



PLASTIC INDUSTRY ANALYSIS

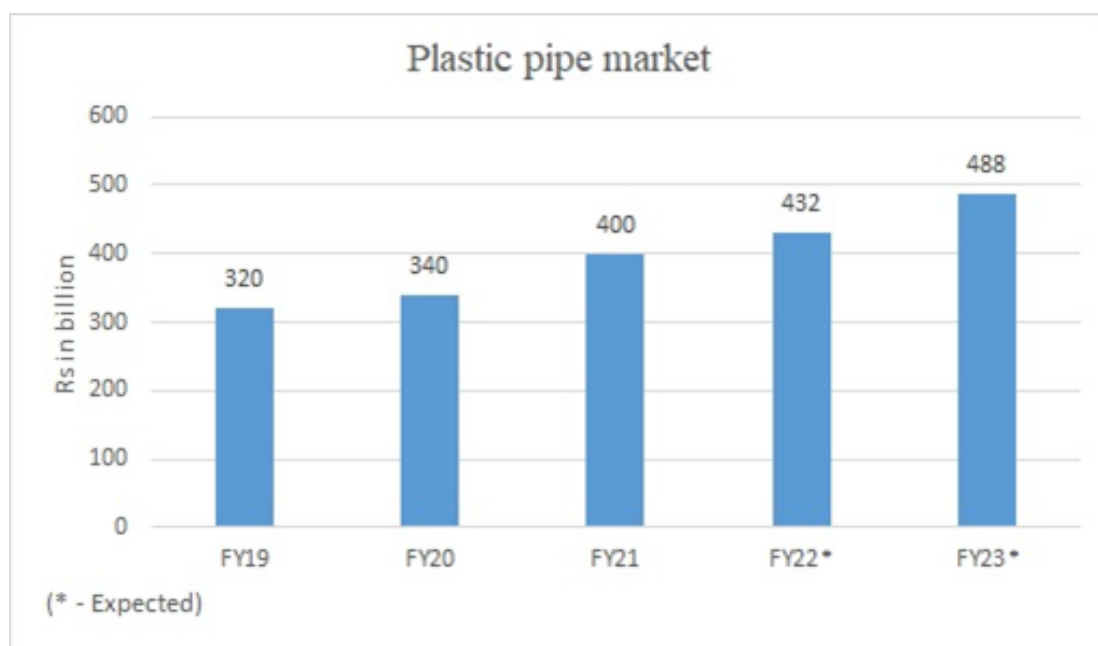
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A plastic is a type of synthetic or man-made polymer; similar in many ways to natural resins found in trees and other plants. Indian plastic industry market is one of the leading sectors in the country's economy. The industry is present across the country and has more than 2,000 exporters. It employs more than 4 million people in the country and constitutes around 30,000 processing units; among these, around 85-90 percent belong to small and medium enterprises. Oil and natural gas are the major raw materials used to manufacture plastics. The plastics production process often begins by treating components of crude oil or natural gas in a cracking process. This process results in the conversion of these components into hydrocarbon monomers such as ethylene and propylene. Further, processing leads to a wider range of monomers such as styrene, vinyl chloride, ethylene glycol, terephthalic acid and many others. These monomers are then chemically bonded into chains called polymers.

Indian Plastic Pipes and Fittings Market

Plastic pipes find application in irrigation, real estate construction for both residential, commercial and water supply and sanitation (WSS) development. Pipes will continue to form an integral part of infrastructure development as they are a cost-effective way to transport water. There is expectation, the industry is scheduled to grow by 11-12% CAGR over FY21-FY25 and is expected to reach Rs 550 billion -600 billion by FY25 led by the Government's continued focus on increasing farmer income via better irrigation facilities and infrastructure, creation and improvement of WSS infra and implementation of 'Housing For All' schemes. Secondly there is a continuous expansion of newer applications for CPVC and HDPE pipes and increasing acceptance of UPVC pipes into other applications. Recent correction across polymers prices could lead to lower industry growth in value terms, as a decrease in raw material prices would impact realisations.

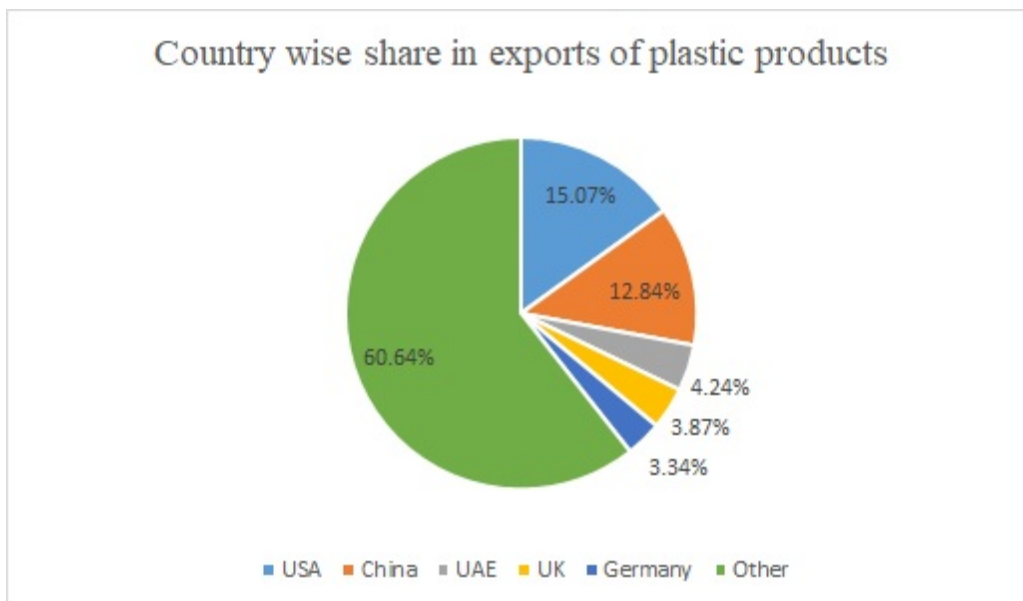


Exports of plastic and related products

India has exported \$6.38 billion of plastics in the first six months (April–September) of current financial year (FY23). The cumulative exports of plastics and related materials during FY22 were valued at \$13.34 billion. This was a 33.4% increase from the 2020–21 exports valued at \$10 billion (Provisional). Plastic raw materials were the largest exported category and constituted 30.7% of the total exports in FY22; it recorded a growth of 26.5% over the previous year. Plastic films and sheets were the second largest category, comprised 15.2% of the total exports, and grew 32.7% over the previous year. India's plastics industry's economic activity is worth Rs 3 Lakh crore annually, out of which one-third is exported. There is a significant growth potential for the Indian plastic industry to become the world's premium supply hub. The plastics industry is expected to have an annual turnover of Rs. 10 lakh crore by 2027. This could be achieved through more exports and import substitution, which in turn will create immense job opportunities. The Indian plastics industry has done well on the exports and domestic fronts and contributed significantly during the pandemic, particularly in supporting the healthcare supplies to the country.

Country wise share in exports of plastic products

India exports plastic to more than 200 countries in the world. India largely exports plastic and related products to the USA, China, UAE, Germany, Italy, the UK, Bangladesh, Nepal, Turkey, France, Viet Nam, Indonesia, etc. The total value of exports to the US, the largest consumer of the Indian plastic industry, stood at \$2,430.8 million in 2021–22, an increase of 63.6% YoY. China is the second largest consumer of plastic export products from India and the total value of exports stood at \$883.5 million.



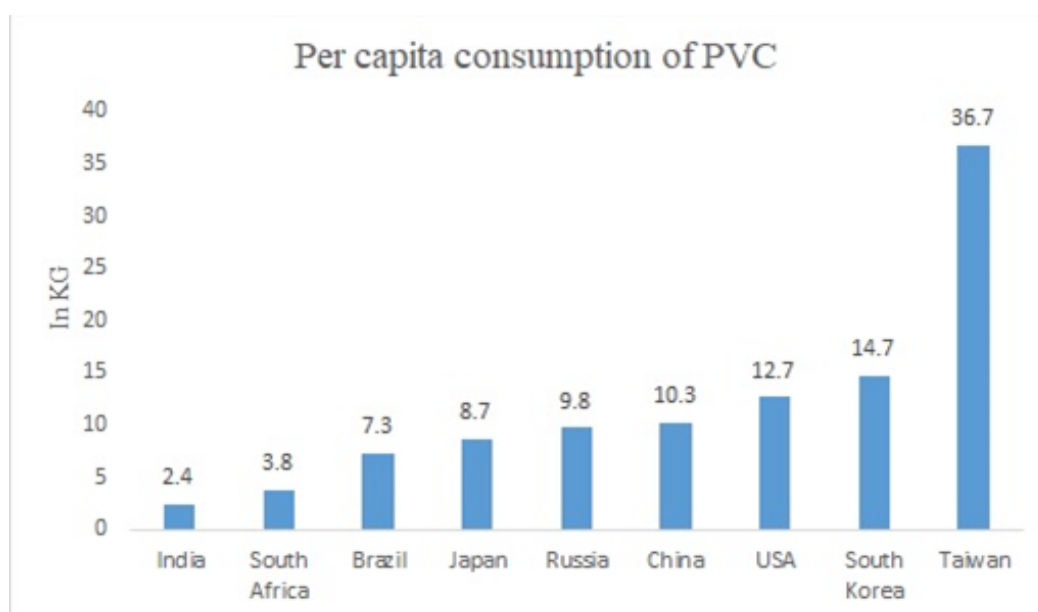
Impact of falling PVC price on plastic industry

The most important raw material for Plastic Products producing companies is Polyvinyl chloride (PVC). PVC resins cost forms almost 60-70 per cent of a pipe manufacturer's revenue. Hence, any change in PVC price will create a huge impact on their financials. In the first half of current financial year, PVC price was down by almost Rs.60-plus and in Q2 alone PVC was almost down by Rs 30. Rising inflation, rising interest rates and lockdowns in China have increased the housing crisis in the UK, US and China. Resultantly, PVC resins are dumped in India. Hence, there is an excess supply of PVC in India. Now, the problem with falling PVC prices is that the companies will have to sell the existing level of inventory (that was manufactured at high PVC prices) at lower prices as market participants would demand the benefits of falling prices.

Since PVC forms a major part of the cost, selling at low prices would reduce the companies' profit margins. Plastic manufacturers had a high level of inventories at the end of the quarter ended March 2022 because of anticipated supply chain disruptions. Hence, these companies have huge inventory losses. And as the PVC price falls further, the margin is expected to squeeze further. Simultaneously, even the sales volumes are expected to fall. For all varieties of PVC, India cumulatively imports around 55 percent of the country's total annual resin demand. India currently produces around 1.55 million tonne per annum of PVC against the country's total consumption of 3.42 million tonne. Japan has become India's leading PVC supplier over the last few years, followed by Taiwan and China as second and third.

Low per capita consumption of PVC in India

Compared to the global average of 6 Kilogram (kg), India's PVC consumption per capita is roughly 2.4 kg. However, India's consumption per capita is further expected to increase and approach the world average, driving growth in product consumption.



Demand drivers

Irrigation--: The irrigation industry is a major end-user segment for plastic pipes. Less than half of India's 60 million hectares (ha) of cultivated land is irrigated. Investment in the sector is expected to rise over the next five years as state governments push to increase irrigation penetration. Irrigation construction spending is expected to rise to Rs 3.7 lakh crore between FY21 to FY25. Earlier the irrigation construction spending stood at from Rs 3.1 lakh crore between 2016 to 2020.

Urban Infrastructure--: The pandemic resulted in lower spending due to a loss of man-days during the lockdown, diversion of state funds to meet social and healthcare spending, and labour migration in FY21. FY22 witnessed the start of deferred projects from FY21, as the government focused on schemes such as the Swachh Bharat Mission, Jal Jeevan Mission, AMRUT, and metro projects, majority of which are currently being implemented. While these projects are long-term engagements, it is expected to drive demand for pipes drastically. Urban infrastructure spending is expected to reach Rs 2.9 lakh crore from FY21 to FY25. Half of the money is expected to go towards WSS projects, which will primarily be led by state governments and funded by the central government through initiatives such as the Jal Jeevan Mission, AMRUT and Swachh Bharat Mission. Following WSS, metro construction will attract the most investment in urban infrastructure development. Several projects announced and implemented by various state governments will drive the piping sector's medium-term growth.

Real Estate--: In India, real estate is a major end-use sector for PVC pipes. Demand for real estate has been sluggish in recent years, however, the government passed the Real Estate (Regulation and Development) Act which established a regulatory system for the sector to boost customer confidence. Furthermore, over the last three fiscal years, the Pradhan Mantri Awas Yojana-Urban (PMAY-U), a scheme under the Housing for All by 2022 programme, has seen healthy construction activity. Post the pandemic, Indian real estate markets have picked up once again, which will drive back the growth in the pipes segment as well.

Substitution and replacement demand--: Plastic pipes have several advantages over metal pipes. Plastic pipes have hastened the replacement of metal pipes due to their superior qualities and inexpensive pricing. In addition, the increase in the availability of raw materials (PVC, PE and PPR) following the commissioning of new petrochemical facilities in India is expected to further support the plastic-pipes industry going forward. The other factor which is expected to drive long-term demand is the replacement of older pipes with plastic pipes.

Value Migration--: One of the most significant shifts in the pipes business over the last decade has been the large-scale migration from metals to polymer-based pipes in most applications, which is especially true in the case of building industry's plumbing and pipe applications. With the introduction of polymers such as CPVC for hot and cold-water plumbing, firefighting, and industrial fluid transportation, this progression has enabled for more research and development in specialised products by organised companies for specific applications.



Recent developments

Govt cuts import duty on PVC-: The government halved the import duty on propylene oxide to 2.5 per cent and polymers of vinyl chloride (PVC) to 7.5 per cent from 10 per cent to reduce the cost of domestic production of plastic products.

Government approves eight plastic parks-: The Centre has approved eight plastic parks that are at various stages of development. These plastic parks are located in Assam, Madhya Pradesh (two parks), Odisha, Jharkhand, Tamil Nadu, Uttarakhand and Chhattisgarh. Plastic Park is an industrial zone, developed in cluster approach for establishing units for plastic enterprises and its allied.

Number of beneficiaries under PM-KISAN crosses 10 crore-: The government has said the number of beneficiaries under the PM-KISAN scheme has crossed 10 crore, increasing more than three-fold from 3.16 crore farmers covered under the first instalment period in early 2019. Under the scheme, announced in February 2019 but made operational with effect from December 2018, the Centre provides an income support of Rs 6,000 per year in three equal instalments to all land holding farmer families.

Outlook

The demand for industry products is expected to grow in medium to long term as there is expectation that agriculture, construction/infrastructure & housing, packaging, automotive, electrical & electronics, healthcare, and fast-moving consumer goods will show solid growth in coming future. Plastic piping segment is expected to witness a demand revival amid a sharp fall in PVC prices from their recent peak. PVC has witnessed a fall in prices in the first half of FY23 on account of easing supply from China and recent fall in crude oil prices. This is likely to give a fillip to plastic piping companies in terms of a revival in rural demand, which had almost dried up due to a sharp price rise over the last one year.



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