CHAPTER

9

INDUSTRY & INFRASTRUCTURE

- Introduction
- Review of Industrial Policies upto 1986
- New Industirial Policy, 1991
- Disinvestment
- Investment Challenge
- New Steps to Boost Manufacturing
- New Steps to Boost Industry
- Make in India
- Indian Infrastructure
- Energy Pricing
- Dedicated Freight Corridor
- Restructuring The PPP
- Boosting Energy Sector
- Railways as Growth Engine
- State Discoms
- Important Issues
- Boosting Public Investment

*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.**

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

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 the industrial sector to be the 'prime moving force' (PMF) of the economy—the logical choice for a faster growth (a fully established idea at that time, all over the world). 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 April 8, 1948 this was not only the first industrial policy statement of India, but it 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.

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 'mixed economy' did fit such a wish (***Conference of State Industry Ministers, 1938***).

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

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, the *nationalisation* and second, the *joint sector*.
4. Industrial Policy Resolution, 1956 (30 October).
5. V. M. Dandekar, ***Forty Years After Independence*** in Bim
6. The statement we get in the ***Second Five Year Plan (1956–61),*** too.

regarded as the principal instrument for raising savings and growth in the economy.[7] The rapid 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.

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

7. Bimal Jalan, ***India's Economic Policy,*** Penguin Books, N. Delhi, 1992, p. 23.
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'*.

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 pointed out several shortcomings of the policy, but it 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]

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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,*** 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 the 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), Government of India, N. Delhi, 1969.

(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. 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 of foreign investment was given with the multinational corporations (MNCs) being allowed to set up their 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).

16. The FERA got executed on January 1, 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 by the MNCs. The MNCs invested via ***technology transfer route.*** Basically, this was an attempt to make up 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 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 the foreign direct investment in the reform era post-1991.

(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.

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

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 (Rosser & Rosser, ***Comparative Economics in A Transforming World,*** PHI & MIT Press, N. Delhi, 2004, pp. 469–75).

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 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 INDUSTIRIAL 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 GoI 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

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.
22. Vijay Joshi and I.M.D. Little, ***India's Economic Reforms, 1991–2001,*** OUP: Clarendon Press, London, 1996, p. 17.
23. ***Economic Survey, 1990–91 & 1991–92,*** GOI, N. Delhi.
24. Sach, Varshney and Bajpai, op.cit., p. 2.
25. ***'Economic Reforms: Two Years After and the Task Ahead',*** Discussion Paper, Department of Economic Affairs, GoI, N. Delhi, 1993, p. 6.
26. Ibid.
27. Bimal Jalan, ***India's Economic Crisis: The Way Ahead,*** OUP, Delhi, 1991, p. 2–12.
28. Sach, Varshney and Bajpai, op.cit., p. 2.

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 economic structure had to be induced with the help of another industrial policy. The new industrial policy, announced by the government on July 23, 1991 had initiated a bigger process of economic reforms in the country, seriously motivated towards the structural readjustment naturally obliged to 'fulfil' 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 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 the entry private sector 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

29. Rakesh Mohan, ***Industrial Policy and Controls*** in the Bimal Jalan edited, ***The Indian Economy: Problems & Prospects,*** op.cit., p. 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 (**India-2015**, Pub. Div., GoI, N. Delhi). Though the numbers are still six, all these six 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.

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 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 to 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

31. ***Economic Survey, 1994–95,*** GoI, N. Delhi.

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 S.E. Asian currency crisis when India had almost no shocks ***(Economic Survey, 1996–97,*** GoI, N. Delhi***).***

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.

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 criticised by the victims and the experts alike. In the early 1970s, the GoI 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 GoI—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

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.

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'** in the Bimal Jalan edited ***The Indian Economy: Problems & Prospects,*** 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.

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 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]

37. First of the series of such suggestions came from **Sach, Varshney and Bajpai** (eds.) ***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 Let's see what happens.

40. Pub. Div., ***India 1991,*** GoI, N. Delhi.

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.).

(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 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.

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:

(i) Token Disinvestment

Disinvestment started in India with a high political caution—in a symbolic way known as the ***'token' disinvestment.*** 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

42. Right since 1991 when disinvestment began, the total governments have been using the disinvestment proceeds to fulfil the fiscal deficits in every budget at least up to 2000–01. From 2000–01 to 2002–03 some of the proceeds went for some social sector works or labourer's security. After 2003 India has a National Investment Fund to which the proceeds of disinvestment automatically flow and is not supposed 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*** p. 62–63.

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 **Samuelson and Nordhaus** in ***Economics,*** 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.

sector. The other hot issue raised by the experts was related to the question of using the *proceeds* of disinvestment.

(ii) 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 ▪

The present disinvestment policy[47] was articulated by the UPA-II under its restructured Common Minimum Prgramme (CMP) in 2009 which is based on the ***main ideology*** that:

(i) Citizens have every right to own part of the shares of Public Sector Undertakings

(ii) Public Sector Undertakings are the wealth of the nation and this wealth should rest in the hands of the people, and

(iii) While pursuing disinvestment, the government has to retain majority shareholding, i.e., at least 51 per cent and management control of the PSUs.

The ***action plan*** for disinvestment in profit making government companies is:

(i) Already listed profitable PSUs (not meeting mandatory shareholding of 10 per cent) are to be made compliant by 'Offer for Sale' by government or by the PSUs through issue of fresh shares or a combination of both;

(ii) Unlisted PSUs with no accumulated losses and having earned net profit in three preceding consecutive years are to be listed;

45. ***Concept Classification of the PSEs,*** Government of India, 16.03.1999.

46. ***India 2003***, Pub. Div., GoI, N. Delhi.

47. Ministry of Finance, ***Disinvestment Policy Announcement,*** Deptt. of Disinvestment, GoI, N. Delhi, Nov. 5, 2009.

(iii) Follow-on public offers would be considered taking into consideration the needs for capital investment of PSUs, on a case-by-case basis, and government could simultaneously or independently offer a portion of its equity shareholding;

(iv) In all cases of disinvestment, the government would retain at least 51 per cent equity and the management control;

(v) All cases of disinvestment are to be decided on a case-by-case basis; and

(vi) The Department of Disinvestment is to identify PSUs in consultation with respective administrative ministries and submit proposal to government in cases requiring Offer for Sale of Government equity.

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: The current policy regarding the use of the disinvestment proceeds 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

48. Various issues of ***Economic Survey,*** GOI, N. Delhi.

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, Deptt. of Disinvestment, GoI, N. Delhi, ***Disinvestment Policy Announcement,*** Jan. 27, 2005.

returns without depleting the corpus, by selected Public Sector 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.

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 Government in RRBs, IIFCL, NABARD, Exim Bank;

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.

(e) Equity infusion in various metro projects;

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

(g) Investment in Indian Railways towards capital expenditure.

The allocations out of the NIF will be decided in the government budget. For the financial year 2013–14 the government approved allocations from the NIF towards spending on recapitalisation of public sector banks and capital expenditure of the Indian Railways.

INVESTMENT CHALLENGE

As per the recent informations released[52] by the GoI, the concerns and policies regarding the investment scenario in the industrial sector is as given below:

Gross Capital Formation (GCF): Investment and capacity additions are critical for sustained industrial growth data clearly indicate a moderation in the growth of GCF in industry—the rate of growth of GCF in four broad sectors of the industry comprising mining, manufacturing, electricity and construction, averaged 10.9 per cent during **2004–11**, almost the same as the rate of growth of GCF in the economy as a whole. The micro, small, and medium enterprises segment had ***the lowest*** medium-term growth of only 0.8 per cent during this period. The share of GCF in industry as a per cent of the overall GCF, after peaking to a level of **54.9** per cent in 2007–8, moderated to **48.3** per cent in 2010–11.

Investment Intentions: While GCF indicates actualisation of investment, investment intentions indicated in the *Industrial Entrepreneur Memorandums* (IEMs) filed are lead indicators of likely investment flow to industry and of entrepreneurs' perception. The investment intentions also provide the sectoral preferences of investors and shifts in these preferences over time. During 2001–10, overall investment indicated in the IEMs filed increased at an average annual rate of 38.7 per cent.

Foreign Direct Investment (FDI): FDI, being a *non-debt capital flow*, is a leading source of external financing, especially for the developing economies. It not only brings in capital and technical know-how but also increases the competitiveness of the economy. Overall it supplements domestic investment, much required for sustaining the high growth rate of the country. Since 2000, significant changes have been made in the FDI policy regime by the government to ensure that India becomes an increasingly attractive and investor-friendly destination.

The current phase of FDI policy is characterised by ***three broad entry options*** for foreign direct investors :

(i) In few sectors, FDI is not permitted (negative list);

(ii) in another small category of sectors, foreign investment is permitted only till a specified level of foreign equity participation; and

(iii) the third category, comprising all the other sectors, is where foreign investment up to 100 per cent of equity participation is allowed. The third category has two subsets:

  (a) one consisting of sectors where automatic approval is granted for FDI (often foreign equity participation less than 100 per cent) and

  (b) the other consisting of sectors where prior approval from the Foreign

52. ***Ministry of Finance,*** GoI, March 16, 2012, N. Delhi & the ***Economic Survey 2011-12,*** op.cit.

Investment Approval Board (FIAB) is required.

Cumulative amount of FDI inflows from April 2000 to December 2011 stood at US$ 240.06 billion, out of which FDI *equity inflows* amounted to US$ 157.97 billion. FDI inflows declined globally in 2009 and 2010. While India was able to largely insulate itself from the decline in global inflows in 2009–10, FDI flows moderated in 2010–11.

Services (financial and non-financial), telecom, construction, drugs & pharmaceuticals, metallurgical industries and power were the sectors that attracted maximum (around 84 per cent) FDI during 2011–12. Cabinet cleared 100 per cent FDI in single brand retail and 5 per cent FDI in multi-brand retail. The decision regarding multi-brand retail is suspended till the consensus is developed through consultation among various stakeholders.

NEW STEPS TO BOOST MANUFACTURING

The GoI has taken several specific initiatives to strengthen industry, particularly the manufacturing sector. The Twelfth Plan document lays down broad strategies for spurring industrial growth and recommends sector specific measures covering micro, small, medium and large industries in the formal as well as informal sectors. Some of the major initiatives that can change the manufacturing landscape of India are as follows: [53]

NATIONAL MANUFACTURING POLICY (NMP)

It was approved by the government in October 2011. The major objectives of the policy are:

(i) Enhancing the share of manufacturing in gross domestic product (GDP) to 25 per cent and creating an additional 100 million additional jobs over a decade or so.

(ii) providing special focus to industries that are employment intensive, those producing capital goods, those having strategic significance, small and medium enterprises, and public sector enterprises besides industries where India enjoys a competitive advantage.

(iii) Promotion of clusters and aggregation, especially through the creation of National Investment and Manufacturing Zones (NIMZs).

(iv) Out of twelve NIMZs so far announced, eight are along the DMIC. Besides, four other NIMZs have been given in-principle approval —

(a) Nagpur in Maharashtra,

(b) Tumkur in Karnataka,

(c) Chittoor district in Andhra Pradesh, and

(d) Medak district in Andhra Pradesh.

DMIC PROJECT

The industrial development initiatives under DMIC (Delhi-Mumbai Industrial Corridor)[54] project presently cover *eight* industrial cities that are proposed to be developed along the railway corridor. The master planning for the investment regions and industrial areas taken up initially to be developed as *new cities* in Gujarat, Madhya Pradesh, Haryana, Rajasthan and Maharashtra have been completed and master planning in Uttar Pradesh has started. The state governments have initiated the process of obtaining land for the new industrial regions/areas as well as for the early bird projects. For five industrial cities EIA (Environmental Impact Assessment) studies have been initiated.

53. ***Economic Survey 2012-13,*** *op.cit., p. 203.*

54. *For a detailed discussion see* ***Chapter - 21****, p.21.12.*

FDI POLICY

Following the policy reform process, the FDI policy is being progressively liberalised on an ongoing basis in order to allow FDI in more industries under the automatic route. Some recent changes in FDI policy, besides consolidation of the policy into a single document include FDI in multi-brand retail trading up to 51 per cent subject to specified conditions; increasing FDI limit to 100 per cent in single-brand retail trading; FDI up to 49 percent in civil aviation and power exchanges; FDI up to 49 percent in the broadcasting sector under the automatic route and FDI above 49 percent and up to 74 percent under the government route both for teleports and mobile TV.

THE E-BIZ PROJECT

The government has announced the setting up of ***Invest India***—a joint-venture company between the Department of Industrial Policy and Promotion and FICCI, as a *not-for-profit*, single window facilitator, for prospective overseas investors and to act as a structured mechanism to attract investment. In addition, the government has initiated implementation of the e-Biz Project, a mission mode project under the NeGP (National e-Governance Plan) for promoting an *online single window* at the national level for business users. The objectives of setting up of the **e-Biz** portal are to provide a number of services to business users, covering the entire life cycle of their operation. The project aims at enhancing India's business competitiveness through a service oriented, event-driven **G2B** (Government to Business) interaction.

NEW STEPS TO BOOST INDUSTRY

The new government at the Centre has been in repair-damage mode for instilling confidence among the business community and boosting industrial growth. The emphasis of the government is on rapidly improving 'ease of doing business' and launching fresh initiatives like *Make in India* and *Digital India*, creating a National Industrial Corridors Authority (NICA), streamlining environment and forest clearances and labour reforms. Some of the **major steps**[55] taken by the government in this regard are as given below:

(i) **Ease of Doing Business:** India's ranking in the *'Doing Business-2015'* (a World Bank annual report) is very low, at 142nd. To improve India's ranking, reforms are being undertaken in areas such as starting a business, dealing with construction permits, registration of property, power supply, paying taxes, enforcing contracts, and resolving insolvency. The *important recent measures* taken in this regard are:

(a) liberalisation of licensing and deregulation of a large number of defence products,

(b) extending the validity of licencses to provide enough time to licencees to procure land and obtain the necessary clearances/approvals from authorities,

(c) adoption of a checklist with specific time-lines for processing all applications filed by foreign investors in cases relating to retail and the export-oriented unit (EoU),

(d) automation of processes for registration with the Employees Provident Fund Organization and Employees State Insurance Corporation,

(e) processing of environment and forest clearances online,

55. ***Economic Survey 2014–15***, MoF, GoI, N. Delhi, Vol. 2, p.91.

(f) reducing the number of documents for exports,

(g) adoption of best practices by states in granting clearances and ensuring compliance through peer evaluation, self-certification, etc.

(ii) Make in India: This programme is aimed to facilitate investment, foster innovation, enhance skill development, protect intellectual property, and build best-in-class manufacturing infrastructure –

(a) Information on *twenty-five* sectors has been provided on a web portal along with details of FDI policy, National Manufacturing Policy, intellectual property rights, and the Delhi-Mumbai Industrial Corridor and other National Industrial Corridors.

(b) An Investor Facilitation Cell has been created in 'Invest India' to guide, assist, and handhold investors.

(iii) E-Biz Project: Under this, sveral new steps have been taken by now –

(a) Government to Business (G2B) portal is being set up to serve as a one-stop shop for delivery of services to the investors and address the needs of the business and industry from inception through the entire life cycle of the business.

(b) The process of applying for industrial licence (IL) and industrial entrepreneur memorandum (IEM) has been made online and this service is now available to entrepreneur on 24x7 basis at the E-Biz website.

(c) Other services of the central government are also being integrated.

(iv) Skill Development: A new Ministry of Skill Development and Entrepreneurship has been set up to promote skill and entrepreneurial activities. New steps taken are:

(a) Common norms for skill training across central ministries/departments are being evolved.

(b) *Thirty-one* industry/employer-led Sector Skill Councils (SSCs) are now operational and these have been aligned with the *twenty-five* sectors of 'Make in India'.

(c) To create a common standard for skills training and certification in the country efforts are on to align the National Council for Vocational Training (NCVT), school boards, and the University Grants Commission (UGC).

(v) Streamlining Environment and Forest Clearances: New steps in this regard are–

(a) A process for online submission of applications for environment, coastal regulation zone (CRZ), and forest clearances has been started.

(b) The decision-making process has been decentralised by strengthening federalism.

(c) To ensure industrial and education growth, the requirement of environment clearance has been done away with for projects for construction of industrial sheds which house plant and machinery, educational institutions and hostels.

(vi) Labour-sector Reforms: New steps regarding labour reforms are:

(a) 'Shram Suvidha' portal has been launched for online registration of units, filing of self-certified, simplified, single online return by units, introduction of a transparent labour inspection scheme via

computerized system as per risk-based criteria, uploading of inspection reports within seventy-two hours and timely redressal of grievances.

(b) Universal Account Number (UAN) has been launched facilitating portable, hassle-free, and universally accessible Provident Fund accounts for employees.

(c) The Apprentices Act, 1961 has been amended so as to make it flexible and attractive to youth and industry.

(d) 'Apprentice Protsahan Yojana' has been launched to support micro small and medium enterprises (MSMEs) in the manufacturing sector in engaging apprentices.

MAKE IN INDIA

'Make in India' campaign is aimed at the revival of the manufacturing sector. The objective is laudable but it faces huge challenges, too. Indian manufacturing has been stagnant at low levels, especially when compared with the East Asian successes.[56]

Out of the two sectors, *services* and *manufacturing*, which has got the potential to play the transformational role in case of India, the services sector, contributing over 60 per cent to the GDP in the last decade, makes this even more contemporary debate. Studies and the growth theory suggest that ***transformational sectors***[57] should be assessed in light of their *underlying characteristics* and not just in terms of the traditional manufacturing-services distinction. There are **five** such important characteristics in the sector:

(i) High *levels* of productivity (for income increase).

(ii) Rapid rate of *growth* of productivity (on both external and domestic fronts—interanational and domestic convergence, respectively).

(iii) Ability to *attract resources* (to spread the benefits to the rest of the economy).

(iv) *Alignment* with country's resources (human resources remain typically unskilled).

(v) *Tradability* of the sector (it determines whether the sector can expand without running into demand constraints).

As per the *Economic Survey 2014–15,* the **comparative advantage** of India in *manufacturing* and *sevices* can be seen in the following way:

(i) The formal segment (registered) of manufacturing in India has some traits of 'transformational sector' (such as high productivity and rapid growth in productivity). But non-formal segment can not be such a sector. Thus, 'formalisation' should be encouraged.

(ii) Some sub-sectors in services (such as telecommunications and finance) are highly productive and dynamic (like formal manufacturing sector). But these sectors have not been able to attract large amounts of *unskilled labour*, limiting the

56. The recent upward revisions to the level of manufacturing share in GDP are to some extent statistical rather than real. Moreover, even the revised data do not change the pattern of trend decline in this share. What has happened is the statistical opposite of the technological change which **Jagdish Bhagwati** [*"Splintering and Disembodiment of Services and Developing Nations",* 1984, The World Economy, 7(2)] referred to as 'splintering' services from goods.

57. The sector which can play the lead role in bringing the largest number of benefits to the economy is known as the **'transformational sector'**. These benefits could be of various kinds – employment opprtunities, growth and income enhancing propects, trdae promotion, poverty alleviation synergy, transition of labour force from one to another sector (in case of India from agriculture to industry or services, etc.

benefits of their dynamism (this unlike the formal manufacturing). These services are skill-intensive sectors while India has more unskilled labour. Construction is one service sector which is *unskilled labour-intensive*, but it is fairly dynamic. However, construction is not a tradable sector, which limits its potential to be a transformational sector.

(iii) One policy conclusion is that efforts should be made to improve the conditions for labour-intensive manufacturing with rapid skill upgradation. This is need of the hour as skill-intensive sectors are dynamic sectors in India and sustaining their dynamism will require skilled labour—otherwise even these sectors could become uncompetitive. It means, to make the 'Make in India' happen, India will first need to make 'Skill India' happen.

India needs to use the right tools (means) to make the 'Make in India' happen. As per the *Survey,* these 'means' are as given below (in decreasing order of their effectiveness and increasing order of controversy):

(i) To attract enough investment from the private sector (domestic as well as foreign) improvement in *business environment* is needed. For this, India needs to take the following steps:

(a) Regulatory simplification,

(b) Less onerous tax structure,

(c) Building infrastructure,

(d) Reforming labour laws, and

(e) Enabling connectivity.

The above-given measures, aimed at improving the 'ease of doing business' would reduce the cost of doing business, increase profitability, and hence encourage the private sector to increase investments. These measures would not just benefit manufacturing, but all sectors of the economy.

(ii) The next category of means could be loosely called—'industrial policy'. Under this, the major required steps, for the promotion of manufacturing, are—

(a) Providing subsidies,

(b) Lowering the cost of capital, and

(c) Creating special economic zones (SEZs)

The above-given measures should be taken for all manufacturing industries to have the right benifit coming to the economy.

(iii) The next category of tools are related to the is the 'tradability' factor of the manufacturing sector. The normal tools applied by India might be called 'protectionist'—

(a) Higher custom on imported manufactured goods,

(b) Imposing the compulsions of local procurement on the foreign companies,

(c) Providing export-related incentives to domestic manufacturing.

But such policy actions go against India's external obligations under the WTO and also undermine its credentials of openness.

INDIAN SCENARIO & THE RIGHT WAY

India has been depending more on the last two of the above-given 'means', which have been counterproductive to the manufacturing sector in general—resulting into an environment of *negative protection* to it. Together with improving the 'business environment' (which is difficult and a long-term process), India needs to impart a competitive edge to its manufacturing industry by tweaking its tax regime without compromising

on its external obligations. The policy steps in this regard should be—

(a) Eliminating the exemptions in the countervailing duty (CVD) and special additional duties (SAD) on imports.

Tax theory accepts neutrality of incentives between domestic production and imports. This requires that all domestic indirect taxes also be levied on imports. So, if a country levies a sales tax, value added tax (VAT), or excise or GST on domestic sales/production, it should also be levied on imports. India's current indirect tax system, however, acts sometimes to favour foreign production over domestically produced goods.

(b) Enacting a well-designed GST preferably with one, internationally competitive rate and with narrowly defined exemptions.

In one stroke the penalties on domestic manufacturing would be eliminated because the GST (central and state) would automatically be levied on imports to ensure neutrality of incentives. In effect, India would be promoting domestic manufacturing without becoming protectionist and without violating any of its international trade obligations under the World Trade Organization (WTO) or under Free Trade Agreements (FTAs).

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:

58. ***Oxford Dictionary of Business***, N. Delhi, 2004.
59. ***India Infrastructure Report, 1994.*** GOI., New Delhi.

(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] 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

60. One of such major suggestion was forwarded by ***Jeffrey D. Sach, Ashutosh Varshney*** and ***Nirupam Bajpai*** (Eds), ***India in the Era of Economic Reforms,*** OUP, N. Delhi, 1999, p. 79.

61. ***Economic Survey, 2006–07,*** GoI, N. Delhi.

62. ***India Infrastructure Report 2007,*** GoI, N. Delhi.

63. Planning Commission, ***Mid Term Appraisal of the 11th Pan,*** GoI, N. Delhi, released October 2011.

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

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.

SECTORAL SITUATION & INITIATIVES[66]

Power Deficit: The deficit in power supply in terms of peak availability and total energy availability declined during the Eleventh Five Year Plan. While the energy deficit decreased from 9.6 per cent in the terminal year of the Tenth Plan (2006–07) to 7.9 per cent during April–December 2011, peak deficit declined from 13.8 per cent in 2006–07 to 10.6 per cent during the current financial year (up to December 2011). *Capacity addition* during the Eleventh Plan is, therefore, expected to be about 50,000 to 52,000 MW.

Ultra Mega Power Projects (UMPPs) Initiative for development of coal-based super critical UMPPs, each of about 4,000 MW capacity, under Case II bidding route. *National Grid* helps to even out supply-demand mismatches. The existing inter-regional transmission capacity of 23,800 MW connects the northern, western, eastern, and north-eastern regions in a synchronous mode operating at the same frequency and the southern region asynchronously operating in the same mode. This has enabled inter-regional energy exchanges of about 39,275 million units (MUs) during April–November 2011, thus contributing to better utilisation of generation capacity and an improved power supply position. Proposals are under way for synchronous integration of the southern region with other regions.

Competition in the electricity sector has been augmented by having an ***open access*** system allowing a buyer to choose his supplier and a seller to choose his buyer. Open access at inter-state transmission level is now fully functional. The facilitative framework created by the Central Electricity Regulatory Commission (CERC) in this regard has provided the desired regulatory certainty for developers in terms of market access, and also payment security against default. *Central Transmission Utility (CTU)* which is responsible for granting connectivity, medium-term open access, and long-term access, has received 141 applications for connectivity involving generation capacity of 1,52,850 MW.

Trading of Electricity is enabled through electricity traders and power exchanges. Power trading helps generation resource optimisation by facilitating trade and flow of power across the country with varied geography, climatic conditions, and natural resource endowments. It has helped in sale of surplus power available with distributing utilities and captive power plants on one hand and purchase of power by deficit utilities to meet sudden surges in demand. Short-term markets also provide generators with an alternative

65. Planning Commission, ***Approach to the 12th Plan,*** GoI, N. Delhi.

66. Analyses on the sectoral situations in the infrastructure sector of India and the new initiatives taken by the GoI in recent times are based on the governments documents – ***Economic Survey 2011-12***, pp. 251-276; ***Approach Paper to the 12th Plan, Mid Term Appraisal of the 11th Plan;*** various ***Papers/Documents*** published by the ***Planning Commission;*** and different ***Releases*** by the concerned ***Central Ministries of the GoI.***

to sell power other than through long-term power purchase agreements (PPAs). The CERC grants inter-state trading licences.

National Electricity Fund (Interest Subsidy Scheme) has been approved to provide interest subsidy (Rs. 8,466 crore) on loan to the state power utilities, both in the public and private sectors, to improve the **distribution network**. The preconditions for eligibility to avail of interest subsidy are linked to the reforms in the power sector and the amount of interest subsidy is linked to the progress achieved in reforms.

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.

With the initiative of the Government of India and of the states, the ***Accelerated Power Development & Reform Programme*** (APDRP) was launched in 2001, for the strengthening of sub–transmission and distribution network and reduction in AT&C losses. The main objective of the programme was to bring AT&C losses below 15 per cent in five years in urban and in high-density areas, the loss as a percentage of turnover was reduced from 33 per cent in 2000–01 to 16.60 per cent in 2005–06.

The APDRP programme has been *restructured.* The restructured APDRP (R-APDRP) was launched in July 2008 as a central sector scheme for the Eleventh Plan (in order that reliable and verifiable baseline data of revenue and enegry in APDRP Project areas is attained over an IT platform and that AT& C loss reduction is achieved on a sustained basis).

In December 2014, the APDRP was subsumed into the new launched Integrated Power Development Scheme (IPDS) with some new features.

Development of Multi-functional Complex (MFC): A new concept of development of MFCs with *budget hotels* was introduced in the *Rail Budget 2009–10,* so that important facilities may be available to rail users in a separate complex in the vicinity of the circulating area on station—a total of 198 stations have been identified by now.

In a major move to give further impetus to ***railways' modernisation*** plans, an Expert Group has been constituted under the Chairmanship of Shri Sam Pitroda to recommend ways and means of meeting the challenges of economic growth, the aspirations of the common man, the needs of changing technology, and the expanding market, while at the same time ensuring adequate focus on

addressing the social and strategic requirements of the country consistent with Indian Railways' national aspirations. The terms of reference of the group involve outlining strategies for modernisation of railways with focus on track, signalling, rolling stock, stations and terminals upgradation; using ICT for improving efficiency and safety; augmenting existing capacities of railways through indigenous development; reviewing projects; and addressing PPP issues. The Expert Group is expected to submit its report by March 2012.

In order ***to attract private capital*** for accelerated construction of fixed rail infrastructure, GoI has formulated PPP investment models. A comprehensive draft policy is under consideration which would replace the existing Railways Infrastructure for Industry Initiative (**R3i**) and Railways Policy for Connectivity to Coal and Iron Ore Mines (**R2CI**) policies for private investments in rail connectivity projects.

National Highways Development Project (NHDP): About 22 per cent of the total length of National Highways (NHs) is single lane/ intermediate lane, about 53 per cent is two lane standard, and the balance 25 per cent is four lane standard or more.

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$ 149.78 million from the ADB for the 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.

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).

The Eleventh Plan had envisaged accelerated efforts to bring the NH network up to a ***minimum two-lane*** standard by the end of the **Twelfth Plan** and for removing existing deficiencies. In order to make a visible impact, the work would be taken up for upgradation on a corridor concept. These corridors would include strengthening (in adjoining reaches) in addition to widening to two-lane/two-lane with paved shoulder standards in order to have better facility over long continuous stretches.

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), around 96 per cent, 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.

Urban Infrastructure: Jawaharlal Nehru National Urban Renewal Mission (JNNURM) has been launched by the Ministry of Urban Development for a seven-year period (i.e., up to March 2012) to encourage cities to initiate steps to bring about improvements in a phased manner in existing civic service levels. The components under the sub-mission Urban Infrastructure and Governance (UIG) include urban renewal, water supply (including desalination plants), sanitation, sewerage and solid waste management, urban transport, development of heritage areas, and preservation of water bodies.

The UIDSSMT *(Urban Infrastructure Development Scheme for Small and Medium Towns)* is a ***sub-component*** of the JNNURM for development of infrastructure facilities in all towns and cities other than the 65 mission cities covered under UIG (Urban Infrastructure and

Governance) sub-mission of the JNNURM. For obtaining assistance under the UIDSSMT, states and urban local bodies (ULBs) need to sign MoAs committing to implementation of the reforms.

Under the pilot scheme, *Urban Infrastructure Development in Satellite Towns around Seven Mega-Cities,* launched in 2011–12 to contribute towards amelioration of basic services in these towns. For the north-eastern region, the *North Eastern Region Urban Development Programme* was launched in November 2009 with Asian Development Bank (ADB) assistance. The project aims to assist the states of Tripura, Mizoram, Sikkim, Meghalaya, and Nagaland to address challenges of urban development in their capital cities.

Urban Transport is one of the key elements of urban infrastructure. As compared to private modes of transport, public transport is energy efficient and less polluting. The public transport system helps improve urban-rural linkages and access of rural/semi-urban population in the periphery to city centres for the purposes of work without proliferation of slums within and around cities. National Urban Transport Policy (NUTP), 2006 **aims** to ensure accessible, safe, affordable, quick, comfortable, reliable, and sustainable mobility for all—under which several projects of 'bus rapid transit system' (BRTSs) and 'Metro Rail Projects' have been sanctioned by May 2012.

Financing Infrastructure: Net bank credit to infrastructure had a healthy growth of 48.4 per cent per annum during 2006–11 but it turned negative 2011–12 and was around 61 per cent of 2010–11—power and telecom sectors saw significant reduction. FDI inflows registered 23.6 per cent growth in 2011–12 with power (43.6 per cent), non-conventional energy (338 per cent) and telecommunications (499 per cent) the preferred sectors for foreign investors—the sectors, however, failed to share the buoyancy in FDI inflows.

ENERGY PRICING

The economic role of rational energy pricing can hardly be under-estimated. Rational energy prices provide the right signals to both the producers and consumers, and lead to a demand-supply match, providing incentives for reducing consumption on the one hand and stimulating production on the other. Aligning domestic energy prices with the global prices, especially when large imports are involved, may be an ideal option as misalignment could pose both micro and macroeconomic problems.

At the microeconomic level, underpricing of energy to the consumer not only reduces the incentive for being energy efficient, it also creates fiscal imbalances. Leakages and inappropriate use may be the other implications. Underpricing to the producer reduces both his incentive and ability to invest in the sector and increases reliance on imports. Over the years, India's energy prices have become misaligned and are now much lower than global prices for many products. The extent of misalignment is substantial, leading to *large untargeted subsidies*. Several initiatives have been taken by the GoI for rationalising the energy prices in different sectors—

(i) The Integrated Energy Policy has outlined the broad contours of the pricing system for coal. The *pricing of coal* is done now on gross calorific value (GCV) basis with effect from 31, January 2012, replacing the earlier system of pricing on the basis of useful heat value (UHV), which takes into account the heat trapped in ash content also, besides the heat value of carbon content. The revision in the GCV is likely to increase the prices of domestic coal to some extent, but this is a desirable adjustment because domestic thermal coal, adjusted for quality differences, continues to be underpriced.

(ii) In case of petroleum products pricing, the government dismantled the Administered Pricing Mechanism in 2002. This decision, however, was not fully implemented and domestic pass through of global price increases remained low for petrol, diesel, kerosene and LPG—in June 2010, the government announced that the *price of petrol was fully deregulated* and the oil companies were free to fix it periodically.

(iii) In *January 2013*, the government announced the new roadmap providing for a gradual price increase for reducing *diesel under-recoveries*.

(iv) Admissibility of subsidised number of liquefied petroleum gas (LPG) cylinders and prices of LPG have also recently been revised. Pricing of gas is presently done under the New Exploration Licensing Policy (NELP). The government provides the operator freedom to sell the gas produced from the NELP blocks at a market-determined price, subject to the approval of pricing formula. The government is reviewing pricing under the PSC (price sharing contract) to clarify the extent to which producers will have the freedom to market the gas.

DEDICATED FREIGHT CORRIDOR

The Eastern and Western Dedicated Freight Corridors (DFC) are a mega-rail transport project being undertaken to increase transportation capacity, reduce unit costs of transportation, and improve service quality:

(i) The Eastern DFC (1,839 route kilometres [RKM]) extends from Dankuni near Kolkata to Ludhiana in Punjab, while the Western DFC (1,499 RKM) extends from the Jawahar Lal Nehru Port (JNPT) in Mumbai to Dadri /Rewari near Delhi.

(ii) A special purpose vehicle, the *Dedicated Freight Corridor Corporation of India Limited* has been set up to implement the project. Out of 10,703 ha of land to be acquired for the project, 7,768 ha (73 per cent) has already been awarded under the Railway Amendment Act (RAA) 2008.

(iii) The Eastern and Western DFC projects are being *funded* through a mix of bilateral/multilateral loans, gross budgetary support (GBS), and PPP. The Western DFC is being funded by the Japan International Cooperation Agency (JICA) up to 77 per cent of the total cost.

(iv) The Ludhiana to Mughalsarai section (1,183 km) of the Eastern DFC is being funded by the World Bank up to 66 per cent of the project cost.

(v) The Mughalsarai-Sonnagar sector (122 km) will be funded by Indian Railways' own resources. Civil construction work of this sector is in progress.

(vi) The Dankuni-Sonnagar section (534 km) of the Eastern DFC to be funded through PPP mode.

(vii) After commissioning of the Eastern and Western DFCs, it is planned to upgrade the speed of passenger trains to 160–200 kmph on the existing routes. A feasibility study for upgradation of speed of passenger trains to 160–200 kmph on the existing Delhi–Mumbai route has been undertaken with co-operation from the Government of Japan in 2012–13.

Apart from the Eastern and Western DFCs, a feasibility study has also been undertaken on four ***future*** freight corridors, viz., East–West Corridor (Kolkata–Mumbai), North–South Corridor (Delhi–Chennai), East Coast Corridor (Kharagpur–Vijayawada) and Southern Corridor (Goa–Chennai). A pre-feasibility study of the

Chennai–Bangalore Freight Corridor is also being proposed.

RESTRUCTURING THE PPP

The infrastructure scenario in India today is not encouraging. Many projects are financially stressed, accounting for almost a third of stressed assets in banks. New projects cannot attract sponsors, as in recent NHAI bids, and banks are unwilling to lend. Given its riskiness, pension and insurance funds have sensibly limited their exposure to these projects. This current state of the public private partnership (PPP) model is due to poorly designed frameworks, which need restructuring[67]. The *Economic Survey 2014–15* has highlighted the 'flaws' in it and also suggested the right 'remedies' for the same.

FLAWS IN EXISTING DESIGN

There are several *in-built flaws* in India's design of the PPPs in infrastructure. They can be seen as given below:

(i) Existing contracts focus more on fiscal benefits than on efficient service provision. For example, in port and airport concessions, the bidder offering the highest share of gross revenue collected to the government is selected. Thus, if this share is 33 per cent (higher in many actual contracts), the user pays 50 per cent more than what is required, since the concessionaire is able to provide service even though it gets only Rs. 1 for every Rs. 1.50 charged.

(ii) They neglect principles allocating risk to the entity best able to manage it. Instead, unmanageable risks, e.g., traffic risk in highways, even though largely unaffected by their actions, are transferred to concessionaires. This is also true for railways and in part, for ports (though inter-terminal competition is possible) and airports.

(iii) The default revenue stream is directly collected user charges. Where this is deemed insufficient, bidders can ask for a viability grant, typically disbursed during construction. This structure leaves the government with no leverage in the case of non-performance, with few contractual remedies short of termination.

Fiscal reporting practices also affect this choice in revenue stream. Current accounting rules treat future committed expenditure as a contingent liability. However, foregone future revenue is not accounted for.

(iv) There are no ex-ante structures for renegotiation. If a bureaucrat restructures a project, there are no rewards; instead it may lead to investigation for graft. Failed projects lead neither to penalties nor investigation. With such asymmetric incentives, bureaucrats naturally avoid renegotiation.

(v) Contracts are over-dependent on market wisdom, e.g., bidders in ultra-mega power projects (UMPP) could index tariff bids to both fuel prices and exchange rates, but almost all chose very limited indexation. When fuel prices rose and the rupee fell, these bids became unviable. To enforce market discipline and penalise reckless bidding, these projects should have been allowed to fail.

Given the several flaws in the model of the PPPs, India has seen significant investment in them from the privates sector. The Survey indicates the **needed modifications** in the following way:

67. **Partha Mukhopadhyay,** Center for Policy Research, New Delhi, 2014, Vol. 1, pp. 75-76.

(a) It is better to continue combining construction and maintenance responsibilities to incentivise building quality. In many projects, especially highways, maintenance costs depend significantly on construction quality. If a single entity is responsible for both construction and maintenance, it takes lifecycle costs into account. Separatingthese responsibilities provide an incentive to increase profits by cutting corners during construction. Suggestions to let the public sector build assets and have the private sector maintain and operate them ignore this linkage.

(b) Risk should only be transferred to those who can manage it. In a highway or a railway project, it is not sensible to transfer usage risk since it is outside the control of the operator. But, it can be done in telecom projects and for individual port terminals that compete with each other, where demand can respond to tariff and quality.

(c) Financing structures should be able to attract pension and insurance funds, which are a natural funding source for long-term infrastructure projects. What does this mean for key sectors? First, rather than prescribe model concession agreements, states should be allowed to experiment.For example, in ports, terminals can be bid on the basis of an annual fee, with full tariff flexibility, subject to competition oversight. For electricity generation, bids can be two-part, with a variable charge based on normative efficiency, or alternatively, determined by regulators and a capacity charge.

(d) Another option, without that drawback, is the Least Present Value of Revenue (LPVR)[68] contract, where the bid is the lowest present value (discounted at a pre-announced rate) of total gross revenue received by the concessionaire. The concession duration is variable and continues until the bid present value amount is received.

A key advantage of this contract is that it converts usage risk to risk of contract duration, which is more manageable for financial institutions. Since the bid is on gross revenue, it also selects bidders who can execute at low cost and demand relatively lower margins and by limiting the scope for renegotiation to the remaining uncollected value of the LPVR bid, it discourages opportunistic bidding. Further, since the present value is protected, this structure is suitable for pension and insurance funds.

RESTRUCTURING THE EXISTING CONTRACTS

To revive private interest and bank lending existing PPP contracts need to restructuring, with burden sharing among different stakeholders. The *finer points* need to be taken into account—

(i) Lenders/banks may have extended credit without necessary due diligence, assuming that projects were implicitly guaranteed. Without burden sharing, this behaviour will be reinforced.

(ii) Many bidders may have assumed that they could renegotiate in the event of negative shocks.

68. (i) E. Engel, R. Fischer and A. Galetovic, **'Highway Franchising: Pitfalls and Opportunities',** *The American Economic Review, 87(2),* 1997, pp 68–72. (ii) Engel E. Engel, R. Fischer and A. Galetovic, **'Least-Present-Value-of-Revenue Auctions and Highway Franchising',** *Journal of Political Economy, 109(5),* 2001, pp 993–1020. Vol. 1, pp. 75-76.

(iii) Thus, there was potentially adverse selection of firms who felt they had the capacity to renegotiate; rather than firms better at executing and operating the project.

(iv) This may have limited participation by foreign firms.

(v) In the absence of burden sharing, such adverse selection would be supported. Thus, the guiding principle should be to restructure contracts based on the project's revenues, differentiating between temporary illiquidity and insolvency.

The private sector remains key to rapid delivery of high quality infrastructure. Restructured PPP frameworks will revive their interest in infrastructure and bring in funding from pension and insurance funds. To make this happen the right policy steps could be—

(a) All stressed highway projects could be switched to electronic tolling.

(b) Revenues can go, as now, into an escrow account, but with a revised order of priority.

(c) Long-term bullet bonds, at the risk-free government rate, can be issued to the extent of the debt in the project. After operations and maintenance, interest payments on these bonds, which may also be guaranteed by the Union government, will be first in order of priority.

(d) Lenders can opt to switch existing debt to these bonds. Allocations for repayment of their principal will have second priority and existing debt that has not been switched, the next priority.

(e) Equity can be the residual claimant. If the project makes money over its lifetime, equity holders will earn a return, though some may exit now, at a discount.

BOOSTING ENERGY SECTOR

The GoI has taken several steps in recent times to boost the the enrgy sector, particularlity the crude oil and natural gas sectors. Major steps are as given below as per the *Economic Survey 2014–15:*

(i) New Gas Pricing Formula: Approved in October 2014 through which the increase in price of domestically produced natural gas strikes a fine balance between the expectations of investors and interests of consumers.

(ii) Reforms in Production-Sharing Contracts to push Investment in Exploration: It has ironed out a number of rigidities in production-sharing contracts to instil confidence among investors and ensure that work, which was stuck in a number of blocks, takes off in right earnest and without further delay.

(iii) Reassessment of Hydrocarbon Potential: An elaborate plan has been rolled out to reassess hydrocarbon resources in India's sedimentary basins, which will provide greater clarity to future investors on the prospects of the basins.

(iv) Project for Survey of Un-appraised Sedimentary Basins of India: A project has been undertaken to appraise about 1.5 million square kilometre area in twenty-four sedimentary basins where scanty geo-scientific data is available. Data generated under the project shall be stored, maintained, validated at the National Data Repository (NDR) which is being set up in the Directorate General of Hydrocarbons (DGH).

(v) Data Acquisition through Non Exclusive Multi-Client Model: A policy for acquisition of geo-scientific data through

a non-exclusive multi-client model is being implemented. This model replaces the earlier fiscal term of profit sharing after cost recovery with the payment of a one-time project fee.

(vi) *Level Playing Field for Gas operations in the North East Region:* For incentivizing exploration and production in the North East region, a 40 per cent subsidy on gas operations has been extended to private companies operating in the region.

(vii) *Gas Grid Infrastructure:* In addition to the existing 15,000 km gas pipeline network, another 15,000 km has been planned for completion of the gas grid.

RAILWAYS AS GROWTH ENGINE

The GoI has taken a number of policy steps to boost the railways to make emerge as a strong engine of growth promotion. The recent steps taken in this regard, as per the *Economic Survey 2014–15,* are as given below:

(i) *Completion of Udhampur-Katra broad gauge line:* The Udhampur-Katra broad gauge line in Jammu and Kashmir, bringing the state closer to the rest of the nation, is an engineering marvel by IR. Four train services up to Katra have commenced from July 2014.

(ii) *Meghalaya gets rail connectivity:* Meghalaya got its first rail connectivity with the completion of the new Dubhnoi-Mendipathar line in August 2014. A new route from Mendipathar in Meghalaya to Guwahati in Assam, got connected by rail in November 2014.

(iii) *High speed Bullet Trains:* Steps are under way for introduction of high speed bullet trains in the country on the Mumbai-Ahmedabad corridor, as part of the Diamond Quadrilateral network of high speed rail, connecting major metros and growth centres of the country.

(iv) *Next Generation e-ticketing (NgeT) application:* The newly launched NgeT, developed by the Central Railway Information Centre (CRIS) has enabled sharp increase in online ticket booking capacity, number of enquiries per minute, as well as the capacity to handle concurrent sessions.

(v) *Premium special trains:* To make sufficient berths available to passengers, and to earn additional revenue, as compared to trains operating on normal fares, IR has introduced premium special trains under the dynamic fare system.

(vi) *Harnessing solar energy:* The Rail Coach Factory, Rae Bareli is presently functioning completely on solar power. A 30 kw solar plant has been commissioned, on the roof top of Rail Bhawan at New Delhi and provision of solar plants at other Railway buildings is being expedited, preferably under the public-private partnership (PPP) model.

(vii) *Wi-Fi Broadband service at select railway stations:* Bengaluru and New Delhi Railway Stations have been provided Wi-Fi broadband facilities.

(viii) *e-catering service in trains:* Indian Railways Catering and Tourism Corporation, has been entrusted the task of implementation of e-catering service in trains.

(ix) *Cooperation with China:* An MoU and an Action Plan have been signed between the Government of India and People's Republic of China, for enhancing technical cooperation in the railway sector. The potential cooperation areas in the MoU include, i) training in heavy haul freight transportation, ii) raising speed of

trains on existing routes, iii) station re-development, iv) high speed rail, and v) setting up of a railway university.

(x) *Early completion of coal transportation projects:* Three rail connectivity projects for coal movement in Jharkhand, Odisha, and Chhattisgarh have been put on fast track.

STATE DISCOMS

The government in September 2012 approved the scheme for Financial Restructuring of State Distribution Companies (Discoms). The salient features of the scheme are as follows:

(i) 50 per cent of the outstanding short-term liabilities up to March 31, 2012 to be taken over by state governments. This shall be first converted into bonds to be issued by Discoms to participating lenders, duly backed by state government guarantee.

(ii) Takeover of liability by state governments from Discoms in the next two to five years by way of special securities and repayment and interest payment to be done by state governments till the date of takeover.

(iii) Restructuring the balance 50 per cent short-term loan by rescheduling loans and providing moratorium on principal.

(iv) The restructuring/reschedulement of loan is to be accompanied by concrete and measurable action by the Discoms/ states to improve their operational performance.

(v) The GoI will provide incentive by way of grant *equal to the value* of the additional energy saved by way of accelerated AT&C loss reduction beyond the loss trajectory specified under the RAPDRP and capital reimbursement support of 25 per cent of principal repayment by the state governments on the liability taken over by the state governments under the scheme.

IMPORTANT ISSUES

Infrastructural bottlenecks have been among the most important areas of concern for the government. The 'big push' which the government wanted to give to the sector has not been able to bring desired results due to various reasons. The emerging issues and concerns outlined by the *Economic Survey 2012–13* and other government documents for the sector are as given below:

(i) The *Twelfth Plan* lays special emphasis on development of the infrastructure sector including:

  (a) Energy, as the availability of quality infrastructure is important not only for sustaining high growth, but also ensuring that the growth is inclusive.

  (b) The total investment in the infrastructure sector during the Plan, estimated at Rs. 56.3 lakh crore (approx. US$1trillion), will be nearly double the amount committed during the Eleventh Plan.

  (c) This step up in investment will be feasible primarily because of enlarged private-sector participation that is envisaged.

(ii) Unbundling of infrastructure projects, *public private partnerships* (PPP), and more transparent regulatory mechanisms have induced private investors to increase their participation in infrastructure sectors:

  (a) Their share in infrastructure investment increased from 22 per cent in the Tenth Plan to 38 per cent in the Eleventh Plan and is expected

to be about 48 per cent during the Twelfth Plan.

(b) Yet, more than half of the resources required for infrastructure would need to come from the public sector, from the government, and the parastatals.

(c) This would require not only the creation of the fiscal space but also use of a *rational pricing policy.*

(d) Scaling up private-sector participation on a sustainable basis will require *redefining the contours of their participation* for the development of infrastructure sector in a transparent and objective manner with a comprehensive regulatory mechanism in place.

(e) From a *macroeconomic perspective*, a high level of investment in the infrastructure sector is essential for the overall revival of investment climate which may finally lead to sustainable growth in an economy.

(f) However, in the current macroeconomic environment, to achieve this objective, there is need to address sector-specific issues over the medium-to-long-term horizon in India.

(iii) There is an *overall shortage of power* in the country both in terms of energy deficit and peak shortage:

(a) At present, overall energy deficit is about 8.6 per cent and peak shortage of power is about 9.0 per cent.

(b) The Eleventh Plan added 55,000 MW of generation capacity which was more than twice the capacity added in the Tenth Plan.

(c) The Twelfth Plan aims to add another 88, 000 MW.

(d) Delivery of this additional capacity would critically depend on resolving *fuel* availability problems, especially when *about half* the generated capacity is expected to come from the private sector.

(e) The private developers may not be able to finance the projects if *coal linkages* are not resolved and there are delays in finalisation of fuel supply agreements (FSAs).

(f) While some decisions have been taken for restructuring Discoms' finances, these may need to be monitored and implemented in spirit.

(iv) Although India has large *coal* reserves, demand for coal is substantially outpacing its domestic availability, with Coal India Ltd. not being able to meet its coal production targets in the Eleventh Plan:

(a) Domestic coal supplies are therefore *not assured* for coal-based power projects planned during the Twelfth Plan. Thus, it is essential to ensure that domestic production of coal increases from 540 million tonnes in 2011-12 to the target of 795 million tonnes at the end of the 12th Plan.

(b) This increase of 255 million tonnes assumes an increase of 64 million tonnes of captive capacity with the rest being met by Coal India Limited.

(c) However, even with this increase, there will be a need to import 185 million tonnes of coal in 2016–17, which may further add to the financing cost of power projects.

(d) Moreeffortmustbemadeforimproving competition and efficiency in the coal sector, which may entail structural reforms.

(e) Problems like delays in obtaining environmental clearances, land acquisitions, and rehabilitation need to be suitably addressed in fast-track mode to achieve the Twelfth Plan targets for coal production, while maintaining a balance between growth needs and *environmental concerns*.

(v) Progress of *road* projects has also suffered on account of similar factors:

(a) The creation of a High-Level Cabinet Committee on Investment to quicken the pace of decision making in critical infrastructure projects by the government is expected to resolve any issues involving inter-ministerial coordination.

(b) Of late, financing of *road* projects has also run into difficulty as leveraged companies implementing road projects are unable to raise more debt in the absence of fresh equity. In current market conditions, these firms are unable to raise *new equity*.

(c) Exit route needs to be eased so that promoters can sell equity positions after construction, passing on all benefits and responsibilities to entities that step in.

(d) Promoters can then use the equity thus released for new projects.

(e) Steps are also needed to up-scale projects in PPP mode for achieving the targets envisaged for the development of roads in the Twelfth Plan.

(vi) The process of extending *transparent policies* and mechanisms for allocation of scarce natural resources to private companies for commercial purposes has also been initiated:

(a) The Mines & Mineral (Development and Regulation) Bill 2011 aims at providing a simple and transparent mechanism for grant of mining lease or prospecting licence through competitive bidding in areas of known mineralisation and on first-in-time basis in areas where mineralisation is not known.

(b) *However*, in order to meet the objective of revenue maximisation in an open, transparent and competitive manner, this should be preceded by detailed geological mapping of the mineral wealth of the country.

(c) Further, any policy prescription regarding the use of natural resources must ensure that the process of selection is fair, reasonable, non-discriminatory, transparent, and aimed at promoting healthy competition and equitable treatment.

(vii) Owing to a number of external and internal factors, viability of *airline* operations in India has come under stress.

(a) A high operating cost environment owing to high and rising cost of aviation turbine fuel (ATF) coupled with rupee depreciation is making operations unviable for carriers in India.

(b) The Expert Report of Nathan Economic Consulting India Private Ltd. (Nathan India) which went into the question of pricing and the tax

regime governing ATF concluded that ATF prices in India are significantly higher (at least 40 per cent) than in competing hubs in the region such as Singapore, Hong Kong and Dubai.

(c) Therefore, there is need to rationalise the tax regime particularly value added tax on ATF which is in the range of 20–30 per cent in most of the states.

(d) The Ministry of Civil Aviation is of the view that ATF should be included under the declared goods category under the relevant provision of the Central Sales Tax Act so that a uniform levy of 5 per cent is achieved.

(e) Equally important is the need for a transparent pricing regime for ATF in India. A high tax regime for aviation in general, and ATF in particular, will reduce the wider economic benefits available from aviation, resulting in a negative impact on economic growth and overall government revenue bases.

(viii) The *Railways* is another urgent priority for the Twelfth Plan:

(a) Capacity in railways has lagged far behind what is needed, especially given the requirement of shifting from road transport to rail in the interests of improving energy efficiency and reducing carbon footprints in development.

(b) The funding pattern of the Twelfth Plan clearly shows that the modernisation of Indian Railways cannot be achieved by simply relying on GBS (Gross Budgetary Support) as about 62 per cent of the resources would have to be generated through non-GBS sources and nearly 20 per cent through private-sector investment.

(c) There is a need to draw up clear strategies to generate resources by identifying segments where Indian Railways can adopt a low-cost policy by playing on volumes and taking advantage of economies of scale and segments where it can adopt a differentiation approach by providing high-quality services and command premium prices.

(ix) The Twelfth Plan document, a GDP growth rate of about 8 per cent requires a growth rate of about 6 per cent in total *energy use* from all sources:

(a) Unfortunately, the capacity of the economy to expand domestic energy supplies to meet this demand is severely limited.

(b) The country is not well-endowed with energy resources, except coal, and the existence of policy distortions makes management of demand and supply more difficult.

(c) Accordingly, the short-run action needed to remove impediments to implementation of projects in infrastructure, especially in the area of energy, includes ensuring fuel supply to power stations, financial restructuring of Discoms, and clarity in terms of the NELP.

(d) At the same time, the long-term strategy should focus on issues like coal production, petroleum price distortion, natural gas pricing, and effective management of the urbanisation process.

BOOSTING PUBLIC INVESTMENT

India is faced with 'the balance sheet syndrome with Indian characteristics' creating a web of difficult challenges that could hold back private investment. Private investment must remain the primary engine of long-run growth. But in the interim, to revive growth and to deepen physical connectivity, public investment, especially in the railways, will have an important role to play.

A slew of economic reforms activated by the new central government has led to a partial revival of investor sentiment. Tentative signs that the worst is over are evident, for example, in data that shows that the rate of stalled projects has begun to decline and that the rate of their revival is moving up. But increasing capital flows are yet to translate into a durable pick-up of real investment, especially in the private sector. This owes to at least five interrelated factors that lead to what the *Mid-Year Economic Analysis 2014–15* called the '*balance sheet syndrome with Indian characteristics*':

(i) Under the pressures of weak profitability and over-indebtedness, the Indian corporate sector is limited in its ability to invest going forward *(the flow challenge)*. One key indicator of profitability—the interest cover ratio (ICR), which if less than one implies firms' cash flows are not sufficient to pay their interest costs—has also worsened in recent years. Further, the debt-equity ratios of the top 500 non-financial firms have been steadily increasing, and their level now is amongst the highest in the emerging economies.

(ii) Weak institutions relating to bankruptcy means that the over-indebtedness problem cannot be easily resolved (the stock and *'difficulty-of-exit' challenge*). This is reflected in the persistence of stalled projects, which have been consistently around 7 to 8 per cent of GDP in the last four years (2010–14).

(iii) Even if some of these problems were solved, the PPP model at least in infrastructure will need to be re-fashioned to become more viable going forward *(the institutional challenge)*.

(iv) Since a significant portion of infrastructure was financed by the banking system, especially the public sector banks, their balance sheets have deteriorated.[66] For example, the sum of non-performing and stressed assets has risen sharply, and for the PSBs they account for over 12 per cent of total assets. Uncertainty about accounting and valuation, and indeed the history of banking difficulties across time and space, counsel in favor of *over-* rather than *under-* recognising the severity of the problem. When banks' balance sheets are stressed they are less able to lend, leading to reduced credit for the private sector *(the financing challenge)*.[67]

(v) In a peculiarly Indian twist, this financing problem is aggravated by generalised risk-aversion *(the challenge of inertial decision-making)*. For the public sector banks in particular, which are exposed to governmental accountability and oversight, lending in a situation of NPAs is not easy because of a generic problem of caution, afflicting bureaucratic decision-making.

STEPS AND SUGGESTIONS

The *Economic Survey 2014–15* highlights the finer points of the infrastructure sector in the follwoing way:

(a) Actions being undertaken by the government to enhance the supply of critical inputs such as coal and gas, as well

as regulatory reform, will alleviate some of the above-given constraints, especially in the public sector where the data identify them as being regulatory in character *(clearances and land acquisition)*.

(b) Steps are being taken to address the institutional problem, by creating a better framework for PPPs and for infrastructure investment in general. The RBI is making efforts to get banks to recognise their bad loan problems, and address them. But the impact of these initiatives has so far been limited. The stock of stalled projects remains extraordinarily high; firm profitability, especially for firms working in the infrastructure sector, remains low. So, questions on the pace and strength of recovery of private sector investment remain open.

(c) If the weakness of private investment offers one negative or indirect rationale for increased public investment, there are also more affirmative rationales. India's recent PPP experience has demonstrated that given weak institutions, the private sector taking on project implementation risks involves costs *(delays in land acquisition, environmental clearances, and variability of input supplies, etc.)*. In some sectors, the public sector may be better placed to absorb some of these risks.

(d) Again, there continue to remain areas of infrastructure—rural roads and railways that provide basic physical connectivity—in which private investment will be under-supplied. One irony is that while financial and digital connectivity are surging ahead, basic physical connectivity appears to lag behind.

Therefore, as emphasized in the *Mid Year Economic Analysis 2014–15,* it seems imperative to consider the case for **reviving targeted public investment** as an engine of growth in the short run not to substitute for private investment but to complement it and indeed to crowd it in.

(e) Public sector implementation capacity in India is variable. But analysis suggests that the Indian Railways could be the next locomotive of growth. Greater public investment in the railways would boost aggregate growth and the competitiveness of Indian manufacturing substantially. In part, these large gains derive from the current massive under-investment in the railways. For example, China and India had similar network capacities until the mid-1990, but because it invested eleven times as much as India in per-capita terms, China's capacity and efficiency have surged.

In contrast, stagnant investment has led to congestion, strained capacity, poor services, weak financial health, and deteriorating competitiveness of logistics-intensive sectors, typically manufacturing. Congestion has effectively led to the railways ceding a significant share in freight traffic to the roads sector. This is not a welcome development since rail transport is typically more cost and energy efficient. The profits generated by freight services have cross-subsidised passengers services and Indian freight rates (PPP adjusted) remain among the highest in the world.

The physical connectivity of the Indian population needs strengthening which has potential to bring enormous benefits in terms of higher standards of living, greater opportunities, and increased potential for human fulfillment.