CHAPTER 9

INDUSTRY AND INFRASTRUCTURE

*In China I was greatly attracted to the Industrial Co-operatives—the Indusco movement—and it seems to me that some such movement is peculiarly suited to India. It would fit in with the Indian background, give a democratic basis to small industry, and develop the co-operative habit. It could be made to complement big industry. It must be remembered that, however rapid might be the development of heavy industry in India, a vast field will remain open to small and cottage industries. Even in the Soviet Russia owner-producer co-operatives have played an important part in industrial growth.**

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** As Jawaharlal Nehru writes in **The Discovery of India**, Oxford University Press, 6th Impression (1st Edition 1946, Oxford, London), N. Delhi, 1994, p. 406.*

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INTRODUCTION

Many of the western economies have already written their success stories of industrialisation leading to accelerated growth and development by the time India became an independent economy. Independent India needed to rejuvenate its economy from a completely dilapidated state. The country had many tasks in front of it—the abject mass poverty, shortage of foodgrains, healthcare, etc., calling for immediate attention. The other areas of attention included industry, infrastructure, science and technology and higher education, to name a few. All these areas of development required heavy capital investment as they had been severly avoided by the colonial ruler for the last 150 years or so. Increasing the growth of the economy and that too with a faster pace was the urgent need of the economy. Looking at the pros and cons of the available options, India decided that the industrial sector should be the 'prime moving force' (PMF) of the economy—the logical choice for faster growth (a fully established idea at that time, the world over). The secondary sector will lead the economy, was well-decided in the 1930s itself by the dominant political forces among the freedom fighters.

As the government of the time had decided upon an active role for the governments in the economy, naturally, the industrial sector was to have a dominant state role—the expansion of the government-owned companies (i.e., the PSUs) to glorious heights. In many ways the development of the Indian economy has been the development of the government sector. Once this idea of state's role in the economy went for a radical change in the early 1990s with the process of economic reforms, the hangover or the drag of it is still visible on the economy. The industrial policies which the governments announced from time to time basically moulded the very nature and structure of the economy. Any discussion on the Indian economy must start with a survey of the industrial policies of the country. Here we have a brief review of the various industrial policies of India till date.

REVIEW OF INDUSTRIAL POLICIES UPTO 1986

For a better understanding of the Indian economy, it is advisable to look into the various industrial polices. The official stances keep changing with every upcoming industrial policy. Understanding these policies become even more important to understand the finer aspects of the reform process which the country will commence by the early 1990s. Here, a brief review of India's industrial policies are being dicussed to serve the purpose.

INDUSTRIAL POLICY RESOLUTION, 1948

Announced on 8 April, 1948 this was not only the first industrial policy statement of India, but also decided the model of the economic system (i.e., the mixed economy), too. Thus, it was the *first* economic policy of the country. The major highlights of the policy are given below:

(i) India will be a mixed economy.[1]

(ii) Some of the important industries were put under the ***Central List*** such as coal, power, railways, civil aviation, arms and ammunition, defence, etc.

(iii) Some other industries (usually of medium category) were put under a ***State List*** such as paper, medicines, textiles, cycles, rickshaws, two-wheelers, etc.

(iv) Rest of the industries (not covered by either the central or the state lists) were

1. Here this should be noted that India will be a planned economy, was well-decided before this industrial policy which articulated for an ***active role*** of the state in the economy. The main objective of planning pointed out at this time was ***poverty alleviation*** by a judicious exploitation of the resources of the country. Only a 'mixed economy' did fit such a wish (***Conference of State Industry Ministers, 1938***).

left open for private sector investment—with many of them having the provision of compulsory licencing.

(v) There was a 10 year period for review of the policy.

INDUSTRIAL POLICY RESOLUTION, 1956

The government was encouraged by the impact of the industrial policy of 1948 and it was only after eight years that the new and more crystallised policies were announced for the Indian industries. The new industrial policy of 1956 had the following major provisions.

1. Reservation of Industries

A clear-cut classification of industries (also known as the **Reservation of Industries**) were affected with three schedules:

(i) Schedule A

This schedule had 17 industrial areas in which the Centre was given complete monopoly. The industries set up under this provision were known as the Central Public Sector Undertakings (CPSUs) later getting popularity as 'PSUs'. Though the number of industries were only 17, the number of PSUs set up by the Government of India went to 254 by 1991. These included those industrial units too which were taken over by the government between 1960 to 1980 under the ***nationalisation*** drives.[2] These industries belonged to Schedules B and C (other than Schedule A).

(ii) Schedule B

There were 12 industrial areas put under this schedule in which the state governments were supposed to take up the initiatives with a more expansive follow up by the private sector. This schedule also carried the provisions of compulsory licencing. It should be noted here that neither the states nor the private sector had monopolies in these industries unlike Schedule A, which provided monopoly to the Centre.[3]

(iii) Schedule C

All industrial areas left out of Schedules A and B were put under this in which the private enterprises had the provisions to set up industries. Many of them had the provisions of licencing and have ***necessarily*** to fit into the framework of the social and economic policy of the state and were subject to control and regulation in terms of the Industries Development and Regulation (IDR) Act and other relevant legislations.[4]

The above classification of industries had an in-built bias in favour of government-owned companies (i.e., the CPSUs) which went according to the ideas of the planning process, too. Thus, expansion of the public sector became almost a directive principle of economic policy and the PSUs did expand in the coming times.[5]

It was this industrial policy in which the then PM Pandit Jawaharlal Nehru had termed the PSUs the ***'temples of modern India',*** symbolically pointing to their importance.[6] There was a time soon after Independence when the PSUs were regarded as the principal instrument for raising savings and growth in the economy.[7] The rapid

2. The nationalisation of industrial units allowed the government to enter the unreserved areas, which consequently increased its industrial presence. Though the nationalisation was provided a highly rational official reason of ***greater public benefit,*** the private sector always doubted it and took it as an insecurity and major unseen future hurdle in the expansion of private industries in the country.

3. The Central government had always the option to set up an industry in any of these 12 industrial areas. This happened in the coming years via two methods—first, through *nationalisation* and second, through the *joint sector*.

4. Industrial Policy Resolution, 1956 (30 October).

5. V. M. Dandekar, ***Forty Years After Independence*** in Bimal Jalan edited ***Indian Economy: Problems and Prospects,*** Penguin Books, New Delhi, 2004, p. 63.

6. This statement we get in the ***Second Five Year Plan (1956–61),*** too.

7. Bimal Jalan, ***India's Economic Policy*** (New Delhi: Penguin Books, 1992), p. 23.

expansion of PSUs accounted for more than half of the GDP of the economy by 1988–89.[8]

2. Provision of Licencing

One of the most important developments of independent India, the provision of compulsory licencing for industries, was cemented in this policy. All the schedule B industries and a number of schedule C industries came under this proivision. This provision established the so-called ***'Licence-Quota-Permit'*** regime (***raj***) in the economy.[9]

3. Expansion of the Public Sector

Expansion of the public sector was pledged for the accelerated industrialisation and growth in the economy—glorification of government companies did start with this policy. The emphasis was on heavy industries.

4. Regional Disparity

To tackle the widening **regional disparity,** the policy committed to set up the upcoming PSUs in the comparatively backward and underdeveloped regions/areas in the economy.[10]

5. Emphasis on Small Industries

There was emphasis on small industries as well as the khadi and village industries.

6. Agricultural Sector

The agricultural sector was pledged as a priority.

8. V.M., Dandekar, **'Forty years After Independence'**, p. 64.
9. These industries which were set up after procuring ***'licences'*** from the government had fixed upper limits of their production known as ***'quota'*** and they needed to procure timely 'permit' (i.e., permission) for the supply of, raw materials—that is why such a name was given to the whole system.
10. Such a commitment went completely against the *'theory of industrial location'*.

Importance

This is considered as the most important industrial policy of India by the experts as it decided not only the industrial expansion but structured the very nature and scope of the economy till 1991 with minor modifications. All the industrial policies were nothing but minor modifications in it except the new industrial policy of 1991 which affected deeper and structural changes in it with which India started a wider process of economic reforms.

Industrial Policy Statement, 1969

This was basically a licencing policy which aimed at solving the shortcomings of the licencing policy started by the Industrial Policy of 1956. The experts and industrialists (new comers) complained that the industrial licencing policy was serving just the opposite purpose for which it was mooted. Inspired by the socialistic ideals and nationalistic feelings the licencing policy had the following reasons:

(i) exploitation of resources for the development of all;

(ii) priority of resource exploitation for the industries;

(iii) price-control of the goods produced by the licenced industries;

(iv) checking concentration of economic power;

(v) channelising investment into desired direction (according to the planning process).

In practice, the licencing policy was not serving the above-given purpose properly. A powerful industrial house was always able to procure fresh licences at the cost of a new budding entrepreneur. The price regulation policy via licencing was aimed at helping the public by providing cheaper goods, but it indirectly served the private licenced industries ultimately (as central subsidies were given to the private companies from where it

was to benefit the poor in the form of cheaper goods). Similarly, the older and well-established industrial houses were capable of creating hurdles for the newer ones with the help of different kinds of trade practices forcing the latter to agree for sell-outs and takeovers. A number of committees were set up by the government to look into the matter and suggest remedies.[11] The committees on industrial licencing policy review not only pointed out several shortcomings of the policy, but also accepted the useful role of industrial licencing.[12] Finally, it was in 1969 that the new industrial licencing policy was announced which affected the following major changes in the area:

(i) The Monopolistic and Restrictive Trade Practices (MRTP) Act was passed. The Act intended to regulate the trading and commercial practices of the firms and checking monopoly and concentration of economic power.

(ii) The firms with assets of Rs. 25 crore or more were put under obligation of taking permission from the Government of India before any expansion, greenfield venture and takeover of other firms (as per the MRTP Act). Such firms came to be known as the ***'MRTP Companies'***. The upper limit (known as the ***'MRTP limit'***) for such companies was revised upward to Rs. 50 crore in 1980 and Rs. 100 crore in 1985.[13]

(iii) For the redressal of the prohibited and restricted practices of trade, the government did set up an ***MRTP Commission***.

INDUSTRIAL POLICY STATEMENT, 1973

The Industrial Policy Statement of 1973 introduced some new thinking into the economy with major ones being as follows:

(i) A new classificatory term i.e., ***core industries*** was created. The industries which were of fundamental importance for the development of industries were put in this category such as iron and steel, cement, coal, crude oil, oil refining and electricity. In the future, these industries came to be known as ***basic industries, infrastructure industries*** in the country.

(ii) Out of the six core industries defined by the policy, the private sector may apply for licences for the industries which were not a part of schedule A of the Industrial Policy, 1956.[14] The private firms eligible to apply for such licences were supposed to have their total assets at Rs. 20 crore or more.

(iii) Some industries were put under the ***reserved list*** in which only the small or medium industries could be set up.[15]

(iv) The concept of ***'joint sector'*** was developed which allowed partnership among the Centre, state and the private sector while setting up some industries. The governments had the discretionary power to exit such ventures in future.

11. There were four specific committees set up on this issue, namely ***Swaminathan Committee (1964), Mahalanobis Committee (1964), R.K. Hazari Committee (1967)*** and ***S. Dutt Committee (1969).*** The Administrative Reform Commission (1969) also pointed out the short comings of the industrial licencing policy perpetuated since 1956.

12. ***Dutt Committee*** (New Delhi: Government of India, 1969).

13. The upward revision was logical as it was hindering the organic growth of such companies—neither the capacity addition was possible nor an investment for technological upgrading.

14. Out of the six core industries only the cement and iron & steel industries were open for private investment with the rest fully ***reserved*** for the central public sector investment.

15. This is considered a follow up to such suggestions forwarded by the ***Industrial Licensing Policy Inquiry Committee*** (S. Dutt, Chairman) (New Delhi: Government of India, 1969).

Here, the government wanted to promote the private sector with state support.

(v) The Government of India had been facing the foreign exchange crunch during that time. To regulate foreign exchange the Foreign Exchange Regulation Act (FERA) was passed in 1973.[16] Experts have called it a ***'draconian'*** Act which hampered the growth and modernisation of Indian industries.

(vi) A limited permission to foreign investment was given, with the multinational corporations (MNCs) being allowed to set up subsidiaries in the country.[17]

INDUSTRIAL POLICY STATEMENT, 1977

The Industrial Policy Statement of 1977 was chalked out by a different political set up from the past with a different political fervour—the dominant voice in the government was having an anti-Indira stance with an inclination towards the Gandhian-socialistic views towards the economy. We see such elements in this policy statement:

(i) Foreign investment in the ***unnecessary areas*** were prohibited (opposite to the IPS of 1973 which promoted foreign investment via technology transfer in the areas of lack of capital or technology). In practice, there was a complete 'no' to foreign investment.[18]

(ii) Emphasis on village industries with a redefinition of the small and cottage industries.

(iii) Decentralised industrialisation was given attention with the objective of linking the masses to the process of industrialisation. The District Industries Centres (DICs) were set to promote the expansion of small and cottage industries at a mass scale.

(iv) Democratic decentralisation got emphasised and the khadi and village industries were restructured.

(v) Serious attention was given on the level of production and the prices of essential commodities of everyday use.

INDUSTRIAL POLICY RESOLUTION, 1980

The year 1980 saw the return of the same political party at the Centre. The new government revised the Industrial Policy of 1977 with few exceptions in the Industrial Policy Resolution, 1980. The major initiatives of the policy were as given below:

(i) Foreign investment via the technology transfer route was allowed again (similar to the provisions of the IPS, 1973).

(ii) The 'MRTP Limit' was revised upward to Rs. 50 crore to promote setting of bigger companies.

(iii) The DICs were continued with.

(iv) Industrial licencing was simplified.

(v) Overall liberal attitude followed towards the expansion of private industries.

16. The FERA got executed on 1 January, 1974. The private sector in the country always complained against this act and doubted its official intentions.

17. This limited permission was restricted to the areas where there was a need of foreign capital. Such MNCs entered the Indian economy with the help of a partner from India—the partner being the major one with 74 per cent shares in the subsidiaries set up for by the MNCs. The MNCs invested via ***technology transfer route.*** Basically, this was an attempt to make up for the loss being incurred by the FERA. This was the period when most of the MNCs had the chances to enter India. Once economic reforms started by 1991, many of them increased their holdings in the Indian subsidiaries with the Indian partner getting the minority shares or a total exit.

18. The permission of working was withdrawn in the case of the already functioning soft drink MNC the ***Coca Cola***. The ongoing process of entry to the computer giant ***IBM*** and automobile major ***Chrysller*** was soon called off. These instances played a highly negative role when India invited FDI in the post-1991 reform era.

INDUSTRIAL POLICY RESOLUTION, 1985 & 1986

The industrial policy resolutions announced by the governments in 1985 and 1986 were very much similar in nature and the latter tried to promote the initiative of the former. The main highlights of the policies are:

(i) Foreign investment was further simplified with more industrial areas being open for their entries. The dominant method of foreign investment remained as in the past, i.e., ***technology transfer,*** but now the equity holding of the MNCs in the Indian subsidiaries could be upto 49 per cent with the Indian partner holding the rest of the 51 per cent shares.

(ii) The *'MRTP Limit'* was revised upward to Rs. 100 crore—promoting the idea of bigger companies.

(iii) The provision of industrial licencing was simplified. Compulsory licencing now remained for 64 industries only.[19]

(iv) High level attention on the sunrise industries such as telecommunication, computerisation and electronics.

(v) Modernisation and the profitability aspects of public sector undertakings were emphasised.

(vi) Industries based on imported raw materials got a boost.[20]

(vii) Under the overall regime of FERA, some relaxations concerning the use of foreign exchange was permitted so that essential technology could be assimilated into Indian industries and international standard could be achieved.

(viii) The agriculture sector was attended with a new scientific approach with many *technology missions* being launched by the government.

These industrial policies were mooted out by the government when the developed world was pushing for the formation of the WTO and a new world economic order looked like a reality. Once the world had become one market, only bigger industrial firms could have managed to cater to such a big market. Side by side sorting out the historical hurdles to industrial expansion perpetuated by the past industrial policies, these new industrial policy resolutions were basically a preparation for the *globalised* future world.

These industrial provisions were attempted at liberalising the economy without any slogan of 'economic reforms'. The government of the time had the mood and willingness of going for the kind of economic reforms which India pursued post-1991 but it lacked the required political support.[21]

The industrial policies conjoined with the overall micro-economic policy followed by the government had one major loophole that it was more dependent on foreign capital with a big part being costlier ones. Once the economy could not meet industrial performance, it became tough for India to service the external borrowings—the

19. A total number of 95 industries had the compulsions of licencing till then. These industries belonged to Schedules B and C of the Industrial Policy Resolution, 1956.

20. This was similar to the policy being followed by Gorbachev in the USSR with the similar fiscal results—a severe balance of payment (BoP) crisis by end 1980s and the early 1990s (J. Barkley Rosser Jin and Marina V. Rosser, ***Comparative Economics in A Transforming World,*** (New Delhi: PHI & MIT Press, 2004), pp. 469–75)).

21. The ***Seventh Five Year Plan (1985–90)*** as well as the ***Sixth Five Year Plan (1980–85)*** had already suggested the government to re-define the role of the state in the economy and permit the private sector into those areas of industries where the presence of the government was non-essential, etc. But such a radical approach might not be digested by the country as it was like 'rolling back' the state. This is why the government of the time looks not going for full-scale economic reforms or vocal moves of liberalisation.

external events (the Gulf war, 1990–91) vitiated the situation, too. Finally, by the end of 1980s India was in the grip of a severe balance of payment crisis with higher rate of inflation (over 13 per cent) and higher fiscal deficit (over 8 per cent).[22] The deep crisis put the economy in a financial crunch, which made India opt for a new way of economic management in the coming times.

NEW INDUSTRIAL POLICY, 1991

It were the industrial policies of past which had shaped the nature and structure of the Indian economy. The need of the hour was to change the nature and structure of the economy by early 1990s. The Government of India decided to change the very nature of the industrial policy which will automatically lead to change in the nature and scope of the economy. And here came the New Industrial Policy of 1991.

With this policy the government kickstarted the very process of reform in the economy, that is why the policy is taken *more as a process than a policy*.

Background: India was faced with severe balance of payment crisis by June 1991. Basically, in early 1990s, there were inter-connected set of events, which were growing unfavourable for the Indian economy:

(i) Due to the Gulf War (1990–91), the higher oil prices were fastly[23] depleting India's foreign reserves.

(ii) Sharp decline in the private remittances from the overseas Indian workers in the wake of the Gulf War[24], specially from the Gulf region.

(iii) Inflation peaking at nearly 17 per cent.[25]

(iv) The gross fiscal deficit of the Central Government reaching 8.4 per cent of the GDP.[26]

(v) By the month of June 1991, India's foreign exchange had declined to just ***two weeks*** of import coverage.[27]

India's near miss with a serious balance of payments crisis was the proximate cause that started India's market liberalisation measures in 1991 followed by a gradualist approach.[28] As the reforms were induced by the crisis of the BoP, the initial phase focussed on macroeconomic stabilisation while the reforms of industrial policy, trade and exchange rate policies, foreign investment policy, financial and tax reforms as well as public sector reforms did also follow soon.

The financial support India recieved from the IMF to fight out the BoP crisis of 1990–91 were having a tag of conditions to be fulfilled by India. These IMF conditionalities required the Indian economy to go for a structural re-adjustment. As the nature and scope of the economy were moulded by the various industrial policies India did follow till date, any desired change in the

22. Vijay Joshi and I.M.D. Little, ***India's Economic Reforms, 1991–2001,*** (Oxford: Clarendon Press, 1996), p. 17.

23. Ministry of Finance, Economic Survey 1990–91 (New Delhi: Government of India, 1991); Ministry of Finance, Economic Survey 1991–92 (New Delhi: Government of India, 1992).

24. Jeffrey D. Sachs, Ashutosh Varsheny and Nirupam Bajpai, ***India in the Era of Economic Reform*** (New Delhi: Oxford University Press, 1999), p. 1.

25. Department of Economic Affairs, **'Economic Reforms: Two Years After and the Task Ahead',** Discussion Paper (New Delhi: Government of India, 1993), p. 6.

26. Ibid.

27. Bimal Jalan, ***India's Economic Crisis: The Way Ahead,*** (New Delhi: Oxford University Press, 1991), pp. 2–12.

28. Sach, Varseny and Bajpai, ***India in the Era of Economic Reforms,*** p. 2.

economic structure had to be induced with the help of another industrial policy. The new industrial policy, announced by the government on 23 July, 1991 had initiated a bigger process of economic reforms in the country, seriously motivated towards the structural readjustment naturally obliged to 'fulfill' IMF conditionalities.[29] The major highlights of the policy are as follows:

1. De-reservation of the Industries

The industries which were reserved for the Central Government by the IPR, 1956, were cut down to only eight. In coming years many other industries were also opened for private sector investment. At present there are only two industries which are fully or partially reserved for the Central Government:

(i) Atomic energy and nuclear research and other related activities, i.e., mining, use management, fuel fabrication, export-import, waste management, etc., of radioactive minerals (none of the nuclear powers in the world have allowed entry of private sector players in these activities, thus no such attempts look logical in India, too).

(ii) Railways (many of the functions related to the railways have been allowed private entry, but still the private sector cannot enter the sector as a full-fledged railway service provider).

2. De-licencing of the Industries

The number of industries put under the compulsory provision of licencing (belonging to Schedules B and C as per the IPR, 1956) were cut down to only 18. Reforms regarding the area were further followed and presently there are only ***five industries***[30] which carry the burden of compulsory licencing:

(i) Aero space and defence related electronics

(ii) Gun powder, industrial explosives and detonating fuse

(iii) Dangerous chemicals

(iv) Tobacco, cigarette and related products

(v) Alcoholic drinks

3. Abolition of the MRTP Limit

The MRTP limit was Rs. 100 crore so that the mergers, acquisitions and takeovers of the industries could become possible. In 2002, a competition Act was passed which has replaced the MRTP Act. In place of the MRTP commission, the Competition Commission has started functioning (though there are still some hitches regarding the compositional form of the latter and its real functions and jurisdictions).

4. Promotion to Foreign Investment

Functioning as a typical closed economy, the Indian economy had never shown any good faith towards foreign capital. The new industrial policy was a pathbreaking step in this regard. Not only the draconian FERA was committed to be diluted, but the government went to encourage

29. Rakesh Mohan, 'Industrial Policy and Control's, in Bimal Jalan (ed.), ***The Indian Economy: Problems and Prospects*** (New Delhi: Penguin Books, 1992), pp. 92–123.

30. In 1985–86 there were just 64 industries under the compulsory licencing provision. By the fiscal 2015–16 the number remained five Publications Division, **India 2016** (New Delhi: Government of India, 2016)). Though the numbers are still five, all these five industries have many internal areas which today carry no obligation of licencing. As for example, the electronic industry was under this provision and entrepreneurs needed licences to produce radio, tv, tape-recorder, etc., what to ask of mobile phones, computers, DVDs and i-pods. Now only those electronic goods carry licencing provision which are related to either the aero-space or the defence sectors—thus we see a great number of electronic industries freed from the licencing provision the item 'electronics' still remains under it. Similarly while 'drug & pharma' still belong to the licenced industries, dozens of drugs and pharmaceuticals have been made free of it. The six industries have gone for high-level internal de-licencing since the reforms started.

foreign investment (FI) in both its forms—direct and indirect. The direct form of FI was called as the foreign direct investment (FDI) under which the MNCs were allowed to set up their firms in India in the different sectors varying from 26 per cent to 100 per cent ownership with them—***Enron*** and ***Coke*** being the flag-bearers. The FDI started in 1991 itself. The indirect form of foreign investment (i.e., in the assets owned by the Indian firms in equity capital) was called the ***portfolio investment scheme*** (PIS) in the country, which formally commenced in 1994.[31] Under the PIS the ***foreign institutional investors*** (FIIs) having good track record are allowed to invest in the Indian security/stock market. The FIIs need to register themselves as a stock broker with SEBI. It means India has not allowed ***individual foreign investment*** in the security market still, only ***institutional investment*** has been allowed till now.[32]

5. FERA Replaced by FEMA

The government committed in 1991 itself to replace the draconian FERA with a highly liberal FEMA, which same into effected in the year 2000–01 with a sun-set clause of two years.[33]

6. Location of Industries

Related provisions were simplified by the policy which was highly cumbersome and had time-consuming process. Now, the industries were classified into 'polluting' and 'non-polluting' categories and a highly simple provision deciding their location was announced:

(i) Non-polluting industries might be set up anywhere.

(ii) Polluting industries to be set up at least 25 kms away from the million cities.

7. Compulsion of Phased Production Abolished

With the compulsion of phased production abolished, now the private firms could go for producing as many goods and models simultaneously.[34] Now the capacity and capital of industries could be utilised to their optimum level.

8. Compulsion to Convert Loans into Shares Abolished

The policy of nationalisation started by the Government of India in the late 1960s was based on the sound logic of ***greater public benefit*** and had its origin in the idea of ***welfare state***—it was

31. Ministry of Finance, ***Economic Survey, 1994–95,*** (New Delhi: Government of India, 1995).

32. It becomes very complex and tough to regulate the individual foreign investment in the share market though it is an easier way of attracting foreign exchange. It should be noted that the South East Asian economies which faced financial crisis in 1996–97 all had allowed individual foreign investment in their share market. As the Indian security market was learning the art of regulation in its nascent phase, the government decided not to allow such foreign investment. The logic was vindicated after the South East Asian currency crisis when India had almost no shocks (Ministry of Finance, Economic Survey 1996–97 (New Delhi: Government of India, 1997).

33. The delayed action by the government in the foreign exchange liberalisation was due to the delayed comfort the economy felt regarding the availability of foreign exchange.

34. This was another hurdle which the private sector industries have been complaining about. As the industrial products were completely new to the Indian market and its consumers alike, the government followed this policy with the logic to provide enough time so that the products become domesticised i.e.,development of awareness about the product and its servicing, maintenance, etc. As for example, the MNC subsidiary Phillips India was allowed to produce a highly simple radio ***Commandar*** and ***Jawan*** models for comparatively longer periods of time then they were allowed to come up with the smaller fashionable radio sets or two-in-ones and three-in-ones. Such provisions hampered their full capacity utilisation as well as achieving the economy of scale had also been tougher. The new industrial policy of 1991 did away with such impediments. By that time, the Indian consumer as well as the market was fully aware of the modern industrial goods.

criticised by the victims and the experts alike. In the early 1970s, the Government of India came with a new idea of it. The major banks of the country were now fully nationalised (14 in number by that time), which had to mobilise resources for the purpose of planned development of India. The private companies who had borrowed capital from these banks (when the banks were privately owned) now wanted their loans to be paid back. The government came with a novel provision for the companies who were unable to repay their loans (most of them were like it)—they could opt to convert their loan amounts into equity shares and hand them over to the banks. The private companies which opted this route (this was a compulsory option) ultimately became a government-owned company as the banks were owned by the Government of India—this was an ***indirect*** route to nationalise private firms. Such a compulsion which hampered the growth and development of the Indian industries was withdrawn by the government in 1991.[35]

The picture presented by the New Industrial Policy of 1991 was taken by many experts, the opposition in the Parliament and even the public figures as well as the business and industry of the country as a ***'rolling back'*** of the state. The glorious role given to the state by the Nehruvian economy seemed completely toppled down. Any one idea the new policy challenged was an emphatic good bye to the 'control regime' perpetuated till now by the government. There was a coalition of interests of politicians, bureaucrats, multinationals as well as the domestic industrial and business houses whose interests were sheltered and by the control regime.[36] Thus, a memorandum to the government requesting not to dismantle the control regime by the major industrial houses of India as well as arrival of the '*Swadeshi Jagaran Manch*' were not illogical. But the governments continued with the reform programme with politically permissible pace and a time came when the same industrial houses requested the government (2002) to expedite the process of reform. Now the Indian industry and business class has been able to understand the economics of 'openness' and a different kind of the mixed economy. But the process of reforms have still to go miles before its real benefits start reaching the masses and development together with reform could be made a mass movement.

This is why experts have suggested that only assuming that reforms will benefit the masses will not be enough to make it happen politically, but the governments, the administrative agencies and the economists all need to link it positively to ***mass welfare***—it might require to create a popular climate and form the political coalitions in favour of the argument that privatisation and accordingly restructured labour laws are basically aimed at creating jobs, better job prospects, alleviating poverty, enriching education and

35. Combined with nationalisation, this ***indirect route*** to nationalisation failed to provide the confidence among the entrepreneurs that the industrial units they are intending to set up will be owned by them. This discouraged entrepreneurship in India while taking risk. The abolition of this compulsion was an indirect indication by the government of no more direct or indirect nationalisation in future. This has served the purpose, there is no doubt in it.

36. This nexus of the interests of the vested groups to the control regime of the economy has been beautifully elaborated by Rakesh Mohan in **'Industrial Policy and Controls'** pp. 92–123. He also points out that the control system perpetuating the academic and intellectual ideological leanings negated the very need for re-examination of the system. The 'planners' and the 'bureaucrats' were able to preserve their powers via the control regime did everything to maintain the status quo, Rakesh Mohan further adds.

providing healthcare to the masses.[37] In the coming times, the government went from one to another generations of the reforms, setting new targets and every time trying to make reforms socio-politically possible.

Reforms with the human face was one such attempt of the United Progressive Alliance in 2003 when it formed the government at the Centre. It was believed that the 'India Shining' slogan of the outgoing government (i.e., the NDA) was correct, but remained localised in its effects to the urban middle class only.[38] The new government seemed taking lessons from the past and tried to make India shine for the rural masses, too. Its one programme, the ***Bharat Nirman*** (a rural infrastructure focused programme), could be seen as a political attempt to make it happen.[39]

Only the coming times will tell as to what extent the government has been able to educate the masses (better say the voters who vote!) the needful logic of the reforms.

DISINVESTMENT

Disinvestment is a process of selling government equities in public sector enterprises. Disinvestment in India is seen connected to three major inter-related areas, namely—

(i) A tool of public sector reforms[40]

(ii) A part of the economic reforms started in mid-1991. It has to be done as a complementary part of the ***'de-reservation of industries'***.[41]

(iii) Initially motivated by the need to raise resources for budgetary allocations.[42]

The approach towards public sector reforms in India has been much more cautious than that of the other developing countries. India did not follow the radical solution to it—under which outright privatisation of commercially viable PSUs is done and the unviable ones are completely

37. First of the series of such suggestions came from Sach, Varshney and Bajpai, ***India in the Era of Economic Reforms,*** p. 24).

38. It should be noted that ***'reform with the human face'*** was not a new slogan or call given by the UPA Government but this was the same slogan with which the reform programme was launched by the Rao-Manmohan Government in 1991—it has only been 're-called back' by the new government with a new committment to live it up.

39. Point should be noted that **Bharat Niraman** has been the only time-bound programme of infrastructure building in rural areas which is supposed to be completed within four years (the time left out of the total term of the Government when the programme was launched). The UPA naturally, tries to make it a political statement and a point for the next General Elections—development becoming an issue of real politics.

40. Publication Division, **India 1991** (New Delhi: Government of India, 1992).

41. The de-reservation of industries had allowed the private sector to enter the areas hitherto reserved for the Central Government. It means in the coming times in the unreserved areas the PSUs were going to face the international class competitiveness posed by the new private companies. To face up the challenges the existing PSUs needed new kind of technological, managerial and marketing strategies (similar to the private companies). For all such preparations there was a requirement of huge capital. The government thought to partly fund the required capital out of the proceeds of disinvestment of the PSUs. In this way disinvestment should be viewed in India as a way of increasing investment in the divested PSUs (which we see taking place in the cases of BALCO, VSNL, etc.).

42. Right since 1991 when disinvestment began, governments have been using the disinvestment proceeds to manage fiscal deficits in the budget at least up to 2000–01. From 2000–01 to 2002–03 some of the proceeds went for some social sector reforms or for labour security. After 2003 India established National Investment Fund to which the proceeds of disinvestment automatically flow and is not regarded as a ***capital receipt*** of the Union Government. This idea of Indian experiment with disinvestment was articulated by Sach, Varshney and Bajpai, ***India in the Era of Economic Reforms***, pp. 62–63.

closed.[43] There was an emphasis on increasing functional autonomy of public sector organisations to improve their efficiency in the 1980s in India as part of the public sector reforms. Once the process of economic reforms started in the early 1990s, disinvestment became a part of the public sector reforms. The C. Rangarajan Commission on Disinvestment of the Public sector Enterprises (1991) went on to suggest the government on the issue in a highly commendable and systematic way, taking empirical notes from the experiences of disinvestment around the world. The government started the process of disinvestment in 1991 itself. In 1997 the goverment did set up a Disinvestment Commission to advice upon the various aspects of the disinvestment process. The financial year 1999–2000 saw a serious attempt by the government to make disinvestment a political process to expedite the process of disinvestment in the country—first a Disinvestment Department and later a full-fledged Ministry of Disinvestment was set up.[44] The new government (UPA) dismantled the Ministry of Disinvestment and today only the Department of Disinvestment is taking care of the matter, working under the Ministry of Finance.

43. As was done by **Margaret Thatcher** in the UK in the mid-1980s. Her brand of privatisation was driven by the conviction that government control makes PSUs inherently less efficient and privatisation therefore improves its economic efficiency and is good for the consumers. However, this idea has been rejected around the world on the empirical bases. ***A PSUs could also have comparable economic efficiency even being under full government control.*** This was followed by Mrs. Thatcher (1979–90) forcefully in Great Britain conjoined with the supply-side economics as was done by Ronald Reagan (1981–89) in the United States as discussed by P.A. Samuelson and W.D. Nordhaus, ***Economics*** (New DelhI; Tata McGraw Hill, 2005), p. 703.

44. A highly experienced person from the media world, Arun Shourie remained the Minister for the whole term of the NDA government. Some highly accelerated and successful disinvestments were done during this period but not without controversies.

TYPES OF DISINVESTMENT

Since the process of disinvestment was started in India (1991), its consisted of ***two official types.*** A brief discussion on them is given below:

1. Token Disinvestment

Disinvestment started in India with a high political caution—in a symbolic way known as the ***'token' disinvestment*** (presently being called as 'minority stake sale'). The general policy was to sell the shares of the PSUs maximum upto the 49 per cent (i.e., maintaining government ownership of the companies). But in practice, shares were sold to the tune of 5–10 per cent only. This phase of disinvestment though brought some extra funds to the government (which were used to fill up the fiscal deficit considering the proceeds as the 'capital receipts') it could not initiate any new element to the PSUs, which could enhance their efficiency. It remained the major criticism of this type of disinvestment, and experts around the world started suggesting the government to go for it in the way that the ownership could be transferred from the government to the private sector. The other hot issue raised by the experts was related to the question of using the *proceeds* of disinvestment.

2. Strategic Disinvestment

In order to make disinvestment a process by which efficiency of the PSUs could be enhanced and the government could de-burden itself of the activities in which the private sector has developed better efficiency (so that the government could concentrate on the areas which have no attraction for the private sector such as social sector support for the poor masses), the government initiated the process of strategic disinvestment. The government classifying the PSUs into ***'strategic'*** and ***'non strategic'*** announced in March 1999 that it will generally reduce its stake (share holding) in the ***'non-strategic'*** public sector enterprises (PSEs)

to 26 per cent or below if necessary and in the ***'strategic'*** PSEs (i.e., arms and ammunition; atomic energy and related activities; and railways) it will retain its majority holding.[45] There was a major shift in the disinvestment policy from selling small lots of share in the profit-making PSUs (i.e., token disinvestment) to the strategic sale with change in management control both in profit and loss-making enterprises. The essence of the strategic disinvestment was—

(i) The minimum shares to be divested will be 51 per cent, and

(ii) the wholesale sale of shares will be done to a ***'strategic partner'*** having international class experience and expertise in the sector.

This form of disinvestment commenced with the Modern Food Industries Ltd. (MFIL). The second PSUs was the BALCO which invited every kind of criticism from the opposition political parties, the Government of Chattisgarh and experts, alike. The other PSUs were CMC Ltd, HTL, IBPL, VSNL, ITDC (13 hotels), Hotel Corporation of India Ltd. (3 hotels), Paradeep Phosphate Ltd (PPL), HZL, IPCL, MUL and Lagan Jute Manufacturing Company Ltd. (LJMC)—a total number of 13 public sector enterprises, were part of the ***'strategic sale'*** or ***'strategic disinvestment'*** of the PSEs.[46] The new government at the Centre did put this policy of strategic disinvestment on the hold practically and came up with a new policy in place.

CURRENT DISINVESTMENT POLICY

India's disinvestment policy*[47] has evolved over time since it commenced in 1991. It has two major features— 'ideology' behind the policy and the 'policy' itself. The ***ideology*** behind the policy is:

(i) Public ownership of PSUs to be promoted as they are wealth of nation;

(ii) Government to hold minimum 51 per cent shares in case of 'minority stake sale'; and

(iii) Upto 50 per cent or more shares might be sold off under 'strategic disinvestment'.

The current ***policy*** of disinvestment followed by the government is as given below:

(i) Minority stake sale (the policy of November 2009 continues):

- Listed PSUs to be taken first to comply to minimum 25 per cent norm;
- New PSUs to be listed which have earned net profit in three preceding consecutive years;
- 'Follow-on' public offers on case by case basis once capital investment needed; and
- DIPAM (Department of Investment and Public Asset Management) to identify PSUs and suggest disinvestment in consultation with respective ministries.

(ii) Strategic Disinvestment i.e., selling 50 per cent or more shares of the PSUs (announced in February 2016):

- To be done through consultation among Ministries/Departments and NITI Aayog;
- NITI Aayog to identify PSUs and advice on its different aspects; and
- CGD (Core Group of Secretaries on Disinvestment) to consider the recommendations of NITI Aayog to facilitate a decision by the CCEA (Cabinet Committee on Economic

45. ***Concept Classification of the PSEs,*** Government of India, 1999.

46. Publications Division, ***India 2003*** (New Delhi: Government of India, 2004).

47. **Ministry of Finance**, Department of Investment and Public Asset Management, Government of India, N. Delhi, March 2017.

Affairs) and to supervise/monitor the implementation process.

The disinvestment policy is today seen as a part of the Government's *comprehensive management of its investment in the PSUs.* Under this, the Government considers its investment in PSUs as an important asset for accelerating economic growth and is committed to their efficient use to achieve optimum return through the following measures:

- Leveraging of assets, capital and financial restructuring;
- Raising fresh investments by improving investors' confidence; and
- Efficient management through rationalization of decision making process.

PROCEEDS OF DISINVESTMENT: DEBATE CONCERNING THE USE

In the very next year of disinvestment, there started a debate in the country concerning the suitable use of the proceeds of disinvestment (i.e., accruing to the government out of the sale of the shares in the PSUs). The debate has by now evolved to a certain stage coming off basically in three phases:

Phase I: This phase could be considered from 1991–2000 in which whatever money the governments received out of disinvestment were used for fulfilling the budgetary requirements (better say bridging the gap of fiscal deficit).[48]

Phase II: This phase which has a very short span (2000–03) saw two new developments. *First,* the government started a practice of using the proceeds not only for fulfilling the need of fiscal deficit but used the money for some other good purposes, such as—re-investment in the PSEs, pre-payment of public debt and on the social sector. *Second,* by the early 2000–01 a broad concensus emerged on the issue of the proposal by the then Finance Minister.[49] The proposal regarding the use of the proceeds of disinvestment was as given below:

Some portions of the disinvestment proceeds should be used:

(i) in the divested PSU itself for upgrading purposes
(ii) in the turn-around of the other PSUs
(iii) in the public debt repayment/pre-payment
(iv) in the social infrastructure (education, healthcare, etc.)
(v) in the rehabilitation of the labour-force (of the divested PSUs) and
(vi) in fulfilling the budgetary requirements.

Phase III: Two major developments of this phase are as given below:

1. **National Investment Fund:** In January 2005, the Government of India decided to constitute a 'National Investment Fund' (NIF)[50] which has the following ***salient features*:**
   (a) The proceeds from disinvestment will be channelised into the NIF, which is to be maintained outside the Consolidated Fund of India.
   (b) The corpus of the National Investment Fund will be of a permanent nature.
   (c) The Fund will be professionally managed, to provide sustainable returns without depleting the corpus, by selected Public Sector

48. Ministry of Finance, Various issue of the ***Economic Survey*** (New Delhi: Government of India).

49. It was proposed by Yashwant Sinha and thus got popularity as the ***'Yashwant Formula'*** of using disinvestment proceeds. Being his personal proposal, the Government of the time was not officially bound to it. However, the idea got support inside and outside of the Parliament and looked having an impact on the government's thinking about the issue.

50. Ministry of Finance, Disinvestment Policy Announcement, Department of Disinvestment (New Delhi: Government of India, 2005).

Mutual Funds *(they are, UTI Asset Management Company Ltd.; SBI Funds Management Company Pvt. Ltd.; LIC Mutual Fund Asset Management Company Ltd.).*

(d) 75 per cent of the annual income of the Fund will be used to finance selected social sector schemes, which promote education, health and employment. The residual 25 per cent of the annual income of the Fund will be used to meet the capital investment requirements of profitable and revivable PSUs that yield adequate returns, in order to enlarge their capital base to finance expansion/diversification.

The income from the NIF investments was utilised on selected social sector schemes, namely the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Accelerated Irrigation Benefits Programme (AIBP), Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY), Accelerated Power Development and Reform Programme, Indira Awas Yojana and National Rural Employment Guarantee Scheme (NREGS).

2. Restructuring of NIF: In November 2009, the governement approved a change in the policy on utilisation of disinvestment proceeds. In view of the difficult situation caused by the global slowdown of 2008–09 and a severe drought in 2009–10, a *one-time exemption* was accorded to disinvestment proceeds being deposited into NIF—to be operational for the fiscals 2009–12, which was furhter extended to 2012–13, in view of the persistent difficult condition of the economy. All disinvestment proceeds *(in place of the income accruing out of the investment of the NIF corpus)* obtained during the three year period were to be used for selected social sector schemes.

Current Policy: In January 2013, the government approved **restructuring** of the NIF and decided that the disinvestment proceeds with effect from the fiscal year 2013–14 will be credited to the existing *'Public Account'* under the head NIF and they would remain there until withdrawn/invested for the approved purpose. It was decided that the NIF would be utilised for the following purposes:

(a) Subscribing to the shares being issued by the CPSE including PSBs and public sector insurance companies, on *rights basis* so as to ensure 51 per cent government ownership in them.

(b) *Preferential allotment* of shares of the CPSE to promoters, so that government shareholding does not go down below 51 per cent in all cases where the CPSE is going to raise fresh equity to meet its Capex [51] programme.

(c) *Recapitalisation* of public sector banks and public sector insurance companies.

(d) Investment by the government in RRBs, IIFCL, NABARD, Exim Bank;

(e) Equity infusion in various metro projects;

(f) Investment in Bhartiya Nabhikiya Vidyut Nigam Limited and Uranium Corporation of India Ltd.;

51. The Prime Minister's Office has been monitoring the CAPEX (Capital Expenditure) programme and investment plans of selected Central Public Sector Enterprises (CPSEs) since 2012-13. The purpose of this exercise was to enhance investment in the economy, utilizing the substantial cash surpluses that are available with some of the CPSEs to drive economic growth.

(g) Investment in Indian Railways towards capital expenditure.

The allocations out of the NIF will be decided in the government **budget**. This way, the policy regarding use of the disinvestment proceeds has become *flexible* enough to adjust to the current socio-economic needs.

MSME SECTOR

As per the SMSE Act, 2006 the MSME are classified in two classes—*manufacturing* and *service* enterprises—and they are defined in terms of investment in plant & machinery[52]. The Micro, Small and Medium Enterprises (MSMEs) play a very vital role in the economy—**3.6** crore such units employ **8.05** crore people and contribute **37.5** per cent to the country's GDP. The sector has huge potential for helping address structural problems like, unemployment, regional imbalances, unequal distribution of national income and wealth. Due to comparatively low capital costs and their forward-backward linkages with other sectors, they are headed to play a crucial role in the success of the Make in India initiative.

Realising the importance of the sector, over the time, the government has undertaken a number of schemes for the establishment of new enterprises and development of existing ones like:

(i) PMEGP (Prime Minister's Employment Generation Programme),

(ii) CGTMSE (Credit Guarantee Trust Fund for Micro and Small Enterprises)

(iii) CLCSS (Credit Linked Capital Subsidy Scheme) for Technology Upgradation,

(iv) SFURTI (Scheme of Fund for Regeneration of Traditional Industries), and

(v) MSECDP (Micro and Small Enterprises-Cluster Development Programme)

Some of the ***recent initiatives*** undertaken by the government for the promotion and development of the MSMEs, have been as given below:

(i) *UAM (Udyog Aadhar Memorandum):* The UAM scheme, notified in September 2015, to promote ease of doing business. Under it, entrepreneurs just need to file an *online* entrepreneurs' memorandum to get a unique Udyog Aadhaar Number (UAN)—a significant improvement over the earlier complex and cumbersome procedure.

(ii) *Employment Exchange for Industries:* To facilitate *match making* between prospective job seekers and employers an employment exchange for industries was set up in June 2015 (in line with Digital India).

(iii) *Framework for Revival and Rehabilitation of MSMEs:* Under this (May 2015), banks need to constitute a Committee for Distressed MSMEs to prepare a Corrective Action Plan (CAP) for them.

(iv) *ASPIRE (Promoting Innovation and Rural Entrepreneurs):* Launched in March 2015 with the objective of setting up a *network* of technology and incubation centres to accelerate entrepreneurship and promote start-ups for innovation and entrepreneurship in rural and agriculture-based industry.

SECTORAL CONCERNS

Due to several global and domestic reasons two industrial sectors, namely – steel and aluminium

52. As per the **SMSE Act, 2006**, the classification is – for ***Micro*** enterprises investment up to Rs. 25 lakh in manufacturing & Rs. 10 lakh in services; for ***Small*** enterprises between Rs. 25 lakh to Rs. 5 crore in manufacturing & between Rs. 10 lakh to Rs. 2 crore in services; and for ***Medium*** enterprises between Rs. 5 to Rs. 10 crore in manufacturing & Rs. 2 to Rs. 5 crore in services.

– are presently faced with certain challenges. Though, the government has taken several timely steps[53], they are still faced with huge challenges –

STEEL INDUSTRY

Due to global and domestic factors Indian steel industry has been faced with ***certain problems*** in recent times. India is the *fourth* largest producer of crude steel in the world (with a total production of 86.5 MT with installed capacity of around 110 MT today) – having 5 per cent share in the global production. Global demand of steel has been near-stagnant (particularly China) – forcing global prices to fall up to 45 per cent in 2015 (in India prices fall has been up to 35 per cent). This has made major global steel producers to 'push' steel products into Indian market, thus raising two major concerns:

(i) A surge in steel imports, and

(ii) Interest of domestic steel industry hit hard.

The Indian steel industry due to higher borrowings, higher raw material costs with lower productivity is at a comparative disadvantage. The GoI took the following ***measures*** to curb the surging steel imports and make domestic production sustainable:

(i) Custom duty increased by up to 2.5 per cent on certain primary iron and steel products.

(ii) Anti-dumping imposed on industrial grade steel imports from China, Malaysia and S. Korea (ranging from US$180 to $316 per tonne). Similar measures were taken by 40 other countries in the world.

(iii) Provisional safeguard custom duty of 20 per cent imposed on hot-rolled flat products of non-alloy and other alloy steel in coils.

(iv) Minimum import price imposed on a number of steel product for a six month period.

(v) Reduced export duty on iron ore to 10 per cent for select steel (from 30 per cent).

As per the government, any further custom increase will impact the downstream industries as steel is used as an *input* in different industries. This makes it clear that the Indian steel industry needs to get more competitive via cutting its borrowings and raw material costs together with enhancing productivity.

ALUMINIUM INDUSTRY

Though India has been a major player in the global aluminium industry, in past few years it has been facing ***certain challenges*** due to global reasons. India is second largest producer (after China) and third largest consumer (after China) of aluminium in the world. Today, India produces *around* 4 MT (China- 21.5 MT) and consumes 3.8 MT (China- 22 MT, USA- 5.5 MT). The ***challenges*** Indian aluminium industry is faced with, may be summed-up as given below:

(i) World aluminium prices have dropped by 41 per cent between 2011 and 2015. During this period in India, imports as a proportion of total demand (sales plus imports) have increased substantially from around 40 per cent to 57 per cent.

(ii) Huge capacity has been created in China and world growth has slowed down.

(iii) The cost of production for India is presently higher than international prices. India's cost of production of aluminium has been increasing gradually while world costs remained static.

(iv) The Indian capacity has increased substantially in 2014–15 and 2015–16 but its utilization has not improved—utilisation was nearly 100 per cent up to 2013-14 and has declined to 50 per cent

53. Ministry of Finance, ***Economic Survey 2017–18***, Vol. 2, (New Delhi: Government of India, 2018)

by late 2015. This has happened due to fall in global prices.

(v) The Indian aluminium industry will continue to face difficulty unless world prices increase, because in the short run it is virtually impossible to reduce the cost of production.

Global aluminium prices, like other metal prices, are *cyclical* and it is difficult to forecast when they will begin to move upwards. But the trend is expected to change when world industrial growth improves. India is avoiding custom duty to reduce import of aluminium because it may erode the competitiveness of downstream sectors like power, transport and construction.

APPAREL AND FOOTWEAR SECTORS

Since the industrial revolution, no country has become a major economy without becoming an industrial power. In case of India, industrial expansion had been not only stunted but largely capital-intensive (job creation being not compatible to investments). Sitting on the cusp of demographic dividend, India needs to generate jobs that are formal, productive and compatible to investment. Besides, the economy has to search for alternatives for promoting growth, exports and broader social transformation. In this case two sectors—apparel and leather & footwear, presently, look eminently suitable candidates[54].

Growth and exports

Almost every high growth economies in post-war history in East Asia has been associated with rapid expansion in clothing and footwear exports in the early stages. In the successful East Asian economies where GDP growth booms averaged between 7-10 per cent, growth in the exports of these two sectors was exceptional—the average annual growth of apparel exports was over 20 per cent, with some close to 50 per cent; and that of leather and footwear averaged more than 25 per cent. In its take-off phase of growth, India has underperformed relative to the East Asian competitors. The Indian underperformance, has been particularly marked in the leather sector.

Social transformation through women empowerment

These industries create high number of jobs, especially for women—apparel sector is the most labour-intensive followed by footwear. Apparels are 80-fold more labour-intensive than auto industry and 240-fold more jobs creating than steel industry—the comparable numbers for leather goods are 33-fold and 100-fold, respectively. As per the World Bank's employment elasticities, it is estimated that rapid export growth in these sectors could generate about 5 lakh additional direct jobs every year. Enhanced opportunity for women implies that these sectors could be 'vehicles for social transformation'—in Bangladesh, female education, total fertility rates, and women's labour force participation moved positively due to the expansion of the apparel sector.

A historic opportunity

India has an opportunity to promote the exports from these sectors as Chinese market shares are either stabilising or falling. The space vacated by China is fast being taken over by Bangladesh and Vietnam in case of apparels; Vietnam and Indonesia in case of leather and footwear. At present, Indian apparel and leather firms are relocating to Bangladesh, Vietnam, Myanmar, and even Ethiopia. The window of opportunity is narrowing and India needs to act fast if it is to regain competitiveness and market share in these sectors.

Challenges

These sectors face a set of *common* challenges—logistics, labour regulations, the policies related to

54. **Economics Survey 2016-17**, Vol. 1, Ministry of Finance, Government of India, N. Delhi, pp. 128-138.

tax and tariff, and disadvantages emanating from the international trading environment compared to the competitors. In addition, the leather and footwear sector faces the *specific* challenge relating to policies that prevent converting its comparative advantage—abundance of cattle—into export opportunities. India still has potential comparative advantage in terms of cheaper and abundant *labour*, but these are nullified by other factors. A brief idea about the challenges are as given below:

(i) *Logistics:* On logistics, India is handicapped relative to competitors in a number of ways. The costs and time involved in getting goods from factory to destination are higher.

(ii) *Labour regulations:* Labour cost is one advantage to India but it is also not working in its favour. The problems are well-known—

- regulations on minimum overtime pay (the Minimum Wages Act 1948 mandates payment of overtime wages at twice the rate of ordinary rates);
- lack of flexibility in part-time work;
- onerous mandatory contributions (employees funds) that become *de facto* taxes for low-paid workers in small firms that results in a 45 per cent lower disposable salary {due to their contributions to the Employee Provident Fund Organisation (EPFO), Employee Pension Scheme (EPS), Labour Welfare Fund (LWF), Employees' Deposit Linked Insurance Scheme (EDLI), and Employee State Insurance (ESI) etc.}.
- apparel and leather firms in India are smaller compared to firms in say China, Bangladesh and Vietnam (an estimated 78 per cent of firms in India employ less than 50 workers with 10 per cent employing more than 500. In China, the comparable numbers are about 15 per cent and 28 per cent respectively).

(iii) *Tax and Tariff Policies:* Tax and tariff policies create distortions impeding India's export competitiveness. In the case of apparels, there are two sets of policies both of which impede competitiveness in man-made fibres and favour instead cotton-based exports. This is serious because internationally, world demand is shifting strongly towards man-made fibres. Similarly, while world's exports are shifting from leather to non-leather footwear, India imposes higher tax on the latter.

(iv) *Discrimination in export markets:* India's competitor exporting nations for apparels and leather and footwear enjoy better market access by way of zero or at least lower tariffs in the two major importing markets, namely, the USA and EU (European Union):

- Bangladesh's exports enter the EU mostly duty free (former being a Less Developed Country), while Indian exports of apparels face average tariffs of 9.1 per cent.
- Vietnam could also attract zero tariffs once the EU–Vietnam FTA (Free Trade Agreement) comes into effect.
- In the US, India faces tariff of 11.4 percent. Ethiopia, which is an emerging new competitor in apparels and leather, enjoys duty free access in US, EU and Canada.
- Indian leather exports also face high tariffs in partner country markets in exports of leather goods and non-leather footwear, with considerable added disadvantage in Japan.

(v) *Specific challenge in leather & footwear sectors:* The sectors use raw hides and skins of a number of animals like cattle, buffalo, goat, sheep and other smaller animals. Amongst these, leather made from cattle hides has greater global demand (owing to its strength, durability and superior quality)—cattle-based global exports dominate buffalo-based exports by a factor of 8 to 9. However, despite having a large cattle population, India's share of global cattle population and exports of cattle hides is low and declining. This trend can be attributed to the limited availability of cattle for slaughter in India, thereby leading to loss of a potential comparative advantage due to underutilization of the abundantly available natural resource.

Several measures of the package approved by the Government for textiles and apparels in *June 2016* are aimed at addressing the challenges described above. Similar provisions are needed for the leather exporters. Immediate actions are needed in the areas of reforming—labour laws, tax rationalisation (GST will be helpful), employees contributions to security schemes and articulating new FTAs, etc.

FDI POLICY MEASURES

Foreign direct investment (FDI) is an important driver of economic growth which helps in—sustaining high growth rate, increasing productivity, a major source of non-debt financial resources, and employment generation. A favourable policy regime and sound business environment facilitate FDI flows.

The government has taken various reforms to liberalizing and simplifying the FDI policy to provide *ease of doing business* climate in the country that will also lead to larger FDI inflows. A number of sectors have been liberalized, including defence, construction, broadcasting, civil aviation, plantation, trading, private sector banking, satellite establishment and operation and credit information companies. By early 2017, the government had taken the following policy steps to promote FDI in the economy:

(i) Up to 49 per cent FDI permitted in *insurance* and *pension funds* (26 per cent under automatic route) and defence sector.

(ii) 100 per cent FDI permitted in manufacturing of *medical devices*; the *white label ATM* and *railway* infrastructure.

(iii) 100 per cent FDI allowed in marketing of food products produced and manufactured in India *(Union Budget 2016–17).*

(iv) To undertake important banking sector reforms and public listing of general insurance companies undertake significant changes in FDI policy *(Union Budget 2016–17).*

(v) Reforms in FDI policy in the areas of Insurance and Pension, Asset Reconstruction Companies, Stock Exchanges *(Union Budget 2016–17).*

(vi) A new policy for management of the PSUs, including strategic disinvestment—this is supposed to have liberal provisions for the FDI *(Union Budget 2016–17).*

As per the latest **Economic Survey 2017-18**, India has performed very well in attracting foreign investment—

- FDI policy reforms initiate in 2016-17 brought most of the sectors under automatic route, except a small negative list. Total inflows of FDI during 2016-17 was US $60.08 billion—the highest ever in a year (around 8 per cent higher than the preceding year). By September 2017, the inflow was US $33.75 billion.

- Mauritius, Singapore and Japan have been top three countries the contributing 36.17 per cent, 20.03 per cent and 10.83 per cent respectively to the total FDI Equity Inflows of india during 2016-17. In terms of the Sectors receiving FDI Equity inflows, Services (Finance, Banking, Insurance etc.), Telecom, and Computer Software and Hardware have been the *top three* sectors with a share of 19.97 per cent, 12.80 per cent and 8.40 per cent respectively.

EASE OF DOING BUSINESS

Doing Business report, an annual publication (since 2004) of the World Bank Group ranks the countries of the world on the basis of their 'regulations that enhance business activity and those that constrain it'. Popularly known as the *'ease of doing business report'*, it measures regulations affecting **11 areas** of the life of a business[55]:

1. Starting a business,
2. Dealing with construction permits,
3. Getting electricity,
4. Registering property,
5. Getting credit,
6. Protecting minority investors,
7. Paying taxes,
8. Trading across borders,
9. Enforcing contracts,
10. Resolving insolvency, and
11. Labour market regulation.

Doing Business 2017 report (released in October 2016) recognizes India's achievements in implementing reforms in four of its ten indicators—Trading Across Borders, Getting Electricity, Enforcing Contracts and Paying Taxes. India's rank has improved to rank 130th in this report (from 142nd of 2015 report) among the 190 countries included in the report. Basically, the report acknowledges only those reforms which have been implemented in Mumbai and Delhi by June 1 each year. This way, several major reform initiatives of India (after 1st June 2016) were not accounted for in this year's report and will enhance India's rank in the next report. This year's report did not include the 'labour market regulaton'.

Reforms for next year's ranking: The Government is committed to its goal of achieving *among top 50 rank in the next report* (2018) and the Government has implemented a host of reforms to make it easier for businesses to *start, operate* and *exit*. Following actions are on anvil in this regard:

(i) Implementing the Insolvency and Bankruptcy Code.

(ii) Implementing GST nationwide by July 1, 2017.

(iii) Implementing a single form for company incorporation, name availability and director's identification number and making it mandatory.

(iv) Merging registries to build a unified online data base of security interests over movable assets.

(v) Further streamlining processes related to customs clearances aimed at faster and cheaper processing.

(vi) Introduction of paperless court procedures and systems including e-filing, e-payment, e-summons.

(vii) Make the colour coded maps of Airports Authority of India, Delhi Urban Arts Commission, Delhi Metro Rail Corporation, Archaeological Survey of India GIS enabled and integrate them with the Single Window System of Municipal Corporation of Delhi.

55. **Doing Business 2017**, World Bank, Washington DC, 2017 and **Ministry of Commerce and Industry**, Government of India, N. Delhi, Press Release, October 28, 2016.

(viii) Allow online filing of application, scheduling of appointment and payment of fees for registering properties.

(ix) Digitize all encumbrances and record of rights of lands for last 30 years and make them available online.

(x) Integrate land records with sale deeds at Sub-Registrar offices.

With the help of various structural and deep-seated reform measures undertaken by the Government, India was able to enhance its rank to **100** (from 130 of 2017) in the World Bank's *Doing Business Report-2018*. As per the Government, there are several reforms and simplifications already complete but still to be acknowledged by the report such as—Municipal Corporations in Mumbai and Delhi reduced the number of procedures to 8; time frame for approvals during construction cycle of a building brought down to 60 days, resolving insolvency eased out, enforcing contracts made easier, etc.

MAKE IN INDIA

Make in India was launched in September 2014 by the GoI to encourage multinational as well as domestic companies to manufacture their products in India. The initiative is set to boost entrepreneurship, not only in manufacturing but in relevant infrastructure and *service sectors* as well. **Major features** of the initiative[56] are as given below:

Vision: attracting both capital and technological investment in India enabling it to become the top global FDI, surpassing even China and the United States.

Objective: To focus on job creation and skill enhancement in 25 key sectors of the economy, including automobiles, aviation, biotechnology, defence manufacturing, electrical machinery, food processing, oil & gas, and pharmaceuticals, among others.

Logo: is inspired from Ashoka Chakra – is a striding lion made of cogs, symbolising manufacturing, strength and national pride.

The initiative also aims at imposing *high quality standards* and the dimensions of *sustainability*. Key policies to be followed are: ease of doing business, getting away with archaic laws, 100 Smart Cities, disinvestment of the PSUs, skills and jobs for the youth, etc. Major *challenges* to the initiatives include – creating a healthy business environment, removal of unfavourable factors, more focus on Indian's MSMEs, lack of world class research and development (R&D), and comparisons with China's 'Made in China' campaign.

Some experts have also highlighted few concerns related to the Make in India campaign. It will be advisable to take care of the concerns:

(i) allegations of siphoning of funds,

(ii) higher pricing,

(iii) more profits to MNCs for setting up plants in India,

(iv) land-grabbing, and

(v) re-entry of black money.

The initiative is based on ***four pillars*** – new processes; new infrastructure; new sectors; and new mindset. The **major steps**[57] taken by the government in this regard are as summed-up below:

(i) An interactive portal for dissemination of information and interaction with investors has been created with the objective of generating awareness about the investment opportunities and prospects of the country, to promote India as a preferred investment destination in markets overseas and to increase Indian share of global FDI.

56. Government of India launch of the initiative, **Make in India**, N. Delhi, 25 September, 2014.

57. Ministry of Finance, **Economic Survey 2015-16**, p. 135.

(ii) ***Invest India*** set up as the national investment promotion and facilitation *agency*.

(iii) With the objective of promoting investment in the country, a full-fledged Investment Facilitation Cell has been set-up under the Make in India initiative, primarily to support all investment queries as well as to *handhold and liaise* with various agencies on behalf of potential investors.

(iv) As envisaged by the *National Manufacturing Policy 2011*, Make in India seeks to enable the sector to contribute 25 per cent to the GDP and create 100 million additional jobs by 2022.

(v) A number of steps to enhance the skills of workers/the unemployed in India in order to improve their employability.

(vi) In order to tap the creative potential and boost entrepreneurship in India, the *Start-up India* and *Stand-up India* campaign has been announced.

(vii) An innovation promotion platform called *AIM* (Atal Innovation Mission) and a techno-financial, incubation and facilitation programme called *SETU* (Self-Employment and Talent Utilization) are being implemented to encourage innovation and start-ups in India.

(viii) For supporting the financial needs of the *small* and *medium* enterprise sector and promote start-ups and entrepreneurship, various steps taken through Make in India –

(a) The *India Aspiration Fund* has also been set up under the SIDBI for *venture capital financing* to the MSME sector.

(b) SIDBI Make in India Loan for Small Enterprises *(SMILE)* launched to offer quasi-equity and term-based short-term loans to Indian SMEs on liberal terms.

(c) A Micro Units Development Refinance Agency ***(MUDRA)*** Bank set up to provide development and refinance to commercial banks/ NBFCs/cooperative banks for loans given to *micro-units*. MUDRA follow a 'credit-plus approach' by also providing several other services such as – financial literacy and addressing skill gaps, information gaps, etc.

As per the latest **Economic Survey 2017-18**, during the year 'Champion Sectors' have been identified by the Government which have potential to emerge global champion—under *Make in India Version 2.0*. Major sectors identified are—capital goods, automobile, defence and aerospace, biotechnology, pharma, electronic design and manufacturing (ESDM), leather and footwear, textiles and apparel, food processing, gems and jewellery, new renewable energy, construction, shipping and railways.

START-UP INDIA

The Start-up India scheme was launched by the GoI in January 2016 with a slogan, *Start-up India* and *Stand-up India*. The mission/scheme aims to build a strong ecosystem for nurturing innovation, driving sustainable economic growth and generating large-scale employment opportunities. Apart from the technology sector the start-up movement will extend to a wide array of other sectors including agriculture, manufacturing, healthcare and education.; and from existing tier 1 cities will extend to tier 2 and tier 3 cities including semi-urban and rural areas. The proposed ***action plan*** *(Economic Survey 2015–16)* for the firms is as given below:

- Creating a compliance regime based on self-certification to reduce the regulatory burden and keep compliance cost low.

- Setting up *Start-up India hub* to create a single point of contact for the entire Start-up ecosystem and enable knowledge exchange and access to funding.
- Rolling out of *mobile app* and *portal* to serve as the single platform for start-ups to interact with government and regulatory institutions and various stakeholders.
- Relaxed norms of public procurement.
- Legal support and fast-tracking of *patent* examination at lower costs to promote awareness of IPR (Intellectual Property Rights).
- Faster and easier exit norms.
- Providing funding support through a *fund of funds* with a corpus of Rs. 10,000 crore.
- Credit Guarantee Fund to catalyse entrepreneurship.
- Tax exemption on capital gains
- Income Tax exemption for three years
- Launch of AIM (Atal Innovation Mission) with the SETU (Self-Employment and Talent Utilisation) programme to serve as a platform for promotion of world-class innovation hubs, start-up businesses and other self-employment activities, particularly in technology-driven areas.
- Building *innovation centres* at national institutes to propel successful innovation through augmentation of incubation and R&D efforts.
- Setting up of 7 new research parks (modelled on the research park at IIT Madras).
- Promoting start-ups in the *biotechnology* sector.
- Launching of innovation-focused programmes for students to foster a *culture of innovation* in the field of science and technology.

To encourage the Startups, the Government has taken several new initiatives (as per the **Economic Survey 2017-18**) in the area:

- Acknowledging the need to reduce the regulatory burden *self-certification* allowed (under three labour laws and six environment laws).
- *Startup India Hub* has been developed as a single point of contact for them enabling them to exchange knowledge and access fund.
- A *Fund of Funds for Startups* (FFS) with a corpus of Rs. 10,000 crores has been created which is being managed by SIDBI.
- Several steps have also been taken to promote *Industry-Academia Partnership and Incubation*. With an aim to foster and facilitate Bio-entrepreneurship, Bio-clusters, Bio-Incubators, Technology Transfer Offices (TTOs) and Bio-Connect, offices are being established in research institutes and universities across India.
- *Seed Fund and Equity Funding* support is also provided to bio-tech Startups under the initiative.

Start-up India will turn Indian youths from *job seekers into job creators*. It will encourage entrepreneurship, innovation and creation of revolutionary new products in India, that will be used by people around the world. The initiative aspires to give India *wings to fly above the sky.*

INDIAN INFRASTRUCTURE

AN INTRODUCTION

Infrastructure is the 'lifeline' of an economy as protein is the lifeline of the human body. Whichever sector be the prime moving force of an economy, i.e., primary, secondary or tertiary, suitable level of infrastructure presence is a pre-requisite for growth and development. This is why

the Government in India has always given priority to the developmental aspects of the sector. But the level of preparedness and performance had been always less than required by the economy. Which sector are called the infrastructure? ***Basically, the goods and services usually requiring higher investment, considered essential for the proper functioning of an economy is called the infrastructure of an economy.***[58] Such sector might be as many as required by a particular economy such as power, transportation, communication, water supply, sewerage, housing, urban amenities, etc.

There are three sectors which are considered as the infrastructure universally around the world namely power, transportation and communication. Since, infrastructure benefits the whole economy, it has been often argued by the economists that the sector should be funded by the government by means of taxation, partly not wholly.

Indian infrastructure sector is clearly overstrained and has suffered from underinvestment in the post-reforms period.[59] Infrastructure bottlenecks are always constraint in achieving a higher growth for the economy. India needs massive investment, both from the public and private sectors, to overcome infrastructure bottlenecks. Investments by the public and private sectors are not alternatives, but complimentary to each other as the required investment is very high. Public investment in the sector depends upon the ability to raise resources (capital) in the public sector and this in turn depends upon the ability to collect the user charges from the consumers. To make this happen following ***three*** factors are extremely important:

(i) Reform of the power sector,

(ii) Introduction of road user charges (either directly via tolls or indirectly via a cess on petrol diesel), and

(iii) Rationalisation of railway fares.

Experts[60] have suggested for expanding public investment in the sector supplemented duly by a vigorous effort of attracting private investment (domestic as well as foreign). Creating the conducive environment to attract private investment in infrastructure should include:

(i) Simplification and transparency in the clearance procedures;

(ii) Unbundling an infrastructure project so that the private sector may go for only those unbundled segment of the project whose they are able to bear; and

(iii) Providing credible and independent regulatory framework so that the private players get fair treatment.

OFFICIAL IDEOLOGY

Putting in place the quality and efficient infrastructure services is essential to realise the full potential of the growth impulses surging through the Indian economy. There is now a widespread consensus[61] (now clearly accepted by the Planning Commission) that exclusive dependence on the government for the provision of all infrastructure services introduces difficulties concerning adequate scale of investment, technical efficiency, proper enforcement of user charges, and competitive market structure. At the same time, complete reliance on private production, particularly without appropriate regulation, is also not likely to produce optimal outcomes.[62]

58. ***Oxford Dictionary of Business***, (New Delhi: Oxford University Press, 2004).

59. ***India Infrastructure Report 1994.*** (New Delhi: Government of India, 1994).

60. One of such major suggestion was forwarded by Sachs, Varsheny and Bajpai, ***India in the Era of Economic Reforms,*** p. 79.

61. Ministry of Finance, ***Economic Survey,*** 2006–07, (New Delhi: Government of India, 2007).

62. ***India Infrastructure Report 2007*** (New Delhi: Government of India, 2011).

India, while stepping up public investment in infrastructure, has been actively engaged in finding the appropriate policy framework, which gives the private sector adequate confidence and incentives to invest on a massive scale, but simultaneously preserves adequate checks and balances through transparency, competition and regulation.

The Eleventh Plan[63] emphasised the need for removing infrastructure bottlenecks for sustained growth—proposed an investment of US$500 billion in infrastructure sectors through a mix of public and private sectors to reduce deficits in identified infrastructure sectors. As a percentage of the gross domestic product (GDP), investment in infrastructure was expected to increase to around 9 per cent. For the first time the contribution of the private sector in total investment in infrastructure was targeted to exceed 30 per cent. Total investment in infrastructure during the Eleventh Plan is estimated to increase to more than 8 per cent of the GDP in the terminal year of the Plan, which was higher by 2.47 percentage points as compared to the Tenth Plan. The private sector is expected to be contributing nearly 36 per cent of this investment.

An analysis[64] of the creation of infrastructure in physical terms indicates that while the achievements in some sectors have been remarkable during the Eleventh Plan as compared to the previous FiveYear Plans, there have been slippages in some sectors. The success in garnering private-sector investment in infrastructure through the public-private partnership (PPP) route during the Plan has ***laid solid foundation*** for a substantial step up in private-sector funding in coming years. PPPs are expected to augment resource availability as well as improve the efficiency of infrastructure service delivery.

The Planning Commission[65], in its aproach paper has projected an investment of over Rs. 45 lakh crore (for about US $1 trilion) during the **Twelfth Plan (2012–17).** It is projected that at least 50 per cent of this investment will come from the private sector as against the 36 per cent anticipated in the Eleventh Plan and public sector investment will need to increase to over Rs. 22.5 lakh crore as against an expenditure of Rs. 13.1 lakh crore during the Eleventh Plan. Financing infrastructure will, therefore, be a big challenge in the coming years and will equire some innovative ideas and new models of financing.

UDAY SCHEME

Without improving the performance of the electricity distribution companies (DISCOMs) of the state governments efforts towards 100 per cent village electrification, 24x7 power supply and clean energy cannot bear fruit. Power outages also adversely affect national priorities like 'Make in India' and 'Digital India'. In addition, default on bank loans by financially stressed DISCOMs has the potential of seriously impacting the banking sector and the economy at large.

For financial and operational turnaround of DISCOMs and to ensure a sustainable permanent solution to the problem, the *UDAY* (Ujwal DISCOM Assurance Yojana) was launched by the GoI, in November 2015. The scheme also aims to reduce interest burden of the DISCOMs, cost of power and their AT&C (Aggregate Transmission & Technical) losses.

Due to legacy issues, DISCOMs are trapped in a vicious cycle with operational losses being funded by debt. Outstanding debt of DISCOMs were Rs. 4.3 lakh crore by 2014-15, with interest rates upto14–15 per cent and AT&C losses as high as 22 per cent. The scheme assures the rise of vibrant and efficient DISCOMs through a

63. Planning Commission, ***Mid Term Appraisal of the 11th Pan*** (New Delhi: Government of India, 2011).

64. ***Planning Commission,*** while announcing the *Approach for the 12th Plan.*

65. Planning Commission, ***Approach to the 12th Plan*** (New Delhi: Government of India,).

permanent resolution of past as well as potential future issues of the sector. It empowers DISCOMs with the opportunity to break even in the next 2-3 years. This is to take place through ***four*** initiatives:

(i) Improving operational efficiencies;
(ii) Reduction of cost of power;
(iii) Reduction in interest cost; and
(iv) Enforcing financial discipline.

Operational efficiency to be improved via steps such as – compulsory smart metering, upgradation of transformers, meters, etc., *energy efficiency* via steps like efficient LED bulbs, agricultural pumps, fans & air-conditioners etc.—to reduce the average AT&C loss from around 22 per cent to 15 per cent and eliminate the gap between ARR (Average Revenue Realised) and ACS (Average Cost of Supply) by 2018-19.

Reduction in cost of power would be achieved through measures such as increased supply of cheaper domestic coal, coal linkage rationalisation, liberal coal swaps from inefficient to efficient plants, coal price rationalisation based on GCV (Gross Calorific Value), supply of washed and crushed coal, and faster completion of transmission lines. NTPC alone is expected to save Rs. 0.35 unit through higher supply of domestic coal and rationalization and swapping of coal which will be passed on to DISCOMs.

The ***salient features*** of the scheme are as given below[66]:

- States shall take over 75 per cent of the DISCOM debt—50 per cent in 2015–16 and 25 per cent in 2016–17. This will reduce the interest cost to 8–9 per cent, from as high as 14–15 per cent.
- GoI will not include the debt taken over by the states in the calculation of fiscal deficit of the States in the financial years 2015–16 and 2016–17.
- States will issue non-SLR including SDL (State Development Loan) bonds in the market or directly to the respective banks and Financial Institutions (FIs).
- DISCOM debt not taken over by the State shall be converted by the Banks and FIs into loans or bonds with interest rate not more than the bank's base rate plus 0.1 per cent. Alternately, this debt may be fully or partly issued by the DISCOM as State guaranteed DISCOM bonds at the prevailing market rates which shall be equal to or less than bank base rate plus 0.1 per cent.
- States to take over the future losses of DISCOMs in a graded manner.
- States accepting UDAY and performing as per *operational milestones* will be given additional / priority funding through Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY),Integrated Power Development Scheme (IPDS), Power Sector Development Fund (PSDF) or other such schemes of Ministry of Power and Ministry of New and Renewable Energy. States not meeting operational milestones will be liable to forfeit their claim on IPDS and DDUGJY grants.
- Such States shall also be supported with additional coal at notified prices and, in case of availability through higher capacity utilisation, low cost power from NTPC and other Central PSUs.
- UDAY is *optional* for all States. However, States are encouraged to take the benefit at the earliest as benefits are dependent on the performance. [By March 2017, most of the states/UTs had joined the scheme.]

Basically, financial liabilities of DISCOMs are the contingent liabilities of the respective States and need to be recognized as such. Debt of DISCOMs is *de facto* borrowing of States which

66. Ministry of Finance, **Economic Survey 2015–16**, pp. 137–138.

is not counted in *de jure* borrowing. However, credit rating agencies and multilateral agencies are conscious of this de facto debt in their appraisals. The 14th Finance Commission also had similar observations. Similarly, the new scheme, DDUGY (Deendayal Upadhyaya Gram Jyoti Yojana), was launched to promote rural electrification. The budgetary support for continuation of the RGGVY (Rajiv Gandhi Grameen Vidyutikaran) in 12th and 13th Plans, has also been carried forward to the new scheme.

UDAY accelerates the process of reform across the entire power sector and will ensure that power is accessible, affordable and available for all. UDAY truly heralds the ***uday*** (rise), of a **'Power'**ful India.

National LED Programme: The Government of India, in January 2015, launched the 100 cities National LED Programmes with the aim of promoting use of the most efficient lighting technology at affordable rates. This programme has two components: *(i) DELP (Domestic Efficient Lighting Programme)* aims to replace incandescent bulbs (77 crore) with LED bulbs (by providing LED bulbs to domestic consumers). *(ii) SLNP (Street Lighting National Programme)* aims to replace conventional streetlights (3.5 crore) with smart and energy-efficient LED streetlights by March 2019.

The programme is supposed to bring in *multiple benefits* to the economy:

(i) Demand reduction in electricity by around 21,500 MW with a monetary savings of Rs. 45,500 crore to domestic consumers and urban local bodies.

(ii) To help in mitigating climate change by cutting CO^2 emission by 85 million tonnes annually. India has committed to reduce its emission intensity per unit GDP by 33-35 per cent below 2005 levels by 2030 (under its Intended Nationally Determined Contribution-INDC).

(iii) To encourage and support domestic manufacturing of LED bulbs, making it consistent with the 'Make in India' policy.

Besides, the government also approved the establishment of a National Smart Grid Mission (NSGM) in the power sector to plan and monitor implementation of policies and programmes related to smart grid activities in India.

AT&C Losses: Due to lack of adequate investment on 'transmission and distribution' (T&D) works, the T&D losses have been consistently on the higher side, and reached to the level of 32.86 Per cent in the year 2000-01.The reduction of these losses was essential to bring economic viability to the state utilities (SEBs). As the T&D loss was not able to capture all the losses in the network, concept of *Aggregate Technical and Commercial (AT&C)* loss was introduced. AT&C loss captures technical as well as commercial losses in the network and is a true indicator of total losses in the system.

High technical losses in the system are primarily ***due to*** inadequate investments over the years for system improvement works, which has resulted in unplanned extensions of the distribution lines, overloading of the system elements like transformers and conductors, and lack of adequate reactive power support.

The commercial losses are mainly due to:

(i) low metering efficiency

(ii) theft, and

(iii) pilferages

This may be eliminated by improving metering efficiency, proper energy accounting & auditing and improved billing & collection efficiency. Fixing of accountability of the personnel/feeder managers may help considerably in reduction of AT&C loss.

In December 2014, the GoI launched a new programme – IPDS (Integrated Power

Development Scheme) – a centrally sponsored scheme (CSS) with a Central *grant* between 60 to 85 per cent. Its ***core aim*** is to attain 24x7 power supply in the country – to be achieved by strengthening sub-transmission network, metering, IT application, Customer Care Services, provisioning of solar panels, reduction in the AT&C of the state DISCOMs. This scheme subsumed the existing scheme, R-APDRP (Restructured Accelerated Power Development and Reforms Programme) of 2008.

RAILWAYS

Indian Railways (IR) is faced with a number of challenges. For speedy capacity creation, IR recognizes the importance of enhancing project execution capabilities. Considering the enormity of the resources required for plan investment in rail infrastructure, and given the limitation of public resources, efforts are on by IR to generate sufficient *internal surplus*, and tap innovative methods of financing, to meet these needs.

The focus is on prioritising investments in important areas like dedicated freight corridors, high speed rail, high capacity rolling stock, last mile rail linkages and port connectivity, and attracting private and FDI investments to supplement available resources. Major ***initiatives*** taken by the GoI are as given below:

- Various measures to improve passenger amenities, infrastructure and services, and initiatives under Make in India, freight initiative, resource mobilisation initiative and green initiatives, etc. High-speed communication network put in place with the help of 48,818 route kilometres. Integral Coach Factory, Chennai, has developed a first-of-its-kind stainless steel three-phase energy-efficient AC-AC transmission 1600 HP DEMU train set.
- Mobile application for freight operations – *Parichaalan* – has been introduced.
- IR is installing solar panels on rooftops of coaches for the train lighting system. Solar plants of 50 MW to come up on the rooftops of IR buildings.
- Diamond Quadrilateral network of High Speed Rail connecting major metros (Delhi, Mumbai, Kolkata and Chennai) to come up.

High Speed Train Project: The feasibility report of the Japan International Cooperation Agency (JICA) was approved by the GoI in December 2015. A new special purpose vehicle with 50 per cent equity participation from the Ministry of Railways and 50 per cent from the state governments of Maharashtra and Gujarat will be set up to implement the project. ***Major features*** of the project are as given below:

- Project completion cost is approximately Rs. 97,636 crore (including price escalation, interest during construction and import duties) – average per km cost of construction works out to be Rs. 140 crore. To be completed in 7 years.
- Japan's ODA (official development assistance) will be Rs. 79, 165 crore (81 per cent of project cost) for 50 years with 0.1 per cent interest and a 15-year moratorium.
- Total length of the proposed corridor will be 508 km between the Bandra Kurla complex in Mumbai and Sabarmati/ Ahmedabad in Gujarat – to cover 12 stations with a maximum design speed of 350 kmph (with a 320 kmph operating speed).
- Sixty-four per cent of the corridor will be constructed on embankment, 25 per cent via duct and 6 per cent tunnel, with a standard gauge.
- To have 10-car trains (750 seats) in the beginning and 16-car trains (1200 seats) in the future. Thirty-five trains per day

each way will operate by 2023, and will go up to 105 trains per day each way in 2053.

- It will have approximately 36,000 daily users per day (both ways) in 2023, which will go up to 186,000 per day (both ways) or 68 million per annum by 2053.

ROADS

With about 52.32 lakh km of road network comprising National Highways, State Highways and other roads, India has the *second* largest road network in the world. The NH in the country cover a total length of 1,00,475 km and carry about 40 per cent of the road traffic.

Financing of the NHDP: A part of the **fuel cess** imposed on petrol and diesel is allocated to the NHAI for funding the implementation of the NHDP. The NHAI leverages the cess flow to borrow additional funds from the debt market. Till date, such borrowings have been limited to funds raised through 54 EC (capital gains tax exemption) bonds and the short-term overdraft facility. Government has also taken loans for financing projects under the NHDP from the World Bank (US$ 1,965 million), Asian Development Bank (US$ 1,605 million) and Japan Bank for International Cooperation (32,060 million yen) which are passed on to the NHAI partly in the form of grants and partly as loan. The NHAI has also availed a direct loan of US$ 180 million from the ADB for the Surat-Manor Expressway Project.

Special Accelerated Road Development Programme for North-East region (SARDP-NE) aims at improving road connectivity to state capitals, district headquarters, and remote places of the north-east region. Development of roads in Left Wing Extremism *(LWE)*-affected areas in the states of Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, and Uttar Pradesh is continuing; Prime Minister's Reconstruction Plan *(PMRP)* for Jammu and Kashmir, launched in November 2004.

By **early 2017**, few new initiatives were taken by the GoI – *Bharatmala* programme to connect non-major ports; *Backward Areas, Religious, Tourist Places Connectivity* programme; *Setubhratam Pariyojana* to construct about 1500 major bridges; and the *District Head Quarter Connectivity Scheme* for development of about 9000 km newly declared NHs.

Pradhan Mantri Gram Sadak Yojna (PMGSY): Launched to provide single all-weather road connectivity to eligible unconnected habitations having population of 500 persons and above in plain areas and 250 persons and above in hill states, tribal (Schedule V) areas, desert (as identified in the Desert Development Programme) areas, and LWE-affected districts as identified by the Ministry of Home Affairs. Rural roads has also been identified as one of the ***six components*** of Bharat Nirman which has the goal of providing all-weather road connectivity to all villages with a population of 1,000 (500 in the case of hilly or tribal areas).

Bharatmala Pariyojana: Launched in 2015-16, this is a new umbrella program for the highways sector that focuses on optimizing efficiency of freight and passenger movement across the country. It *aims* at bridging critical infrastructure gaps through effective interventions like development of Economic Corridors, Inter Corridors and Feeder Routes, National Corridor Efficiency Improvement, Border and International connectivity roads, Coastal and Port connectivity roads and Green-field expressways. The *objective* of the program is to achieve optimal resource allocation for a holistic highway development.

CIVIL AVIATION

Airport infrastructure development continues to be a matter of concern. Upgradation of many airports, including construction of new

terminals, upgradation in 18 non-metro airports, for improving air navigation services the Airport Authority of India (AAI) installing the new ATS automation system. In order to address issues concerning viability of the civil aviation sector, particularly the airline industry, a Working Group was constituted on 12, December 2011 under the chairmanship of the Secretary civil aviation. Their major recommendations were:

(i) state governments should rationalise the value added tax (VAT) on aviation turbine fuel (ATF),

(ii) foreign airlines be permitted to invest in domestic airlines undertakings,

(iii) direct import of ATF by airlines for their own consumption be allowed,

(iv) airlines should be asked to prepare their turnaround plans,

(v) fare structure should be reviewed by airlines to cover the cost of their operations.

(vi) an economic regulatory framework suggested with regard to excessive/ predatory pricing by 31, May 2012.

MARITIME AGENDA 2010–20

The **objective** of the Maritime Agenda 2010–20 is not only creating more capacity but setting up ports on a par with the best international ports in terms of performance:

(i) A target of 3,130 MT port capacity has been set for the year 2020. More than 50 per cent of this capacity is to be created in the non-major ports as the traffic handled by these ports is expected to increase to 1,280 MT.

(ii) This enlarged scale of operation is expected to reduce transaction costs considerably and make Indian ports *globally competitive.*

(iii) Proposed investment in major and non-major ports by 2020 is expected to be around Rs. 2,96,000 crore.

(iv) Most of the investment to come from the private sector including FDI (up to 100 per cent under the automatic route is permitted for construction and maintenance of ports), and private sector to fund most of the projects through PPP or on 'build operate transfer' (BOT) or 'build operate own transfer' (BOOT) basis.

(v) Private-sector participation will not only increase investment in the ports infrastructure, it is expected to improve operations of the ports through the induction of the latest technology and better management practices.

(vi) Public funds will be mainly deployed for common use infrastructure facilities like deepening of port channels, rail and road connectivity from ports to hinterland, etc.

SMART CITIES

The GoI has launched the Smart Cities Mission with the collaboration of states and UTs for urban development. The *purpose* of the mission is – to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology, especially technology that leads to smart outcomes.

The Mission targets *promoting* cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'smart' solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas and create a replicable model which will act like a lighthouse to other aspiring cities. The smart city includes the following ***core*** infrastructure development:

- adequate water supply;
- assured electricity supply;
- sanitation, including solid waste management;
- efficient urban mobility and public transport;
- affordable housing, especially for the poor;
- robust IT connectivity and digitalization;
- good governance, especially e-Governance and citizen participation;
- sustainable environment;
- safety and security of citizens, particularly women, children and the elderly; and
- health and education.

Strategy: The strategic components of area-based development in the mission are:

- city improvement (retrofitting);
- city renewal (redevelopment);
- city extension (greenfield development); and
- a pan-city initiative in which smart solutions are applied.

Retrofitting will introduce planning in an existing built-up area to achieve smart city objectives, along with other objectives, to make the existing area more efficient and liveable. In retrofitting, an area consisting of more than 500 acres will be identified by the city in consultation with citizens. Redevelopment will effect a replacement of the existing built-up environment and enable co-creation of a new layout with enhanced infrastructure using mixed land use and increased density. Redevelopment envisages an area of more than 50 acres, identified by urban local bodies (ULBs) in consultation with citizens.

Greenfield development will introduce most of the smart solutions in a previously vacant area (more than 250 acres) using innovative planning, plan financing and plan implementation tools (e.g. land pooling/ land reconstitution) with provision for affordable housing, especially for the poor. Greenfield development is required around cities in order to address the needs of the expanding population.

Finance: The Mission will cover 100 cities which have been distributed among the states and UTs on the basis of equitable criteria. The distribution of smart cities will be reviewed after two years of the implementation of the mission.

The Smart City Mission will be operated as a Centrally Sponsored Scheme (CSS) and the central government proposes to give it financial support to the extent of Rs. 48,000 crore over five years, i.e. on an average Rs. 100 crore per city per year. An equal amount, on a matching basis, will have to be contributed by the state/ULB; therefore, nearly one lakh crore of government/ULB funds will be available for smart cities development. In the first phase of implementation, *twenty* cities have been shortlisted to roll out the programme.

The migration from the rural areas to the cities is increasing with a higher pace. A *neo middle class* is emerging which has aspirations of better living standards. With all these challenges to the successful implementation of the mission, the centre of attention is the citizen. In other words, a smart city will work towards ensuring the best for all people, regardless of social status, age, income levels and gender, only when *citizens will actively participate* in governance and reforms. Smart Cities Mission requires involvement of *smart people* in the process of making decisions on deploying smart solutions, implementing reforms, doing more with less, maintaining oversight during implementation and designing post-project structures in order to make the smart city developments sustainable.

Other Urban Infrastructure: With increasing urbanization, opportunities as well as challenges related to urban infrastructure are also increasing. In this context, up to early 2016, the government

has taken various ***new initiatives*** to improve urban infrastructure:

SBM (Swachh Bharat Mission) aims at making India *free from open defecation* and at achieving 100 per cent scientific management of municipal solid waste in 4041 statutory towns/cities in the country. The targets set for the mission which have to be achieved by 2 October 2019.

HRIDAY (National Heritage City Development and Augmentation Yojana) aims at preserving and revitalizing the soul and unique character of *heritage cities* in India. In the first phase, it contains 12 cities – Ajmer, Amaravati, Amritsar, Badami, Dwarka, Mathura, Puri, Varanasi, Velankanni, Kanchipuram, Gaya and Warangal.

AMRUT (Atal Mission for Rejuvenation and Urban Transformation) aims at improving basic urban infrastructure in 500 cities/towns which will be known as *mission cities/towns*. This is a Centrally Sponsored Scheme (CSS) funded by GoI, States and the local bodies.

A number of other initiatives in the existing scheme of the policy framework have also been taken – public transport through Bus Rapid Transit Systems (BRTS) approved for 11 cities under the JNNURM (Jawaharlal Nehru National Urban Renewal Mission); Buses and Metro Rail Projects to be equipped with ITS (Intelligent Transport System).

PRIVATE SECTOR AND URBANISATION

Proper urban planning becomes an important issue for India as it is urbanising fast. Given the Government push to the Smart City scheme, it will be needful to tap the potential of every possible candidate in this regard. One of such candidate is the private sector. There are few examples where we find the sector able to develop praiseworthy townships—in certain areas beating the public sector also—though they have their own limitations, too. Two such cases have been cited by the **Economic Survey 2016-17** (quoting case studies)[67] in this regard—of two different time periods:

1. **Gurgaon:** It was in 2001 when Haryana government removed restrictions on the land acquisition process and empowered the HUDA (Haryana Urban Development Authority) and allowed private builders to develop township on the erstwhile agricultural land—and here started the development of today's Gurgaon. Today the city is under the control of HUDA, Municipal Corporation of Gurgaon (created in 2008) and the private builders. In Gurgaon, the private sector has stepped in to address many of the failings of the public sector, with mixed success:
   - Corrected the failure of the public sector by creating private sewage, water, electricity, security and fire prevention.
   - Rapid Metro in Gurgaon was built by DLF and Infrastructure Leasing & Financial Services Limited (IL&FS), with HUDA providing the requisite land.
   - Roads are of good quality.
   - Shortfall in transport facilities is covered by the private modes of transport.

   Precisely speaking, private players have addressed most challenges but they have been unable to provide services beyond their own property line as cooperation lacks amongst them and the authorities. The public authorities have had limited success in providing the city with large

67. **Economic Survey 2016-17** (Vol. 1, p. 313) cites the studies of S. Rajagopalan & A. Tabarrok, ***Lessons from Gurgaon, India's Private City***, in D. Anderson & S. Moroni (Ed.), Cities and Private Planning, Cheltenham, UK: Edward Elgar, 2014.

scale infrastructure. The failures of the city are also well known:

- It suffered from lack of cohesive urban plan and its explosive growth has outpaced the planning efforts (like in any other Indian cities).
- Multiple layers of local and higher authorities, having greater power to extract rents, have increased the transaction costs for the private builders. Different private builders have to seek different political patronage as otherwise none would manage to function.
- Competition among private suppliers has produced two failures:

(i) Prices of water, electricity, sewage, and so forth are close to marginal cost but average cost is far too high (because of the failure to exploit economies of scale).

(ii) Competitive suppliers have produced negative externalities such as excess pollution with diesel fumes, over used common resources by dumping sewage waste and, groundwater dissipation leading to unsustainable level of water table. A vibrant civil society could have been able to put checks on such issues (but city being quite young this is almost absent by now).

2. **Jamshedpur:** This is a private township and one of the best-governed cities in India. Jamshedpur Utilities and Services Company Ltd. (JUSCO), a wholly-owned subsidiary of Tata Steel, is responsible for provisioning of the basic services here. The township is widely regarded as having some of the best urban infrastructure in the country and JUSCO is considered a *model provider*. It has a grown up civil society which checks negative externalities of the urban expansion. The township was rated the second best in the country by *ORG Marg Nielsen* (the worldwide market research firm) on its "quality-of-life index" in 2008, and in 2010 the city was ranked 7th of 441 cities and towns in India on "sanitation" and "cleanliness" by the Ministry of Urban Development.

India needs to take few important lessons from the experience the above-cited examples—so that the privately developed townships are ideal ones:

(i) Private sector can develop quite a competitive urban centres.

(ii) Private sector will have to bear the burden of higher transaction costs, if the city is managed by multiple authorities. Such costs would also be higher if initial cohesive development plan for the city is not put in place. Post-growth infrastructure development costs are much higher and at times prohibitive.

(iii) The active role of *civil society* can prevent excessive exploitation of resources and reduce the impact of negative externalities associated with rapid urbanisation. We see this being present in the latter but absent in the former.

PPP MODELS

Managing adequate amount of fund for infrastructure development has been always a challenge for India. In reform era, the government evolved the idea of public private partnership (PPP) for the sector aimed at attracting investments from the private sector (domestic as well as foreign). We see an encouraging contributions coming from the private sector in this regard also. But by 2013-14, the PPPs started getting unattractive for the

private sector—primarily caused by the in-built flaws in the PPP models together with regulatory reasons—although external reasons have been also there (slowdown in the country's economy due to recession among the western economies).

Various volumes of the *Economic Survey* together with the *Kelkar Committee* on the PPP have discussed about the various flaws in the existing model of the PPP, primarily used for the development of road projects in the country. In this backdrop, a better PPP model was announced by the Government by early 2016—the ***Hybrid Annuity Model (HAM)***. A brief review of the major PPP models (few of them are non-PPP models, too) are given below:

(i) *BOT-TOLL:* The 'Build-Operate-Transfer-Toll' was one of the earliest models of PPP. Other than sharing the project cost (with the Government) the private bidder was to build, maintain, operate the road and collect toll on the vehicular traffic. The bid was given to the private company offering to share maximum toll revenue to the government. The private party used to cover "all risks" related to—land acquisition, construction (damage), inflation, cost over-runs caused by delays and commercial. The government was responsible for only regulatory clearances.

Due to inherent drawbacks, this model proved to be unsustainable for the private bidder—undue delay in land acquisition due to litigation, cost over-runs and uncertainties in traffic movement (commercial risk)—made the road projects economically unviable.

(ii) *BOT-ANNUITY:* This was an improvement over the BOT-TOLL model aimed at reversing the declining interest of the private companies towards road projects by manly reducing the risk for the private players. Other than sharing the project cost the private player was to build, maintain and operate the road projects without any responsibility of collecting toll on the traffic. The private players were offered a fixed amount of money annually (called 'annuity') as compensation—the party bidding for the minimum 'annuity' used to get the project. Toll collection was the responsibility of the Government.

This was different from the previous model (BOT-TOLL) in one sense—private players were not having any commercial risk (traffic)—but they remained very much exposed to other risks (land acquisition delays, inflation, cost over-runs, construction). Even this model, over the time proved to be unviable for the private sector due to the leftover risks they were exposed to.

(iii) *EPC MODEL:* The PPP model which was seen to be a better way out to promote the infra projects were visibly failing by the year 2010 and Government was unable to attract the private players towards the road sector. It was in this backdrop that the Engineering-Procurement-Construction (EPC) Model was announced. In this model, project cost was fully covered by the Government (it means, it was not a PPP model and was like normal contracts given to the bidders) together with majority of the risks—land acquisition, cost over-runs due to delay, inflation and commercial.

The private developers were supposed to design, construct and hand over the road projects to the government—maintenance, operation and toll collection being the government's responsibilities. Contract was given to the private player who offered to construct roads at the

lowest cost/price guaranteeing the desired quality levels. It means, the private player in this model was only exposed to the construction-related risks which is a normal risk involved in any contract given by the government to the private party.

EPC Model could have been a temporary way out to develop road projects as it was fully funded by the government—reform era had aimed to attract investment from the private players by evolving a 'business model' for the road sector—need was to develop a new PPP model. In this backdrop we see the government coming up with a new PPP model for the road projects—the Hybrid Annuity Model.

(iv) *HAM:* Hybrid Annuity Model (HAM) is a mix of EPC and BOT-ANNUITY models. In this model the project cost is shared by the government and the private player in ratio of 40:60, respectively. The private player is responsible to construct and hand over the roads to the government which will collect toll (if wishes)—maintenance remaining the responsibility of the private player till the annuity period. Private player is paid a fixed sum of economic compensation (called 'annuity', similar to the BOT-ANNUITY model of past) by the government for a fixed tenure (normally 15 years, though it is flexible). The private player which demands lowest annuity (in bidding) gets the contract.

In this model, most of the major risks are covered by the government—land acquisition, clearances, operation, toll collection and commercial while the risks related to inflation and cost over-runs are shared in ratio of the project cost sharing. But the private sector is still exposed to the construction and maintenance risks (delays from the government side in clearances and land acquisition have chances to enhance the degree of risks private players are exposed to). But overall, this is the best PPP model for the time devoid of most of the flaws of past. Private sector has shown good response to this model. By early 2018, this model was notified by the Government for other infra sectors too.

(v) *Swiss Challenge Model:* Government of India, for the first time, announced the use of this model for redevelopment of railway stations in the country (by late 2015). This is a very flexible method of giving contracts (i.e., public procurement) which can be used in PPP as well as non-PPP projects.

In this, one bidder is asked by the government to submit the proposal for the project which is put in public domain. Afterwards, several other bidders submit their proposals aimed at improving and beating the original (first) bidder—finally an improved bid is selected (called counter proposal). If the original bidder is not able to match the counter proposal, the project is awarded to the counter bidder. Government has made it an online method.

Though, the Government of India used this model for the first time, this has already been used by several states by now—Karnataka, Andhra Pradesh, Rajasthan, Madhya Pradesh, Bihar, Punjab and Gujarat—for roads and housing projects. In 2009, the Supreme Court approved the method for award of contracts.

(vi) *PPP Model for other sectors:* Though, the idea of PPP model was originally evolved for the infrastructure sector, in recent times, there have been proposals for its uses in other areas, too—such as education,

healthcare and even agriculture. The model is getting popular support from the urban local bodies in the country and it is believed that in the *Smart Cities* scheme it could play a very lucrative role. Recently, the **Economic Survey 2016-17** suggested[68] the government to create a new institution as a PPP to compete with and complement existing institutions to procure stock and dispose pulses.

(vii) *PPPP Model:* Experts have suggested public private people partnership (PPPP) model, too for certain sector in the country. Though such a model has been in use since 2000-01 itself by in agriculture sector to promote participatory irrigation development—in the Command Area Development Programme of 1974 (renamed as Command Area Development and Watershed Management Programme in 2004)—in which individual financial contributions come from the farmers (around 15 per cent of the total cost) to develop field channels and drains.

It is believed that in the area of developing, maintaining and protecting local public assets this model could be highly effective. In future, the local bodies—urban as well as rural—may be using this model to develop social and economic infrastructure.

68. Basically, the **Economic Survey 2016-17** (Vol. 1, pp. 156 & 170) has supported the advice of the ***Committee on Incentivising Pulses Production Through Minimum Support Price (MSP) and Related Policies*** headed by Arvind Subramanian, Chief Economic Adviser (report submitted in September, 2016)—the expert committee was set up by the government on account of the price volatility of pulses seen during 2015-16.

CONCERNS OF PETROLEUM SECTOR

In the absence of a global gas market for benchmarking domestic gas prices in India, various formulae have been suggested. Since October 2014 a formula based on producer and consumer markets is being used to arrive at domestic gas prices in India. It was expected that the formula would balance the interest of producers and consumers in the country.

However, market-determined arm's length pricing for domestic gas, with an effective regulator, to provide adequate incentive for investment and also ensure competiveness and transparency remains the *first-best solution* that merits consideration. It would reflect the appropriate gas price in relation to alternative fuels. In the medium-term, being a large consumer, India may be able to be a *price setter* for gas prices in the region. Possible steps to address the concerns of the sector are as given below *(Economic Survey 2015–16):*

- Petroleum products and natural gas should be included under the Goods and Services Tax (GST), or at least its exclusion should not be indicated in the Constitution Amendment Bill.
- The cess collections could be used to support construction of a network of gas pipelines, which is of crucial importance for providing clean energy to deprived regions of the country. The progress is somewhat constrained at present by having been linked to revival of fertilizer units and development of small industries in areas along the gas highway projects. Alternatively, in order to promote the gas pipeline network, Viability Gap Funding (VGF) may be provided for promoting pipeline assets creation and development of efficient markets.

- Impetus is required for construction of not only cross-country pipelines but also city gas distribution. The present system of bidding by the Petroleum and Natural Gas Regulatory Board (PNGRB) is lopsided and long-drawn-out and needs to be reformed since it has constrained development of the gas network.
- Expansion of the PNG/CNG (Compressed Natural Gas) network could help provide gas connections to rural areas.
- Rationalization of LPG subsidy is essential. It may be useful to cap subsidy to 10 LPG cylinders for each household (that being the maximum used for usual domestic cooking) while aligning taxes and duties on domestic and commercial LPG users.
- Import of liquefied Natural Gas (LNG) for use in the power industry is exempt from customs duty while LNG for all other uses attracts 5 per cent customs duties. There should be no exemptions for any sector.
- In order to develop a cost-effective and revenue-neutral mechanism for *swapping of gas* across producing and consuming states for the *national gas grid*, it is important to make special tax provision for sale of natural gas under the Central Sales Tax Act 1956. Natural gas and LNG may be treated as *declared goods* to bring about tax parity with crude oil and make prices uniform across states.

Meanwhile, India has entered into exploring the ***unconventional*** resources of energy such as the *CBM (Coal Bed Methane)* and *Shale Oil & Gas.* The estimated CBM resources are about 92 TCF (trillion cubic feet) of which only 9.9 TCF has so far been confirmed – current production is about 1 million cubic metre per day. In the *Shale Oil & Gas* areas, presently, the assessment process is going on in 50 blocks. Commercial production is yet to begin.

RENEWABLE ENERGY

India's renewable energy potential has been assessed (in the medium-term) at 8, 96,602 MW, which includes the potential from *solar* (7,48,990 MW), *wind* (1, 00,000 MW), *small hydro* (20,000 MW) and *biomass* (26,800 MW) power.

Apart from grid power requirement, renewable energy sources are also being used for distributed generation, lighting, pumping and motive power requirement in remote and inaccessible areas. India is graduating from Mega watts to Gig watts in the generation of clean renewable energy. The target from various renewable energy sources has been increased by the GoI to **175 GW** by the year **2022** – solar and wind to contribute 100 GW and 60 GW, respectively. The ***major steps*** taken by the government to boost the sector in recent times are as given below *(by early 2017):*

(i) *Solar Rooftop:* Grid-connected rooftops systems to come up by 2019-20 under the National Solar Mission (NSM).

(ii) *Solar Parks:* 25 solar parks and ultra mega solar power projects with an aggregate capacity of 20,000 MW to be set up in the next five years (from 2015-16 to 2019-20).

(iii) *Solar Projects under the NSM:* In February 2015, the government announced to set up 15,000 MW of grid-connected solar PV power projects under the NSM by 2018-19.

(iv) *Solar Pumps:* Target of installing of one lakh solar pumps for irrigation and drinking water by 2016.

(v) *Solar Cities:* Approval granted for 56 solar city projects under the Development of Solar Cities Programme.

- *The Surya Mitra*: This scheme was launched in May 2015 for creating 50,000 trained personnel within a period of five years (2015-16 to 2019-20).

In addition to the above, major policy initiatives taken by the government up to March 2016 include:

(i) National Offshore Wind Energy Policy 2015 to exploit the vast 7600 km coastline for development of offshore wind energy in the Indian Exclusive Economic Zone (EEZ),

(ii) Inclusion of renewable energy in the *priority sector* and bank loans up to Rs. 15 crore limit to borrowers categories for purposes like solar-based power generators, biomass- based power generators, windmills, micro-hydel plants and for nonconventional energy-based public utilities like street lighting systems, and remote village electrification. For individual households this is up to Rs. 10 lakh per borrower.

(iii) Investments in renewable energy are on *automatic route*, i.e. automatic approval for up to **74** per cent *foreign equity participation* in a JV and **100** per cent foreign investment as equity is permissible with the approval of the Foreign Investment Promotion Board (FIPB).

(iv) Approval to the amendments in the National Tariff Policy 2005, for promotion of renewable power.

LOGISTICS SECTOR

Logistics is the backbone of supply chain (management of flows of goods from the point of origin to the point of consumption). It includes transportation, inventory management, warehousing, materials handling, packaging, and integration of information. Largely 'unorganised', the sector has remained 'unexplored' in India. As per the latest **Economic Survey 2017-18**, *major statistics* which highlight the importance of India's logistics sector are as given below:

- India's logistics industry is around US$ 160 billion worth and has a compound annual growth rate (CAGR) of 7.8 per cent during last five years.
- With the implementation of GST, the Indian logistics market is expected to reach about US$ 215 billion in 2020, growing at a CAGR of 10.5 per cent.
- It provides employment to more than 22 million people.
- With a 10 per cent cut in the cost of logistics exports are estimated to grow by 5-8 per cent.

Though, in terms of overall performance India jumped to 35th rank (from 54th in 2014) in the latest Logistics Performance Index-2016 (World Bank), the sector faces numerous challenges which need immediate attention form the Government:

- High cost impacting domestic and global competitiveness,
- Under-developed material handling infrastructure,
- Fragmented warehousing, multiple regulatory and policy making bodies,
- Lack of seamless movement across modes,
- Lack of integrated IT infrastructure and modern technology.

Government has identified the action points to develop this sector in an integrated way. These action points are—adopting new technology, improved investment, skilling, removing bottlenecks, improving intermodal transportation, automation, single window system for giving clearances, and simplifying processes. To strengthen the sector the Government has created a new Logistics Division (in the Department of Commerce). The sector has been put in the

Harmonized Master List of Infrastructure Sub-sector (given 'infrastructure status' by late 2017) which will benefit it in many ways:

(i) Cheaper fund/credit (at lower rates of interest) on longer tenure fund will be facilitated.

(ii) Simplified process of approval (for construction of multimodal logistics (parks) facilities which includes both storage and transportation).

(iii) Increased market accountability through regulatory authority and will attract investments from debt and pension funds.

Apart from increasing trade, better performance in logistics will augment the programme like Make in India, and also enable India to become an important part of the global supply chain.

HOUSING POLICY

Housing is a key policy priority of the Government today. With increasingly 'fluid' population the housing policy need to enable horizontal or spatial mobility (i.e., movement within and between cities) and vertical mobility (to climb socio-economic ladder) as opportunities arise. The **Economic Survey 2017-18** has highlighted certain factors in this regard when the country is going for an ambitious scheme—*Housing for All*. Two basic issues related to the sector is rental and vacant houses.

Rental Housing: Such housing is important for both horizontal and vertical mobility as it allows people to access suitable housing without actually having to buy it. Across the income spectrum, rental housing is an important foothold into a city for new arrivals, until they purchase their own homes. For rural migrants, in particular, whose financial portfolios may already be tied up in land and livestock, it is access to shelter that is more important than investing in their own houses that is subject to local market risk. Nonetheless, the share of rental housing has actually been declining in Indian cities since independence from 54 per cent in 1961 to 28 per cent in 2011. Though the country has witnessed a decline in the share of rentals, it is not uniform—it has been sharper in the northern states (excluding the mountain states). Rental is more prevalent in urban areas (31 per cent) than the rural (5 per cent), as per the Census 2011—with more urbanised states having higher percentages of renting.

Vacant Housing: Despite the shortage of housing in urban India (more than 18 million households in 2012), there is also a trend increase in vacant houses (11.1 million in 2011 from 6.5 million of 2001). As per the Census 2011 vacant houses constitute around 12 per cent of the share of the total urban housing stock. The number and share of vacant houses for some major cities are—Mumbai has the highest number of total vacant houses (0.48 million), followed by Delhi (0.3 million) and Bengaluru (around 0.3 million). In terms of share of vacant houses to total residential stock, Gurgaon ranks highest (26 per cent). The phenomenon of high vacancy rates is not fully understood but unclear property rights, weak contract enforcement and low rental yields may be important factors. The spatial distribution of the new real estate may also be an issue as the vacancy rates generally increase with distance away from the denser urban cores.

Home ownership is encouraged as part of socio-economic policy in most part of the world including India. While there is nothing wrong in encouraging home ownership, it needs to be recognized that the rental market is also an important part of the urban eco-system. Housing needs of India are complex and policies have been mostly focused on building more homes and on home ownership. In recent decades several factors have constrained this market in the country, such as—rent control, unclear property rights

and difficulties with contract enforcement. India needs a *holistic housing policy* which is capable to resolve the existing constraints to the sector and the issues of rental and vacant housing.

RECENT CHALLENGES

Infrastructure sector has been faced with some long-standing challenges in the country. In the period of reforms Government aimed to involve the synergy of the private sector into it. The public private partnership model was taking ground year after year. But due to certain internal and external factors the sector almost got derailed by late 2013-14. As per various Government documents these factors are as given below:

(i) Project delays which cause high cost over-runs. Though, the situation has improved after the new Government took control but still around 427 such projects are lingering in the pipeline of approvals at various states. By February, 2018, the Government announced to classify such projects into different sub-categories which can give right information (other than calling all of them as 'stalled' projects).

(ii) Delays in land acquisition. With the Land Act of 2015 being withdrawn and an effective 'land pooling' policy put in place things have started improving in this regard. Some states have surplus land in the pooling arrangement (such as Andhra Pradesh).

(iii) Scarcity of fund due to longer gestation period. With the help of Infrastructure Investment Trusts, 5/25 Refinancing scheme, debt restructuring things improved but not much. Since late 2017-18, the Government is pursuing insolvency procedure (under the newly enforced Bankruptcy and Insolvency Act) and things look taking pace.

(iv) Weaknesses of the existing PPP models also took a heavy toll. Though it has been improved by the new model of it—hybrid annuity model (HAM). Though, the model was put in place for only road sector it was notified for other infra sectors also by late 2017.

(v) Slowdown in the economy kick-started by the global financial crisis of 2008 together with a state of 'policy paralysis' prevailing in the domestic economy since 2010 onwards. After the new Government took control the state of policy paralysis is no more there but there are several complex legacy factors which need to be addressed in an effective way.

(vi) A typical 'twin balance sheet crises' taking grip over the economy (declared so by the *Economic Survey*) by late 2016-17. Due to this while on one hand the public sector banks are unfit to promote lending (which have been the lead lenders to the sector) hit with high non-performing assets (NPAs) on the other hand big private corporates are not eligible to borrow (due to high losses) and invest in the economy.