

Current scenario and future of excipient industry

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THE Indian pharmaceutical industry in 2021 has been reassessed in various ways. India's ambition by 2030 is identified as a set of imperatives for all the stakeholders. The pharmaceutical industry, along with the healthcare sector, has created an impact to the unseen ways due to the outbreak of Covid 19 pandemic that leads to the material impact around the consumer requirement and preferences that is accompanied by the macroeconomic, microeconomic, and structural changes in the end-to-end value chain. Amid the pandemic, things have changed, especially in the pharmaceutical industry. The world has responded with agility- from sequencing the novel coronavirus in January to Vaccine being administered to the first recipient in the UK. The efficacy levels are over 90 per cent exceeding all the expectations of the government and the markets across the world. The innovation has been possible owing to the extraordinary global efforts. Healthcare is likely to be overhead based on the pharma business as per geography. The pharmaceutical industry will be closely monitored by the government in all countries in times to come.

Excipients are necessary for the formulation of a drug's dosage form or any pharmaceutical product, the addition of bulk to solids (formulas), and the facilitation of correct absorption. Along with active medicinal substances, these ingredients make up the dose forms. They serve as protecting agents, bulking agents, flavouring and colouring agents, and in some cases, they can also be employed to improve drug bioavailability.

In recent advancements, new technologies for the controlled release of small molecule medications have been introduced. Pathway pharmaceutical-grade thermoplastic polyurethane (TPU) excipients from Lubrizol Life Science Polymers (LSP) allow regulated freedom in medication delivery systems and other applications. Lubrizol is now producing the materials according to GMP guidelines, allowing them to be used as excipients.

India must evaluate its current role of excipients within the global pharmaceutical industry, explore the possibilities to consolidate and strengthen the positioning in the light of geopolitical and economic shifts, attainment of self-sufficiency as a worldwide compe-

titution in the pharma industry that has innovation a guiding principle for the future growth.

The pharmaceutical industry has exceeded the expectations in responding to the global crisis, providing medications to over 150 countries besides meeting all the domestic demands. From March 2020 onwards, the industry has been hit by debilitating restrictions, impediments to reach potential customers with an expectation to operate & supply drugs to those in India and around the globe. The significant vaccine capacity ramp-up achieved over the year to augment the vaccine administration within India and globally.

The excipients, has grown at a compound growth rate of 11 per cent in the domestic market and 16 per cent in the export market over the last two decades. There are considerable measures related to the similar pace to the gross domestic product (GDP). The overall growth has chiefly driven the industry's leadership in supplying generic formulations to the market across the globe.

In 2020-2030, as per estimates, the Indian pharmaceutical industry will grow at a compounded annual growth rate of 12 per cent to reach US \$130 billion by 2030 from the US \$41.7 billion in 2020.

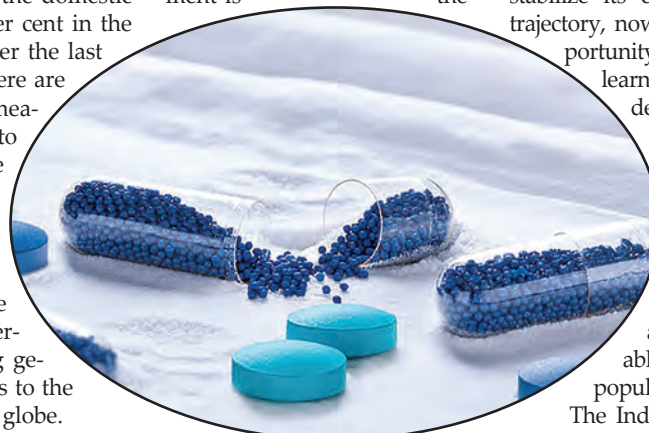
To attain that self-sufficiency level, the world's natural pharmacy is now refocusing on the next set of avenues to feed the growth of the engine with strategic and economic plans; by realizing the ambition, we need to concentrate on the key stakeholders of the Indian pharmaceutical industry- the payers, providers, policymakers, physicians, pharma industry players, academia and another plethora of service providers all across the logistics and distribution, IT, capital pools, packaging, and other auxiliary industries.

To build up a holistic consensus, all need to reach out to industry-wide stakeholders. The viewpoints will be sought over the countless interactions through the structural questionnaire coupled with secondary analysis and global primary case studies through the EY proprietary research. The future opportunities of the pharmaceutical industry are way forward than the duly

ratified through the stakeholders' roundtables.

The key considerations will adopt a call to action chiefly aiming at the industry; both academic and government have been the outline action while in the future. The opportunities will emerge based on four classified sections: Innovation and R&D, Healthcare Delivery, Manufacturing & Supply Chain, and Market Access.

Regarding the domestic front, ambition translates the growth rate to 10-11 per cent over the coming years. The average social health indicator and low proportion of total healthcare spending as a proportion of GDP indicate an opportunity to improve healthcare delivery. The anti-infective segment is the



leading indication with 14% of the market share that has affected the domestic pharma market.

Despite a sluggish start to the year due to the epidemic, the domestic market grew by 2.2 percent from April to September 2020 compared to last years. Vaccines account for two per cent of the domestic pharmaceutical industry, which comprises consumption through the 'Universal Immunization Program (UIP)' and the 'private retail sector.' Indian enterprises meet the majority of UIP demand. MNCs have a 63 percent share of the private market in value, owing to higher-priced human papillomavirus, pneumococcal, influenza, and meningococcal vaccines.

The current estimate of the Indian pharmaceutical industry, there is a supply of 40 per cent of the generics in the biggest pharma market. There is 25 per cent of the prescription drug in the UK; along with that, it caters to 60 per cent of the global vaccine demand- in all the cases. India is the leading supplier in the pharmaceuticals in the world. With the growing opportunities in formulation, travel value was about US\$652 billion in 2019.

The share of export in India is 2.5 per cent. The increased price pressure on the global generics trade has raised by competition in India's export corridors; the current portfolio of the product is expected to extend this divide in the future. The international pharmaceutical trade is also expected to reach a size of US\$1-1.3 trillion by 2030. The ambition is to garner a global share of around 6-7 per cent by value to attain the US \$73 billion.

Preparations needed in post pandemic world

Covid-19 has demonstrated the significance of a solid healthcare system, without which a country's economy and society could be jeopardized. As India continues to fight Covid-19 and stabilize its economic growth trajectory, now is the ideal opportunity to put lessons learned from the pandemic's problems and best practices into effect. The essential healthcare infrastructure must be developed quickly and made available to the entire population.

The Indian pharmaceutical sector has played a significant role in improving healthcare and financial results in the country. For the industry, the pandemic has expedited several opportunities and problems. While the widening trust deficit with China creates an opportunity for India, other nations such as Vietnam and Malaysia are becoming more competitive. India also relies on China for two-thirds of its bulk medicine and drug intermediary imports.

To win in the post-pandemic era, the industry must continue to build on its strengths while also taking a great leap forward in terms of innovation. New capabilities must be introduced across all business processes to increase efficiencies and assist the sector in advancing up the value chain. The government must also offer the necessary enablers and a growth-friendly corporate climate.

Future considerations and way forward for excipient industry

- Create an overarching regulatory body to improve government efficiency and effectiveness.
- Enhance industry-academic collaboration and develop a vibrant research and

innovation ecosystem.

- Getting in ways for financing R&D to stimulate private investments and funding routes is for high-risk/long-term initiatives.
- Manufacturing at scale in a cluster-wise approach for API and formulations is a must to be globally competitive and self-reliant.
- Manufacture more value-added products that boost export revenues and replace imports for domestic demand.
- Adopt operational excellence techniques across the supply chain to get the most out of existing infrastructure.
- Adapt innovative models for improving affordability as an alternative to price capping; Shift government procurement away from lowest cost to multi-criteria decision-making; and provide detailed guidelines for leveraging e-pharmacy in addition to the current retail network (India's traditional distribution system).

Pharmaceutical formulation specialists are using multi-functional excipients to improve the production process and product quality. It can aid pharma manufacturing by promoting flowability, compressibility, bioavailability, particle size distribution, and dust generation, among other things. The newly released EUDRAGIT FS 100 from Evonik is a substantial upgrade to the current EUDRAGIT FS 30 D. It enables pharmaceutical businesses to employ the polymer in a variety of applications, including hot melt extrusion, solvent spray-drying, and solvent coating, which was previously difficult due to the availability of just the aqueous version. This approach to multi-functionality allows you to do a lot of different things.

The research has been accelerated. Manufacturing and supply chain projects would be focused on developing API capabilities to enable the manufacture of complex generics, biosimilars, gene and cell therapies, and other products. The most significant enabler for establishing world-class manufacturing facilities is the ease of doing business. The manufacturing sector's attractiveness must be improved to recruit the most incredible people in India and outside. ◆

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