Journal of Advances and Scholarly Researches in Allied Education
Vol. 16, Issue No. 9, June-2019, ISSN 2230-7540

Roles of Institutions & Policies in Make in India Initiative A Success and the Hurdles

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Abstract – India's potential in the manufacturing sector has not been fully utilized yet. The Indian Manufacturing industry certainly needs to be upgraded on a priority basis to compete with its emerging market peers. Although India missed the 'bus 'of Manufacturing Revolution in Asia, which was taken well in time by countries like China, South Korea and Thailand. However this lost opportunity can still be availed by our Country by means of major Industrial Reforms supported with a backing of effective and targeted policy.

In the present Study the Industrial reforms, hurdles & challenges and the roles of Institutions for the present initiative have been analysed and need have Industry 4.0 has been evaluated.

Keywords: Make in India, Entrepreneurship, Manufacturing, NSDC, National Manufacturing Policy, Targeted Skill Development, Industry 4.0 etc.

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1. INTRODUCTION

A. Why the Manufacturing sector is Important?

Manufacturing sector is the second most labour intensive sector after Agriculture. According to estimates, every job created in manufacturing has a potential to create 2-3 additional jobs in other sectors. The share of manufacturing in India's GDP has stagnated at 16-17%, whereas in the other emerging economies, manufacturing accounts as a major contributor. For example, it contributes 29% of GDP in China and South Korea, and 27% in Thailand.

Macroeconomic importance of manufacturing is that the avenues of employment can be expanded outside agricultural sector to provide sustainable living opportunities to the huge population. It is estimated that India needs to create 10 million new jobs each year outside agriculture to stay at its current unemployment level of 7 percent.

From the angle of development strategy, India's late Policy Resurgence on Manufacturing is the main reason why the country lags behind China. The sector's unique role in initiating structural change has remained unattended while focusing on less employment providing, less tradable and less technology oriented Service sector. For a country of more than one billion people, manufacturing is believed to be the viable solution for finding employment and income. In this context, development of manufacturing sector is a way to deliver inclusive growth as it helps people in the rural areas to seek employment in this sector.

Some of the pull-backs of the sustainable development strategy were later corrected by the policy makers. There was a realization that an unconventional development path centered on service sector revolution has serious limitations on employment horizon as well as on foreign trade. Several policies were launched in quick time to correct the defects in the existing strategy and therefore National Manufacturing Policy was introduced.

2. MANUFACTURE IN INDIA- OPPORTUNITIES & THREATS

India's manufacturers have long performed below their potential. Although the country's manufacturing exports are growing (particularly in skill-intensive sectors such as auto components, engineered goods, generic pharmaceuticals, and small cars) its manufacturing sector generates just 16 percent of India's GDP—much less than the 55 percent from services. Moreover, a majority of India's largest manufacturers don't return their cost of capital, a factor that dampens investment in the sector and makes it less attractive than its counterparts in competing economies, such as China and Thailand. Indeed, China's manufacturers captured nearly 45 percent of the global growth in manufacturing exports from low-

cost countries between 2001 and 2010, whereas India accounted for a paltry 5 percent.

Many Sectors in India will see strong Domestic Market growth, driven by increased consumption:

To be sure, global economic growth is poised to create opportunities for low-cost manufacturers everywhere: by 2015 the market for manufactured goods from low-cost countries will more than double, to nearly $8 trillion a year. China will probably capture much of the growth. Still, we estimate that up to $5 trillion a year will be up for grabs as global companies seek to diversify production and sources of supply beyond China, both to address rising factor costs there and to chase domestic demand in other countries. India has a massive workforce, an emerging supply base, and access to natural resources needed in production—notably, iron ore and aluminum for engineered goods, cotton for textiles, and coal for power generation. The country could become a viable manufacturing alternative to China in industries ranging from apparel to auto components and might even dominate some skill-intensive manufacturing sectors.

More than half of India's manufacturing companies do not return their cost of capital.

Nonetheless, India's rapidly expanding economy, which has grown by 7 percent a year over the past decade, gives the country's manufacturers a huge opportunity to reverse the tide. History shows that as incomes rise, the demand for consumer goods skyrockets. And many of India's consumption sectors, including food and beverages, textiles and apparel, and electrical equipment and machinery have reached this inflection point. In fact, our research suggests that these sectors will grow from 12 to 20 percent annually over the next 15 years.

Every export and GDP (gross domestic product) statistic in the world points to the economic advantages of a country adept at making finished products. Is this possible in India? Yes, it is. First, because we are a country of 1.3 billion people which gives us immediate capitalistic motivation to produce end products and not just raw materials. Second, the efforts and is perhaps poised to be the world's favourite manufacturing investment destination. I believe we have the opportunity to lead the world. The time is right, but we need one more thing. If India's manufacturing big leagues, along with China, best practices in operations—while tailoring them to India's unique environment to improve the efficiency and effectiveness of the country's manufacturing investments dramatically. A look at how some Indian companies are making liberalization in the past few years have allowed India to be considered Asia's Silicon Valley ahead of the Manufacturing Mecca, China. Third, courtesy the "Make in India" campaign, India is fast becoming one of the largest recipients of foreign direct investment: at an annual rate of $75 billion, India inroads in these areas suggests a path that others can follow. Manufacturing sector realized its full potential; it could generate 25 to 30 percent of GDP Germany, Japan, and the United States. Along the way, we estimate that India could create 60 million to 90 million new manufacturing jobs and become an attractive investment destination for its own entrepreneurs and multinational companies. India's product makers must embrace global by 2025, thus propelling the country into the

3. OBJECTIVE

The main objectives of the study are as follows:

- To Study the importance of Manufacturing Sector in an Economy.
- Major hurdles & challenges in the development of Manufacturing Sector.
- Roles of Policies & Institutions in the development of the Manufacturing Sector.
- Industrial Reforms which would help the "Make in India policy" flourish into reality.

4. LITERATURE REVIEW

Yatish Rajawat, First Post, "Modi's 'Make in India' plan: The 7 hurdles it has to overcome to boost manufacturing" Date of Publishing: Sep 25, 2014.

According to a report published in the Business/Economy section of the newspaper, First Post in September 2014. Many hurdles or challenges have been identified by the author. To revive manufacturing in India isn't easy as over the years we have lost ground in this area. The industry presently focuses on taxes, subsidies and grants in any policy but these sops are not enough to build a manufacturing ecosystem. Especially, if the current ecosystem is hollow- thanks to Chinese imports. The animal spirits of the entrepreneurs search for the highest valuations and maximum profits. This is where sops play a role as they help in increasing profits. But manufacturing comes with other difficulties: there is a burden of labour, and capital is sunk in land and equipment. The opportunity cost of this capital is that if employed in trading or marketing it will give a quicker, surer and higher returns. This is the mindset and the outlook that has to be tackled if manufacturing has to become popular again. If a government sets on itself a target of reviving manufacturing it may have to do several things, which are as follows:

Smart Controls:

Trading or imports of goods for mass consumption especially in the food, consumer goods, electrical

products and light engineering goods needs to be controlled. Control cannot be physical barriers but smart barriers. A smart barrier for food, particularly processed imported food flooding our markets, is to have strong regulations on quality clearances. Chinese chocolates and candies flood Indian markets since importers presently do not have to take FDA permission.

Smart Cities and Manufacturing Clusters:

Smart cities need to be combined with manufacturing clusters in a manner that creates liveable places for a workforce. Manufacturing does not exist in vacuum. It needs an ecosystem of labour markets, liveable spaces, and access to markets. The trouble with the government policy on Special Economic Zones was that it allowed builders and developers to create these islands which did not have all the components of an ecosystem.

Smart Taxation:

Manufacturing constitutes just 16 per cent of the GDP but pays more excise duty than services which constitutes 60 per cent of GDP, and pays service taxes. Excise duty exemptions are region-specific or state benefits granted by the Centre. The trouble with an excise tax holiday is that it distorts the manufacturing landscape. Entrepreneurs use the tax benefit region for packaging and shipping and wait for the next region to be granted the benefit for planning their investment. This does not help anybody and has to change. Excise benefits need to be linked to the number of jobs created as a percentage of turnovers and should not be region-specific. This would level the playing field and at the same time allow labour intensive SMEs to avail of these benefits. Moreover a tax holiday linked to region and a period also inhibits expansion in that location as the entrepreneur is closely watching for the next location of a tax holiday.

Higher the value addition, the greater the usage of electricity in manufacturing.

There is 60 per cent additional charge put on industry so that farmers can get free power for agriculture. Lack of power or captive power supply adds to the cost of production, reducing competitiveness. A much better model of charging for power has to be deployed so that manufacturing should not pay for giving subsidies to farmers.

Soft Loans:

Soft loans are provided to the Manufactures often as Policy Incentives by the Banks or NBFIs as per the directives of the Government.

Most of the manufacturers prefer to focus on their Core functions; they prefer to invest capital in those locations which offer them the most lucrative schemes, incentives, policy measures, ease of doing business, low taxation, graranteed safety and soft loan options. They just don't wish to invest in ancillary functions like power back-ups or developing the transportation.

But if still they are forced to invest in ancillary functions, the government must be aware of those problems and must offer Soft Loans to the manufacturers.

Freight rates:

Another subsidy, that is borne by manufacturing sector is- high freight rates. As I have argued earlier, freight rates cannot be raised endlessly by railways to subsidise passenger fares. Manufacturing sector and the locations of manufacturing units is highly dependent on the cost of logistics.

Challenges of Land Acquisition Bill:

Another issue that affects both current and new manufacturing units is land. The UPA government created the biggest bottleneck with its land acquisition bill, which makes land so expensive that it cannot be acquired for manufacturing. The only place land is available is in places that are uninhabited or barren and this does not make manufacturing attractive for labour. Cities dependent on manufacturing are no longer attracting the best employees as they are located in places where it is impossible for an ambitious youth to live.

Even if an existing unit wants to expand, the state industrial development corporation cannot allocate him additional space. This is the problem across states with most state industrial development corporation having stopped providing services to their existing industrial parks. In states like Haryana, the HSIDC, under the Congress, became an instrument for acquiring land and giving it out to builders.

Hemant Singh, What is National Manufacturing Policy of India? Published on May 18th 2018

Roles of Policies & Institutions required for growth of Manufacturing Sector in the Country.

Our Manufacturing sector, in order to compete globally needs Reforms in Policies as well as support from many Institutions which play instrumental roles in supporting this industry. It can be achieved through collaboration between the government and the private sector which increases the role of Institutions for 'Make in India' initiative.

B. National Manufacturing Policy of India:

National Manufacturing Policy (NMP) was notified on 4th November 2011 by the Department of

Industrial Policy and Promotion (DIPP) under The Ministry of Commerce and Industry with an objective to enhance the share of manufacturing sector in GDP to 25% from 16%, with Benchmarking Reference that the contribution of manufacturing being at 34% at that time in Chinese Economy. Another objective was to create 100 million jobs over a decade, i.e. till the year 2021. The NMP is based on the principle of industrial growth in partnership with the states. The central government would be creating the Enabling Policy Framework & provide incentives for infrastructure development on a Public Private Partnership (PPP) mode.

The National Manufacturing Policy seeks to empower rural youth by providing necessary skills to make them employable. India is a young country with over 60% of its population in the working age group.

Over 220 million people were estimated to join the work force in the next decade, including the gainful employment for at least 110 million (50% of the total employment expected to be generated) employment seekers in manufacturing sector alone. With a view to accelerating the growth of the manufacturing sector, the manufacturing policy proposes to create an enabling suitable environment for the holistic development of the country. Some of the key features of the National Manufacturing Policy are:

- Incentives for Small and Medium Enterprises (SMEs).
- Industrial training and skill up-gradation measures for young work force.
- Rationalization and simplification of business regulations.
- Simple and expeditious procedure for closure of units.
- Financial and institutional mechanism for technology development including green technology.

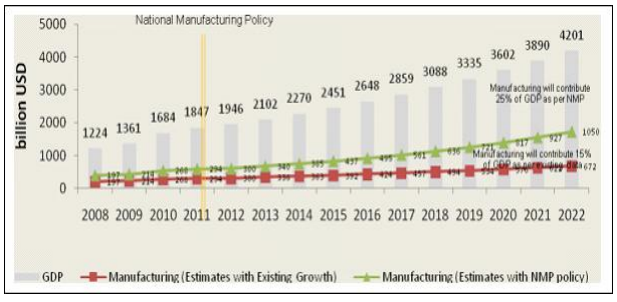

Fig: 1 (Source: www.archives.projectvendor.com)

So with the help of National Manufacturing Policy government of India want to increase the contribution of the manufacturing sector in the GDP, which is considered as the backbone of the Indian economy.

Skill Up gradation- Skill Development is crucial to the success of manufacturing sector too just like any other sector. If we take a notice of the other Developed or Emerging Economies, there we find a consensus on the significance of Skill Development efforts. It is estimated that only 4.7% of India's workforce is formally skilled, as against 52% in the US, 68% in the UK, 75% in Germany, 80% in Japan, 96% in South Korea and 24% in China.

Role of PMKVY:

The objective of this Scheme is to encourage skill development for youth by providing monetary rewards for successful completion of approved training programs. Specifically, the Scheme aims to:

Encourage standardization in the certification process and initiate a process of creating a registry of skills

Enable and mobilize a large number of Indian youth to take up skill training and become employable and earn their livelihood. Increase productivity of the existing workforce and align the training and certification to the needs of the country.

Provide Monetary Awards for Skill Certification to boost employability and productivity of youth by incentivizing them for skill trainings.

Reward candidates undergoing skill training by authorized institutions at an average monetary reward of Rs. 8,000 (Rupees Eight Thousand) per candidate.

Benefit 24 lakh youth at an approximate total cost of Rs. 1,500 Crores.

C. National Skill Development Programme:

The government of India has set up the National Skill development Council (NSDC), in collaboration with the private sector, and it supported with funding from international agencies like the World Bank. The NSDC has joined hands with Accenture for design and development of a customized skill development programme that will meet the needs of the industry in coming times. The programme is ambitious plans to skill 500 million youth by 2020.the NSDC has taken the right approach of understanding the prevailing challenges and then preparing a roadmap that is aligned with industry needs and trainee expectations. Hopefully, the youth will be able to match up to the opportunity and contribute in realizing India's potential as a developed nation.

D. Challenges in implementation of PMKVY:

The government is now planning to eventually phase out the franchisee model due to poor compliance under its flagship skilling scheme PMKVY and offer a chance to all franchisees to become training providers. "As per PMKVY (2016-20) guidelines, only first level franchising is allowed and the franchisee centres will be given lower priority. It is planned to gradually phase out franchisee agreements," the erstwhile Union Minister for Skill Development and Entrepreneurship Rajiv Pratap Rudy said in a written reply in the Rajya Sabha. According to numbers shared by Rudy, the top five states in terms of franchisee centres are Uttar Pradesh (399), Rajasthan (323), Haryana (143), Punjab (134) and Madhya Pradesh (118).

E. Is Make in India's Success guaranteed?

Today India is mulling over implementing the policy of 'Make in India', but other emerging economies introduced this policy around 30-40 years back. During this period of three or four decades, the manufacturing sector has undergone tremendous change and the challenges are also very different today. Therefore, many influential commentators have argued that manufacturing as an engine of sustainable growth can't be relied upon too much. In their views India must and can race to prosperity on the strength of its services sector alone. Today it is viewed with skepticism that the stress which is being made upon by promoting 'Make in India' would bear similar fruits in the future by such analysts.

But according to some prominent economists like Dr. Arvind Panagariya, Professor of Economics at Columbia University, Manufacturing could still be the sustainable solution for the age-old challenges like uncertainty in the employment & uneven distribution of income across the vast population of our country who come under the economically productive age-group.

Therefore India must promote its Manufacturing sector along with continue to making a conductive environment which could rather accelerate the growth of the Service sector by innovations in order to maintain its leadership position there. Agriculture, which currently employs 45% of the workforce has its own contributions and importance in the economy and must be expanded in terms of yield per acre.

Many policy makers are convinced for the fact that Manufacturing is crucial in the sustainable and composite economic development of the population. But some recent developments in the Manufacturing practices around the world are perceived as hurdles or challenges. Some of the biggest challenges are stringent & discriminatory international norms on Carbon Credit Policies, rising Protectionism & Automation.

Rajat Dhawan, Gautam Swaroop, and Adil Zainulbhai, McKinsey & Co. March 2012, date of retrieval: 15 Nov. 2018

India's manufacturers have a golden chance to emerge from the shadow of the country's services sector and seize more of the global market. McKinsey analysis finds that rising demand in India, together with the multinationals' desire to diversify their production to include low-cost plants in countries other than China could together help India's manufacturing sector to grow six-fold by 2025, to $1 trillion, while creating up to 90 million domestic jobs. Capturing this opportunity will require India's manufacturers to improve their productivity dramatically; in some cases by up to five times current levels. The country's central and state governments can help by dismantling barriers in markets for land, labor, infrastructure, and some products. But the lion's share of the improvement must come from India's manufacturers themselves. Recognizing this, a few leading ones are upgrading their competitiveness by bolstering their operations to improve the productivity of labor and capital, while launching targeted programs to train the plant operators, managers, maintenance engineers, and other professionals the country needs to reach its manufacturing potential. A closer look at the experiences of these companies offers lessons for other Indian manufacturers and for global product makers considering opportunities in India.

According to the report of the above mentioned authors, Four imperatives for India's government to boost Manufacturing has been recommended:

- **Bolster operations:**

India's legacy of industrial protectionism has left many of the country's manufacturers uncompetitive. To seize the opportunities now available to them, they must dramatically increase the productivity of their labor and capital. The rewards could be significant: a McKinsey benchmarking study of 75 Indian manufacturers found that for an average company, the potential productivity improvements represented about seven percentage points in additional returns on sales.

- **Improve labour productivity:**

Indian manufacturers lag behind their global peers in production planning, supply chain management, quality, and maintenance areas that contribute to their lower productivity (Exhibit 4). Consequently, workers in India's manufacturing sector are almost four and five times less productive, on average, than their counterparts in Thailand and China, respectively.

Nonetheless, some Indian companies are making strides. Tata Steel, for instance, improved its output

per worker by a factor of eight between 1998 and 2011, largely by adapting its operational and management practices to India's unique conditions. The company dramatically improved the output of its blast furnaces, for example, by learning to adjust them continually to account for the large variations in the ash content of Indian coal from shipment to shipment. In this way, the steelmaker can burn coal with a high ash content more efficiently than would otherwise be possible.

The company has also made significant organizational changes to support the new ways of working. To make employees more accountable, for example, Tata Steel reduced the number of managerial layers to 5, from 13. It also began investing heavily in building analytical and interpersonal skills among frontline managers and staff to ensure access to scarce competencies. Today, the company's Shavak Nanavati Technical Institute trains more than 2,000 employees a year in both "hard" skills as well as "soft" ones, such as conflict resolution. Together, these moves strengthened the company's focus on continuous improvement—Tata Steel won the coveted Deming Prize in 2008 for advances in process excellence and quality improvements—and helped it become one of the world's lowest-cost steel producers.

- **Improve Capital Productivity:**

India's manufacturers must also improve the productivity of their capital, in some cases by 50 percent or more. While such improvements are challenging, they are possible if companies set bold targets and adopt an "owner–entrepreneur" mind-set when tackling large capital projects or making other big investments.

For example, a global mining and metals company that was setting up aluminum smelter operations in India set a capital cost target 50 percent lower than the industry's global average. The company then empowered its project teams to reach the goal, for example, by giving them greater freedom to make decisions about capital specifications and which low-cost equipment suppliers to use. (A technical and commercial audit team of senior managers would ensure that the new approach didn't compromise the quality of capital equipment or backfire in the form of graft.) Many Indian companies are also assessing the technical design of their capital equipment to make trade-offs between capital expenditures and life cycle expectations for reliability—essentially State of the art specifications.

For example, Tata Power has lowered its capital expenditures in a drive to identify relatively inexpensive designs and specifications for big projects. During the planning stages of a new 4,000-megawatt facility, for instance, the company brought together customers, suppliers, and Tata engineers to make a number of Indigenous design decisions. These included using cheaper welded tubes instead of seamless ones in feed water heaters and redesigning the layout of the turbine-generator building to make it more compact. Together, such trade-offs saved the company more than $100 million in capital outlays while preserving the plant's core capabilities and meeting standards for safety and reliability.

- **Targeted Skill Development:**

India's manufacturers could learn a lot from the IT sector's experience in promoting the large-scale development of skills. India's IT services and business-process-outsourcing sectors together hire nearly a million new recruits a year and bring them up to speed in just months. A key factor in this success was the early recognition among Indian IT companies, back in the 1990s, that the number of engineering graduates in computer sciences wouldn't meet the needs of the country's burgeoning IT sector. In response, Infosys, Wipro, and other companies began hiring graduates from all engineering disciplines and using in-house curricula and faculties to build skills among new hires. That approach ultimately led to the formation of a successful network of independent, privately owned computer-training institutes, such as Aptech and NIIT.

Akash Gupta, Co-founder and Chief Technology Officer- Grey Orange Pte. Ltd, "Industry 4.0 should be India's battle cry". Date of publishing: 09 Jun 2017, HT Live Mint.

Importance of Targeted Skill Development in the Manufacturing Sectors in India:

India's manufacturers should follow a similar path by establishing in-house training centers to promote vital manufacturing roles, including those of fitters, machinists, maintenance engineers, and welders. Some Indian companies are already taking matters into their own hands. For example, to impart vocational skills, India's largest automaker, Maruti Suzuki, has adopted six technical institutes across the country, some in regions with little manufacturing presence. By using the company's own managers as faculty for some classes, Maruti Suzuki inculcates trainees with a strong feel for its culture as well. The automaker is now expanding its training programs to include employees of key suppliers.

Serving Duel Purposes of Indian Manufacturers: Skill Development & CSR

Although training programs make good business sense, they are also increasingly necessary to get local populations to accept the establishment of a manufacturing footprint in India. Tata Motors' partnership with the Gujarat state government to improve the skills of local workers, for example,

helped the company to improve concerns about the displacement of residents by the construction of a Tata Nano car factory, while giving the company access to new workers. Today, nearly 1,000 people who live within a 10-kilometer radius of this Sanand factory make Nanos.

Similarly, Tata Steel has agreed with the Orissa state government to train and improve the skills of workers living near a planned steel plant in Kalinganagar. The company has pledged to give local villagers jobs in the project's execution and operations.

Multi-layer Skill Development Program:

Frontline workers aren't the only ones whose skills need upgrading; India's manufacturers must also improve those of managers. Consider the experience of the cement maker Holcim, where executives set and achieved such goals as significantly improving the reliability and energy efficiency of the production process, as well as other important operating metrics at the company's Indian subsidiaries.

At the heart of this initiative is an academy the company set up in its Indian plant to help future leaders bolster their skills through a "field and forum" approach that intersperses class work with hands-on fieldwork in the form of operational-improvement projects. Similarly, Holcim trains its managers to focus performance dialogues with frontline employees on the importance of identifying the root causes of problems and of finding potential solutions through cross-functional teams. The company uses operational "war rooms" in its Indian plants to serve as a clearinghouse for the best ideas and to uncover the best contributions. In parallel, Holcim created an ambitious leadership program to support the personal development of up-and-coming manufacturing leaders.

The combination of rocketing domestic demand and the multinationals' desire to diversify their manufacturing footprint offers Indian product makers a once-in-a-generation opportunity to emerge from the shadow of the country's services sector. By improving their productivity and bolstering operations, they could become an engine of economic prosperity for the whole country.

5. RESEARCH METHODOLOGY

Most of the research has been done on the basis of the Literature Review of the Articles, Journals, and Web references described above. These articles have covered most of the points which are required to be explained in the Objective of the current study; like- current status of Manufacturing industry in India; importance of Manufacturing sector; Policy Framework to promote Manufacturing industry, Incentives and Plans to develop the Environment & Culture of Manufacturing; Hurdles & possible Remedial actions for developing the manufacturing industry in India etc. All the references have been taken from a span of just 6 years, within the period of year 2012 to year 2018.

The research articles selected for this research paper have been focusing on Indian Manufacturing Sector. There are two methods of sampling for selection of articles. These methods are probability and non-probability sampling. In this research paper, non-probability based convenience sampling has been used. In the convenience sampling the researcher selects the samples as per his/her convenience. The authors keep in mind while selecting the papers that the study/article must be able to provide answers to all the points mentioned in the Objective section of the Article. The papers analysed in the research are both empirical and conceptual in nature.

6. FINDING

The author attempted to find out the Status, Policies and possible improvements in the output of the Manufacturing Sector in India. Although there has been quite visible improvements like- Outcomes of National Manufacturing Policy, Skill Development Programs etc, however lot many challenges still remain un-attended like Implementation of incentive-backed manufacturing, export, Targeted Skill Development, to upgrade operation, to improve Capital & Labour Productivity etc.

Manufacturing is and always will continue to remain crucial to the Economic Development of the country, but despite being at equal opportunity and resource pool, as we failed to catch-up with rest of the Emerging Manufacturing economics like China, Malaysia, South Korea etc; now for making Manufacturing a success we need to design Policies, Infrastructure and Resource-Pool keeping in mind the requirements of "Industry 4.0"

7. LIMITATION AND CONCLUSION

The major limitation of this research is that it is based on secondary data of already available literatures. The author didn't include any primary data in this research paper due to his own choice probably due to time constraints. There is a definitive scope to design a questionnaire on the various parameters of manufacturing sector in India.

The overall conclusions derived from this literature review done in this research indicate towards a paradox- despite being a Big, Emerging & Comparable economies of the world. On one side of the coin India is getting reflected as world's 7th largest economy, whereas on the other side of the coin it is lagging behind its competitors like China,

South Korea, Indonesia, Malaysia etc as far as development of Manufacturing sector is concerned.

Some more conclusions include:

- India needs more efficient Policy Measures to boost Manufacturing sector and attract more investors (domestic & international both).
- Skill Development Programs for Employability in manufacturing sector needs to be monitored and updated on a continuous basis.
- Empowerment of Institutions for Manufacturing is required keeping in mind the Industry 4.0; and not (Industry 2.0 or 3.0) the one which was adopted by China, South Korea or Malaysia during 1980s or 90s.

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