



Make in India: Re-chanting the Mantra with a Difference

Satish Y. Deodhar

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INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD-380 015
INDIA

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Satish Y. Deodhar¹

Abstract

Make in India is an old mantra. It was very much there during India's colonial period and the post-independence decades till 1991, and now it has been pronounced from the ramparts of Red Fort. The paper attempts to trace the origin and idea of Make in India through time and identifies what needs to be done to turn the Make in India mantra into a reality. Free market is the engine of growth for the economy and government has to provide the necessary lubricant for it to work. This involves reforming industrial, labour, and land acquisition laws; liberalizing inflow of FDI and technology; simplifying and integrating state/center administrative compliances for business; government staying away from economic activities which do not qualify for market failure argument, and, instead concentrating on improving comparative advantage of the country by investing in merit goods such as basic research, primary education, and primary healthcare.

¹ Author is Professor, Economics Area, Indian Institute of Management Ahmedabad, India 380015

Make in India: Re-chanting the Mantra with a Difference

1. It is an Old Mantra

From the ramparts of the Red Fort, Prime Ministers of India talk to the nation every 15th of August with the usual supply of pride and promises. The address mostly goes unnoticed confirming the economic adage that talk is cheap for supply exceeds demand. However, there was a pleasant departure from this perception on 15 August 2014. While Mr. Narendra Modi had been attracting ever increasing viewership leading up to the May 2014 Lok Sabha elections, it reached a crescendo on the independence day, when as per some reports, a whopping 56 million viewers watched their newly elected Prime Minister with rapt attention. In his maiden independence day speech, if Mr. Modi was humble enough to acknowledge India's socio-demographic ills, he also seemed confident to chant the economic mantra - Make in India.

Come to think of it, the mantra of Make in India is not a new one. There are no prizes for deciphering the objective of this mantra - Have higher employment, better standard of living, and high per capita GDP for the nation. What is difficult is the process of attaining that objective. In the pre-independence days, economists like Dadabhai Nauroji (1901) lamented the economic drain of India by the colonial masters. Raw material was being procured cheaply from Indians and shipped out to get it processed in England, only to be shipped back and sold to Indians for a profit. To him, this was an obvious consequence of subjects of the colonies being treated unequally by the colonizers. Of course, despite this disadvantage, at the turn of the 19th century it was Laxmanrao Kirloskar who produced India's first iron plough (Kirloskar, 2003) and Sir Jamshedji Tata's efforts paved way for India's first steel mill. Entrepreneurship was very much there and Make in India story was evolving. However, Justice M.G. Ranade of the then Bombay Presidency, had expressed concerns over sustainability of such efforts. In his lectures delivered in Deccan College, Pune in 1892 (Ranade, 1898), he had noted that science and its application were the ultimate basis for industrial society. As quoted by John Adams (1971), Ranade opined that while India needed pragmatic education and skilled labour, issues of political dominance (by the British) were attracting far more attention than the formidable though unfelt domination of

capital and skill. As we will consider later, this emphasis on pragmatic education continues to be very important even today.

The next phase of Make in India began with the advent of independence in 1947. The zeitgeist of that era was that someone (East India Company) had come as a trader and became our master. Therefore, the hard earned independence was to be protected by having no truck with the rest of the world. This translated into a principle of ‘make only in India and only for India.’ To achieve this, Nehru was attracted by the model followed by the Union of Soviet Socialist Republic (USSR). Though enamoured with socialism, Nehru did not want to emulate USSR’s bloody revolution and the consequent civil war of the 1920s. He was a Fabian socialist. Like the Roman general Fabius, who won battles by slowly tiring his opponents, Fabian socialists believed in ushering-in socialism through gradual changes and not bloody revolutions. To further this objective, he sent Dr. Mahalonobis to US and France where he interacted with Wassily Leontief and the French Marxists, respectively. Armed with input-output model of Leontief and the socialist ideal, Nehru could introduce central planning, command and control economy (License Raj), and extreme restrictions on imports and exports.

2. Mantra had Failed to Work

There were a few dissenters to these Nehruvian developments. Milton Friedman visited India in 1955 on the invitation of government of India and expressed reservations about the obsession with input-output model (Guha, 2007). He emphasized development of human capital and mobility of labour and goods through infrastructure development. Dr. B.R. Shenoy (1955) too had written a dissent note to the second five year plan and asserted that government intervention should be limited to the cases of market failure – namely public goods, (natural) monopolies and merit goods. Krishnamurthy (Balasubramanyam, 2001) too had criticized the government for spending absurdly low amounts on education and wasting large sums on heavy industries. He advocated enhancement of prestige of school teachers through higher salaries which would in turn increase employability of workforce. These dissenting voices fell on the deaf ears of the then policy makers and planners¹. The communist state of Cuba was successful

¹ As pointed out by Guha (2007), records of such views of Friedman, Shenoy, and Krishnamurthy were made public only in the 1990s.

in universalizing primary education and health care but suffered heavily in terms of economic growth. In India, however, government neither universalized education and health nor promoted rapid economic growth. IBM and Coca Cola leaving India under duress in 1977 and 1978 were tell-tale signs of something being wrong in the policies. The poor average GDP growth rate of about 1.5 per cent per capita till then, however, was described pejoratively as the Hindu rate of growth by Raj Krishna! It should rightly have been christened as the socialist rate of growth. The experiment of a highly controlled economy in making only in India and making only for India had failed.

By 1991, the consequences of decades of license raj, planning, and autarkic worldview had reached its nadir. Foreign currency reserves fell sharply and dipped below \$ 1 billion in January 1991 and despite initial borrowing from IMF, default on payments had become a real possibility in June 1991 (Acharya, 2001). As a response, government had to devalue Indian Rupee by 18 per cent in July 1991 and allow up to 51 per cent foreign direct investment in India. This about turn in the policies was more of an exigency than a planned strategy. As Aiyar (2012) points out, this trigger for the liberalization process was more of an accidental silver lining, a happenstance of sorts. There was no concrete policy of Make in India at this juncture but mere survival instinct had played a part. The liberalization process that began in 1991 did not seem to benefit industrial sector. A country on its developmental path goes through the sequential high GDP shares of agriculture, industry, and tertiary services, respectively. Of course, traditionally share of agriculture in India's GDP was the highest. It remained so till 1974 when its share in the GDP was at 40 per cent. From here on, industrial sector should have grown substantially, leaving share of agriculture behind. Expectedly, share of agriculture did come down to about 14 per cent by early 2014. However, growth in the industrial sector seemed to skip the developmental path. Between 1979 to early 2014, share of industry remained stagnant at about 25 per cent. In fact, within industrial sector, share of manufacturing in GDP is only about 15 per cent (GOI, 2014). Clearly, Make in India story was not happening with the accidental liberalization that began in 1991.

In contrast, it is the tertiary sector which has leap-frogged with a share in GDP of about 60 per cent. While lot is made about India's software industry, it does not employ any

significant proportion of workforce. For example, the share of services associated with knowledge and technology, finance, business, and telecommunication is about 25.3 per cent of GDP, however, the estimated employment in these service sectors is only about 2.2 per cent (The Hindu, 2014). In contrast, innumerable traditional unorganized services including ones in wholesale trade, retail trade, transportation, tourism, administrative support, and quite a few other services seems to employ too many individuals with low earnings. Umpteen number of anecdotal experiences such as but not limited to competing taxicab drivers swarming around passengers at airports and railway stations, citizens being pestered by competing agents at regional transport offices (RTOs), court offices, district collectorates and other administrative offices, pilgrims being harried by teeming garland/pooja thali sellers, and street-performer families begging for a well-deserved bakshishi, bring out this phenomena. In short, informal and traditional services contribute a lot to low wage employment and high productivity services that generate substantive revenues/GDP provide little in employment. This contrast is reflective of a very small highly-skilled employable population residing in a large pool of population faced with both - inadequate job opportunities and skillsets required for the manufacturing sector.

3. Re-chanting with a Difference?

And now, the old Make in India mantra, which was not heard during the 1991 liberalization process, has been pronounced loud and clear from the ramparts of red fort. In fact, even the previous government was concerned about the poor performance of manufacturing sector. In 2011, it had announced national manufacturing policy which aimed at enhancing the share of manufacturing in GDP from 16 per cent to 25 per cent by 2022. Between 2011 and 2014, however, nothing substantial happened except change of government at the center.

Interestingly, principles of neo-classical economics do not support advocacy of a proactive policy such as Make in India. The comparative advantage theory of David Ricardo prescribes that a country would export those goods in which it has a comparative (cost) advantage. Factor abundance theory of Heckscher and Ohlin shows that a country will export those goods which use its abundance factors more intensively. And, the new trade theories of Paul Krugman et al show that a country will specialize in production and export of differentiated products which take advantage of economies of scale on the production side and consumers'

preference for variety on the other. None of these theories prescribe any overtly pro-active role for the government. Adam Smith (1776), the father of modern economics said, “It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest.” Therefore, free market and the self-interest of the market players will decide who (which country) will produce what. In fact, proactive policies of government also suffer from fallacy of composition. Disregarding principles of economics, if leader of a single country were to incentivize firms from all over the world to produce goods in his/her country, it just may work. However, if all leaders from all the countries were to announce and implement this policy, then it is not going to succeed for any one of them.

In this context, what does one make of the new Make in India mantra? Prime Minister Modi’s government is not a champion of socialist ideology. It supports free market ideology. Then how would this Make in India mantra be different than its previous chants? The re-chanting would make sense on two counts. While the free market ideology expects no government interference, there are two caveats where government involvement is required. The first caveat is that if we want free market to be the engine of growth, then the government has to provide lubricant for the smooth functioning of this engine. Efficient judiciary, protection of property rights, good civil administration, and, importantly, market friendly government policies are these lubricants. The second caveat is that markets do not always function well. There are certain perversions where markets fail to deliver. Government has to intervene in such cases but must limit its intervention to these perversions only. The obvious interventions are in the cases of pure public goods such as provision of internal and external security and prevention of monopolies or collusive practices by firms. All governments have been pursuing these objectives and will continue to do so in future. Importantly, the crucial interventions where government can support Make in India story are required in network infrastructure projects such as rapid transit metros, buses, railways, highway, and irrigation; and other big infrastructure projects such as power generation, lighthouses, dams, and irrigation. And, importantly, government will also have to focus attention on merit goods such as primary health care, education, and basic research. Interventions of these kinds help improve comparative advantage of a nation.

4. Market Friendly Laws

Make in India mantra gives a perception that it is an invitation only to foreign firms to produce in India. In fact, Make in India policies should substantially facilitate production by domestic firms as well. In this context, sequencing of the policies assumes importance. Level playing field will have to be offered to domestic firms, especially the small and medium sized firms prior to or concurrently with the incentives that will be offered to foreign firms. In the last 7 decades, growth of manufacturing firms has been stifled primarily due to many archaic laws and needs to be changed first.

Labour and Industrial Laws

For example, a manufacturing unit comes under the purview of Factory's Act 1948 the moment it employs 10 or more workers with power or 20 or more workers without power. As a result, firms have a disincentive to expand operations, for the moment they hire beyond 10 (or 20) workers, they are restricted to only 50 hours of overtime work per worker per quarter, and women are excluded from working in night shifts (ILO, 2014). The minimum worker limit on firms to come under the purview of factories act could be raised to 20 (40) workers, respectively. In fact, the overtime restriction could be raised to 100 hours and with certain safety provisions, women too be allowed to work in night shifts. Currently, all factories in a particular area are allowed to have weekly-off only on a specific day. They be allowed to have weekly-offs on different days so that the problem of power load-shedding will be managed much more effectively preventing valuable production loss. At present, the rules of factories act are to be amended by state governments. They be allowed to be formed by central government so that the rules get changed quickly across states and remain consistent throughout the country.

Similarly, Industrial Disputes Act (IDA, 1947) requires that a firm must take approval from the government for laying-off workers or shutting the firm down if it employees 100 or more workers. As a result, firms are unable to adjust to changing market conditions by altering its labour requirement. Moreover, under extreme conditions, exit of loss-making firms becomes very difficult. Amendment to this act should be made so that firms are required to take government approval only if they employ 300 or more workers. This flexibility will provide confidence to the industry to invest in manufacturing. Currently, it is sufficient to gather 15 per

cent of employees to form a union at a workplace. This means, a workplace could have as many as 6 unions. This creates problems in terms of inter-union rivalries among workers and firms also find it difficult to deal with many unions simultaneously. As a result, the transaction cost of negotiation with workers is too high. The norm on minimum number of workers required to form a union should be raised to at least 30 per cent. Government of Rajasthan has brought about such changes in the industrial laws (TOI, 2014a). Other states may have to actively pursue this objective to promote manufacturing.

Land Ceiling and Land Acquisition Laws

The Make in India mantra also needs efficient provision of an important factor of production – land. David Ricardo (1817) described rent as a reward for the original and indestructible powers of the soil. However, if the supply of land is ill-managed, these rewards (rents) can skyrocket choking industrial development. The Urban Land Ceiling Act (ULCA, 1978) was enacted with a typical socialist mindset to avoid concentration of urban land in the hands of a few rich individuals. However, this law led to shortage of usable land in urban areas, for lands were either not declared out of fear or kept vacant with convenient exemptions sought by the owners. Though the central government gave the lead by repealing the act in 1999, quite a few states including West Bengal have yet to do so (TOI, 2014b). And, those states which have repealed the act have not pro-actively made use of the vacant lands. Using large tracts of urban vacant lands for housing of urban poor will provide impetus for realty sector, put a halt to skyrocketing realty prices, and, importantly, solve the problem of affordable housing for the industrial workers – an important pre-requisite for growth of manufacturing sector.

Similarly, for faster industrialization, fair but quicker land acquisition processes have to be in place. Countries with very low population density in Americas and Africa, and countries such as Australia, New Zealand, and Russia have fewer land acquisition issues, for land is abundantly available. Similarly, totalitarian regimes like China may also have fewer issues in acquiring land, for considerations of sanctity of individual rights and freedom may not necessarily take precedence over dictates of the state. On the other hand, land acquisition for industrial growth is a challenging issue for countries like India which are both – vibrant democracies and very densely populated. In 1950s, when large dams such as Hirakud and

Bhakra were constructed, Jawaharlal Nehru would inaugurate them, but reports of sufferings of villagers evicted from their land and being made destitute would also surface alongside (Guha, 2007). This was the result of the coercive power government had enjoyed for over a century through the colonial Land Acquisition Act of 1894. As a reaction, a new act was passed in 2013 (GOI, 2014) and given a lengthy name - Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (LARR). However, the hastily passed act had many lacuna.

LARR had left out over 13 central laws that could have prevented higher compensation to landowners. Moreover, LARR made it mandatory to return lands that were acquired but not used for 5 years. This was inconsistent with implementation of large infrastructure projects which generally have long gestation periods. Similarly, no more than 5 per cent of fertile land could have been acquired in any district as per LARR. This too would have prevented many mega-projects to get implemented. In the context of land acquisition in Singur, Sen (2007) had clearly opined that industry always competes with agriculture for land, and historically, for trade and logistic reasons, production of industrial goods has taken place along large rivers like Hooghly and Ganga which obviously have fertile lands. This happens, for industry generates output many times more than what a fertile land can. Moreover, projects such as affordable housing, rural infrastructure, national security, industrial corridors along highways may not need to have consent and lengthy social impact assessments, for the benefits of such projects are starkly obvious. The latest ordinance promulgated at the end of 2014 has made appropriate changes to LARR on the above issues (The Hindu, 2015). It will be in the interest of state governments to take advantage of the new provisions to promote employment and infrastructure development in rural areas.

5. Flow of Funds from Abroad

Savings and Investments

For the Make in India mantra to succeed, India will need huge long-term investments in infrastructure, be it ports, defence, industrial corridors, affordable housing, highways, mass transit railways, and quite a few other sectors. Savings generated within Indian economy will certainly not be sufficient for this purpose. In fact, as per the World Bank data, in the year 2013,

India's domestic savings rate was 27.8 per cent, much lower than 51.8 per cent, 52.1 per cent, 35.5 per cent, and 34.1 per cent of China, Singapore, Malaysia, and South Korea, respectively (World Bank, 2015). Indians have a certain propensity to buy gold instead of putting substantive savings into financial assets. Inflation has further intensified this propensity, for gold is viewed as a safeguard against inflation. Buying gold is hoarding of finances which does not lead to any productive use for investment purposes. While lower rates of inflation can reverse this trend, for gold will not be used as a hedge against inflation, bringing financial inclusion through opening up of bank accounts for the poor and educating households about financial instruments such as mutual funds, gold loans will increase savings rate.

Even with moderate increases in savings rate, India's savings rate is very low compared to East Asian countries. In stark contrast, however, the need for domestic investments is too large. Hence, India will have to attract foreign direct investments (FDI) and institutional portfolio investment. For sometime now, 100 per cent FDI is allowed in a whole range of activities. This includes activities such as greenfield airport projects, townships, oil and natural gas exploration, high-speed train projects, rail terminals and electrification, power sector (except nuclear), telecom, biotechnology, and single brand retail. FDI in passenger airline, cable TV, and now even the defence sector can be made upto 49 per cent with automatic route. A significant import of this listing is that the government has made it easier, at least in terms of ownership, for foreign entities to invest in India. There are a few exceptions still. FDI in print media and food processing in pickle and bread segment is still restricted to 26 per cent (IFC, 2015) and FDI in multi-brand retail is limited to 51 per cent subject to approval by respective state governments.

Impact of Multi-Brand Retail

100 per cent FDI in multi-brand retail has been hotly debated and mostly resisted due to pressure from domestic groups. However, time is ripe for allowing 100 per cent FDI in multi-brand retail. First, it is not that the domestic players will be suddenly exposed to competition from large retail firms from abroad. Already, Reliance Fresh, Star Bazar, Big Bazar and a few other domestic large retail outlets have been successfully operating in Indian market. They have the expertise in modern retailing including volume procurements, logistics, and marketing.

Thus, sequencing of opening up retail sector for foreign firms has been correct. Moreover, large domestic and foreign retailers will not be a threat to domestic kirana stores as been alleged. In fact, Kirana stores offer tough competition to the large retailers. For millions of Indians Kirana stores offer small volume sales, flexible credit, anytime home-delivery, and proximity-shopping which large foreign retailers cannot. Furthermore, kirana stores also stand to pick-up some good practices from large retailers such as clean store and working environment, absence of child-labour, and better record keeping through automated billing counters. All in all, a healthy competition among foreign retailers, domestic retailers, and kirana stores will only generate more employment and more options for customers.

Ease of Starting and Doing Business

There are a few important caveats, however, for a successful implementation of FDI policy. In fact, some of them help domestic firms as well. As per the World Bank ratings, India ranks as low as 179th and 134th in terms of ease of starting business and ease of doing business, respectively (World Bank, 2014). The corresponding ranks for South Korea are 34 and 7, respectively. Unless governmental procedures are simplified and undue delays in clearances of permits are avoided, the tall policy statements will not materialize in influx of FDI in India. Government recognizes this issue, and, at least on paper it aims at bringing, among other things, a few of the following changes: 1) Process of applying for industrial license and industrial entrepreneur memorandum to be made online on 24×7 basis through eBiz portal. 2) Services of all central government departments and ministries to be integrated with the eBiz – a single window IT platform for services. 3) A check-list of required compliances to be placed on ministry/department web portals. 4) All returns to be filed on-line through a unified form. 5) Process of obtaining environmental clearances to be made online. And, in addition to such measures, availability of uninterrupted power and other infrastructural services will go a long way in attracting FDI. Hopefully, FDI in and privatization of power sector itself would remove this hurdle.

Advance Information on Taxation

Second, in an effort to attract FDI, governments channelize foreign investment through export processing zones (EPZs), which receive tax holidays on production of goods for exports.

EPZs were promoted in the past by countries such as Malaysia. However, they created what is termed as “shallow industrialization”, for industrial activity in EPZs has lower multiplier effect on domestic production, employment, income, and transfer of technology. Instead, Special Economic Zones (SEZs) such as the ones promoted in China will benefit domestic sector abundantly. Of course, India is a large country and foreign firms may produce goods in (non-EPZ or SEZ) India and show as if it was produced in an EPZ or SEZ and avoid taxation. Similarly, to avoid taxation, Indian subsidiaries of foreign firms sell shares and/or goods to its parent firm abroad at lower price than what the price would have been in an arms-length contract between two independent firms. To counter such tax avoidance, government of India had proposed transfer pricing rules and General Anti-Avoidance Rules (GAAR). Government attempted to impose GAAR with a retrospective effect starting 2010. Such provisions create uncertainty about government’s intentions and prevent inward FDI. As per the recommendations of the Expert Committee on GAAR (Shome Committee, 2012), government must first train its officers about global tax laws and implement GAAR only in 2016 or later, not bother firms with alleged tax benefits of Rs. 3 crore or lower, and, must strengthen functioning of Authority for Advance Ruling (AAR). Through AAR, foreign firms would know and have clarity on their potential tax liabilities in advance. Implementation of GAAR by 2016 by incorporating such suggestions would offer foreign firms a degree of comfort to initiate long-term FDI.

Inevitability of Current Account Deficit

Third caveat is about the balance of payments impact of FDI. If India is successful in attracting substantive amounts of FDI, there is a potential for perpetuating high current account deficit. It is often alleged by businessmen that once they get access to FDI, they will be able to export more. While this may be true for an individual business or a few businesses, this is just now possible at an aggregate macroeconomic level (Krugman, 1996). This is referred to as the fallacy of composition – What is true for an individual cannot be true for the economy. If there is a net inflow of foreign investments on capital account, it means that foreign citizens and firms are buying Indian assets. These include physical assets such as land, buildings, machinery, and financial assets such as shares, debentures, and bonds. If there is a net inflow, and therefore, a surplus on the capital account, there must be an outflow, and therefore, deficit on current account. This is the only way to have a zero balance of payments. If foreigners are buying our

assets on a net basis, then we must be buying their goods and services on a net basis. This is merely a self-evident statement of accounting principle.

This above accounting principle is also evident from the national income identity, $(S-I) = (G-T) + (X-M)$, where the terms refer to values of savings, investments, government expenditure, taxes, exports, and imports, respectively. The parenthesis values, therefore, refer to excess of savings of investments, fiscal deficit, and current account surplus. Assuming that fiscal deficit is constant, higher the negative value of $(S-I)$ on account of low savings and high FDI, the higher will be the negative value of $(X-M)$. In short, higher the FDI, higher is the current account deficit. Therefore, one must remember that as long as substantive amounts of net foreign investments keep coming into India, India must be ready to experience a current account deficit. This has been evidenced by Mexico in the early 1990s (Krugman, 1996). Optimism about Mexico's economic prospects led to pouring-in of foreign investment from 1989. Increased supply of US dollars strengthened Peso and Mexican exports declined. On the other hand, while some of the foreign funds were spent on imported equipment and technology for Mexican factories, the rest caused domestic income boom, causing Mexicans to purchase expensive imported goods. Thus, massive capital inflows caused massive current account deficit².

6. Merit Goods and Comparative Advantage

So far, we talked about the market friendly policies that can act as lubricant for the free-market engine of growth. However, if this engine of growth depends perpetually on the doses of FDI and foreign technology, this would result in persistent current account deficit. Of course, inculcating habit among households of saving into various financial instruments and promoting financial inclusion of millions who do not have even a bank account will help reduce dependence on foreign funding. However, more often than not, FDI is coupled with foreign technology. As long as there is dependence on foreign technology, FDI will have to be internalized. Dependence on foreign technology can be reduce only in the long-run by focusing on provision of merit goods such as basic and applied research. Moreover, in the short to medium term,

² If GDP is represented by Y and consumption is represented by C , then we can write, $Y = C + S + T$. Similarly, Y can also be expressed in terms of different expenditures. That is, $Y = C + I + G + (X - M)$. Equating the two equations and rearranging the terms gives us: $(S-I) = (G-T) + (X-M)$.

comparative advantage can also be improved by focusing attention on another set of merit goods – primary education and health care. Merit goods such as research, education, and health show high degree of positive externalities on society. Left to itself, private sector under provides these activities. These are classic cases of market failure, and, therefore, government's role is very critical in these fields.

Primary Education, Training, and Health Care

If Indian economy has to catch-up on manufacturing and attain at least 25 per cent share in GDP, it needs skilled, educated, and healthy workforce. Producing consistent quality output on the shop floor and persistently providing professional services requires a workforce that is educated and able bodied. In comparison to the 2010 literacy rates of 95 per cent in China and Mexico, 93 per cent in Malaysia, and 90 per cent in Brazil (World Bank, 2015), India's literacy rate measured by its own liberal standards was little over 73 per cent in 2011. This means that in a group of 4 people, on an average more than 1 person cannot read and write. Moreover, in comparison to the 2013 infant mortality rates (IMR) of 11, 12, and 13 per 1000 live births in China, Brazil, and Mexico, respectively; India's IMR was as high as 41 per 1000 live births that year. A high IMR is a proxy for morbidity – a departure from a state of physical or psychological well-being resulting from disease, illness, injury, or sickness. Therefore, the much touted potential build-up of investments in manufacturing by domestic firms and by technology driven FDI stands no chance to succeed unless India's workforce has basic education and health to work efficiently on the shop floor or anywhere in the supply chain.

While universalization of primary education must be emphasized, skill development for the manufacturing sector is also important. To hasten this process, retired personnel from armed forces and railways could be effectively used. These two organizations have thousands of skilled and experienced personnel who introduce, maintain, and up-grade mechanical and electrical equipment of all kinds for their own use. Such personnel can contribute significantly to strengthen and expand the existing industrial training institutes (ITIs). Moreover, in healthcare, while the expensive super-specialty hospitals could be left in the hands of the private sector, government must focus on primary health care which is not only labour intensive but cheap. For example, Government of Gujarat has successfully implemented Chirajeevi scheme that provides

affordable pre and post-natal healthcare in rural areas. This scheme has won Prime Ministers award as well as Wall Street Journal award (Deodhar, 2012).

Endogenous Growth of Knowledge and Technology

Come to think of it – from the alarm clock that wakes one up in the morning to the zero watt bulb that we glow at bedtime and all products that are used in between, were developed outside India. This almost sounds as if technology and knowledge has become exogenous to the Indian economy. We may have manufactured Fiat and Ambassador cars in the past but the technology came from abroad. Similarly, we may succeed in manufacturing everything from cellphones, mass transit metros, to submarines; however, so far all these inventions have occurred outside India. Make in India mantra has to go beyond this exogeneity of knowledge and technology for the Indian economy.

For starters, this means that government must focus on public goods such as basic research and higher education. Government owned Air India, which is certainly not a public good, has so far incurred a massive cumulative loss of about Rs. 33,200 crore (India Today, 2014). The precious tax revenue that Indians have paid to cover this loss could instead be used to finance setting up of academic institutions. And there are umpteen number of other public sector enterprises that could take the disinvestment rout to finance educational sector. Of course, acquiring land and buildings for such academic institutions may not pose a problem; however, most difficult aspect is to attract qualified human capital. Salaries and incentives to academicians, and those include high-school teachers, research professors and scientists, should be such that talented individuals are drawn to higher education and research. The traditional system of rote learning which hardly equips students with professional skills and innovative thinking has to be discarded. Teaching methods that encourage lateral thinking and group activities will have to be promoted. Increasingly, in the comity of nations, India will have to be a pro-active participant in the use of sustainable, low-carbon emitting technologies in the industrial sector. Therefore, simply borrowing conventional technology through FDI which is new to India is not going to be enough. A long term goal would be to promote basic research in innovating use of alternate energy sources.

Grow in India

Similarly, in the agricultural sector, productivity growth is a major concern. Productivity of green revolution crops has reached its peak and India needs a new revolution in agriculture for feeding the burgeoning population. Today, about 40 to 50 per cent of edible oil and dal, the main sources of cooking medium and protein, respectively, are being imported into India (NYT, 2012). While high productivity genetically modified (GM) food and non-food crops have been already under cultivation in US, Argentina, China and quite a few other countries, India has not allowed field trials of cultivation of GM food crops. This has help up scientific research in food crops that are particularly suitable to India. So far, the only non-food GM crop that has been allowed to grow commercially is Bt Cotton. Interestingly, since its introduction in 2002, cotton production in India has trebled and India has now overtaken both US and China to become the world's number 1 producer of cotton.

Of course, opponents have criticized GM technology for promoting potentially hazardous mutations that transcend specie barriers. However, as long as meticulous field trials are carried out to ensure stable varieties, it should not be a matter of concern. After all, green revolution era high yielding varieties (HYV) of crops were also developed by human intervention – cross breeding of Indian wheat and rice with those of far-away lands of Mexico to the west and the Philippines to the east. It would not be out of context to mention that when Laxmanrao Kirloskar manufactured India's first iron plough at the turn of the 19th century, opponents had claimed that iron plough poisoned the soil and reduced its fertility! India must introduce GM food crops which require less pesticide use, give higher productivity, and which can also be grown in arid regions. On the demand side, a study on acceptance of GM crops (Deodhar, Ganesh and Chern, 2008) shows that majority of consumers are willing to accept GM foods. Very recently, Maharashtra government has allowed field trials of 5 GM crops. This is a welcome move.

7. Concluding Observations

Make in India is an old mantra chanted since pre-independence days. In the post-independence era of centralized planning, it assumed a staunchly autarkic hue. However, by 1991 it became obvious that an inward looking economic policy was not going to work. Economic liberalization was embraced as a fait accompli then. However, re-chanting of Make in

India mantra begun with the new government taking office at the center. What does one make of this initiative? Prime Minister Mr. Narendra Modi arrived in a Mahindra Scorpio car for his swearing-in ceremony, however, by the time he addressed the nation on 15 August 2014, he had begun using BMWs. He even sports a Montblanc pen which he used at the swearing-in ceremony. Therefore, the message in today's context certainly cannot be autarkic in nature.

Make in India mantra would work if government were to allow private sector to flourish, and, importantly, unlike in the past, focus only on the sectors where it is supposed to function. If free market is going to be the engine of growth, then government needs to provide the necessary lubricant for this engine. As discussed, center and the states will have to bring necessary changes to the archaic industrial, labour and land acquisition laws which offer safeguards to labour and landowners but does not stifle growth of manufacturing. Societal welfare can be promoted not by permanent job safety and illiquidity in land transactions but by providing horizontal an upward mobility to workers and landowners arising out of growth in manufacturing and infrastructure development. Similarly, low savings rate to finance domestic investments will have to raised by incentives to households to invest in financial instruments rather than gold and promote financial inclusion of millions of households which do not even have a bank account today. And, while this will take time, FDI may be allowed to flow in along with its attendant technology transfer. However, for a smooth and substantive flow of FDI, government will have to ensure bringing synergy in various local, state, and central administrative clearances. Moreover, issues related to transfer pricing and tax avoidance must be conveyed in transparent manner in advance through AAR. These initiatives create much need confidence the foreign firms need for a sustained long-term presence in the country.

An inevitable consequence of a sustained and substantive net inflow of FDI would be that India will experience current account deficit for the foreseeable future. This will continue to happen if technology continues to be available only exogenously from rest of the world. Moreover, while one may believe in the theory of comparative advantage, it does not mean that a country cannot improve its comparative advantage. Nurturing environment for progress of technology and improving comparative advantage of the workforce through education, skill development and healthcare has to happen. Left to itself, private sector underprovides basic

research, education, and primary healthcare. These being the classic cases of market failure, government must step-in to universalize primary education and healthcare, and promote research institutions with appropriate incentives for human capital.

Thus, re-chanting of Make in India must happen with a difference. Two things need to be done with a difference – First, market friendly policies must act as a lubricant for the engine of growth, something that Milton Friedman had suggested in his visit to India in 1955. Second, government must get out of activities which do not fit into market failure arguments, something that B.R. Shenoy had suggested in 1955. Sooner the government bids tata to Air India the better. Disinvestments of such unwarranted public sector enterprises could generate thousands of crores of rupees which can be better spent by the government on merit goods, which private sector will underprovide. As was opined by Justice M.G. Ranade in 1892, India needs pragmatic education and skilled labour, for science and its application are the ultimate basis for an industrial society.

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