SPECIAL REPORT ON INDIA

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GLOBAL BUSINESS REPORTS

INDIA: A SLEEPING GIANT AWAKENS

EXPECTATION INCREASES AS DEVELOPMENT GATHERS PACE

India has long been a country of potential. Promises of rapid development and prosperity have often been made, yet the delivery has taken its time. Now, with its ever-growing market base and its talented workforce, India is stepping up its case of becoming a global manufacturing hub driven by the 'Make in India' campaign. Economically, India's annual GDP growth rate has remained at over 5.5% for the past 10 years and 7.3% growth is expected in the coming fiscal year (2018-2019) according to the World Bank. At the current rate, India is outpacing China as the world's fastest rising major economy.

India's chemicals industry is also witnessing sizeable growth. Between 2010 and 2015, it posted a strong compound annual growth rate (CAGR) of 13% according to JM Financial Institutional Securities, reaching US\$160 billion by 2017. It is expected to dramatically increase to US\$403 billion by 2025 according to the IBEF. But what is contributing to the sector's increased fortunes?

RISING DOMESTIC DEMAND MEETS A GLOBAL SUPPLY SHORTAGE

The Indian chemical industry's rapid growth, which is forecasted to have a CAGR of 8% to 10% to 2025, is being driven by both domestic and international factors. Increasing development is leading to an insatiable demand in a number of end-user markets, including personal care, agrochemicals, food, feed and paints and coating, which is resulting in higher consumption of chemicals per capita. A growing middle class and increasing urbanization are specifically contributing to this. According to the National Council of Applied Research, the Indian middle class could grow from 31 million households in 2008 to 148 million households by 2030, quadrupling consumption power. Moreover, India's urban population is expected to increase by 275 million by 2030.

Narendra Modi's 'Make in India' initiative, combined with stringent environmental regulations put in place in China, has also led to increased opportunities for India's manufacturers. Furthermore, a temporarily weakened rupee is contributing to rising export competitiveness and trade wars disrupting global dynamics are underlining India's credentials as an alternative partner to China. "The global turbulence, due to oil price movement and possible trade flow changes as a result of protectionist regimes across the world, may not impact India as adversely due to its inherently large domestic market strength and stable political regime via a vibrant democracy," said H. S. Karangle, director general of the Indian Chemical Council.

A HELPING HAND FROM THE GOVERNMENT

With respect to governance, India is trying to strip bureaucratic complications which have for so long hindered cross-state development. The new Goods and Services Tax (GST), which came into effect in June 2017, has been a key stepping stone unifying the country into a single market as it has replaced numerous federal and state taxes. Since its implementation, India has jumped



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Shiv Anand-A, 1st Floor, 372/374 S. V. Road, Goregaon (West), Mumbai - 400 104 **Phone:** +91(22) 2872 8032 **Fax:** +91(22) 2878 9755 **E-mail:** info@trivedigroupe.com **Website:** www.trivedigroupe.com 30 places in the World Bank's Ease of Doing Business Index (2018), albeit still at 100th. Despite variables such as 'Protecting Minority Investors' and 'Getting Electricity' being as high as 4th and 29th respectively, the country ranks as low as 164th for 'Enforcing Contracts' and 181st with respect to 'Dealing with Construction Permits'. Raman Ramachandran, chairman and managing director at BASF India, has seen a far-reaching impact of the GST on the industrial environment: "The transportation system has become at least 20% more efficient post-GST [...] In order to optimize taxes, we used to have a lot of warehouses all over India as having a warehouse just across the border meant optimizing on state taxes. This is not needed anymore. [...] The third efficiency is how GST is formalizing the whole economy. Prior to GST implementation, a large proportion of businesses were not in the formal economy. When things become more formalized, I believe companies like BASF will benefit as that is what we have been doing for many years."

REPEATING CHALLENGES LIE AHEAD

Although clear action has been taken by both industry and government alike, old and new cracks continue to deter India's long-term prospects as a regional chemical manufacturing powerhouse. A key hindrance remains the lack of feedstock options. The government had approved of four Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs) in the states of Andhra Pradesh (Vishakhapatnam), Gujarat (Dahej), Odisha (Paradeep) and Tamil Nadu (Cuddalore and Naghapattinam), to improve efficiency and collaboration, but finding an anchor tenant to provide a reliable flow of feedstock continues to be the key flaw. For now, the country can rely on its close geographical proximity to the Gulf for cheap feedstock. However, as feedstock prices will likely remain volatile moving forward and domestic demand continues to increase, building feedstock capabilities will be a question of when, not if.



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MANUFACTURING NEW OPPORTUNITIES AT HOME AND ABROAD

India's chemicals industry is expected to have a CAGR of between 8% and 10% until 2025, due in part to the exponential increase in domestic chemical consumption. Strict new environmental regulations put in place by the Chinese government have also created further opportunities for India's producers as markets across APAC seek an alternative source of supply away from China. Pramod Thota, president of FMC India, highlighted: "This is an opportunity for India to advertise itself as the next big destination for chemical manufacturing [...] Companies do not like the uncertainty that comes with political, regulatory and economic changes and that is what is happening in China, so for those looking at alternatives, India ranks high in such conversations right now. We are actively contemplating investing in some manufacturing capabilities within India and believe that India will be a future hub of manufacturing not only for our existing products but for some of the new R&D molecules that are in the pipeline. In order for us to invest in India, we need the support of the government."

Short and medium-term growth will be propped up by the aforementioned factors. However, the long-term future success of the industry centers around the longing need for a reliable stream of feedstock. As Harshad Naik, managing director for India at Huntsman, underlined: "The shortage of feedstock and the volatile forex situation is creating anxiety in the market as customers want stable supplies at stable prices. Materials that are available locally at a stable price will quickly become the leading product in the market. We need investment into the supply chain in order to make products locally available and in the next five to 10 years, the market demand will be for world scale production facilities within India."

For now, the lack of feedstock can be partly met by the right import strategy. However, with India's oil demand by 2040 expected to rise quicker than any other country according to the International Energy Agency, there is a growing need for "The government is pragmatic and keen on promoting sustainable growth based on risk based assessment instead of hazard based approach. Regulatory standards are becoming more relevant in the chemical industry and the government is open to listening to suggestions. Manufacturers and Associations are recommending for self-regulated operations as opposed to mandated regulations."



this to be addressed in the coming decade. India's Chemicals and Petrochemicals Secretary P. Raghavendra Rao underlined the importance of implementing an integrated policy towards this, highlighting that by 2025, the ethylene deficit is set to reach 7.5 million tonnes; the equivalent of five new crackers. Feedstock gives birth to each value chain in the chemicals industry and without it, India's dependence and lack of security will remain.

COLLABORATION ESSENTIAL FOR PROGRESSION

Collaborative ecosystems have been the bedrock for many of the world's leading chemicals manufacturing hubs. The Petroleum, Chemicals & Petrochemicals Investment Regions (PCPIRs) have been India's response. Of the four PCPIRs declared by the Ministry of Chemicals and Fertilizers in 2007, Dahej in Gujarat has shown most progression. Major Indian companies including ONGC, GACL and OPAL have opened facilities there, and so have multinationals including BASF and LANXESS. The ecosystem is also becoming a hotbed for smaller and medium sized Indian companies to expand into. Dai-Ichi Karkaria, for example, has invested a new plant at Dahej. "We are currently focused on doubling capacity at our Dahej site with a new plant. The rationale behind this was to increase our footprint as part of the PCPIR," said Shernaz Vakil, chairperson and managing director at Dai-Ichi Karkaria.

For what has become the flagship operation for India's chemicals industry, inefficiencies continue to affect development at Dahej. Vakil highlighted that a number of challenges have hampered progression of the PCPIR, which has led to the slow pace development of the ecosystem: "The PCPIR was supposed to have an anchor tenant who was meant to supply feedstock to the downstream. However, this is yet to happen. We have been trying to communicate to the government that the actual functionality for which the PCPIR was set up is not being served."

OPEN FOR BUSINESS

The unavailability of feedstock is a pressing concern for India, but for the most part, the chemical sector has much to look forward to. It will come as welcome news for Modi that the leading multinationals are continuing to invest in the country through an array of avenues, including debottlenecking current operations, building new plants and R&D facilities, and through M&As. BASF has recently opened its Innovation Campus, with its own R&D center in Mumbai, which caters to the discovery of new molecules, particularly for agricultural applications. Huntsman has invested in a greenfield plant in Chakan and Dow India announced the opening of its Pack Studio in Mumbai in January 2018. "The studio is an evolution of a journey that we have been on for a long time. We already have multiple laboratory capabilities in India that have grown over the years. What we did with the new innovation center is to combine all of our technologies under one roof. It encourages cross-business collaboration and allows our customers the opportunity to view the entire portfolio and determine what makes the most sense for them," said Sudhir Shenoy, CEO of Dow India.

SPECIALTY CHEMICALS

With APAC's specialty chemicals market expected to increase from US\$259.6 billion in 2017 to US\$361 billion in 2023 representing a CAGR of 5.7%, according to P&S Market Research, India's special-





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Dai-Ichi has recently expanded manufacturing capabilities with a new plant in Dahej, in effect doubling its present capacity.



Address: Liberty Building, 3rd Floor, Sir V. Thackersey Marg, New Marine Lines, Churchgate, Mumbai - 400020 Phone: +91 22 2201 5895 Website: www.dai-ichiindia.com ty chemicals industry is more than keeping up with the region's rapid development. All the key segments of specialty chemicals are set for double digit growth over the coming five years, including a CAGR of 13% in personal care and 10% in paints and coatings, according to India Ratings and Research. Vinay Patil, president for the Indian Specialty Chemicals Manufacturers Association, has witnessed a number of shifts within the specialty chemicals space in India. "There has been a significant rise in the production of functional chemicals, especially for corrosion prevention and electroplating. There is a clear move from companies moving towards low-volume, highvalue productions. Moreover, companies are demonstrating awareness in understanding their customers' needs and finding new innovative solutions to address them," said Patil.



With a large pool of readily available, well-educated talent, more specialty chemicals are being produced in India, and not just for India. Local companies are exporting their value-added products across the globe, underlining the quality of research being undertaken. Leveraging their technological expertise, a number of domestic companies are setting a strong example for the industry to follow on from. Gharda Chemicals, founded by the prominent chemical engineer Dr. Keki Gharda, has prospered from a strong and vibrant R&D program, and its expertise in process development. Some journeys have been less smooth but just as fruitful. Dharamsi Morarji, headquartered in Mumbai, had to undergo a set of transformations in its past to survive, having been a leading producer of phosphates and agrochemicals. The company has now found its niche in the research and manufacturing of sulphur chemicals. "We have undergone significant restructuring and now consider ourselves as one of the best companies in the world handling hazardous chemicals," said Bimal Goculdas, managing director of Dharamsi Morarji.

AGROCHEMICALS

India's agrochemicals sector is expected to reach US\$6.3 billion by 2020, with domestic demand growing by 6.5% annually and a 9% annual growth in exports according to FICCI. As India's agricultural sector continues to modernize, the use of agrochemicals has witnessed large scale growth, particularly due to the increased usage of crop protection products and pesticides. The industry remains dominated by the large multinationals, including Bayer Crop Science, BASF, and Syngenta. FMC has strengthened its hand in the market by acquiring DuPont's crop protection business in November, 2017. The acquisition has put FMC India as one of the top three market leaders with an industry leading portfolio of insecticides. Both industry and consumer are becoming more astute with respect to the benefits of crop protection. Pramod Thota, president of FMC, has also noticed a shift in attitude from the growers themselves becoming less cost sensitive. "The grower is now able to understand

"What is relevant to Evonik is how we can cater and customize to India-specific needs, whether that is through localization, greater innovation or customization in application technology. That is where the leverage comes from, in alignment with the global strategy."



Sanjeev Taneja, President and Managing Director – India, Evonik

new innovative chemistries and the value they bring and is willing to invest in them," he said.

Given the clear opportunities in the market, there is a cluster of local companies across the country, most noticeably Bharat Rasayan, Dhanuka Agritech and Insecticides India, that are expanding to meet growing demand. For example, Willowood has recently completed its new in-house R&D facility and has seen significant growth since its inception ten years ago. "Since 2008, the entire chemical and agrochemical sectors have done well [...] We were fortunate to enter the market at a time when there were significant growth opportunities available," said Parikshit Mundhra, managing director of Willowood.

According to the IBEF, 58% of the Indian population rely on agriculture as its primary source of livelihood. Despite India being the second largest consumer of agrochemicals globally, the per capita usage of crop-protection products is comparatively very low when compared to the more developed countries across Asia. Given the vast size of the market and the fact it remains largely untapped, there is opportunity for agrochemical companies.

A FINAL THOUGHT

India's chemicals sector is at an exciting period of development. Although there is great potential, questions still need to be answered. In a country as vast and populated as India, creating a thriving collaborative ecosystem, such as Singapore's Jurong Island or Houston, USA, will be challenging. However, if the PCPIRs can be supported by a strong foundation and a reliable anchor tenant, a major hurdle will have been cleared. Development remains in its infancy but learning from other jurisdictions will be pivotal to quick and efficient progress. Sudhir Shenoy, CEO of Dow India echoed this by that stating that as the industry is still in an evolutionary process: "We do not want to repeat mistakes, because it is an industry that has its challenges with respect to the environment, health and safety. We want to learn from other geographies that are perhaps ahead of us and learn from their mistakes."

Opportunity is the first word that springs to mind when exploring India's chemicals industry. At every point across the industry's supply chain, there is an opportunity to create value and if due diligence is carefully planned, there is great potential to add value to India's fast-growing chemicals industry.

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