“MAKE-IN-INDIA”, A STEPPING STONE TO “MAKE-BY-INDIA”

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ABSTRACT: Indian government vision is to become economically strong. For this we need to be strong in manufacturing and exporting. Exporting is only possible when manufacturing export quality goods in India. To boost the manufacturing capabilities, government of India devised a policy “Make in India” project. Under this “Make in India” project, the permissions will be given at one go for establishing industries under the supervision of Superman of India the Prime Minister or under the supervision of Spiderman’s of various states, the Chief Ministers. Under this “Make in India” project the foreign industrialists, NRI’s and Indian industrialists are invited to establish their industries in India. It is a boost to the states to devise their easier industrial policies, which may motivate the industrialists to establish their industries at their own states. Recently the Telangana state already unveiled a new industrial policy, under this new industrial friendly industrial policy the permissions will be given with 15 days of submission of proposal through online only. The special cell has been established in the CMs office to look after all the documents verification to speed up the permission process. They have also collected the data for availability of land for establishing industries in Telangana. About six industrial corridors have been identified and notified for establishing industries in Telangana under “Make in Telangana” logo. All the states should establish and devise their industrial policies to attract the various industries according to the resources and minerals availability. “Make in India” and “Make in Telangan’ logos are creating records in social media such as Facebook and WhatsApp. An USA based big software company Google and Amazon are going to establish its second campuses in Hyderabad. There are more industries are coming up after the unveiling of “Make in India” and “Make in Telangana” projects. It may be expected that the positive impact will be there on growth rate of Indian Economy by 2020. Therefore India will become economically strong. Recently the Prime Minister of India, Chief Minister of Andra Pradesh and IT Minister of Telangana participated in “World Economic Forum-2018” to boost up the Foreign Investments in India. Telangana IT Minister Mr.KTR actively participated in WEF 2018 and invited big foreign industrialists to invest in Telangana in the areas of Start Ups in IT sector, R&D in Solar and Wind Energy and Automotive Industries.
1. INTRODUCTION

An idea could change our lives. Recently, Indian Prime Minister, Mr. Narendra Modi’s great idea, “Make in India”, to invite the large and small manufactures to establish their manufacturing units or business centers in India, sown a seed in our NRI’s to establish manufacturing Industries in India. A revolutionary change has been found in thought process of every Indian, within and outside of India for which this forum itself is an example. Hon’ble PM Narendra Modi viewed FDI as “First Develop India” rather “Foreign Direct Investment”. It is insisted that India should not only be viewed as a market but it should be considered as an emphatic opportunity for making India a global economic giant. Make in India is future plan of Government of India to encourage Multinational and domestic companies to invest the money or manufacture their products in India. The intention of this mission is to increase share of manufacturing from the current level of 15% of GDP to 25% and create additional employment opportunity for 100 million during the next decade in various sectors some of which are pharmaceuticals, railways, automobile, pharmaceutical, chemicals etc.,

The logo for Make in India campaign is an elegant lion, inspired by the India’s national emblem Ashoka Chakra and designed to represent India’s success in all spheres. The wheel denotes the peaceful progress and dynamism - a sign from India’s enlightened past, pointing the way to a vibrant future. The prowling lion stands for strength, courage, tenacity and wisdom – values that are every bit as Indian today as they have ever been. This paper throws some light on such facts, issues, effects and challenges with reference to the mission ‘Make in India’.

2. LITERATURE REVIEW

Rajeshwari M. Shettar (2017) studied the impact of make in India campaign and its major focus areas. She viewed New Processes, New Infrastructure, New Sectors and New Mind-sets are the four major pillars on which the vision of manufacturing depends. She addressed various challenges of make in India which includes financial requirements, imparting skills and training to workers, and focus towards novelty and innovations in small and medium sized industries. In this paper she suggested that India should consciously work towards attracting greater FDI into Research and Development. She finally remarked that the proposal of Make in India will boost manufacturing the electronic manufacturing market in the country. Pratiksha Mishra and Taruna(2016) in a paper titled Role of Make in India as driver of growth in manufacturing sector have studied the Changing Paradigm in Manufacturing Sector after the initiation of Make in India Campaign. They emphasized that rebooting Indian economy and providing job opportunities for young generation in India are the demands that made Make in India mission more powerful. They also focused on the need of emphasizing on Innovative ideas and Advanced Technology for the better tomorrow. In this paper, they listed various challenges for making India a global manufacturing hub. They concluded that if the government continues same motto, a significant growth in the manufacturing sector and progress towards India becoming a global hub can be achieved. Jaswal (2014) viewed the active role played by Micro, Small and Medium Enterprises (MSMEs) in attaining economic growth, sustaining livelihood and in promoting equitable regional development. In this paper he indentified that the most important contribution of this sector is towards employment generation which is second only to agriculture in India. The experiences of recent year’s shows that employment in agriculture sector has been declining as well as large industries are
also experiencing jobless growth. T. Vijayaragavan (2015) in a paper described how Make in India is positive for marketers in terms of economy. Initially the paper described the challenges behind manufacturing sector stating that the idea of make in India is to turn domestic companies into global champions and promote green and advanced manufacturing and help these companies to integrate into global value chain. They briefed the opportunities behind Make in India that will create jobs in the services sector and allied services like logistics, transportation, retail etc. The final remarks given in the paper is that Make in India aims to turn India into a "Global Manufacturing Hub".

3. **OBJECTIVES & BENEFITS OF MAKE IN INDIA**

![Objectives of Make in India](image)

- **Objectives of Make in India initiative**
  - Develop skills
  - Protect Intellectual Property
  - Foster Innovation
  - Reduce Barriers to doing business

![Benefits of Make in India](image)

- **Boost to India’s Economic growth**
- **Increased Employment**
- **Inflow of FDI**
- **Enhancement if Technology**
- **Opportunities for the youth**

4. **‘MAKE IN INDIA’ TO ‘MAKE INDIA’ BETTER**

As a matter of fact, the development of any country is largely depends on three major sources; (i) agriculture of food grains, (ii) mining such as minerals, ores, coal, petroleum products etc. and (iii) manufacturing various types of goods such as electronics goods, mechanical and electrical equipments, fast moving goods etc. The first two i.e. agriculture and mining, can be performed necessarily within the country’s land and these two depend on nature and environmental factors. But, the third one, i.e. manufacturing can be done
anywhere on the globe and not necessarily in a country that produces its raw materials nor the one which uses the final product.

Given a room of thought, it is the obvious fact that a country would flourish if it sufficiently manufactures the goods required for its own consumption and does not depend on any other country’s mercy for any goods or services. For example, a roti (or a meal) prepared at home will definitely cost less than that is purchased from a restaurant. So also, a product manufactured in the country certainly costs less than that is imported. But this requires the skills, capabilities, technological know-how and willfulness from the public (doers) side while the encouraging policies, subsidies and creation of motivating environment from the rulers (government). Thus, it is in the hands of people and the government policies to promote this sector.

This fact is realized by the government of India, and has come out from LION’s mouth. Materialization of the mission, ‘Make in India’ can really ‘Make India’ better through a significant change in its economy. One can observe the following benefits out of this program.

4.1 Enhancement of Employment Generation: Undoubtedly, this program can generate a huge job generation. A recent survey conducted by a local newspaper of a state (Telangana) reveals that about 60 thousands of unemployed educated (graduated) youth is added to the list of unemployed every year and is in the increasing trend. Thus, it may flair up to become an impossible task in the coming next 10 years if it not planned now. And the development of manufacturing sector is the only best alternative to provide employment to all the youth.

4.2 Forestall Migration of Human Power and Intellectual Property: Most of Indian highly educated and technically graduated youth are migrating to USA, Australia, New Zealand, Singapore, Malaysia as they are not finding a suitable job for their qualification or not finding the required facilities. Other less educated are moving to gulf countries as they are not finding a job to do. On one hand, this migration is resulting in a lot of intellectual property is going out of country and is contributed to further development of the so called developed countries and on the other hand donating a human power, industrial labour (Shramik Shakthi) to under developed/developing countries, but not getting utilized for India. This is going unnoticed. Make-in-India is an urgent need to attack this problem.

4.3 A light of hope to Frustrated Youth: The youth not having a job after their finishing school, is getting frustrated and this is creating to negative mindset leading to become criminals or victims by becoming the tools in the hands of anti-social elements. A sample survey by a newspaper reported that about 90% of the crime cases such as chain snatching, eve teasing, pick pocketing, cyber crimes, robbery, thefts etc. in a metropolitan city are found to be done by educated youth of age group 20-35. And out of these, about 60% are frustrated unemployed technical graduates. This problem is to be addressed seriously. If the youth of this age group is made busy with a work, the problem can be curbed a greater extent. Make-in-India program can definitely help in this direction.

4.4 Enhance Economical growth: India needs to improve its economy growth, by adopting or best practicing various means of strategies, such as exporting IT products, productivity improvement in agriculture, manufacturing high value products in India, manufacturing and exporting other goods such as fashion goods etc. India has almost achieved the required growth in exporting IT products and also fashion goods. However, India is good and efficient in agriculture production, but due to natural calamities, it is unable to achieve the required growth. So, the manufacturing sector is only the opportunity to enhance the Indian economy growth. There are plenty of resources, such as lands, minerals, coal reserves, and other raw materials available in India. Most importantly the government of India is promoting Industrialization in all the states of India. Indian govt. is bringing new industrial policies, which will approve the industries at one go under the Prime Minister and Chief Ministers supervision. Most of the states are adopting new industrial policies, developing industrial friendly policies under the “Make in India” project.
4.5 **Pride of India:** “Be Indian-Buy Indian” was a slogan sometime back, made a significant difference in Indian economy which made use of the sentiment of patriotism. This project can use the conceptual aspects of such slogans and inculcate the culture of buying the ‘Made-in-India’ products. This will make Indians proud of their products at the same time builds the confidence in Indian manufacturers.

4.6 **Overall Cost Reduction:** Making a product at own place can reduce the overall manufacturing cost, transportation cost, labour cost and all other associated costs. This reduced production cost enables product supply at competitive prices.

5. **MEASURES TO MAKE ‘MAKE-IN-INDIA’ BETTER**

The following are some of the measures to be considered:

5.1 **Role of Media in popularizing the concept**

Lack of awareness about Make in India project to the Indian industrialists, foreign investors and NRI’s is the major weakness. It is more important to create awareness among the various industrialists and people by giving a vide publicity through press/media and conducting Essays, Articles, Column writings, Delphi, Interviews, Talk shows, Webinars, Seminars, Panel discussion and so forth on “Make in India” project.

The positive politicians like Telangana Chief Minister, KCR has taken very positive measure to support foreign and Indian investors for establishing new manufacturing industries in India. In Hyderabad, one big 2 days conference was already conducted to gain knowledge on “Make in India”. In this year end of November, in Hyderabad a big international conference is going to be held on the topic of “Make in India”. Another positive chief minister of Chhattisgarh Dr. Raman Singh also conducted investors meeting in a big way to attract the industrialist to invest in his state of Chhattisgarh, in “Make in India” project and “Smart Cities” development project. Like this the positive politician strategies will enhance the success rate of new policies to 100%. The positive politician’s impact will be more on GDP growth and Indians economy growth.

5.2 **Role of academicians, scholars and educationalists**

Academicians, scholars and educationalists can play a great role in this regard by conducting of workshops/ seminars/ conferences at Engineering Colleges and Universities and popularizing “Make in India” as a slogan. Awareness creation among the students, industrialist and common people about “Make in India” project, its objectives, its impact on various factors, its impact on employment creation and its advantages etc; is more important for success of this “Make in India” project. Awareness creation occurs by conducting workshops and conferences by the colleges and universities. The workshops and conferences bring the students, teachers, industrialists and intellectuals at one platform and share their ideas and knowledge. Some students may speak on difficulties in implementing the project, some teachers tell about the impact on financial growth of India, some industrialist may speak on criticalities in getting the approvals from the government, some students may ask about the impact of “Make in India” on job creations etc. Finally the outcome of workshops and conferences make the people gain knowledge on “Make in India” project.

5.3 **Role of officials in Government departments**

Rigid industrial policies are in practice in the central and certain state governments to approve the file to establish new industries in India. To attract industrialists, recently Telangana, govt. has developed a new industrial policy known as ‘Single Window Policy’ for getting all approvals within 15 days. Such type of new industrial policies should be adopted by other states will give boost to the “Make in India” project. By establishing various types of manufacturing industries, the employment creation growth will increase multiple times. This type of new industrial policies may reduce the weakness of “Make in India”.
Regarding land pooling, most of the state govt. are failing in providing land to the industrialist to establish new manufacturing units. Only Telangana govt. has done survey on entire state and collected about 1,50,000 acres of land for establishing new industries under the “Make in India” project. Such exercise should be made in all the states.

Lack of required skill in the available manpower is yet another weakness. The skill sets have to be developed only and only by establishing Skill Development Training Centers (SDTC) in all the states. Recently, the Telangana govt. has taken a major decision to establish various skill development training centers in all the districts. Telangana already developed a “Telangana Academy for Skill and Knowledge (TASK)” centre for training the engineering Diploma/Degree holders to gain job skills.

5.4 Role of Ministers of State and Central Governments

Now a day’s growth in IT industry, electronics industry is increasing very fast. The usage of lap tops, televisions and mobile phones is exponentially increasing. Unfortunately, most of the electronics goods are imported from other countries in huge quantities which definably affect the financial status of our country. To minimize the financial crunch in India, Make in India is the best solution. Therefore every business people, intellectuals, manufacturing heads should address this issue and take a lead role (Thanks to honorable PM of India for taking the initiative) to establish more number of manufacturing units in India. This will simultaneously increase productivity of Indian manufacturing sector and opportunities to create new employment.

The efforts made by Mr. K. T. Rama Rao, IT and Panchayatraj minister of Telangana, are noteworthy and exemplary to other states officials and leaders. He participated in first “Make in India” conference held at Hyderabad, which was a great motivation for the investors and Industrialists. He visited the state capitals of USA and conducted meetings with foreign Industrialist and NRIs to establish new manufacturing units in India. He was also explaining opportunities for establishing industries in the specific areas such as Electronics, Aerospace, IT, Pharma, etc. He has also conducted meeting with CEO’s of Microsoft, Google, Impact Investors, Telecom Networks, Esco Corporation, Melan University etc. of USA based companies and universities for putting off industries and educational universities in the state of Telangana. USA based google company is establishing its second campus in Hyderabad, Telangana state.

The Prime Minister of India recently visited many countries and stood as an exemplary in this direction. Every state has to take this as an inspiration and move their steps forward.

In recent past the conference on “World Economic Forum 2018” at Davos, Switzerland, our Prime Minister of India, Chief Minister of Andra Pradesh and IT Minister of Telangana were participated. The IT Minister of Telangana played lead role at “Invest India” sub theme organized at WEF 2018 on 26/01/18 and he invited all big foreign industrialist to invest in Telangana and in India in various fields like Startups in IT sector, R&D in Solar and Wind Energy, Automotive sectors etc.. He has already signed numerous MOUs with IT industries like Mahindra Tech is going to establish its centre at Warangal, a second developed city after Hyderabad in Telangana.

5.5 Role of Industrialists in Capacity Building in Manufacturing

India is lagging in electronic goods manufacturing, power plant equipments manufacturing, metro-train bogies manufacturing, aeroplane manufacturing, machinery manufacturing etc; This is the time for capacity building in manufacturing through inviting foreign investors by various state governments to establish manufacturing units under the “Make in India” project. There is a large scope in establishing electronics goods manufacturing units in various states of India. This is another big opportunity for capacity building in manufacturing by establishing manufacturing units in India.

It is very important for the growth of economic status of country every year. Therefore all the states should strive to generate, formulate various strategies and implement the best practices and benchmarks in the
interest of enhancing manufacturing capacities, utilizing the available resources effectively, agriculture productivity improvement etc. depending on the priorities.

5.6 Role of Politicians on “Make in India”

Any new policy initiation and its success rate depend on the positive mind set off the politicians. The “Make in India” project is initiated by a positive politician and PM of India Mr. Narendra Modi. So the success rate of this “Make in India” is advanced for 40% remaining 60% success rate is depending on our state Chief Ministers and other positive politicians. So, irrespective of their political agendas, it is high time for our politicians to act positively on this issue keeping their party flags aside.

5.7 Role of Banks and Financial Institutions on “Make in India”

The role of Bank’s is very important in financing the new industrialists. When banks give loans on easy way, more number of entrepreneurs will come forward for establishing new, small and medium scale industries in India. Banks should motivate the small and medium scale industrialist by providing loans with less interest rate to establish new manufacturing units under “Make in India” project. Banks should form the easy loaning policies for new industrialists for establishing Electronics, Aerospace and other product manufacturing units under “Make in India” project. Banks should act as a bridge between govt. policies such as “Make in India” ‘Smart Cities’ and industrialists by providing sufficient loans on less interest rate policies and monthly EMI deducting policies. Banks should maintain strong relationships with industrialists and government to make success of “Make in India” and ‘Smart Cities’ projects in giving loans easily and taking EMI in easy installment policies.

5.8 Role of Training Centers and Trainers for Skill Development

To become success of “Make in India” project involvement of technical educational institutes and industrial training centers is very much essential. Technical institutes and Indian training centers should develop need based training programmes and train the man power. By designing and developing need based, skill development training programme, skills of the manpower will be increased. The growth in the industries and skill development growth go parallel, so that the shortage of skilled manpower does not arise. Institution and Industry collaborations or partnership may further strength the skilled manpower available for success of “Make in India” project. Through collaborative projects, highly skilled manpower will be developed to fit in to the industry requirements. Through institutions and industry mutual partnership, the best curriculum will be developed and the best practical training will be given to the learners and finally best in class skilled manpower will be developed. Skilled manpower availability will enhance the productivity and efficiency of the Industries, and “Make in India” project will became more successful.

6. IMPORTANT INDUSTRIES FOR “MAKE IN INDIA”

The central government and state governments, the universities and the industrial societies etc. should identify the important industries by conducting conferences and workshops to make success of “Make in India” project. Mainly India is lagging behind in producing electronic goods, Aerospace assembly, Assembly of Metro trains, high speed trains production, pharmacy products etc.

By establishing more number of electronic goods manufacturing units and their logistic management warehousing units may give good impact to the “Make in India” project.

Apart from all these things, the Aerospace, IT, Pharma, Energy and Power sector industries should be established to increase the job creation growth in India. To make success of “Make in India” project skill development and managerial development plays vital role. Through skill and managerial development programmes, more number of people (HR) can be trained and kept ready for deployment in various industries. The most important industries according to the experts participated in “Make in India” conferences are IT, Electronics, Aerospace, Pharmaceuticals, Power Sector Parts and Equipments etc.
7. IT AND HIGH TECHNOLOGY FOR “MAKE IN INDIA”

India is number one in IT products production and exporting, but in high technology development, India is lagging behind China, Japan, Germany etc; The IT products should be developed such that to utilize for only technology development, reduce the machine breakdown, for testing engine and engine monitoring systems etc.. Technology development plays vital role in producing high quality products and it leads to make success of “Make in India” project. IT and Technology resources will be produced in advance and make readily available for the new industries to come up in India.

8. SUCCESS OF MAKE-IN-INDIA

To review and evaluate the success of a program, it is needed to throw some light on the events occurred during the recent past (the last six months).

- In January 2015, the Spice Group said it would start a mobile phone manufacturing unit in Uttar Pradesh (UP) with an investment of Rs.500 crore. A memorandum of understanding was signed between the Spice Group and the Government of UP.
- In January 2015, HyunChil Hong, the President & CEO of Samsung South West Asia, met with Kalraj Mishra, Union Minister for Micro, Small and Medium Enterprises (MSME), to discuss a joint initiative under which 10 'MSME-Samsung Technical Schools' will be established in India.
- In February 2015, Samsung said that will manufacture the Samsung Z1 in its plant in Noida.
- In February 2015, Hitachi said it was committed to the initiative. It said that it would increase its employees in India from 10,000 to 13,000 and it would try to increase its revenues from India from ¥100 billion to ¥210 billion. It said that an auto-component plant will be set up in Chennai in 2016.
- In February 2015, Huawei opened a new research and development (R&D) campus in Bengaluru. It had invested US$170 million to establish the research and development center.
- In April 2015, Airbus said that it will manufacture its products in India and invest $ 2 Billion US dollars.
- Also in February, Marine Products Export Development Authority said that it was interested in supplying shrimp eggs to shrimp farmers in India under the initiative.
- In May, 2015 Tata JLR (Jaguar Land-Rover) announced that it will move its production of the Land Rover Defender to its Pune facility in India in 2016.
- Shiv Kumar Rungta, president, FTAPCCI, stressed on key sectors like services (mainly in IT), mechanization of Agriculture sector for achieving increased productivity, among others, for the success of ‘Make in India’.
- Recently, Mr. KT Rama Rao, IT minister of Telangana attracted and made MoUs with several companies (including Google, Microsoft etc.) to establish their companies at Hyderabad, the state capital during his visit to America (May 2015).

Above are a few among the successes of the programme. This seems to be a good sign and a positive trend of development. At present government more number of positive minded politicians is available, so the expected success rate of “Make in India” may reach to 80% - 90%. It means that by involving various governments actively in implementing these policies effectively may enhance the success rate of “Make in India”. Higher the success rate of “Make in India” will lead to creation of more jobs and leads to economic development of India. Higher the job creation rate will lead to more satisfaction of youth of India and the life style of people will be changed. The success rate of one leads to other and other leads to another, the chain reaction takes place to ultimate growth of Indian economy improvement and reduce poverty level.

9. THE JOURNEY TO ZENITH – A STRATEGIC VISION FOR GROWTH

Finally, in the journey of this manufacturing field it is now the time to review the facts, issues, effects and challenges with reference to the concept of ‘Make-in-India’, and before its consolidation of the discussion made so far, certain queries require to be answered and attract everybody’s attention.
WHERE SHOULD ‘MAKE-IN- INDIA’ END?

Without any iota of doubt, ‘Make-in India’ is good concept to enhance the employment and make India better. But there are certain questions that ring in the intellectuals for which one should definitely think of.

1. What is the ultimate goal of this programme?
2. Where will it end?
3. How long will it persist?
4. Is there any strategic view? If so, what?
5. Should always India depend on somebody (i.e. some country) and work under them and for them?
6. Can’t India manufacture products for itself?
7. Can’t India invest in other countries like how other countries are invited now?
8. When does such invitation India get to ‘make for other countries’? Is government looking forward and making some strategic plans in this direction?
9. Can’t India become a country of exporter for some products by which it is recognized (by developing core competence)?

And many more questions like these…

There is dire necessity to initiate a thought process in this dimension. Brainstorming sessions should be conducted in this aspect to lay down the long term plans; goals and objective vis-à-vis formulate a suitable strategy for taking the country’s flag high.

One good idea is that, this movement of ‘Make-in India’ should become a foot step for a new slogan “Make-by-India’. Keeping in mind, the fact that India is second largest populated country, there is no shortage for human resource, no dearth of technological knowledge and no less in any area except for the initiative, confidence, commitment and determination. Hence, this concept Make-in-India should be slowly transformed to Make-by-India.

MAKE-IN INDIA TO ‘MAKE BY INDIA’

As told in Bhagavadgeetha, the ultimate holy book of dharma,

Shreya Swadharma Vigunah! paradvartatra swanusstithyathah!!
Swadharme nidhanam shreya! Paradharmo bhayavahah!!
(Karma Yoga-Chapter-3; verse 35)

This means, though easy to do, although looks good, para-dharma is dangerous and never better than the swadharma, even though it is difficult. Of course, Make-in-India concept is preventing para-dharma to some extent by bringing the companies to Indian employable youth and hence reducing migrations to other countries. However, ‘make-by-India’ makes completely the Indians self sufficient (swadharma). Further, it should have a ‘time bound’ objective to become India to invest in other countries to call ‘Make-of-India’, why not it could grow to a level to invest in USA, Canada, England, Germany, Australia any part of the globe.

As remembered “Swadeshi Movement” by Gandhiji, Home Rule by Anne Besant and many examples in the history have clearly shown that India can do anything for itself and can live any time by itself. Whatever the policy may be, whatever concept may be, unless it is conducted in a willful committed and dedicated environment at all levels, it will not be a successful formula.

In India the new governments are coming and going, forming some developmental policies such as

(i) Skilling India
(ii) Digital India
(iii) Make in India
(iv) Smart Cities

Nobody measures or bothered for their successful implementation and their implementation success rate. Due to IT growth and social media impact, the new govt. and new politician are becoming positive and
developing new strategies to implement the new policies successfully. Some governments are conducting conferences and workshops to get awareness about new policies of governments.

‘BUY BY INDIA’ TO ‘INDIA MAKES’ – 5 FIVE-STEP GROWTH MODEL

From last five to six decades, we have been hearing the words “India is developing country”, but never known when it can become a developed country. After a thorough analysis, a 5-step growth model seen through the manufacturing reference frame is herewith suggested for Indian development to become a ‘developed country’. The strategic programme ‘Make in India’ can be considered as second step. To become a developed country it has to pass through three more stages as shown in figure 4. The time bounds are also suggested along with the description of each step of the model.

**Step – 1: Buy by India**

At this step, India buys the products from the other countries, which we have been doing so, hither to. At this stage, the country cannot prosper because its money flows out. This period is already passed out.

**Step – 2: Make in India**

This stage is a turning point to move towards growth. Here, other countries come to India and invest here to manufacture the goods. Of course, the technology and designs may be of their own, but, the labor, land and all other aspects of manufacturing environment are pertaining to India. This is the period prevailing and government should plan in such a way that this stage should last for about not more than 5-10 years period during which the transformation process should be initiated.

**Step – 3: Make by India**

At this stage, India transforms to a new shape where in it manufactures its required products by itself. That means, it has to strong in technologically, economically, educationally as well as financially so that it can manufacture to gain satisfaction of its people and can compete with global standards. The need of other countries should be minimized and the business men and industrialists should strive for indigenization of their processes, products and components. India should see experience of this period after 5 to 10 years and the government should so plan.

**Step – 4: Make of India**

The growth should reach a stage that India should be able to supply/export its products to other countries. Here, other countries buy products from India and the foreign currency starts flowing in. Of course, the
technology and designs may be of own or bought, but, the labor, land and all other aspects of manufacturing environment are pertaining to India and the pride of making will be taken by India. Steps should be initiated with a vision that after one to one and a half decade period (less than this is preferable), the country should see this stage.

Step – 5: India Makes

This is the peak stage of growth India will be called on the developed countries and will be called by other countries to establish the industries in their countries. Here, other countries buy products of Indian based companies and the foreign currency starts flowing in. Of course, the technology and designs are of India, but, the labor, land and all other aspects of manufacturing environment are of the inviting country and obviously the pride and price of making will be taken by India along with the profit. Strategies should be developed and measures should be initiated in this dimension by governments that after two decades (a lesser period appreciated), India should witness this stage.

10. CONCLUSION

Conclusively, this programme cannot see a success unless everybody, right from Prime Minister (PM), Chief Minister (CM) to a common man (cm), shoulders this responsibility and evaluate time to time. Hope hence, this good programme “Make in India” will become a stepping stone for a better programme “Make by India” and further climb to reach the best programmes “Make of India” and “India Makes”.

REFERENCES

[10]“Turning the “Make in India” dream into a reality for the electronics and hardware industry”, ASSOCHAM India, April 2016.
[11]“Enadu”, Telugu Daily News Papers
[12]T News Telugu TV News Channel
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