

Impact of make in India program on electronic manufacturing & logistics performance: a study in economic geography

Pratyush Singh

Research Scholar, Department of Geography, Allahabad University, India

Abstract

Make in India program was launched by Government of India with a vision to make India a Global Manufacturing Hub. It is basically a drive to increase share of Manufacturing in India's GDP. Manufacturing contributes around 15% in GDP and Government's aim is to increase it up to 25%. Government's aim is to create more jobs through manufacturing. For the Make in India campaign, the government of India has identified 25 priority sectors that shall be promoted adequately. Niti Aayog, has recommended the launch of 'Move in India' programme to decongest national highways. Under the Manufacturing Drive under Make in India campaign, Government is focusing mainly on Manufacturing of Electronics Items. Various initiatives have been taken to promote innovation in country.

Keywords: make in India, manufacturing, move in India, niti aayog, electronics items

Introduction

Make in India program was launched by Government of India with a vision to make India a Global Manufacturing Hub. It is basically a drive to increase share of Manufacturing in India's GDP in which Service Industries are having more share than Manufacturing.

India has changed dramatically over the past 65 years. While this has been at multiple levels and across varied scales, one of the biggest transformatory force is Demography as our population has increased over three-fold to reach 121 crores. This includes an addition of over 30 crore people to Urban India. As well as an increase of 55 crore youth (below the age of 35), which is more than one and a half times the total population of the country then.

Furthermore, with increasing levels of development, literacy and communication, the aspirations of our people have soared, moving from scarcity and survival to safety and surplus. We are therefore looking at a completely different India today, and our governance systems need to be transformed to keep up with the same.

Second Major Transformation is in the Field of Economy, Our economy has undergone a paradigm shift. It has expanded by over a hundred times, going from a GDP of Rs 10,000 crore to Rs 100 lakh crore at current prices, to emerge as one of the world's largest.

Agriculture's share in this has seen a dramatic drop, from more than 50% to less than 15% of GDP. And our central government's Twelfth Five Year Plan size of Rs 43 lakh crore, dwarfs the First Five Year Plan size of Rs 2,400 crore.

Now Manufacturing contributes around 15% in GDP and Government's aim is to increase it up to 25%. Government's aim is to create more jobs through manufacturing and attract foreign investment citing the strategic location of India to manufacture and tap the developing market of Asia.

The nature of our economy, and the role of the Government in it, has undergone a paradigm shift as well. Driven by an increasingly open and liberalized structure, our private sector has matured into a vibrant and dynamic force, operating not just at the international cutting edge, but also with a global scale and reach. This changed economic landscape requires a new administrative paradigm in which the role of Government must evolve from simply allocating resources in a command and control eco-system, to a far more nuanced one of directing, calibrating, supporting and regulating a market eco-system. National development must be seen beyond the limited sphere of the 'Public Sector'. Government must thus transition from being a 'provider of first and last resort' and 'major player' in the economy, to being a 'catalyst' nurturing an 'enabling environment', where the entrepreneurial spirits of all, from small self-employed entrepreneurs to large corporations, can flourish. This importantly, frees up the Government to focus its precious resources on public welfare domains such as essential entitlements of food, nutrition, health, education and livelihood of vulnerable and marginalized groups. Today, we live in a 'global village', connected by modern transport, communications and media, and networked international markets and institutions.

For the Make in India campaign, the government of India has identified 25 priority sectors that shall be promoted adequately. These are the sectors where likelihood of FDI (foreign direct investment) is the highest and investment shall be promoted by the government of India.

In context of above Target, Government is working on some other aspects and sub elements of Make in India to achieve its target, one of them is to significantly reduce the time lag in transportation of goods and ensure faster trade. This is also termed as "Move in India".

The National Institution for Transforming India Aayog, or Niti Aayog, has recommended the launch of 'Move in India' programme to decongest national highways, and has asked the government to freeze network expansion for the next three years. The government's think tank has also suggested a study by the National Highways Authority of India (NHAI) to decongest national highways in the next two-three months and priorities top 10 cities for constructing bypass road projects.

The average waiting time of Indian trucks at check-posts is 70 minutes, compared with 5 minutes globally. As a result, in comparison with a global standard of 700-800 km per day, Indian truckers are only able to cover a distance of just 300 km per day, according to latest estimates prepared by the Niti Aayog, with eastern states such as Assam, West Bengal and Odisha having the worst record in terms of stop time at check points.

As against an atrocious average wait time of 294 minutes, or nearly five hours in Assam, which has the worst waiting time for trucks at check-posts, followed by West Bengal at 107 minutes and Odisha at 103 minutes, the Niti Aayog has recommended working towards an average of 20 minutes per truck at a review meeting of the infrastructure sector for the financial year 2015-16.

In the World Bank's Logistics Performance Index which measures international supply chain efficiency, India was placed 54th in 2014, a middling ranking among major emerging markets and down from 39th in 2007, signaling scope for improvement. Average truck speeds in the US can exceed 90 km per hour on highways while in India, a long-distance average of about 13 km per hour is considered reasonably good. In the latest biennial

Logistics Performance Index India's ranking has jumped to 35 in 2016. The Index analyses countries across six components: efficiency of customs and border management clearance, quality of trade and transport infrastructure, ease of arranging competitively priced shipments, competence and quality of logistics services, ability to track and trace consignments, and the frequency with which shipments reach consignees within scheduled or expected delivery times. It is computed from the survey responses of about 1,051 logistics industry professionals.

Despite the unusual surge, India clearly has a long way to go on a bevy of parameters. According to the 2016 survey, only 69 per cent of shipments from India meet the quality criteria, compared to 72 per cent for China and 77 per cent for Kenya. Also, India has an average of 5 forms required for import or export, compared to 4.5 for China and 2 for Germany. On this front, the Goods and Services Tax (GST) has the potential to catalyze the transport sector in India.

Most Indian ports are struggling, especially if the efficiency parameters are contrasted with global benchmarks. The average pre-berthing detention time for India's major ports — the time taken by a ship from its arrival at the anchorage and moving to the reporting station till it arrives at the operational berth (excluding time taken for inward movement) — is high. At ports such as Rotterdam and Singapore, the time taken is almost nil. Shipping permits and clearances take up to 3 days in India, whereas, in Singapore

or Hong Kong, arranging a shipment and get all clearances takes about a couple of hours. According to a World Bank report, India's current port capacity can be boosted by at least 35 per cent simply by revamping port management practices, especially for the government-run major ports.

Under the Manufacturing Drive under Make in India campaign, Government is focusing mainly on Manufacturing of Electronics Items.

Electronics industry is among the largest and fastest growing manufacturing industry in the world. The total Electronics Equipment Production of the world during the year 2014 was estimated to be around US\$ 2.0 trillion. The maximum 2 production was that of Computer Systems and Peripherals (26.6 percent) followed by communication equipment (21.7 percent), Consumer Electronics (12.6 percent), Instruments (10.7%), industrial equipment (9.5 percent) and Equipment for Government / Military (8.8 percent). Over the years, production bases have shifted from USA and EU to Asia and the latter's share in global production has increased to over 60%.

India's total Electronics Hardware Production in 2014-15 is estimated at US\$ 32.46 billion. This represents a share of about 1.5 percent in world electronic hardware production.

Electronics manufacturing industry has received a tiny part of the total foreign direct investment (FDI) into India. From April 1, 2000 to June 30, 2015, it received only \$1.68 billion or 0.66% of the total FDI inflow of \$258 billion FDI inflow. In flow terms, the total FDI in electronics in 2014-15 was \$142.9 million and amounted to just 0.42% of the total FDI inflow. Although telecommunications received 6% of the total FDI inflow during 2014-15 on its own, this was almost entirely in the provision of telecommunications services. In several countries, the contribution of electronic industry to GDP is significant. For example, it contributes 15.5% to GDP in Taiwan, 15.1% in South Korea and 12.7% in China. But in India, this proportion is only 1.7%. Furthermore, OEM/ODM [Original Equipment Manufacturing / Original Design Manufacturing] and local component suppliers are still in infancy in India. Most of the OEM is confined to last mile assembly indicating that the industry remains in the early stages of development

Various initiatives have been taken to promote innovation in India. Electronics Development Fund (EDF) has been created to help generate an ecosystem of R&D in electronics in India to promote IP generation and large-scale manufacturing. Initiatives 14 have also been taken to promote incubators, centers of excellence and R&D in electronics sector. There have been large-scale initiatives to create skilled manpower to achieve targets of 1,500 Ph.D. in Electronics Sector Design and Manufacturing (ESDM) and another 1,500 Ph.D. in Information Technology and Information Technology Enabled Services (IT/ITES) per year by 2020. The scheme for setting up seven new Electronics and IT Academies has been approved and the Special Manpower Development Program for VLSI and Chip Design has also been approved. Financial assistance to the states/UTs for skill development and vocational training has been approved with a target of 400,000 individuals in the ESDM sector.

At the present juncture, India has an unusual opportunity. Real wages in manufacturing in China have been rising at 10% per year since 2007. In 2014, they stood at more than Rs. 5 lakh per year. These increased wages are rendering China uncompetitive in employment-intensive activities. In surveys, Chinese firms point to labor costs as the number one barrier to their development. Just as the Hong Kong and Taiwanese investors moved to China in the early 1980s in response to 19 high wages in their respective locations, firms currently located in China are looking for locations with less expensive labor. India can be that location. But this requires a number of steps like Ending Tax Uncertainty because multinationals, currently predominantly invested in China, have the latest technologies as well as links to global markets, any strategy aimed at connecting Indian electronics industry to global markets must recognize the importance of bringing them to India. Although retrospective taxation is now behind us, frequent transgressions by tax officials involving issuance of tax notices without reasonable basis continue to shape the perceptions of foreign investors. The notices also carry a real cost in that a proportion of the assessed tax revenue must be immediately deposited.

And Government need to forge free trade agreements (FTAs) to forge duty free market for our electronic goods. At present, our approach with respect to FTAs is defensive because we are a much larger importer of electronic products than exporter. But a switch to export oriented strategy would convert FTAs into an opportunity.

As Government is aggressively working to “Make in India” a success, it is also slowly gaining ground. Within the short span of time, there are many instances of the initiative’s success. In December 2015, Micromax announced that it would put up three new manufacturing units in Rajasthan, Telangana and Andhra Pradesh. Japan announced it would set up a USD 12 billion fund for Make in India-related projects, called the “Japan-India Make-in-India Special Finance Facility” after the Japanese Prime Minister Shinzo Abe’s visit to the country. Huawei opened a new Research and Development (R&D) campus in Bengaluru and is in the process of setting up a telecom hardware manufacturing plant in Chennai. France-based LH Aviation signed a Memorandum of Understanding (MoU) with OIS Advanced Technologies to set up a manufacturing facility in India for producing drones. Foxconn announced it would invest USD 5 billion over five years for R&D and creating ahi- tech semiconductor manufacturing facility in Maharashtra. Samsung said it would manufacture the Samsung Z1 in its plant in Noida while General Motors declared that it would invest USD 1 billion to begin producing automobiles in the capital state.

References

1. Alexander JW. Economic Geography. Prentice-Hall, New Delhi, 1988.
2. Bryson J, Henry N, Keeble D, Martin R. (eds.) The Economic Geography Reader: Producing and Consuming Global Capitalism. John Wiley and Sons, Inc, New York, 1999.
3. Guha JS, Chattoraj PR. A New Approach to Economic Geography: A Study of Resources. The World Press Private Limited, Kolkata, 2002.
4. Knowles R, Wareing J. Economic and Social Geography Made Simple, Rupa and Company, New Delhi, 2000.
5. Sharma TC, Coutinho O. Economic and Commercial Geography of India, Vikas Publishing House Private Ltd. New Delhi, 2003.
6. Khullar DR. India: A Comprehensive Geography, Kalyani Publishers, New Delhi.
7. Misra, R.P. Regional Planning, Concepts, Techniques, Policies and Case Studies, 2002-2007. Concept Publishing Company, New Delhi.
8. Miller E. A Geography of Manufacturing. Prentice-Hall, Englewood Cliffs, New Jersey, 1962.
9. NITI AAYOG, Government of India: Make in India–Strategy For Electronic Product, New Delhi.
10. Department of Industrial Policy & Promotion, Ministry of Commerce and Industry.