Expanding capacities and investing in cutting-edge facilities, we deliver innovative solutions to meet evolving market demands.

Recognising the importance of operational efficiency, we are actively pursuing captive production capabilities to enhance cost-effectiveness. Furthermore, we are expanding our capacities and investing in state-of-the-art laboratories and cutting-edge equipment. These investments empower us to deliver ground-breaking products that meet the ever-evolving needs of the market.

Process Improvement

Our focus is on shortening the time it takes for processes to be completed and reducing the amount of solvent used in process development by recycling the solvent that has been recovered. We aim to decrease the amount of waste produced so that it has a smaller impact on the environment.

Regulatory Filings

Our R&T team has made significant progress in regulatory filings. During the year, our filing achievements include three US DMFs (Sitagliptin Hydrochloride, Desvenlafaxine Succinate, Bupropion Hydrobromide Form-I), one EU DMF (Vildagliptin), one Japan DMF (Sitagliptin Phosphate Anhydrous), two China DMFs (Pentoxifylline and Pregabalin), and multiple amendments to US DMFs and CEPs in the pharmaceutical segment.

API

Hikal's R&T Initiatives in Animal Health APIs

Our R&T team has embarked on the development of multiple Animal Health APIs simultaneously. One of these APIs has already undergone successful validation on a plant scale, while the development of a few others has been completed.

Application of Green Chemistry Principles

In line with our dedication to sustainability, we diligently apply Green Chemistry principles throughout the development of Animal Health APIs. By prioritising environmentally friendly practices, we strive to minimise our ecological footprint and contribute positively.

Innovative and Safer Process for Key Starting Materials (KSMs)

An innovative and significantly safer process for one of the Key Starting Materials (KSMs) used in Animal Health API production was developed, leading to a filed patent. This process avoids the use of hazardous Carbon monoxide and eliminates the need for conducting the reaction at lower temperatures, making it safer and more efficient.

Development of Green Chemistry-Based APIs

We apply Green Chemistry principles throughout the development of our Animal Health APIs and adhere to the highest standards of sustainability. We kickstarted the development of several Animal Health APIs in parallel with an existing one, achieving successful validation on a plant scale at Unit-2. Furthermore, the development of several other APIs has been completed, showcasing our expertise in this field. This commitment ensures that our products not only deliver effective solutions but are also environmentally responsible, making a positive impact on the world around us.

CDMO

Exploring Lipid Chemistry: A New Frontier for Hikal

As part of a customer project, our CDMO team ventured into the realm of Lipid Chemistry, marking a significant milestone for Hikal. Lipids, complex molecules commonly used as excipients in the pharmaceutical and cosmetic industries, were successfully explored and developed by our team.

Scaling Up Nutritional Supplement Drug Production

The CDMO team accomplished the successful development and scale-up of a nutritional supplement drug, enabling us to supply commercial quantities to our valued customers. This achievement not only demonstrates our capabilities in meeting specific formulation requirements but also showcases our commitment to delivering effective and safe products.

Recognition in Macrolide Chemistry: Publication in ACS Omega Journal

The development work in Macrolide chemistry undertaken by our CDMO team was recognised and published in a prestigious journal by the American Chemical Society, known as ACS Omega. This accomplishment showcases our expertise and contributes to the scientific community's knowledge in this field.

Safety and Sustainability at the Core

Successful Scaling of Click Chemistry and Safety Measures

A major achievement was the successful development and scaling up of Click Chemistry accompanied by the implementation of robust Safety Measures/Controls. This ground-breaking accomplishment involved the handling of a highly hazardous chemical on a large scale for the first time in India, reinforcing our commitment to innovation and safety.

Robust Process Development for a Flavouring Agent

Our talented team successfully developed the synthesis route and a robust process for a Flavouring Agent, paving the way for upcoming scale-up initiatives. This achievement highlights our dedication to delivering high-quality products that meet the unique needs of our customers.

Development of Greener Process for an Advanced Intermediates

In our continuous pursuit of greener practices, we developed a much more environmentally friendly process for an Advanced Intermediate supplied to one of our customers. This innovative process eliminated the use of a hazardous reagent while improving both the Process Mass Intensity (PMI) and overall throughput, contributing to more sustainable and efficient production

Crop Protection

New Equipment's in ET Lab:

The Effluent Treatability Lab (ETL) is upgraded with two new equipment.

Bomb calorimetre to find out the calorific value of by-products/ residue.

MBR – Membrane bioreactor used for biodegradation study of aqueous effluents.

Milestones Achieved Last Year

- A crop project successfully implemented process that recycles aqueous effluent, resulting in a remarkable 75% reduction in overall effluent quantity and it was implemented on a commercial scale.
- The same crop project achieved significant progress by reducing impurity formation in one step using a suitable catalyst, leading to improved yield and purity of the final product.
- Additionally, another crop project saw the successful development and implementation of a robust process for Grignard reagent preparation at a commercial scale, showcasing our ability to innovate and optimise processes in the agricultural chemicals industry.

Outlook

As part of our R&T strategy, we will continue to prioritise product development that cater to our customer's needs, aiming to commercialise them effectively. Our goal is to convert contract development projects into long-term manufacturing opportunities in both Pharma and Crop Protection divisions.

To enhance product competitiveness, we are implementing process improvements, productivity measures, and cost-reduction strategies. We are actively investing in new technologies and forging partnerships to support these endeavours. Our commitment to newer and greener technologies will contribute to reducing our carbon footprint, optimising resource utilisation, and improving overall process efficiency.

FINANCIAL REVIEW

Consolidated Abridged Profit & Loss Statement

(in ₹ mn)

Particulars	2022-23	2021-22
Total revenue	20,284	19,476
EBITDA	2,625	3,454
PBT	1,054	2,185
PAT	784	1,605

Revenue from Operations

Our total revenue registered a growth of 4% y-o-y, reaching ₹20,284 million compared to the previous year's figure of ₹19,476 million. The performance of the Crop Protection division was a significant contributing factor to this achievement, as it met the high demand of our global CDMO customers and added existing contracts with global innovator companies.

EBITDA

Our EBITDA for the current fiscal year amounted to ₹2,625 million, marking a decline from the previous year's figure of ₹3,454 million. During the year, we implemented various cost-saving measures to protect our margins. Additionally, our EBITDA margin stood at 13%.

PAT

Our PAT for 2022-23 stood at ₹784 million. Factors contributing to this included an increase in depreciation due to asset additions, as well as a marginal uptick in finance costs resulting from interest rate hikes.

₹20,284 mn
REVENUE

₹2,625 mn
EBITDA

Consolidated Cash Flow Statement

(₹ in mn)

Particulars	As on 31 March 2023	As on 31 March 2022
Opening Cash and Cash Equivalents	114	76
Cash flows from:		
(a) Operating Activities	3,153	2,937
(b) Investing Activities	(2,923)	(2,843)
(c) Financing Activities	(77)	(56)
Closing Cash and Cash Equivalents	267	114

Working Capital Position

As of 31 March 2023, we maintained a strong working capital position, which was supported by an increase in both trade receivables and inventory levels. Although this was partially offset by an increase in trade payables, we generated ₹3,153 million from operating activities, an increase from the previous year's value of ₹2,937 million. Our investing activities resulted in a cash outflow of ₹2,923 million, which was utilised to expand capacity as part of our ongoing capex program aimed at realising future business opportunities. Meanwhile, financing activities led to a smaller outflow of ₹77 million, indicating an increase in outflow, from the previous year's figures. As of 2022-23, the company's closing balance of cash and cash equivalents stood at ₹267 million.

₹3,153 mn
OPERATING CASH FLOW

₹267 mn
CASH AND CASH EQUIVALENTS

Debt Position

In 2022-23, the net-debt equity ratio slightly increased to 0.61 in 2022-23 compared to 0.59 in previous year. However, there was a increase in the net debt to EBITDA ratio, which rose to 2.62 from the previous year's value of 1.81. The interest cost incurred during the current fiscal year was ₹481 million, indicating an increase from the previous year's interest cost of ₹312 million.

Return on Equity (ROE) and Return on Capital Employed (ROCE)

2022-2023 saw a decrease in the Return on Equity (ROE) to reach 7.07% compared to the previous year's figure of 16.2%. On the other hand, the Return on Capital Employed (ROCE) declined by 650 basis points from 15% in 2021-22 to 8.5% in 2022-23.

Capex

For 2023-24, we have allocated a total of ₹1,500 million towards a Capex programme aimed at increasing capitalisation. The funds will be used to create multi-product plants that will benefit both the Pharmaceutical and Crop Protection divisions, as well as upgrade the infrastructure of existing production facilities. We anticipate that these new plants will reach full capacity utilisation within the next 2-3 years.

Key Financial Ratios

Key Ratios	As on 31 March 2023	As on 31 March 2022	Variance (%)
Debtor Turnover	4.56	4.17	9%
Inventory Turnover	3.43	3.35	2%
Interest Coverage Ratio	3.19	7.00	54%
Current Ratio	1.42	1.25	13%
Net Debt Equity Ratio	0.61	0.59	3%
Net Profit Margin (%)	3.91	8.26	53%
Net Worth	11,335	10,680	6%

STRATEGIC REVIEW

Project Pinnacle

Over the last two years, we have embraced a new growth story to further strengthen our bold aspirations. Project Pinnacle, our business transformation initiative, has already begun to bear fruit, bringing us closer to our vision.

Leadership in ESG

Aligned with our shared purpose of improving lives and serving the larger community, we are committed to incorporating sustainability into every aspect of our operations.

We are proactively engaging with international rating agencies to ensure global recognition of our efforts in ESG. These agency ratings will serve as a critical factor in establishing ESG as a distinctive characteristic that sets us apart from competitors. Our commitment and prompt action have already garnered the attention of esteemed EcoVadis, who recently awarded us the prestigious bronze medal for our Crop Protection business, validating our dedication to sustainability.

Going forward, ESG will be a key driver of our business. We have defined a future strategy and roadmap to make a positive environmental impact through our operations.

Regulatory Compliance

We believe in being in alignment with our commitment to green chemistry and green engineering, therefore, we continue to invest in the right processes and systems which help us in conducting our business in a safe and responsible manner that also meets the global regulatory standards.

Competitive Advantage

Our production plants are compliant with international agencies like the US FDA, PMDA, EU, and other global agencies.

How We Use It:

- We use it to maintain create shared value.
- We use it to align our interests with collective well-being.

Key Pharma Regulatory Approvals

Integrated Management System across all Sites

Manufacturing Excellence

We are strategically investing in our operations, enabling us to optimise resources and achieve greater operational efficiency. Moreover, we are actively expanding our capacities and making investments in new equipment.

Competitive Advantage

Our state-of-art GMP/Non-GMP manufacturing facilities have positioned us well to meet the requirements of customers across our business segments.

How We Use It:

- Ensure on-time delivery of products to our valued customers.
- Maintain profitability without compromising on our quality and ESG commitments.

HIBEX Productivity Challenge

We have launched an organisation-wide Capital Efficiency Program termed as 'HIBEX Productivity Challenge' that focuses on creating holistic sustainable outcomes. The programme has been launched as an innovative micro-battle competition to keep every Hikalite excited and engaged while ensuring the timely delivery of tangible results across:

- Increased throughput from existing assets.
- Higher profitability in a sustained manner.
- Improved asset returns through sustainable operations.

Initiatives Undertaken

Capacity

Launch of:

- 1 new synthetic laboratories at our R&T Centre, Pune.

Addition of:

- A new API production block at Jigani Unit I.
  - 3 APIs have been validated.
  - 2 APIs under progress.
- A new production block at Jigani Unit II.
- Used for the production of APIs, CDMOs, and intermediates.

Capacity

HIBEX:

- Lean Six Sigma Principles.
  - 100 people trained and additional 200 people to be Six Sigma trained by next year.
- Implementation of self-managed teams (SMTs) at Unit I, Jigani site and Panoli site.
- 20% production increment for one pharmaceutical product facilitated by automation and efficient material handling.
- Achieved 20% cost improvement across 3 generic APIs.

Compliance

Planned Approvals

- Unit II, Panoli, Bengaluru for extension into API manufacturing.

Research and Technology

Our commitment to harnessing the full potential of science and technology has been instrumental in our ability to deliver exceptional products and solutions to our customers. This approach not only ensures high-quality outcomes but also enhances the productivity of our sites and the profitability of our businesses.

We are actively expanding our capacities and making substantial investments in new laboratories and cutting-edge laboratory equipment.

Competitive Advantage

Our R&D capabilities rely on our Company's culture of innovation, research, and collaboration.

How We Use It:

- Diversify our product portfolio by creating high-value new products.
- Improve the profitability of our existing product portfolio.
- Create a differentiated value proposition by developing capabilities across complex chemistries.

Customer Centricity

At the heart of our business lies a customer strategy that transcends the ordinary, aiming to create an extraordinary experience for every client we serve. We are committed to forging a unique value proposition, one that intertwines the realms of custom manufacturing and bulk development services, unleashing a vast array of capabilities that set us apart.

Competitive Advantage

Our customer orientation relies on our commitment to being a reliable partner for our customers.

How We Use It:

- Create enduring and value-accretive partnerships with our customers.
- Provide exceptional customer service and innovate basis customer feedback to build loyalty and advocacy.

Initiatives Undertaken

Key Account Management (KAM) Systems

This year, we have adopted a KAM approach across multiple accounts to build deeper strategic relationships. As part of our KAMs, we have:

- Defined priority accounts basis current size and full potential.
- Define key roles and responsibilities to manage priority accounts and ensure delivery excellence.
- Developed a mechanism to consistently ensure customer delight.

Customer Roadshow

- Roadshow through strategic locations across the globe, including Japan, South Korea, Europe, the US, and Latin America.
- It is an opportunity to engage with senior leadership from our existing esteemed clientele while forging new connections with potential customers.
- It will help in paving the way for future partnerships that will be instrumental in realising our vision.

Supply Chain Management

In line with increasing cases of geopolitical rifts, concerns of geo-concentration risks and focus on ESG, we are increasingly making efforts to de-risk our supply chain. We have undertaken multiple initiatives across backward integration, identification of alternative sources and partnerships, localisation, and digitisation.

Competitive Advantage

A resilient, de-risked supply chain enables us to navigate global uncertainties while ensuring continuous supply to our customers.

How We Use It:

- De-risk our production process, while keeping our supply chain reliable.
- Maintain market competitiveness during times of global business shocks.

Initiatives Undertaken

Backward Integration

- We have initiated backward integration for KSMs and started multi-sourcing from diverse geographies to mitigate disruption.

Localisation

- We have started to develop connections with local vendors to initiate and expand supply chains within India.

Alternate Sources and Partnerships

- We have started partnerships with suppliers in India, Europe, Japan, and Korea for supply chain security.
- New partners developed for domestic strategic sourcing.

Digitised and Integrated Supply Chain

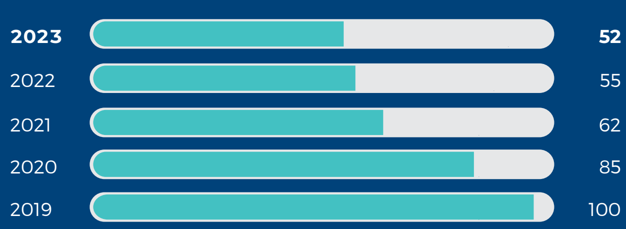
- We have started identification of weak links in our supply chain for improvement.
- We have started building up inventory and building real-time network visibility.

Reducing our Dependence on a Single Geography

A substantial portion of our supply chain risk arises because of the concentration of our supply chain towards a single geography. Considering the global pharmaceutical industry, China supplies a substantial portion of KSMs, APIs, and DIs to the rest of the world. As part of our supply chain initiatives, we have been able to reduce dependence on China for one of our key products by developing local vendors. This is how we aim to benchmark the management of supply chain risk for the rest of our products.

Share of Procurement from China for Select Products

(%)



Risk Management

We acknowledge that we operate in an environment filled with both known and unknown risks, uncertainties, and variable assumptions. Some of these factors include the financial health of the global and domestic economies, the performance of the industry in India and worldwide, external competition, regulatory risks, our future growth and expansion prospects, technological implementations, potential adverse changes in revenue, income, or cash flows, and exposure to market risks, among others.

Recognising the significance of risk management in achieving our strategic objectives, we adopt a formal and systematic approach to identify and manage potential risks. We view risk management as a critical element in effectively and efficiently managing the organisation, ensuring continued success in the face of challenges.

Page 90

Human Resources

At Hikal, we firmly believe that our people constitute our most valuable asset. We place considerable emphasis on assembling best-in-class teams, led by exceptional professionals. Over the years, we have cultivated a meritocratic, empowering, and caring culture that fosters a spirit of excellence. Encouraging the development of talent is a top priority, and we provide our employees with ample opportunities to hone their capabilities, promoting innovation, lateral thinking, and the acquisition of diverse skills. By adopting this approach, we prepare our workforce for future leadership roles, ensuring a bright and promising future for both our employees and the organisation.

The management of Human Resources at Hikal is dedicated to implementing transformational HR processes and policies. These initiatives consistently reinforce our competitive advantage in the market. Our HR strategy aligns HR Policies, Standards, and Roles and Responsibilities with the overall business strategy, giving the department the ability to successfully address the unique needs of different business units. This alignment ensures seamless coordination and cooperation throughout the organisation, further enhancing our ability to meet business objectives effectively.

Page 77

Internal Controls and their Adequacy

Our internal control systems are commensurate with the nature and size of its business. Internal financial controls with reference to the Financial Statements are adequate. Additionally, the Audit Committee at frequent intervals has independent sessions with the statutory auditor and the management to discuss the adequacy and effectiveness of internal financial controls.

Organisational Threats

Adverse Movements in Raw Material Prices: Our profit margins continue to be susceptible to increases in raw material prices for essential intermediates and chemicals. Over the last year, we witnessed significant price fluctuations due to the COVID-related lockdowns in China. Nevertheless, we have the ability to transfer some of the raw material expenses to our customers, which helps us offset a portion of the pricing risk.

High Working Capital Intensity: Our level of working capital requirement remains elevated. This is attributed to the contractual dynamics in contract manufacturing, where it is essential for us to uphold a minimum inventory threshold. This practice guarantees a seamless and uninterrupted supply of goods to our customers.