



July 25, 2011

Manufactured Goods Lead Surge in Indian Exports

By **VIKAS BAJAJ**

PUNE, India — When Ranjit Date returned to India 20 years ago after earning a doctorate in robotics from an American university, he hoped to help automate factory assembly lines in his home country.

His company, Precision Automation and Robotics India, has done that. But more recently it has also begun selling robots to Western manufacturers like Caterpillar, Ford and Chrysler. This year, in fact, a third of Precision Automation's sales will come from exports, up from almost nothing five years ago.

Mr. Date's company is emblematic of a recent surge in exports of engineered and other sophisticated goods from India — a country perhaps better known for exports of skilled services like software outsourcing.

But in fact, Indian exports of goods are now nearly double exports of services, growing 37.5 percent, to \$245.9 billion, in the 12 months that ended in March. Leading the way are high-value products like industrial machinery, automobiles and car parts, and refined petroleum products.

Indian exports are following a different path from that taken by other Asian countries like Japan, Korea and China. Those countries started by exporting products like garments and toys made by large numbers of low-paid, low-skilled workers, before moving to more sophisticated products like cars and industrial machinery.

India has largely skipped the first step and gone straight to producing capital-intensive items that require skilled workers but not necessarily many of them. Rather than pursue the traditional developing-country model of exports, India aspires to eventually achieve something more like Germany's mix of industrial goods for the global market — even if India has a long way to go before approaching Germany's \$1.3 trillion in annual exports.

Over the last decade, industrial export hubs have sprouted around India, some with the help of government planning. Here in Pune, about 100 miles east of Mumbai, a vibrant domestic automotive and engineering hub supplies the United States and other Western markets.

Chennai in the south has become India's Detroit, as car factories ship small Fords, Nissans and Hyundais to Europe, Africa and Latin America.

In the west, Gujarat State is home to several large petroleum refineries that take imported crude oil and process it into products like jet and diesel fuel that are sold in other Asian countries. (The need to import crude oil for domestic use, though, is the main reason India continues to run a trade deficit — \$104.8 billion in the last fiscal year.)

Meanwhile, traditional exports like textiles and agricultural products together account for less than 20 percent of the goods India sells to the world. India now exports fewer garments than its neighbor Bangladesh, which has one-eighth India's population and an economy only about one-fifteenth as large.

"India has moved away from the textiles story," said Rohini Malkani, an economist at Citigroup in India. "Now, it's engineering goods and chemicals, including pharmaceuticals."

In many ways, these are virtues born of necessity. The country's poor transportation and electricity infrastructure and restrictive labor laws have discouraged companies from setting up labor-intensive manufacturing plants like those for which China is known. Instead, many Indian exporters specialize in higher-value goods and services that require fewer, but more skilled, workers.

The flowering of these industrial bases can be traced to the early 1990s. That is when a financial crisis forced Indian policy makers to slough off socialist policies known as the "licenses raj," which tightly regulated industrial production and kept foreign competition out. The changes let businesses set up factories based on market demand and allowed foreigners to invest in India, exposing domestic companies to greater competition.

"India is beginning to get its act together in terms of the productivity of its industrial sector," said Eswar S. Prasad, an Indian-born economics professor at Cornell University.

"Fundamentally, India always had a good productive base. And given the low base which we were starting from, it's not surprising that India is doing so well."

But still not as well as it could be. Some economists predict the Indian economy will grow by 7.5 percent this year, to \$1.6 trillion. Such growth might thrill many countries, but it would be down from 8.5 percent last year. And it is below the 10 percent growth rate that many

economists say India could achieve if it invested more in infrastructure and if the government further relaxed its tight grip on many parts of the economy.

The slowing growth is all the more reason the increase in industrial exports is a bright spot for India.

Here in Pune, manufacturers say exports are booming.

Mr. Date, the robotics entrepreneur, expects sales at his company to increase 20 percent this year, to \$67 million. The company is building a second factory, a 150,000-square-foot plant on the outskirts of Pune, to keep up with demand for its robots and automated assembly lines. He said Precision Automation's products were 10 to 50 percent less expensive than similar equipment made by Western suppliers.

Mr. Date started the business with a friend, Mangesh Kale, who, like him, grew up in Pune. After earning advanced degrees from Rensselaer Polytechnic Institute in Troy, N.Y., they returned to India in the early 1990s — just as policy makers were pushing through early economic changes.

At first many Indian manufacturers were unwilling to invest in robots, Mr. Date said, because labor in India was so cheap. But in the increasing global economy, Indian manufacturers had to improve productivity to meet rising demand and compete with foreign companies.

“We have grown in waves with the Indian economy,” he said.

In 2003, the company opened an office near Detroit and started winning small contracts to supply assembly line machinery and other equipment to auto parts makers. After a few years, it landed a small contract with Caterpillar, which has since become one of its biggest customers. It also won overseas orders from companies like Renault after supplying their Indian factories.

Analysts say Indian exporters like Precision Automation have performed admirably given the challenges they face. But for India to become an export powerhouse like China — which had exports of \$1.58 trillion last year — policy makers must substantially improve its infrastructure, make labor regulations more flexible and improve basic education, said K. T. Chacko, director of the Indian Institute of Foreign Trade in New Delhi.

Mr. Date said his biggest challenge was finding, training and keeping qualified engineers. His company puts every entry-level engineer through a year of paid in-house training that he says costs it 1 million rupees (about \$22,200) each, because college graduates do not have

sufficient skills. About one-quarter of employees stay for just three years before jumping to other companies.

Infrastructure is another big concern. His factory receives power from the electric utility only about half the time, forcing him to rely on diesel generators.

Yet, roads and regulatory approvals are improving, Mr. Date said. As recently as five years ago, it took customs and tax authorities seven days to approve export shipments. That has been reduced to two days, he said.

“It is bearable,” he added, “but still needs improvement.”