Second Edition

THE INDIAN ECONOMY

For UPSC and State Civil Services Preliminary and Main Examinations

Also useful for other Competitive Examinations

- Domestic Economy
- External Sector—Looking Outwards
- Global Economy and Outlook
- Indian Economy Revisited

Sanjiv Verma

CHAPTER

1 OUTPUT OF AN ECONOMY

1.1 CONCEPT OF OUTPUT

What would we understand if we were told that today the largest economy in the world is the US? Surely, we would wonder on what parameter—whether in terms of land area or population or output!

In every economy 'goods' are being produced, that is, raw materials are being converted into finished goods, agricultural crops, forestry, livestock, steel, cement, cars, cycles, bread etc. Similarly, 'services' are also being rendered like banking, insurance, shipping etc. All of these have a monetary value in the local currency like the USD in the US and the INR in India.

Thus, output per se implies aggregation of monetary value of all the goods and services produced in an economy in a given time period which may be a quarter (3 months), half-a-year (6 months) or a year (12 months).

In other words, 'output' includes all goods and services exchanged for money. For example, a fisherman catching fishes, may use some of it for self-consumption and the remaining may be used for selling in the market; thus, the monetary value of all the fishes would be considered under the concept of output.

It sounds simple so far, but delving a little deeper output may as well comprise of intermediate goods like steel and cement, which in turn are inputs for other goods referred to as 'final goods'. These final goods cannot be put to further use, except for use like cars, buildings etc.

If we were to include both the intermediate and final goods in our definition of output, then that would effectively mean counting the same thing twice and in the process inflate the output of an economy. For example, production of wheat and its milling as flour results in the making of bread; thus for output purposes, only the monetary value of bread would be considered and not that of wheat and flour. Therefore, we can conclusively derive that the output should have only final goods in order to avoid double counting.

But, what about a sale of second hand goods like say a second hand car? Should they be reflected in the output of an economy? The answer is no, as they have already been included once when manufactured and therefore does not amount to a fresh production. Thus, output of an economy is the monetary value of the final goods and services in a given time period.

The production of goods and rendering of services are referred to as economic activities; but who are the producers of goods and services in an economy? They could either be individuals, small and petty businesses, private companies like the Tatas, Birlas, Reliance Industries etc., or even government like the public sector companies ONGC, SAIL etc., or even foreign companies like Nokia, Sony, Samsung etc.

If we were to take the monetary value of all the final goods and services produced within the geographic boundary of a country, irrespective of who the producer of the goods and services are, then it is called 'domestic output' of the economy.

Thus, in the Indian context, domestic output consists of the monetary value of all final goods and services produced/rendered by individuals, private sector, public sector and foreign companies.

Having looked into who are the producers in an economy, let us look now at how the goods are produced. In order to produce goods, at first we need some place/infrastructure where the goods can be produced. Thus we would need to have a some land (or building); money as seed capital, in order to buy machines and raw material, invest in marketing, arrange for transportation etc.; labour for production and then a person whom we call the entrepreneur as the producer of goods. These are known as 'factors of production' in an economy.

Thus, in a 'production life cycle', each factor of production will have an associated cost—be it the seed capital for investment, rent for the place/infrastructure, or for that matter the labour wages and salaries; as an entrepreneur, the profit that an entrepreneur gains at the end of the day, is principally for the risk that he/she takes for production.

It is important to note that profit is a cost for any economic activity; but then what is cost is also income for factors of production. For example, rent is an income for land, interest is the income for capital, wages and salaries are the income for workers and supervisors and profit per se is the income for the risks taken by the entrepreneur. Let us illustrate this example further with numbers. Following are the details of a manufacturing company:

Land (rent)	:	₹10,000
Labour (Wages & Salaries)	:	₹1,000
Capital (Interest)	:	₹750
Entrepreneur (Profit)	:	₹500
Total	:	**₹12,250**

In this example, the total cost (all costs included) to an entrepreneur is ₹12,250; what is the output! It is the same amount as ₹12,250; and what is the income of all the factors of production! It is again the same as ₹12,250. This basically means that output/cost is income for factors of production. Thus, output and the income are two sides of the same coin. Whether we say output or income, it implies the same thing.

At times, output is also referred as the product of an economy, (quantity multiplied by factor cost) thus domestic product and domestic income of an economy are the same.

So far, we has discussed about the domestic output/product/income, but what about the income of Indians staying abroad? For a more comprehensive analysis of the output, it is necessary to look beyond the geographic boundaries that would include the income of all the Indian nationals irrespective of the country they currently reside.

But if we include the income of Indian nationals outside the country, it will also be logical to deduct the income of foreign nationals residing in our country. This is also referred to as Net Factor Income From Abroad (NFIAD). Thus,

Domestic Product + Income of Indians Abroad – Income of Foreigners in India = National Product

or

Domestic Product (+/–) NFIAD = National Product

Net factor income from abroad can be positive or negative depending up on which is more—income of Indian nationals abroad or income of foreign nationals in India, that is, national product is less than the domestic product, if the income of Indian nationals abroad is less than the income of foreigners in India and vice versa.

An increased foreign currency denominated debt of a country or selling domestic assets to foreign entities would tend to reduce the national product leaving domestic product unchanged.

1.2 CONCEPT OF DEPRECIATION

The output of an economy also consists of production of machines/machineries which are consumed every year, referred to as 'depreciation' and much of the output of such machines could be replacement in nature and not signifying additions to machine or capital stock in the economy.

Let us assume that cars are being produced in an economy and there is also depreciation of cars , that is, the cars would eventually have to be replaced after their shell-life. For example, a car is priced at ₹3,00,000 and has a life of, say 10 years. Then, depreciation (or consumption) of car is ₹30,000 a year. Thus, if the output of an economy ignores consumption (or depreciation) of its machine stocks, it is referred as a 'gross' concept and if it is accounted for it is known as 'net' concept.

Accordingly, there is Gross National Product (GNP) and Gross Domestic Product (GDP).

Hence,

GNP – Depreciation = Net National Product (NNP)

GDP – Depreciation = Net Domestic Product (NDP)

Thus, there are four concepts in the output of an economy—GNP, GDP, NNP and NDP. Let us now try to understand which method is technically the best measure of growth. Clearly, it is the NNP as it first covers all the nationals of a country and is also a net increase after depreciation. It is also called as "National Income" of an economy.

But NNP/GNP are gradually losing significance since countries have high external debts that are serviced through internal resources which tends to increase outflows and reduce GNP of a country, leaving GDP unaffected. Similarly, the sale of assets to foreign entities will also have a similar impact. Further remittances have become significant in economies like India affecting GNP not seen as a correct way to judge output of an economy.

1.3 GDP—AS A MEASURE OF GROWTH

India, US and most other economies have switched over to GDP for measuring growth of their respective economies. Let us recall the concept of 'monetary value of goods and services' as output which has been discussed in the beginning of the chapter.

But this monetary value can be viewed from two perspectives— factor cost (It is also the income for the factors of production) and market price for example the price of a car as illustrated earlier. To further elucidate, the market price is the price paid for a goods or services in the market. Let us discuss the differences between the factor cost and market prices?

We all know that the government levies taxes (and also gives subsidies) on different goods and services before they reach the market. In India, excise duty is payable on manufacturing of goods and similarly, service tax is payable on services provided (we will discuss these later in the Chapter on government finances).

Now,

Factor Cost + Indirect Taxes – Subsidies = Market Price

or

Factor Cost + Net Taxes (as subsidies can never be equal or more than taxes in an economy) = Market Price.

Now the question, that in the monetary value whether factor cost or market price should be taken?

The output measured at market prices can be increased by increasing taxes in an economy. This does not necessarily imply that more goods and services have been produced in the economy. Output of an economy is worked out both at market prices as well as factor cost, but for growth purposes, output at factor cost is considered. This means that increased value in production of goods and services in an economy is captured at factor cost and not at market prices.

The difference between the output at market price and at factor cost is tax burden on an economy, which is useful for cross-country comparisons.

Can output at market price and factor cost be the same? The answer is yes, in cases of exceptional circumstances where the taxes are equal to subsidies or in utopian circumstances where taxes and subsidies both are zero. This concept is more of an academic relevance rather than of practical utility.

The moment we start talking about the monetary value either at market prices or factor cost, the concept of inflation becomes important. In simpler terms, inflation is increasing prices and during inflationary times it tends to inflate the value in nominal terms. Suppose inflation is at 10 per cent, it implies that the price is going up by 10 per cent, that is to say that the factor cost is also increasing, which would increase the output, even though there is no physical increase in the production of goods and services. It is because of this reason that the output measured at factor cost would have to be adjusted to actually reflect the increased production of goods and services in an economy. The adjustment is a statistical exercise which is done by using the GDP deflator that gives the output at factor cost in terms of 'constant prices'.

The output at constant prices refers to the output obtained after being adjusted for inflation. To further explain, suppose we do not adjust for inflation and the output growth for an year is 9 per cent so is inflation. It means that the output has not increased, but their prices have increased. Without adjusting for inflation, the increase in output has little or no significance and actually could be misleading.

This adjustment for inflation is also known as 'real' or otherwise it is 'nominal' and is generic in nature. Real growth is adjusted for inflation while nominal growth ignores adjustment for inflation. Growth by definition has to be 'real'.

Similarly, there is 'nominal' and 'real' interest rate, income, wages, but there is no concept of nominal and real growth as growth by definition has to be adjusted for inflation. This is implied in the meaning of the word growth itself.

The use of the word 'growth' in the Indian context implies increase in GDP at factor cost at constant prices.

In India, the entire computation is the responsibility of the Central Statistical Organisation (CSO), Government of India. The estimates of growth are provided by the organisation on quarterly basis at the end March, June, September and December every year and the annual growth estimates are provided during April–March, every year which is also referred to as the financial year (calendar year is January–December). All the government and corporate accounting in India is with reference to the financial year.

What we have covered so far is a simple exposure to 'National Income Aggregates', also referred as 'National Income Accounting' for students who do not have exposure to economics.

This is the output method of computation of National Income Accounting. There are other methods like the income and expenditure method relevant for the students who want to pursue a career in economics. For further study on these topics, reference can be made to NCERT text book of Class X and XII .

CHAPTER 2

TOWARDS INCLUSIVE GROWTH

(Growth and Development)

2.1 GROWTH RATE OF INDIAN ECONOMY

Now, let us go back to the statement made in the beginning of 'growth rates slowing down'. The phrase basically means that the output of an economy is increasing but at a decreasing rate over the previous quarter/half-year/year, whichever is the reference period. If during the same reference period, output has declined, then it is referred to as 'contraction' of output. Continuous periods of contraction over two quarters are known as 'recession' and still longer periods of continuous recession are known as 'depression'.

Until now, the world economy has witnessed The Great Depression during 1929–1933. (We shall discuss more about this aspect in the Chapter on Global Outlook.)

As we have discussed earlier, growth plays an important role in an economy. As we know by now that 'increased growth' means 'increased output' and 'increased income' of an economy with increased income for factors of production which sets off a circular motion of further increase in income.

Increased Income → Increased purchasing power → Increased demand for goods and services → Increased production → Increased output → Increased income

Increased income → Increased savings → Increased investment → Increased output → Increased income

Thus, increasing growth of an economy signifies well-being of that economy. Jobs get created, income levels increase and overall wealth of an economy increases. For this very reason, every economy would like to increase its overall growth. India was believed till the reforms were initiated, caught in a 'low-growth cycle' with low levels of incomes, thereby resulting in low savings and thus low investments, ultimately again leading to low income and again to low savings, which is known as the low-growth cycle.

It was also said during those days that India is unable to break through the 'Hindu rate of growth' with its inability to grow beyond 3.5 per cent (the term was coined by the noted Indian economist, late Prof. Raj Krishna), with low income and increasing population leading to increased poverty and unemployment in the country, regional/intra-regional imbalances and also widening of income inequalities.

Inability of an economy to increase growth rates of economies is not only due to low savings and investment but also due to lack of resources, technology and infrastructure

constraints. These factors were a handicap earlier for India but things have changed in the 21st century.

The 21st century has been good for India, as growth rates had started moving upwards and on were on the verge of achieving a double-digit growth, probably for the first time, except may be for a year briefly in the 1980s. Though growth rates have increased but it has not made any perceptible impact on the poverty, unemployment, inter-/intra-regional and income imbalances. Despite the high growth rates achieved, we have not got the desired results. There has been a distinct deceleration in growth since 2010 sliding down to the lowest in last decade of 4.4 per cent. But the larger question remains of high growth achieved had not yielded tangible benefits to the Indian economy.

This would lead us to another concept of 'development'. How are growth and development different from each other?

2.2 DEVELOPMENT—INCLUSIVE GROWTH

The concept of development is qualitative, whereas that of growth is quantitative. While growth is an arithmetic number signifying an increase in the output of an economy, development includes distribution of output or the ability of the increased output and income to reach the bottom-most stratum of society. Development also implies equitable distribution in the economy.

Earlier it was widely believed that initially increased growth is required and then development would happen, through what is referred as the 'trickle-down theory'. This means that the increased growth would percolate down to the bottom-most stratum of society and provide equitable distribution. This is the significance of the word 'growth and development'.

In the earlier years, the problem was our inability to push up rates of growth and the emphasis was on increasing growth for the trickle-down theory to work which would have allowed for development and equitable distribution. But the story for India is quite different since the economic reforms initiated in 1991 and since 2005. India has not only broken through the low-growth cycle but also become one of the fastest-growing economies after China.

The high growth rate achieved since 2005 questions the trickle-down theory in India, as it has not benefited the Indian masses in terms of lowering absolute poverty levels significantly, creating employment opportunities, reducing inter-/intra-regional imbalances (rather it has only accentuated). There are reasons to understand why 'trickle-down theory' has not worked for India. Firstly, the Indian economy has a structural problem of excessive economic dependence on the agricultural sector. Over 65 per cent of the population is either directly/indirectly dependent on this sector.

The contribution of the agricultural sector to the overall gross domestic product (GDP) is only 18 per cent. The largest contribution of over 55 per cent comes from the services sector and the remaining 27 per cent is contributed by the secondary sector of which only 14 per cent is by the manufacturing sector. The sector contributing the least to GDP has the maximum dependence (agriculture) and the sector contributing the most, has the least dependence (services).

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The high growth rate achieved since 2005 questions the trickle-down theory in India, as it has not benefited the Indian masses in terms of lowering absolute poverty levels significantly, creating employment opportunities, reducing inter-/intra-regional imbalances (rather it has only accentuated). There are reasons to understand why 'trickle-down theory' has not worked for India. Firstly, the Indian economy has a structural problem of excessive economic dependence on the agricultural sector. Over 65 per cent of the population is either directly/indirectly dependent on this sector.

The contribution of the agricultural sector to the overall gross domestic product (GDP) is only 18 per cent. The largest contribution of over 55 per cent comes from the services sector and the remaining 27 per cent is contributed by the secondary sector of which only 14 per cent is by the manufacturing sector. The sector contributing the least to GDP has the maximum dependence (agriculture) and the sector contributing the most, has the least dependence (services).

Secondly, In India's growth process, there has been a missing link of the relative earlier maturity of the services sector before achieving manufacturing sector maturity. Ideally, it should be first manufacturing sector before the services sector or at best together. This is an important feature as there is a linkage between manufacturing sector and agricultural sector either through raw materials or as a market for the industrial produce, and also for employment opportunities. This provides for greater sustainable growth of economies.

Thus, the benefit of increased growth in recent years has largely been confined to the services sector and little to the manufacturing sector and has not percolated to the agricultural sector where the majority of our population resides.

The peaking or maturity of the service sector in India could be due to the surge in BPOs and KPOs and also due to the need for value-added services by the bigger economies establishing bases in India given the low cost of hiring, easier to impart skills and a large young workforce. Still, a larger question of why this excessive dependence on agricultural sector, remains still to be resolved. It is said that India's population mostly resides in villages. Lack of employment opportunities in the manufacturing sector, lack of formal education/skills, lesser growth of agro-based industries, traditional thinking and abject poverty could be some of the many reasons.

But it also has to do with the governmental efforts by providing basic, effective and efficient infrastructure around villages including the road/rail links. The aim should be to have pan-India rail-road connectivity. This would provide for easy accessibility and faster mode of travel the making labour mobile.

History has been testimony to the fact that roads are the gateways to development in countries like Germany, the United States and more recently China. India has only recently woken up to this reality and due emphasis is now being given to the road building, primarily through various projects, namely, Golden Quadrilateral (connecting the 4 metropolitan cities Delhi–Kolkatta–Chennai–Mumbai), the North–South corridor (Srinagar–Kanyakumari) and the East–West corridor (Silchar–Porbandar).

Besides, efforts are also on for building of roads for Tier II and III cities and also for villages under the Pradhan Mantri Gramin Sadak Yojana (PMGSY) scheme.

The government, having realized that benefits of increased growth has not been reaching the people and hence now discontinued using nomenclature of 'development' and has replaced it by the term 'inclusive growth'.

It is not a new concept but only how development is now being viewed by the government. The earlier belief was that for development to take place, growth was a necessary condition. The changed notion of inclusive growth is that any growth should benefit the people by and large which means that the benefits of growth should be more broad-based, should have an orientation towards 'masses' and not only 'classes'. Thus, inclusive growth has both growth and development as components, not to be seen as separate, but viewed as together, today and also in the future.

Inclusivity would imply more equitable distribution of the gains achieved through higher growth. But, equitable distribution is not about equal distribution in an economy, arithmetically. This is possible only in theory. Equitable distribution is all about 'fair and just share' for the masses, especially the poor. It is not about the rich getting richer, as long as the poor are also moving up the ladder in terms of income and welfare, even though less proportionately than the privileged sections of the economy.

As long as both the subsets in an economy are moving up in the same direction, have means of livelihood, are economically better off and their basic needs are met, the objective of equitable distribution is being achieved. Hence, inequitable distribution would mean the rich getting richer and the poor remaining poor, or the worse, still becoming poorer.

As we have been discussing that inclusive growth is oriented towards masses, what should inclusive growth give? or when can we say that growth has become inclusive and begun to deliver?

Inclusive growth should lead to:

(1) Employment opportunities for the masses at the entry level, providing livelihood, means of income, increasing their purchasing power and improving their 'well-beingness'. This should result in reducing absolute poverty levels.
(2) Reduction of inter-/intra-regional imbalances.
(3) Create opportunities for skill development/formation.
(4) Better dispersal of industries.
(5) Increased agro-based industries.
(6) A gradual shift away from the excessive economic dependence on the agricultural sector through employment-driven and positive migration.
(7) Increased vocational employment (carpentry, repairs to cars/scooters/TV/mobiles, gardening, etc.).

Inclusive growth would also require a changed perception of both the central government and also the state governments, working in tandem, by creating an 'enabling environment' for the above deliverables.

Such an environment would require the following:

(1) Pan-India road/rail links which would link the entire country and provide accessibility and affordable faster mode of transport for people and goods.
(2) Providing accessibility and affordability to public services (primary health care and education), public utilities (electricity, drinking water and sanitation) and public goods (social assets like community centres, etc.).
(3) Re-energizing the Industrial Training Institutes (ITIs) for skill development.
(4) Policy framework conducive for investment by private sector (something like Tata Motors for their NANO car project in Gujarat).
(5) Focus on directly creating employment opportunities. The government has already launched Mahatma Gandhi National Rural Employment Guarantee Scheme, which provides employment for 100 days to one member from every poor family/household in every district of the country.

The creation of the enabling environment by the government is a key prerequisite, which would largely determine India's ability to achieve inclusive growth in future. Growth and development or inclusive growth has always been an avowed objective of the government since independence. The difference today is not in the objective but the manner in which it is being sought to be achieved.

Earlier, the government had taken up, both the responsibilities of increasing growth and equitable distribution, and spread scarce resources across both resulting in the dilution of efforts and achieving neither growth nor equitable distribution.

The reforms of 1991 mark a change in the strategy of letting the private sector play a major responsibility in the investment and growth while on the other hand the government would concentrate on the welfare measures and create the enabling environment for desired inclusive growth of the economy in future. This is also based on the fact that more and better growth by the private sector would mean larger tax revenue base for the government which would enable the government in expanding the social sector interventions as a way of redistribution to the people.

Inclusive growth is not a new concept and is said to be a combination of both, what was earlier known as growth, development and equitable distribution, all rolled into a new terminology known as inclusive growth, specific and unique to India.

In future, the challenge would lie not in achieving a higher growth but to provide greater inclusivity, more broad-based, which benefits the masses. Inclusive growth was a challenge as identified by the eleventh five-year plan only to become a larger challenge in the twelfth five-year plan.

CHAPTER

3 SUSTAINABLE DEVELOPMENT AND GREEN GDP

3.1 SUSTAINABLE DEVELOPMENT

At present, a few new terminologies are also being used for economies such as 'sustainable development' and 'green GDP'. 'Sustainable development' is a global terminology which is being used to address the global issues of global warming, environmental aspects, increased global pollution and ecological imbalances, which are critical for survival of planet earth and is thus a broader concept not relating to any one country but for the world as a whole.

It is neither the problem of one country nor can it be solved by one country. It is more macro in nature, which requires to be addressed by countries collectively through a dialogue and a consensus building at a global platform. This is about the present generation's ability to meet 'its' own needs but without compromising on the ability of the future generation to meet 'its' needs. It is about a better environment for the future generation rather than what the present generation has inherited, to say the least not a worse than that inherited.

Even though there has been a consciousness on the issue of sustainable development, the real thrust was provided with the Earth Summit during 1992 and then through various international conventions.

All the conventions mentioned so far have flagged the underlying issues especially that of reduction in greenhouse gases emission, which is critical for sustainable development. It also addresses areas of cleaner energy, reduction in biodiversity losses, tree plantation, solar/wind energy and other such global issues in sustainable development.

It is not about flagging of issues, which is important in as much as the need for collective consensus. But the reduction level so arrived through consensus, for different countries, should be adhered within the prescribed time lines. This is the problem area of a sharp divide between the rich countries and the countries such as India and China of achieving a broad-based, self-imposed reduction levels where each and every conventions have been failed. All the rich countries have failed to meet the deadlines repeatedly on all the major issues but most importantly on GHS emission reduction levels.

India, on the other hand, has been more forthright in its approach of already having low levels of such emissions and the projected level of emissions even by 2031 lower than the global average of 2005. Its progress in cleaner energy, solar and wind energy and the tree plantation is commendable.

However, there are larger issues for India. The worrying fact of the increased growth, expanding size of output still has millions of poor people living below US $1 per day and India being home to the largest number of poor people in the world is very disturbing. Poverty and sustainable development cannot be divorced from each other. The increasing number of slums, widespread absence of hygienic sanitation, pitiable living conditions, continued use of plastics and polluted rivers are all an integral part of sustainable development so far as India is concerned.

3.2 GREEN GDP

Green GDP refers to a national accounting system of the utilization of the non-renewable natural resources of any country and is now being envisioned as a part of sustainable development. The objective is to utilize the resources optimally, efficiently and effectively in furthering the growth of economies and at the same time a realization of their scarcity value. It is also believed that such an accounting will also pave the way for greater R&D for developing viable alternatives to the fast depleting non-renewable natural resources of the country.

Clearly, the biggest issue is that of absolute poverty which has to be addressed in prior, before one can talk about broader aspects of sustainable development. This not to say that India should not address the issue of sustainable development, but addressing the needs of the poor is unquestionably the priority, of giving them the means of living and a hygienic, decent living standards.

Thus, inclusive growth, sustainable development and green GDP are all different terminologies, totally distinct from each other in their meaning but cannot be said to be independent but inter-related in terms of their implications.

CHAPTER

4 POVERTY AND SOCIAL SECTOR

4.1 WHAT IS MEANT BY POVERTY IN INDIA?

Poverty is defined as the minimum basic consumption level, essential for survival. It has been defined by the Planning Commission of India in terms of calorie intake. Absolute poverty is a condition, where the calorie intake is less than 2400 kcalories per person per day in rural areas and 2100 kcalories per person per day in urban areas.

The World Bank has coined its own universal definition of poverty levels as per person consumption of less than US $1 per day.

Relative poverty, is across difference in income levels of the rich and the relative poor. Even by this crude definition of Planning Commission of absolute poverty, it is estimated that over 230 million people are living below poverty line (BPL). According to the definition of World Bank, the numbers would increase significantly. India is said to have the largest number of people living BPL. The number of people BPL is even more higher than the entire population of the US. Poverty is largely concentrated in states such as UP, Bihar, Orissa, MP, West Bengal and they account for over 50 per cent of the total poverty in India.

Despite over six decades of independence, why poverty continues to exist? It can be attributed to the large economic dependence on the agricultural sector, subsistence, traditional and stagnating, which are not able to provide enough for the dependent population in terms of employment opportunities, high levels of adult illiteracy, large number of landless, small and marginal farmers with no income support. There is absence of employment opportunities in the manufacturing sector.

It is not about how poverty is measured crude or refined? It is the biggest curse of post-independence India of not being able to address the large-scale poverty in the country despite the well-intended schemes as can be seen in the following sections.

4.2 SOCIAL SECTOR

Social sector and poverty are interrelated as it largely comprises of those BPL and also that segment of the population which is outside the mainstream of development, which consists of the under-privileged, always at the receiving end, poor, backward classes and scheduled castes/tribes. It will also have landless, small and marginal farmers who are engaged in casual work in the informal sector, living virtually on a daily basis. They are the most vulnerable section prone to exploitation, domination and do not have any voice or can also be known as 'silent sufferers' or a 'mere spectator' to their pitiable and pathetic condition oblivious of the fact that India is today one of the fastest growing economies.

One has already seen earlier, why this has happened. But what has the Government done about this? It has adopted a three-pronged strategy to address the social sectors which are as follows:

(1) Broad Targeting;
(2) Narrow Targeting;
(3) Social Security.

Broad Targeting

Under broad targeting the Government has two ambitious programmes. First is the Bharat Nirman (2005–2010) which has six sub-programmes:

(1) Irrigation—to bring an additional 1 crore hectare under irrigation facilities.
(2) Rural road connectivity—covering all villages with population more than 1000 and villages in hilly and tribal areas with population more than 500.
(3) Indira Awas Yojana—building 6 million houses for the poor.
(4) Potable water—providing with drinking water in 55,065 new habitations.
(5) Rural electrification—electricity to 1,25,000 villages benefiting 223 million households.
(6) Rural telephony—providing telephone connection to 66,822 villages.

Second is the programme of the UPA Government, which has eight ambitious flagship schemes:

(1) Sarva Siksha Abhiyan—all children in the age group of 6–14 years to be enrolled in school by 2010.
(2) Mid-day Meal scheme—provision of one wholesome full meal to the children in school. This is to meet both the objective of malnutrition amongst children and also to give a boost to the enrolment ratio in schools.
(3) Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA).
(4) Total Sanitation Campaign.
(5) Jawaharlal Nehru National Urban Renewal Mission (JnNURM).
(6) Integrated Child Development and Services (ICDS).
(7) National Rural Health Mission (NRHM).
(8) Rajiv Gandhi Drinking Water Scheme.

Of all the above, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) is the most ambitious project of the government which is being implemented at the national level and of magnitude not seen anywhere in the world. It is the brain child of Jean Dreze, a Belgian economist. This scheme has now been enacted and guarantees unskilled wage employment of 100 days to one person in every rural household at a minimum wage. The 100 days employment under this scheme is visualized in the lean season of agricultural activities. This scheme is being implemented in all the districts of the country and is seen as a major step in creating the employment opportunities and also for poverty alleviation in the country. Women are given preference for employment under this scheme, which has no middlemen or contractor and directly being implemented by the Gram Panchayats and the wages are paid in the bank account of those who are provided with the employment. The state governments are required to give unemployment allowance of one-third of the wages if not able to provide employment within 15 days of their registration. This scheme has been globally lauded as one of the most well intended schemes for the social sector anywhere in the world.

Critics of the scheme, however, feel that such a scheme could be damaging in the long run by pushing up the minimum wages and increase cost in the agricultural as well as urban areas, adversely affect productivity and also prevent migration of labour, besides fuelling inflation.

Narrow Targeting

The government is attempting narrow targeting which are as follows:

(1) Wage Employment Scheme—primarily through Mahatma Gandhi NREGA.
(2) Self-Employment Schemes—primarily through Swaran Jayanti Grameen Sah-rozgar Yogana (SGSY) in the rural areas and through Swaran Jayanti Shahri Rozgar Yogana (SJSRY) in the urban areas.
(3) Food security—primarily through TPDS, AAY, Annapurna Scheme for senior citizens.

Social Security

The government is providing social security under its various programmes such as:

(1) **Aam Admi Bima Yojana**: This scheme is targeted at the rural landless households where one earning member within the age group of 18–59 years is insured at a premium of ₹200 per year borne 50 per cent by the central government and the remaining 50 per cent to be borne by the state governments. The coverage is ₹30,000 for natural death and ₹75,000 in case of accidental death. As an additional incentive, children of the insured studying of the class 9–12 would get scholarship of ₹300 per quarter.

(2) **Universal Health Insurance Scheme (UHIS)**: This scheme of the Government is being implemented by the Oriental Insurance Company aimed at BPL families.

This scheme provides coverage of hospitalization expenses upto ₹30,000 per year, per person insured under the scheme. The premium is ₹165 per annum for individuals, ₹248 per annum for a family of 5 members and ₹330 per annum for a family of 7 members.

(3) **Janashree Bima Yogana (JBY)**: This scheme is being implemented by the Life Insurance Corporation of India (LIC) aimed at BPL families, providing insurance

coverage at a premium of ₹200 per annum (50 per cent to be borne by the insured and 50 per cent by the Social Security Fund). The coverage is ₹20,000 for natural death and ₹50,000 for accidental death.

(4) **Swavalamban Scheme**: This scheme has been launched by LIC, on behalf of the government in 2010, as a pension scheme for the unorganized sector.

'Why' the plethora of schemes has not yielded the desired results? A few reasons for not delivering are as follows:

(1) The Government has well-designed schemes. The question is not about intention but that of implementation of these schemes, proper identification of the targeted beneficiaries.
(2) There is also a lack of awareness of these schemes amongst the masses given their illiteracy and ignorance.
(3) There is also absence of any monitoring mechanism for the efficacy of such schemes or to know the end result. The focus is on increased outlays and new schemes but there is no mechanism of tracking down the outcome.
(4) It may be better to implement these programmes through NGOs after a strict screening process and also with proper checks and balances in place.
(5) There is a need to bring in an independent 'social audit' of these schemes not for fixing accountability but for plugging leakages, improving delivery so as to make the schemes effective and true to their intention for the overall benefit of the social sector.
(6) Today, there is availability of modern technology which can be deployed for capturing information and creating a database which will enable a tracking mechanism for the target group and their reach and will be useful in refining the schemes in future.
(7) Finally, the focus of the government has been on schemes, so many that they overlap with diffused focus and accountability at different levels.

The aspect of changing the orientation from schemes to the people in the villages could be a better strategy and it also leads to convergence of all the schemes. This could be done following the 'cluster approach' which is implementing all the schemes starting from the most backward villages, bunched together as a cluster, for the schemes to be implemented and ensuring their sustainability by transferring the onus of further development to the villages and then moving to another cluster.

It would be the responsibility of the state government to monitor the functioning of the cluster of villages that are assisted through the schemes. This would provide for better delivery of schemes, proper monitoring and also for sustainability of the efforts and will lead to fundamental changes as the needs of the villages would get assessed first and not the other way around. It will also enable the government to acquire an understanding of the resources required and then the government could look at various alternatives of implementing them.

Right since Independence, these problems have persisted. It has also engaged the attention of successive governments but it has always been through increased outlays and new schemes which have been launched for them, year after year, but without tangible benefits. What is now required is to tackle them differently. A few suggestions have been provided earlier, not that they are bound to succeed, but will display the attitude of the government of willing to experiment to find long-lasting solutions to the vexed problems. The government has to keep in mind that it is not the resources which matter but in their efficient spending, technology-enabled monitoring mechanism and being on the learning curve each year, reorienting and successfully addressing the needs of the social sector.

Let us also admit that the task is daunting but it has to be accomplished one way or the other, a major challenge for the governments both the centre and state collectively.

4.3 MICRO FINANCE

Given that social sector do not have access to organize sources of finance say through banks and also given their extensive paper work, cumbersome procedures, documentation requirement, the micro credit institutions are today seen as offering a solution both for the social sector as well as addressing the issues of poverty. These institutions, as a concept have their genesis in Bangladesh, pioneered by Mohammed Yunus, for which he was awarded the Nobel Prize, as successful institutions for reaching out to the last unit of any economy not possible through banks and directly contributing to the uplift of the poor especially rural women.

In India, the SHG movement started in 1992 under NABARD and with involvement of banks. Under the SHG scheme credit is linked to savings by focusing on capacity building, with low interest rates usually 8–10 per cent with monthly repayment but responsibility of the group and not individuals. SHGs in India cover 90 million poor households and have extended credit of over ₹25,000 crore.

Micro Finance Institutions (MFIs) are institutions which provide credit to the poor but at a high interest rate but lower than that charged by the money lenders. MFIs in India have engaged the attention of the government only since 2003 and in the last 7 years, have seen an exponential expansion to reach 30 million and credit of over ₹30,000 crore. These have been seen as partnering SHGs in micro finance in India and also a major way through which the country could provide 'financial inclusion', that is, to provide accessibility to organized sources of finance to the poor people and reduce their dependence on the money lenders for their income generating activities enabling them to have source of income, employment and also get out of poverty.

However, in recent times, MFIs especially in Andhra Pradesh, have given a new dimension and raised the following fundamental issues:

(1) Their prime motive is to earn profits through high profit margins by charging high interest rates but slightly lower than that charged by the money lenders.
(2) MFIs have reached out to those ignored by the banks and also the fact they are not complementing the efforts of the banks. There is sizeable concentration of MFIs in areas where there is banking penetration.
(3) MFIs are finding softer options of lending like SHGs, which leads to multiple financing, debt burden on the borrowers.
(4) MFI are aggressive and are more consumer-oriented loans, less productive-oriented, similar like a private bank selling consumer loans or the US banks' lending to sub-prime borrowers.

These developments have forced the government to rethink on this model of financial inclusion and adding in place regulations for the MFI.

However, at a broader level and to provide greater inclusivity the nationalized banks are better placed than the MFIs through innovative means such as the correspondent banking route, which will keep costs low of reaching out without the need for more branches. Micro finance through MFIs would thus require a redesign but their greater complementary and compatibility role with the banks would have to be explored to make them as effective institutions of micro finance in India.

Social sector is one of the key sectors of the economy and reaching out to them and drawing them into mainstream of development is the biggest responsibility of the government, as only then the biggest transformation of the economy would happen by bringing all round prosperity.

CHAPTER

5

FOOD SECURITY

5.1 FOOD SECURITY

The first aspect of food security is the domestic availability of food grains. No country would ever be willing to depend on other countries for their requirement of food grains or agricultural commodities, unless it does not have any other option. Since Independence, India has travelled a long way towards the food security, from an importer of food grains, which has now achieved 'self-sufficiency' in food grains, through the increased domestic production.

Buffer Stock of Food Grains

India is one among the few countries in the world having government-held stock of food grains, for the following reasons:

(1) Buffer for meeting natural calamities;
(2) Price stabilization in case of crop failures;
(3) Providing food grains under public distribution system.

The government has buffer stock norms for different months in a year. At present, the maximum stock of the food grains of wheat and rice are to be held by the government, as buffer stock is 27 million tonnes to meet the aforesaid objectives.

Food Corporation of India (FCI) has the prime responsibility of procuring the food grains and the procurement is done at minimum support price (MSP) and stored in its warehouses at different locations and from there it is supplied to the state governments in terms of requirement. FCI also sells in the open market to stabilize, if their prices turn volatile especially in periods of crop failures.

Certain issues which are around buffer stock operations are briefed as follows:

First, the government is currently holding many multiples more than that required under the norms of around over 50–60 million tonnes, even when higher stocks have been held in the past. Why does the government hold higher stocks than required? It is because of the MSP of food grains and also the procurement price; and at that price government is mandatorily required to procure whatever arrives to FCI. If there is a bumper crop, FCI will have to procure the entire stock. Even if the market price of the food grain is higher, farmers prefer to sell to FCI because it procures in bulk. This leads in a buildup of stocks.

Second, FCI does not have enough storage capacity to hold the high levels of food grain stocks. At present, the entire capacity of FCI is around 60 million tonnes, while actual available storage, will not be more than 50 million tonnes. Even this storage is not appropriate. There is a tremendous wastage of around ₹50,000 crore annually by both on account improper and on inadequate storage facilities.

The other aspect under food security is around the public distribution system (PDS). Food grains are distributed to the state governments at an 'issue price' for their distribution to the poor through the PDS at prices, much below their economic cost (MSP with transportation and storage cost). As a result, the government has to bear the differential cost between the economic cost and the price charged in the PDS, as 'food subsidy' of over ₹75,000 crore.

PDS was a general entitlement for all the consumers or citizens, where a fixed amount of food grains, sugar and edible oil were distributed through the dedicated government-owned shops or outlets at a rate or price lower than the prevailing market rate. In a bid, to ensure focus of PDS towards the poor or for the economically backward families and in an attempt to stop pilferage and diversion of food grains to the open market, a 'Revamped Public Distribution System (RPDS)' was launched in June 1992 in 1775 blocks (mostly backward and remote areas) throughout the country.

Subsequently, the Targeted Public Distribution System (TPDS) was introduced effective from June 1997, which envisaged subsidized distribution of food grains to poor families (classified in India as below poverty line (BPL), above poverty line (APL) and poorest of the poor families identified as Antyodaya Anna Yojana (AAY). TPDS was amended with an intention to benefit around 6 crore (60 million) poor families for whom a quantity of about 7.2 million tonnes of food grains was earmarked annually.

The identification of the poor under the scheme is performed by the states as per poverty estimates of Planning Commission of India. In 2000, in view of the consensus on increasing the allocation of food grains to BPL families, and also to better target the program, the Indian government has increased the allocation to BPL families from 10 to 20 kg of food grains per family per month at 50 per cent of the economic cost and allocation to the APL families.

The number of BPL families has been increased by shifting the base to the population projections of the Registrar General as on 1 March 2000 instead of the earlier population projections of 1995. This has increased the total number of BPL families who are at present eligible for subsidized food grains. The allocation of food grains for the BPL families was further increased from 20 to 25 kg per family per month with effective from July 2001. Initially, the AAY families were provided 25 kg of food grains per family per month at the time of launching of the scheme in December 2000. The scale of issue of food grains under APL, BPL and AAY has been revised to 35 kg per family per month with effective as on 1 April 2002 with a view to enhance the food security at the household level.

Under the TPDS, all ration card holders have been segregated into APL and BPL families. The BPL families acquire food grains, sugar and kerosene at one-half of the price than that to the APL families.

Further, the central government has another scheme known as AAY launched during the year 2000, under which the bottom most 2.5 crore below poverty families get 35 kg of rice at ₹3 per kg and wheat at ₹2 per kg through the same fair price shops.

Senior citizens of 65 years of age and above if not covered under National Old Age Pension Scheme acquires 10 kg of food grains at free of cost.

Issues in Targeted Public Distribution System (TPDS)—Reasons

The main flaw in the system that a large chunk of those who are eligible for subsidized food grains under BPL category have been left out leading to critically question comprehensiveness of TPDS.

The criteria for inclusion in the BPL list are solely economical which is often understated or under reported because lack of availability of national income data. There are allegations that persons having political patronage have found a place in the BPL list. Not all BPL families are 'actually' BPL, but are included. A large number of the very poor families are in the APL category and are thus denied their right for acquiring the subsidized food grains from TPDS.

Further, the BPL families graduating in terms of income criteria should technically be excluded as beneficiaries under BPL, however, they continue to do so. There is thus incentive to be classified as a BPL family; as a result no family would like this tag to go. In the existing system, there is 'no exit but entry' only, thus becoming an ever increasing liability of the government, in terms of increase subsidy bill and the benefits 'not exactly' those for whom it is intended.

Clearly, it is not the schemes but the delivery channel which has failed us. Starting from the identification of beneficiaries, bogus cards (in terms of a recent government survey over ₹1.75 crore are bogus cards). There is no attempt to review the ration cards which are issued.

The other is the large-scale black marketing, hoardings and their diversion to open market. Government resources, say that as much as 20 per cent of the food grains meant to be supplied under TPDS, find their own way in the open market. Even the quality of food grains being supplied under TPDS is of suspect, given the conditions of storage in the warehouses of FCI.

The TPDS in its current form is not only inefficient, but more importantly, it does not reach out to the poor people, besides wastage and diversion is rampant. It is ironical that a country like India has more than enough required buffer stock, excessive subsidization by the government, yet there is hunger and about 270 million poor people in the country. Can this be known as 'food security' in India?

National Food Security Bill

Distinctly, inclusion of the people as been a major issue in TPDS and the government has tried to address by attempting a revamp of the TPDS, by moving away from 'inclusion' to that of 'exclusion', or including a larger percent of both rural and urban population as part of the 'National Food Security' bill.

This bill proposes to cover 75 per cent of the rural and 50 per cent of the urban population. It seeks to provide 5 kg of rice at ₹3, wheat at ₹2 and coarse cereals at ₹1 per month to each in the population covered. State government will be free to decide the criteria for coverage of population. The current scheme of Antodaya covers the poorest of the poor and would be continued.

This will demand food grain requirement of around 60 million tonnes and entail an annual subsidy of around ₹1.3 lakh crore or ₹1 billion annually.

What can be the Issues around the Food Security Bill?

Food security should be envisioned around a 'basic nutrition basket of goods' aimed at getting rid of malnutrition and ensuring 'nutrition security' of its population. Mere inclusion of coarse cereals will not allow building nutrition security for its population. Various international reports have clearly mentioned that addressing, both hunger and malnutrition, should be accorded as the top most priority in India.

Both in terms of 'hunger' and 'malnutrition', India ranks poorly. In terms of a study by the International Food Policy Research Institute, India is ranked 67 out of 84 countries in the Global Hunger Index.

Implementing such a scheme at a massive level, without addressing the inefficiencies in the delivery system, relative ability of the state governments, can well defeat the very purpose of the scheme, of reaching out to the poor.

Procurement of food grains of such magnitude would require not only augmenting but also scaling-up storage capacity and improving the facilities in storing them. India may well need to import food grains which would impact global food prices and also impacting their prices in India.

It is not about the magnitude of the subsidy bill and their provision made in the present budget. It is the continuous and the increasing liability of any government in perpetuity. How long can it be sustained in the future? Will such a scheme not provide complacency to its population, of shying away from work with the 'assured food available' without working to earn to buy the food?

What Needs to be Done as a Part of Food Security?

Initially, there is a need to have a mechanism to identify the beneficiaries or the poor people. BPL cards are of conclusive proof of them being beneficiaries, but 'not a conclusive proof of being below poverty line'. This is the biggest challenge in addressing food security in India.

The government has set up the Unique Identification Authority of India, the first of its kind in the world with the ambitious objective of allotting biometric twelve digit unique ID number to each and every person in the country under 'Aadhaar project'. However, the talks about the project will provide only a unique 'identity' to the people but not enable ascertaining 'income or consumption expenditure' of the people, which is required for identification of beneficiaries.

The best way, which the government is proposing, is by following the 'exclusion method', of excluding certain categories as beneficiaries, rather than identifying the targeted beneficiaries. However, even this will require broad consensus on the categories to be excluded and cannot be left to the state governments for uniformity purposes. One category may be excluded by one state but the same category may be included by some other state. Broad parameters of exclusion should be spelt out by the central government through a process of consensus and leave the fine tuning to the respective state governments.

As mentioned earlier, food security should be seen as 'nutrition security' providing food grains to the people with 'mal nutrition' is a bigger damage. Objective of the government should be not only to 'feed' but also have a 'fit' population.

The entire TPDS operations of procurement, storage, movement and its ultimate distribution to the poor should be computerized with a technology leveraged tracking mechanism throughout the country. Even though it is a difficult task, it can be created by the government with the help of creating a data base of the entire population, through the 'Aadhaar scheme'. It is also feasible to have an efficient food management system.

Storage capacity has to be increased at least by about 15–20 million tonnes in the immediate short run. There is a need to adopt the public private sector partnership (PPP) for streamlining storage, storage facilities transportation and establishing an efficient delivery chain.

Any subsidy mechanism is always inefficient as there is bound to be leakages, no matter what efforts are made, to plug them. The only better way to reach out to the poor people is providing direct income support, to the extent subsidy is to be given. For example, if the government desires to give to the poor people rice at ₹3 per kg as against a market price of say ₹15 per kg in the market.

The poor people can be a provided an income support of ₹12 per kg. This is possible if the government has both their identity and access to their account where the amount can be credited. Alternatively, smart cards with embedded monetary values can be given to the poor people for purchasing food grains at market prices.

Finally, at a more fundamental level, food security should be, as well said, 'Never give a poor person a fish to eat but rather teach him how to fish'.

The central problem in India is creating employment opportunities for the people. India has to work around it, as larger part of sustainable food security for the people, of their relative ability to earn a livelihood with which, they can purchase what they wish to consume. Focusing on improved agricultural productivity, work around the supply chain so that 'availability of the minimum nutrition basket at reasonable prices is always ensured'.

Government should provide subsidized food basket, to those physically handicapped, those incapable of entering employment stream, senior citizens and other such classes as the government may deem fit, 'but as matter of exception rather than a rule'.

Food security has to be seen in broader context covering hunger, malnutrition, absolute poverty, addressing inefficiencies in the delivery channel, stream lining identification of beneficiaries, all aimed at improving living conditions of the people and getting rid of absolute poverty from the country.

CHAPTER

6

AGRICULTURE SECTOR

6.1 'WHY' IS AGRICULTURE SECTOR IMPORTANT FOR INDIA?

In the previous section, we had dealt about agriculture sector which has about 60 per cent plus population-dependence, an aspect which has been there since Independence. This sector provides us with food security and raw material for manufacturing sector.

Each and every country would like to be self-sufficient for its requirements of food grains, pulses, sugar, edible oils, milk, fruits and vegetables.

India has the largest number of villages of over 6,00,000. Majority of our population resides in villages. No other country has so many villages.

India's agricultural sector is characterized by traditional, subsistence and livelihood, rain fed farming, food grain oriented, lacking in diversification and commercialization. Over 80 per cent of the farmers are landless, small and marginal farmers with cultivation for consumption and little diversification. Agricultural finance is informal with reliance on the money lenders. It is said about India that majority of our economic issues are primarily of poverty and unemployment and both the problems and their resolution lie in the agricultural sector.

There is enough literature available on agriculture in standard text books on Indian Economy. It would be suffice to say here that the key issues in agriculture are to increase production through distinct improved productivity.

'Why' is Productivity Important?

In the earlier years, production could be increased by bringing in more and more land under cultivation without addressing productivity. However, today all available arable land is already under cultivation which means production can be increased only through increased productivity.

With the increasing population, increased incomes especially of the poor in the future would increase the demand for agricultural products manifold. What would happen if productivity does not increase? It would mean 'supply' not sufficient for 'demand' which would result in increased prices of food items, as it happened in 2009–2010 with food inflation climbing over 15 per cent in a short period. As everyone will be aware that food inflation will hurt all but the poor will be hit much harder.

Agriculture sector is considered as very vulnerable because it is one sector where demand will only keep on increasing and supply will always be volatile with so many structural factors and others like monsoon dependence as only 40 per cent land is irrigated.

Realizing the importance of food grains way back in the sixties, the government ushered in the 'Green Revolution' pioneered by Dr M. S. Swaminathan, to improve the productivity of wheat and other cereals, through researched improved seeds known as high yielding varieties (HYV) seeds. This was the first time where a scientific approach was adopted and with measured applications of fertilizers, insecticides/pesticides, productivity of wheat quadrupled. The success story was made possible only by creating the right model of optimal land size, assured/adequate water supply, soil conduciveness in the areas such as Punjab, Haryana and Western Uttar Pradesh.

However, it was more of an experiment to see how to improve productivity especially of wheat. Much of the self-sufficiency in wheat can be attributed to the Green Revolution. Our attempts with other revolutions in the agriculture sector were centred around products and their relative importance such as:

- White Revolution (milk and milk products).
- Yellow Revolution (oil seeds).
- Blue Revolution (marine products).
- Golden Revolution (Honey).
- Golden Fibre Revolution (Jute).
- Silver Fibre Revolution (Cotton).
- Brown Revolution (Cocoa).

More recently, Rainbow Revolution (includes horticulture comprising of fruits, vegetables, floriculture, plantation crops, spices, etc.).

India is one among the largest producers of various agricultural goods in terms of area under cultivation and production; however, it clearly lags behind in the productivity in all major crops which is not sufficient for the domestic market as is evident in their increasing prices. It is not sufficient enough to be satisfied as the largest producer of pulses, coconut, ginger, turmeric, pepper, milk or even the fact that India is the second largest producer of rice, wheat, ground nut, fruits and vegetables. It has to be seen in relation to the relative domestic demand and productivity rather than only production.

India is blessed with large land area whereas, China has lesser arable land than us but its agricultural production is double than that of India. Clearly, productivity is the chief differentiator between India and China.

Another concern is that the average annual growth of agricultural production right since Independence has been only 2.5 per cent. This is very low keeping in view the domestic needs. Food grains output has been trapped between 175 and 200 million tonnes of which wheat has stagnated around 70 million tonnes in the last few years. There is an urgent requirement to increase the production which can happen only with the increased productivity.

Growth in agricultural production is seen as a multiplier for the rest of the economy as it helps in augmenting supply of food products thereby cooling prices. It also increases income of the farmers and thus greater demand for non-agricultural goods giving incentive to the industrial sector to produce more and provide an upward spiral in growth.

6.2 NEW AGRICULTURAL POLICY 2000

The government realizing the importance of the agriculture sector formulated the New Agricultural Policy during 2000, which has tried to give a new direction to the agriculture sector which has the following salient features:

- Agriculture sector has to grow at an average annual growth of a minimum 4 per cent over the next few decades.
- Greater focus has to be given on horticulture, animal husbandry, poultry, dairy, aquaculture given their potential and their twin ability to raise the plank of growth and increase purchasing power.
- Need to provide food and nutrition security.
- There is a requirement for greater biotechnology use, newer plant varieties and their protection through suitable legislation, greater thrust on scientific farming, dissemination of technology advancements.
- Focus on agro and social forestry for maintaining ecological imbalances.
- Regular supply of price protection to farmers through the minimum support price system.
- Dismantling restrictions on movements of agricultural commodities.
- Increase public investment in agriculture sector especially rural electrification, irrigation projects, watershed development, etc.
- Create off-farm employment opportunities through promotion of agro-processing units.
- Land reforms to be provided a decisive thrust for better land distribution, consolidation and re-distribution of surplus land to landless farmers.
- National Agriculture Insurance Corporation should provide insurance cover in case of crop failure, droughts, etc.
- Allowing private sector participation through contract farming.

The new agricultural policy of the central government is only indicative in nature as agriculture being in the state list falls within the domain of respective state governments which would have the responsibility to implement the policy. Many experts including Prime Minister Manmohan Singh feel that India's agriculture sector requires a 'Green Revolution II'.

6.3 RAINBOW REVOLUTION

The earlier Green Revolution was centred on wheat and now what is required is a comprehensive revolution, which covers the entire agriculture sector known as Rainbow Revolution and it essentially means the following:

- Agricultural activities to change from subsistence and livelihood activities to as a commercial venture with focus on productivity and profitability.

- Crop diversification, commercialization, moving up the value addition chain.
- Intensification of research and should ensure their effective dissemination amongst farmers.
- Agricultural extension service, which is transmission of appropriate technology from lab to land, has virtually collapsed in India. Less than 1 per cent of farmers make use of the extension services (Krishi Vigyan Kendra). Block level extension services are not equipped with the latest advancements in technology. There is an urgent requirement of their integration in the agriculture sector to close the knowledge gap.
- Allowing modern science, biotechnology, organic farming to be blended within the agriculture sector.
- Farmers to move away from two-crop cycle to shorter duration crops allowing for multiple cropping.
- Stress on completion of irrigation projects to get more and more land under irrigation.
- Increase both on and off farm employment.
- Focusing on rural transportation.
- The farmer should become the fulcrum and efforts made to improve his standards of living and in his prosperity, lies the prosperity of the agriculture sector and the Indian Economy.

Dr M. S. Swaminathan, an agricultural economist, however, feels that India needs 'Ever Green Revolution' for long-term sustainability. It cannot be achieved in one shot but continuous shots at improving production and productivity, suitable blend of the traditional with modern, focused on locally renewable sources of energy, organic farming and making inputs and credit available to the farmers, as fundamentally more important today.

Agriculture sector right since Independence has been a thrust area, with increased investments in each successive five-year plans, but problems have not only remained unresolved but only accentuated over a period of time with large-scale rural poverty.

6.4 MINIMUM SUPPORT PRICE (MSP)

The government announces the minimum support price (MSP) for twenty-four crops including rice, wheat, pulses, sugarcane prior to harvest which is to say that the minimum price of crops in the market would not be less than the MSP announced for the crop. Of the MSP announced for various crops, the government through Food Corporation of India, as discussed in an earlier chapter, directly procures wheat and rice for meeting buffer stock requirements and also to channelize the food grains to the poor through various government sponsored schemes. For the remaining crops, the government would ensure a price which is higher than the MSP in the market.

Fruits and vegetables are sold to the agriculture produce marketing cooperatives (APMC) of the respective state governments, which also fix the price keeping in view their relative cost and also ensure the farmer obtains a fair price.

The delivery channel has a number of middle men, who serve as bottlenecks and also responsible for increased prices, large-scale hoardings and also prevents the farmer from getting benefits of increased prices.

The MSP allows a farmer knowing the price which he would get for the produce in the market especially for the food grains, but it is also believed that the benefits largely go to the bigger farmers, besides the MSP has prevented diversification of the agriculture sector. Many critics have favored discontinuation of the MSP, but the large scale small and marginal farmers do benefit, even though a larger chunk of the benefit is reaped by the affluent farmers. Further it may be too pre mature for India, presently to move towards a market pricing for food grains.

6.5 INDIAN AGRICULTURE—TEN NEW THOUGHTS

Agriculture sector in India requires an out-of-box thinking keeping in mind the criticality of this sector.

At first, the scientific/modern genetic engineered farming today is crucial for India's future.

Secondly, the markets for the farmers are distorted, not enabling them to get the best prices and there is a need to connect the farmer directly with the markets what is referred as F(Farmer) • F(firm) • F(fork).

At present, selling of agricultural commodities is under the APMCs of the respective state government. Today, technology/internet provides not only for domestic access but also for global access.

Farmers would need to be sensitized towards accessing those markets which get them a better pricing. This would also do away with the inefficient middle men syndrome, which are intermediaries with no contribution and on the contrary are largely responsible for distorting, hoardings and other such malpractices.

Third, is contract farming which also allows for direct contact of the farmer with the market. Under this, the land is with the farmer except that production of a crop is under a 'contract' with a buyer directly who also has the responsibility of providing necessary inputs and also picking up the produce whenever ready.

This will however require two critical supports from the government:

- Amendments to the respective APMC of different state governments.
- Enacting legislations to ensure that interest of the farmers is adequately protected.

Fourthly, a serious thought would have to be afforded to corporate farming which allows private sector players to enter into agricultural activities. It is not true that this step would lead to greater marginalization and exploitation of the small and marginal farmers.

There is a larger take away in the form of increased productivity, commercialization, diversification, greater value-addition, greater and efficient use of land, building an efficient supply chain, increased investment and readily absorbed modern technologies. Almost 40 per cent of food products are wasted and destroyed in the absence of supply chain which can easily be plugged by the large corporates resulting in increased supply of food products and this would lead to lower prices in the markets.

Fifthly, what is required today is complete mapping of soils across the length and breadth of the country, superimposed with historical data of the climate, rainfall, crop suitability and then decide on the cropping pattern. Today, technology information is available to allow for soil, climate-based cropping pattern and not on traditional and historical-based cropping pattern.

Sixthly, need of growth will start to encroach upon land for setting up the special economic zones, setting up power plants, building roads, etc., which means in future the land available for agriculture would gradually be reduced.

In terms of The National Bureau of Soil Survey and Land, Government of India, land under non-agriculture has increased from 3 per cent in 1950–51 to over 11 per cent presently. This makes increasing productivity not only important but an absolute 'Must'.

Seventhly, there is an increasing trend amongst farmers in the belief of agriculture as non-viable and unprofitable provided, the increasing cost of production and they exiting by selling the land for industrial activities. In recent times, the government is also declaring large land area as non-agriculture to support industrial growth.

Herein, lies the challenges of balancing both but larger challenge would be to reestablish agricultural activities as not only viable but also as a profitable commercial proposition.

Eighth, is the land reforms which have been an avowed objective since Independence but little has been done and still lesser achieved. There is a need for this to be prioritized by the state governments. Further efforts should be made to computerize land records such as the 'Bhoomi Project in Karnataka' and web-based land records under the 'Dharitree Project in Assam'. India also has large waste land area which could be given to rural landless people on ownership basis at free of cost for integrated farming-cum-forestry operations. This would serve the objective of utilization of waste land besides giving the landless farmers a source of livelihood.

Ninthly, current agriculture sector is starved of investment and it receives as little as 0.3 per cent of GDP. There is an urgent need to step up public investment in irrigation, roads, power and public health.

Finally, today strategy for agriculture sector would have to be broken down to the last unit which is the village or at best district level. Issues at each district level would need to be prioritized and then efforts should be made for their resolution.

What the agriculture sector needs is not another green or rainbow or evergreen revolution but a renaissance which is rebuilding the agriculture sector.

6.6 FOOD PROCESSING INDUSTRY—AN OVERVIEW, OPPORTUNITIES AND CHALLENGES

India's Agrarian Strength

India produces 200 million tonnes of food grains of which it is one among the largest producers of wheat and rice. It is the second largest producer of groundnuts, fruits and vegetables, which accounts for 10 per cent of the world's fruits production and the country is leading in the production of mangoes and bananas. India is the world's largest producer of milk owing to the strong business models which are formed through cooperative movements in the country. Meat and poultry has also gained popularity due to the emergence of producers that have integrated breeding, feed milling, contract growing and marketing facilities which results in improved productivity. Meat, fish and poultry are in rural areas as they are easily affordable and provide necessary nutrients.

In recent years, there has been a shift from conventional farming of food grains to horticulture which includes fruits, vegetables, ornamental crops, medicinal and aromatic plants, spices and plantation crops including coconut, cashew nuts and cocoa and allied activities.

Nascent Food Processing

Despite the agrarian strength of production in India, food processing industry is still in a nascent stage but holds tremendous potential to grow, considering the wide-ranging and large raw material base that the country offers, along with a consumer base of over one billion people. This industry holds tremendous opportunities for large investments and an untapped market. Even though India's agricultural production base is reasonably strong, it has low productivity and is largely a livelihood activity. It is also characterized by high levels of wastage of over 35 per cent especially in fruits and vegetables.

Processing of fruits and vegetables is low 2 per cent, around 35 per cent in milk, 21 per cent in meat and 6 per cent in poultry products. By international comparison, these levels are significantly low—processing of agricultural produce is around 40 per cent in China, 30 per cent in Thailand, 70 per cent in Brazil, 78 per cent in the Philippines and 80 per cent in Malaysia. Value addition in agriculture produce in India is hardly 20 per cent.

The other important aspect is organized sector which has very little presence and largely dominated by the unorganized sector. For example, in fruits and vegetables segment over 90 per cent is by the unorganized sector.

The food processing industry in India has a very small share of 1.5 per cent in the total GDP of the country and as a part of total manufacturing accounts for around 9 per cent. India's share in world trade in respect of processed food is only about 1.6 per cent.

Potential of the Food Processing Industry

This industry has to be seen in the larger context of the industry witnessing an exponential growth and the market growing from US $190 billion likely to go up to US $300 billion by 2015 and further to US $350 billion by 2025. Such a huge market cannot be handled by the unorganized sector and has to be taken care as a sound business proposition both in terms of the potential and also harnessing this potential.

According to the Confederation of Indian Industry (CII) the food processing sector has the potential to attract US $33 billion of investment in 10 years and can generate employment of 9 million person-days.

Government Initiatives

Realizing the importance of food processing and its potential in India, the government has set up a separate Ministry for Food Processing Industries during 1998, with the following under its purview:

- Fruit and vegetable processing (including freezing and dehydration).
- Grain processing.
- Processing of fish (including canning and freezing).
- Processing and refrigeration of certain agricultural products, dairy products, poultry and eggs, meat and meat products.
- Industries that are related to bread, oilseeds, meals (edible), breakfast foods, biscuits, confectionery, malt extract, protein isolate, high protein food, weaning food and extruded food products (including other ready-to-eat foods).
- Beer, including non-alcoholic beer.
- Alcoholic drinks from non-molasses base.
- Aerated water and soft drinks.

The vision 2015 for the food processing sector aims at the following:

- Enhancing and stabilizing the income level of the farmers.
- Providing choice to consumers in terms of wide variety and taste including traditional ethnic food.
- Providing greater assurance in terms of safety and quality of food to consumers.
- On promoting a dynamic food processing industry.
- Enhancing the competitiveness of food processing industry in both domestic as well as international markets.
- To establish the food processing sector attractive for both domestic and foreign investors.
- Achieving integration of the food processing infrastructure from farm to market.
- Having a transparent and industry friendly regulatory regime.
- Arranging in place a transparent system of standards based on science.

The following specific targets have been set out for the year 2015:

- Increase in the level of processing of perishables from 6 to 20 per cent.
- Increase in value addition from 20 to 35 per cent.
- Share in global food trade to increase from 1.5 to 3 per cent.

An estimated investment of ₹100,000 crores is required to achieve the vision, of which ₹45,000 crores is expected to come from the private sector, ₹45,000 crores from financial institutions and ₹10,000 crores from government.

The government seeks to create an appropriate environment for entrepreneurs to set up food processing industries through the following:

- Fiscal initiatives and interventions such as rationalization of tax structure on fresh foods as well as processed foods and machinery used for the production of processed foods.

- A concerted promotion campaign to create market for processed foods by providing financial assistance to industry associations, NGOs/cooperatives, private sector units, state government organization for undertaking generic market promotion.
- Harmonization and simplification of food laws by an appropriate enactment to cover all provisions relating to food products so that the existing system of multiple laws is replaced and also covering issues concerning standards such as nutrition, merit goods, futures marketing, equalization fund, etc.
- Efforts to expand the availability of the right kind and the quality of raw material round the year by increasing production and improving productivity.
- Strengthening of database and market intelligence system through studies and surveys are to be conducted in various states to enable planned investment in the appropriate sector matching with the availability of raw material and marketability of processed products.
- Strengthening extension services and to the farmers and co-operatives in the areas of post harvest management of agro-produce to encourage the creation of pre-processing facilities near the farms such as washing, fumigation, packaging, etc.
- Efforts to encourage setting up of agro-processing facilities as close to the area of production as possible to avoid wastage and reduce transportation cost.
- Promotion of investments, both foreign as well as domestic.
- Simplification of documentation and procedures under taxation laws to avoid unnecessary harassment arising out of mere technicalities.
- Establishment of cold chain, low cost pre-cooling facilities near farms, cold stores and grading, sorting, packing facilities to reduce wastage, improve quality and shelf life of products.
- Application of biotechnology, remote sensing technology, energy saving technologies and technologies for environmental protection.
- Building up a strong infrastructural base for production of value added products with special emphasis on food safety and quality matching international standards.
- Development of packaging technologies for individual products, especially cut-fruits and vegetables, so as to increase their shelf life and improve consumer acceptance both in the domestic and international markets.
- Development of new technologies in food processing and packaging and also to provide for the mechanism to facilitate quick transfer of technologies to field through a network of R&D institutions having a central institute at the national level with satellite institutions located strategically in various regions to cover up the whole country and to make available the required testing facilities. This could be done by establishing a new institution or by strengthening an existing one.
- Development of area-specific agro food parks dedicated to processing of predominant produce of the area e.g., apple in J&K, pineapple in North East, lichi in Bihar, mango in Maharashtra and Andhra Pradesh, etc.
- Development of anchor industrial centre and/or linkage with anchor industrial units having network of small processing units.
- Development of agro-industrial multi-products units capable of processing a cluster of trans-seasonal produces.

- Establishment of a sustained and lasting linkage between the farmers and the processors based on mutual trust, understanding and benefits by utilizing the existing infrastructure of cooperative, village panchayats and such other institutions.
- Mechanism to reduce the gap between the farm gate price of agro-produce and the final price paid by the consumer.
- Development of futures market in the best interest of both the farmers and the processors ensuring minimum price stability to the farmer and a sustained supply of raw material to the processor.
- Setting up of an equalization fund to ensure sustained supply of raw material at a particular price level and at the same time to plough back the savings occurring in the eventuality of lower price to make the fund self-regenerative.
- Establishment of a strong linkage between the processor and the market to effect cost economies by elimination of avoidable intermediaries.
- Establishment of marketing network with an apex body to ensure proper marketing of processed products.
- Development of marketing capabilities both with regard to infrastructure and quality in order to promote competitive capabilities to face not only the WTO challenge but also to undertake exports in a great way.

Given the trends in the Indian food and beverage sector including key industry consideration, it is imperative for the Indian industry to leverage the emerging opportunities through the following:

- Exploitation of the huge untapped potential in processed foods.
- Opportunities demonstrated by contract farming, captive supplies of raw materials, disintermediation and direct access to farmers, availability of new and improved seeds and farm technology.
- Value addition to unprocessed categories of food such as dairy, fruits and vegetable, staples and edible oils.
- Exploitation of increasing health and safety awareness of the Indian consumer—this would pave the way for value added products on a health platform.
- Investment in supply chain in order to improve costs, tighten supplies and minimize wastage.
- Investment in better packaging and cold chain infrastructure will aid the processed food and beverage sector as these would aid in processing of fruits and vegetables.
- Exploration of appropriate regional branding strategies in order to appeal to the deep rooted traditions, values and customs of the consumer.
- Taking advantage of the inherent ethnic tastes and food habits of the Indian consumer—this provides the local food players a distinct advantage over foreign entrants into the sector and poses an entry barrier for the latter.
- Exploitation of the increasing consumerism fuelled by new job opportunities, larger disposable incomes and the emerging boom in modern retail trade.
- Opportunities for growth through the inorganic route, both domestically and outbound this would provide access to new product categories, brands, markets and new technologies.

- The SEZ/AEZ opportunity would also provide players an added incentive to develop green field projects within these zones and enjoy additional fiscal benefits.
- The Indian foods and beverage industry is poised for a significant leap forward—these are interesting times and continued success will depend on a proper understanding of the landscape and challenges therein, quickly exploiting emerging opportunities, skillful execution of strategic mergers and acquisitions and effecting a seamless organization to evolve into truly global players.

Mega Food Park Scheme

Highest priority has been accorded by the government for the development of infrastructure. The government has already taken several initiatives on this front which include developing of food parks, packaging centres, modernized abattoirs, integrated cold chain facilities, irradiation facilities and value added centres.

The initiative to develop food parks was taken primarily in order to assist the small and medium enterprises which are unable to invest in capital intensive activities. So far, twenty-two food parks have come into operation which provide common facilities such as cold storage, food testing and analysis labs.

The primary objective of the MFPS is to provide adequate/excellent infrastructure facilities for food processing along the value chain from the farm to market. It will include creation of infrastructure near the farm, transportation, logistics and centralized processing centres.

The main feature of the scheme is a cluster-based approach. The scheme will be demand-driven; pre-marketed and would facilitate food processing units to meet environmental, safety and social standards. The expected outcome results in increased realization for farmers, creation of high quality rural processing infrastructure, reduction in wastage, capacity building of the producers and processors and creation of an efficient supply chain along with significant direct and indirect employment generation.

The scheme aims to facilitate the establishment of a strong food processing industry backed by an efficient supply chain, which would include collection centres, primary processing centres and cold chain infrastructure. The food processing units, under the scheme, would be located at a central processing centre (CPC) with requirements based on common infrastructure which are required for processing, packaging, environmental protection systems, quality control labs, trade facilitation centres, etc.

Urgency of Such Initiatives—Reasons

As mentioned earlier, it is because of the growing market largely because of increased income of people, rapid urbanization, changing demographics, movement away from joint families to nuclear families and increasing number of working women. The changing pace of life has marked a preference for processed food.

These have resulted in shift in consumption driven by the processed food market which is increasing and presently accounts for 32 per cent of the total food market and is likely to grow further only. The food processing industry is growing and has become one of the largest industries in India—it is ranked fifth in terms of production, consumption, export and expected growth.

Consumption patterns in India have been undergoing a visible shift. Earlier, the share of cereal products was the highest, followed by milk and milk products, vegetables, edible oil and meat products. However, in recent years, the growth rates for fruits, vegetables, meat and dairy products have been higher than cereals and pulses. This shift in turn implies that there is also a need to diversify the food production base to match the changing consumption preferences.

This shift in consumption follows the pattern observed in developed countries in the evolution of the global food demand. There is a shift from carbohydrate staples to animal sources and sugar. On following this pattern, in future, there will be increasing demand for prepared meals, snack foods and convenience foods and further on the demand would shift towards functional, organic and diet foods. These are post-liberalization trends that have given an impetus to the sector.

Some Structural Issues

Farmers have a limited market for their agricultural produce, which are confined to the local 'Mandis', and are governed by APMC under the respective state government; and the farmers can only sell to them. They cannot sell directly to the private parties for further processing. As a result, they are denied better prices and also prevent food processing. They also have limited information about the market(s), prevailing prices and operate within their limited knowledge, based on their own wisdom.

The supply chain of agricultural produce from the farmer to the ultimate consumer lacks transparency and passes through a number of middlemen raising cost through commission charges, resulting in higher prices without any value addition. Further, the absence of storage/warehousing facilities and an inefficient transport system results in wastage, which only add up to higher prices.

There is virtual no use made of even the available technology let alone leveraging technology in the entire supply chain. There is no quality control and testing mechanism for agricultural produce which reaches the consumer. The extent of use of fertilizers, hygiene aspects and whether they are safe for human consumption is not seen as anyone's responsibility.

Remedial Measures

The government has taken the first step, by allowing the FDI in multi-brand retailing. Despite the opposition by various vested groups, it is a step in the right direction (which are dealt at length in the section on foreign investment). This will address most of the structural issues, especially back end activities. This will lead to an organized development of the supply chain bring in transparency and the investment in development of cold chains and warehousing facilities. It will also lead to a technology infusion and a boost to the food processing industry. This will also ensure a larger participation of the private sector in the entire chain.

However, this step will require a critical enabler, that of, amending to the respective APMC act of the respective state governments. This amendment will allow farmers to sell directly to those interested in food processing, which allow private sector to set up back yards for picking up produce from the farmers. It will also open up the supply chain.

It is for this reason the central government has permitted the FDI subject to consent of state governments.

In recent times, there has been a biotechnology revolution and now is the time for 'food revolution' around food processing industry and this is the reason why this industry is known as a 'sunrise industry' in view of its potentiality. India besides meeting its own food needs in terms of quality, diversified and value added products is also capable of expanding to global markets. The food market can never have a down turn like other markets as it is driven as a basic necessity and the demand will always be there for the same. The real challenge will be from the supply side or the ability to feed this growing market.

The food processing industry in India has only become to evolve and has the capability of becoming the fastest growing sector in the future, with tremendous opportunity and potential, but also at the same time a challenge in overcoming the structural issues, improvements in supply chain and transforming from an informal to a formal sector business activity.

7 LAND REFORMS—ANOTHER PERSPECTIVE

7.1 LAND REFORMS—ASPECTS

Contemporary land reforms in India addressed aspects such as abolition of the 'Zamindari' system, land ceiling act, reforms in tenancy, rights of tenants, redistribution of surplus land and land consolidation. These have been a focus area right since Independence, largely within the state government domain. They continue to be a priority area with prevalence of a large number of small and marginal farmers and also a large number of landless farmers.

The objective of this chapter is to bring out a new perspective, which has become extremely relevant and also would require to be addressed on an equal important priority, in tandem with the requirements of the economy.

The total area covered under agriculture is around 60 per cent of the land area of India. Various articles mention a declining trend of area under agriculture, as a disturbing trend. The forest cover of India is around 20 per cent, unreported around 5 per cent and the remaining 13 per cent as mountains, rivers and also for non-agricultural purposes including industries. Thus, a total land area for industrial/service sector/infrastructure activities is only 11 per cent.

How much of GDP is accounted by various sectors of the economy in relation to the land use? Agriculture consumes up to 60 per cent of the land area whereas, contributes only 17 per cent of GDP, while industrial/service sector contribute over 80 per cent of GDP but has only 11 per cent of the land area. Growth in future will require large land area under non-agriculture for industries, service sector activities and also for building infrastructure.

This is not to undermine the importance of agricultural sector in India. The issue lies in improving the agricultural productivity, rather than the area under agriculture. This sector is important for food security and also for meeting the requirements of a growing population, however, at the same time it cannot become a driver of growth. This has to be driven around a widened and diversified manufacturing and industrial base, which will require freeing up of land under agriculture. At least there should be political acceptability of this fact.

7.2 LAND ACQUISITION BILL

At present, there is lot of resistance for conversion of agricultural land for non-agricultural use and a subject matter, of the respective state government. Further, the present policy of land acquisition is being done in terms of the Land Acquisition Act of 1894, now amended. Companies are restive over delay of their projects, mainly due to serious problems in land acquisition and environmental clearances. Eighteen major projects in sectors such as steel and power, equivalent to ₹244,815.50 crores, are stuck due to procedures relating to land acquisition and forest and environmental clearances.

In the absence of investment in critical areas, it will be difficult to increase levels of growth. Already India is experiencing a slow down in growth and investment, which needs to be scaled-up. This is not a question of resources (which is available), but their conversion into investment as an issue. It is in this context a new land acquisition law entitled the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Bill 2012', has been enacted to replace the existing Land Acquisition Act of 1894.

The act will provide transparent process for land acquisition for industrialization, development of essential infrastructural facilities and urbanization, with least disturbance to the owners of the land and other affected families. The affected families, whose land has been acquired and also to the families whose livelihoods are affected by land acquisition, will now get just and fair compensation.

The proposed land acquisition law defines 'public purpose' so as to prevent arbitrary acquisition of land. Social impact assessment and establishment of public purpose has been made mandatory through the participatory processes. The affected families have been guaranteed certain rights for rehabilitation and resettlement.

Safeguards for protecting food security and limitations/prohibitions on acquisition of land in scheduled areas without the consent of the Gram Sabhas has been done to ensure special dispensation to SCs/STs with regard to compensation, resettlement and rehabilitation.

It is an appreciable move by the government of reviewing a policy framed over 100 years ago. This would be for the first time comprehensively covers acquisition, rehabilitation and resettlement under one Act. It is a land mark bill but at the same time it is also felt that it could increase cost of projects, for which land is being acquired, manifold.

At a broader level, this bill will lead to uniformity and transparency, remove ambiguities and more importantly facilitate the process of conversion of land from agriculture to non-agriculture and facilitate investment in the economy. While the act, will be a landmark in land reforms, post-independence, there are still unresolved issues which would need the attention of the government as a part of the land reforms.

7.3 NATIONAL LAND USE POLICY—EFFICIENCY IN THE USE OF LAND

Land is a scarce resource for the country and every effort should be made to have 'land efficiency' either in agriculture or in any other activity. It should be appropriate to have at central government level a 'National Land Use Policy', and within the broad umbrella, state government could have their respective land use policies. This would result in better utilization of land, depending on the priorities of government and a balance between competing usages of land based on efficiency and productivity. Their importance also lies in the fact that this policy should then become the base of land acquisition policy and not on the other way around, of first acquiring the land and then talk about land use policy.

7.4 LEASING OF AGRICULTURAL LAND

At present, leasing out of land is only for non-agricultural land and agricultural land can only be used for self-cultivation or could be sold but present laws do not allow leasing of land and giving out agricultural land on rent. Farmers who cannot undertake farming on their entire land area, or those who are not interested can rent out their land to those who are interested or those who do not have land. This could help increasing both production as well as productivity and also lead a way to make agriculture, a commercial venture which presently is by and large a livelihood activity.

Widespread prohibition of land leasing, prevents healthy rural–urban migration, as villagers are unable to lease their land, and often have to leave land untilled or leave a family member behind to work on land. Lifting these restrictions can help landless, acquire land from those who migrate, even while it will allow, landowners with education and skills to move to industry or services.

Compulsory registration of leaseholds and of the owner's title would provide tenants and landowners a protection. Of course, for such a leasing market to take off, owners should be confident that long-term tenancy would not lead to their losing ownership. With a vibrant leasing market, and a clear title, there should be a little reason for not strengthening their ownership rights.

This lease hold mechanism can also be considered for large projects and also infrastructure, which would obviate the need for 'land acquisition', and by pass many issues such as cost, compensation to be paid, resettlement and other such issues. It will also keep capital costs down of large projects and make land available quickly for projects.

7.5 MOVING FROM 'PRESUMPTIVE TO CONCLUSIVE' TITLE

Economic Survey 2012–2013, mentions 'The National Land Records Modernization Program' (NLRMP) which started during 2008 aimed at updating and digitizing land records by the end of the Twelfth Plan. Eventually, the intent is to move from 'presumptive title', where registration of a title does not imply the owner's title is legally valid, to 'conclusive title', where it does. Digitization will help in lowering the costs of land transactions, while conclusive title will eliminate legal uncertainty and the requirement to use the government as an intermediary for acquiring land so as to 'cleanse' the title.

This is a time-consuming activity requiring active engagement of the state governments and leveraging technology and would need to be completed in a time-bound manner.

Once completed, it would bring in transparency in land dealings, allow for fair pricing and development of an organized market.

7.6 COMPUTERIZATION OF LAND RECORDS

Majority of the issues encountered by the people in exercising control over land, is because of, complex land record system and its overwhelming control by 'lower' level bureaucracy. There is a need to make land records accessible and understood by the common man living in the villages.

It is unfortunate that the system of land administration and management, despite its long history in India, has remained neglected in most parts of the country particularly after development agenda became the major focus of the government and administration in the recent few decades. The regular survey and the settlement operations started after the independence were abandoned, under a mistaken notion, that this whole exercise aimed at periodical revision of the land revenue, which had no place in a democratic polity, particularly because there were other major sources of revenue.

It was little realized, that proper and scientifically updated land records, are not only critical for agricultural development, but also are the backbone of developmental effort. Manual updating and physical verification of land records before their computerization is a must. There should be a National Authority for Computerization of Land Records (NACLR) at the Government of India level. In most states, the work is being handled by the Directorate of Land Records and Surveys who are not able to cope up with the task on account of their multiple responsibilities and this acquires low priority. There is thus a need that at the state level, there should be a dedicated institution in the form of the State Authority for Computerization of Land Records (SACLR) similar to the NACLR to exclusively deal with the computerization of land records. Both should work in tandem and complete the process in a time-bound period.

Such digital land records would be useful in creating a national portal of land records and furthering land reforms being attempted since Independence.

7.7 BEYOND LAND AND LAND RIGHTS

There are few more contentious and complex issues in India today than those dealing with land and land rights. Rather than focusing on land as an issue in isolation, a continuum of rights has to be established regarding land, especially in the areas of access and reform, law and enforcement, use planning and management, administration and information and other cross-cutting issues.

The new and existing initiatives on land should be guided by the core values of pro-poor, conflict resolution, democratic governance, equity, justice, as well as gender sensitivity. Although land policy development is taking place, it generally lacks a human rights framework. Land is not simply a resource for one human right. While some rights have been recently established in the legal framework (such as work, education, food), they can all be adversely affected by access—or lack of access—to land, and the legal implications of it for a broad range of human rights is obvious.

Resolving land issues and land reforms largely fall in domain of the state governments, as a result, progress and priority accorded to this sensitive issue has not been uniform across different states. It has not got the desired attention because of 'vested' interest group, nexus between 'land mafias' and political parties. There is a need to rise above them, impart a decisive thrust and a resolve, of implementing land reforms, in the national interests and also for the benefit of a large cross section of people, the land less and the poor.

CHAPTER

8

SALIENT FEATURES— 'NEW INDIA'

8.1 NEW INDIA

In the recent past, there has been a rapid transformation in the Indian Economy and certain new features have emerged, old perceptions and outlook of the Indian Economy has changed yielding a different perspective of India known as New India and are characterized by the following features:

- India for a long period was believed to be a third world developing country and the first feature is the change in the status from developing, third world country to that of an 'emerging economy', which is an economy with a great potential for accelerating growth that offers investment opportunities. Its huge population is not seen as a liability, but is seen as source of demand and establishes India as the second largest potential market in the world after China.
- Various international reports talk of the future decades belonging to the BRICS economies comprising of Brazil, Russia, India China and South Africa. More recently, Indonesia, South Korea, Vietnam and Taiwan have also been provided the same status and could witness a gradual shift in the global economy.
- Secondly, change in the status from a third world economy to a 'potential economy' and is significant as it questions the supremacy today of the first world countries. It also implies larger say in global matters, sharing at global platforms and global recognition of the New India.
- India is widely believed to become a 'knowledge economy' as it already has millions of knowledge hubs and with the government having set up the Knowledge Commission of India for developing strategies for global knowledge to reside in the country.
- India is being projected as a 'young economy' with over 50 per cent of its population under 25 years of age or 70 per cent of the population under 35 years, a feature which makes India unique or the only country in the world. This is in contrast to the global phenomenon of ageing work force, increased longevity leading to large proportion of non-working to working population globally and increased investment in social security for the ageing population. India can also reap the benefits of favourable demographic dividends through extensive and intensive education and stress on skill development.

- India is being now referred to as a 'market economy' where economic decisions of production and pricing are largely through market forces of demand and supply, rather than the government.

  At present, pricing of food grains (minimum support price), retail petro goods such as LPG, kerosene and diesel (administered price mechanism), fertilizers (group retention price scheme) and utilities are regulated by government and pricing of the remaining products are market determined. Prices determined through the market are said to be 'efficient'.

The aforementioned are some of the emerging features of India known as the 'New India'. Two aspects need to be remembered in mind. First, the global perceptions having changed about India gives a new perspective. Secondly, they reflect the 'advantages' for India but still need harnessing through education and skill formation to be converted as opportunities, otherwise, India from a position of strength in these advantages can be taken over by other emerging economies.

However, then in our zeal and enthusiasm we should not forget that there is also a Real India which one has referred to in the earlier sections, too which can gloss New India.

It may be useful to just revisit the Real India of having the following features:

- Large population residing in 6 lakh odd villages in the country completely oblivious of the New India, under abject absolute poverty, undernourished and living under pitiable conditions.
- Traditional, subsistence and stagnating agriculture sector.
- Lack of employment opportunities in the economy with large-scale unemployment.
- A large proportion of the workforce of over 90 per cent engaged in the informal sector in casual work for livelihood.
- While sectoral composition of GDP has altered towards service sector but economic dependence continues to be on the agriculture sector.
- The increased growth of recent times as well as benefits of reforms of not having touched them or an exclusive rather than inclusive growth.
- Completely oblivious of the fact that there is an international perspective of a New India.

The most notable aspect of the Real India is the large number of population which continues to live below absolute poverty levels and that India continues to be home to the largest number of poor people in the world. While we can draw comfort of the 'New India' *we should not* forget the 'Real India' which is where the soul of the country resides. The biggest challenge for the government and the economy is to integrate Real with New India.

CHAPTER

9 INDUSTRIAL SECTOR AND LIBERALIZATION

9.1 ROLE OF INDUSTRY IN AN ECONOMY

Previously, we have addressed the agricultural sector and its importance to the economy. The industrial sector plays an equally important role as it accelerates growth of economies, provides self-reliance, employment, creates a demand for the agricultural produce and creates 'ripple effect' (similar to throwing a pebble in a pond and you can see the waves moving outwards).

Industries can create townships around them thereby creating indirect employment (Jamshedpur, Rourkela, Bhilai are a few to mention here). Industrialization is all about focusing on the industries allowing them to meet the requirements of the economy besides providing linkages to the agricultural sector and also employment opportunities in the economy. This can be achieved only through higher industrial growth which can provide momentum to overall growth and also make it sustainable in future.

There has been a missing link in India of the industrial/manufacturing sector, despite policies and governmental focus, not playing its role of creating linkages with agricultural sector and also creating desired employment opportunities. The services sector becoming a major contributor to output rather than the manufacturing or the industrial sector. Such sectoral composition in favour of services does happen but once industrial sector has achieved a level of maturity emerged globally competitive and the service sector supporting higher levels of growth of economies, which has not happened in India.

Let us understand industry a bit more closely. It implies conversion of any raw material into a finished good or a manufacturing activity producing wide range of goods which is required in the economy. Industries can also be categorized across the following features:

(1) **Products**—basic industries (steel, cement), capital good industries (manufacturing of plant and machineries). Intermediate goods industries (manufacture of dyes, tools, etc.,) and consumer goods industries (manufacture of cars, scooters, fridges, TV, etc.). The consumer goods industries are also known as 'White Goods Industry'.

(2) **Ownership**—government (public sector), private and foreign (private sector), public and private sector (joint sector).

(3) **Scale of investment in plant and machinery**—large industries (investment in plant and machinery of over ₹10 crores), medium industries (₹1–10 crores), small-scale industries (₹10 lakh to ₹1 crores), village and cottage industries (less than ₹10 lakh).

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(4) **Capital/Labour intensity**—capital intensive industries (larger capital intensive in relation to labour) and labour intensive industries (larger intensity of labour in relation to capital).

Economies desirous of pushing up rates of growth of their economy, would need industrial goods for development and shift focus on setting up basic and capital goods industries commonly known as initiation of the process of industrialization.

India started its journey of industrialization during the second five-year plan (1955/56–60/61). The pattern of industrialization in India is also known as the 'Mahalanobis Model' (an Indian scientist) with the setting up of basic and capital goods industries by the government directly, strongly influenced by the Russian model of state-run industries.

9.2 PUBLIC SECTOR IN INDIA

One may ask 'why' public sector was chosen for industrialization. Post-independence India was deeply influenced by the Soviet Union which had state-run industries and was an era of 'socialism' with large role of the government in production of goods and services. 'Capitalism' was associated with exploitative tendencies and having vested interest.

Immediately after Independence, the private sector was virtually non-existent in India and whatever existed did not have the maturity, resources, technology, etc., to shoulder could get the responsibility of the industrialization. The government, at its own level technology and other such support from other countries which may not have been possible otherwise.

Even if it is presumed that the task was entrusted to the then private sector, industrialization would have required huge resources, technology support and well-trained manpower, which were not available within the then private sector. Basic/capital goods industries have long gestation period (time between investment and commercial production), high break-even point (long period before profits accrue). These could be seen as natural dis-incentives for the private sector at that time.

Setting up public sector in India for industrialization was a conscious, well thought out and deliberate decision given the magnitude of responsibility and the need for moving on a pre-determined path of industrialization. The role of public sector in India was clearly cut-out and set up with the following objectives:

(1) Create significant 'capacities' (ability to produce) in basic and capital goods.
(2) Achieve self-reliance in core areas and also facilitate import substitution.
(3) Attain commanding heights of the economy and become a driver for the industrial growth and a 'catalyst' in accelerating overall growth of the economy.
(4) Adopt pro-labour technology to create employment opportunities.
(5) Setting up industries in backward/tribal areas for their integration with the rest of the economy and also for better regional development.
(6) Provide for development of the private sector.
(7) Set up self-contained townships covering residential, schools, hospitals, transport, etc.
(8) Public sector to have regulated prices by the government given their importance to the economy and not creating an upward spiral in the prices of basic goods.

Six decades since setting up of public sector, can it be said they have delivered or achieved the objectives?

(1) Broadly they have delivered in creating significant 'capacities' in all core areas and having achieved self-reliance in all kinds of industrial goods required in the economy.
(2) Today, India can safely claim that it is not dependent on any country for its requirement of industrial goods largely due to the public sector.
(3) They have provided gainful employment.
(4) It has also facilitated evolution of the private sector and also been responsible for the levels of industrialization and industrial maturity reached.
(5) They can also be credited for making the industrial sector a driver of growth and lifting overall rates of growth.

They have had their own set of issues too, but many of them cannot be directly attributed to them, issues of capacity utilization, technology-related, time and cost overruns but most importantly, many public sector enterprises are loss making. Of the two hundred twenty odd PSU one third are loss making with high levels of accumulated losses.

However, can we really blame the public sector for being loss making? Public sector was set up with socio-welfare considerations provided the objectives of industrialization, self-reliance, employment generation, development of backward/tribal areas. More fundamentally, government ownership and profits do not go together. Profit is a function of pure businesses and public sector by virtue of government being the owner cannot function as a pure business.

Similarly, to comment on the efficiency levels of public sector is incorrect as efficiency levels can be envisioned amongst the 'comparables'. One can comment on who is more efficient amongst say, Pepsi and Coke. However, all public sectors are operating as monopolies in terms of their scale of operations.

Whom would you compare ONGC or BHEL or SAIL with? This is true for all public sectors. It is not to say that public sector is efficient. The expression conveyed here is that it is not possible to comment on efficiency levels of public sector based on efficiency levels of the private sector.

Further comparison of the public sector is technically incorrect as private sector operates as a commercial venture with an explicit profit motive unlike the public sector which also have social objectives to fulfil. Public sector has not to be envisioned from the perspective of profit-making or efficiency levels but in the larger context of the objectives which are assigned to them when they were set up.

We would revisit public sector a bit later after developing an understanding of the industrial policies which have defined the role of public sector and also path of industrialization.

9.3 INDUSTRIAL POLICIES

The role of public and private sector, overall direction to industrial growth and the industrialization has been guided by various industrial policies of the government that has been announced from time-to-time in view of changing priorities starting from 1948 onwards.

However, clearly there are some landmark policies such as the Industrial Policy of 1956 which has given the present character of public sector. The other is the Industrial Policy of 1991 which is hailed as the usherer of economic reforms in India. It may not be required to go into each and every industrial policy since 1948, however, it would be suffice to see the salient key features of all policies pre-1991 which would facilitate a better understanding of the Industrial Policy of 1991 and the changes brought about in the right context.

Industrial Policies (pre-1991) are as follows:

(1) The industrial sector was highly regulated, bureaucratic controls and subject to strict licensing system by the government with the need for a licence for any industrial activity, besides the need for compulsory registration before commencing the business.
(2) The policy of 1956 brought the role of public sector sharply by reserving as many as eighteen areas exclusively for the public sector. In certain areas, private sector was allowed but subject to the requirement of licence and registration. However, public sector could also be set up in these areas if deemed necessary by the Government.
(3) Thus, most critical and important areas of oil, power, heavy equipments, telecom, etc., were exclusively in the domain of public sector.
(4) Bigger private companies were highly regulated through the monopolies and restrictive trade practices (MRTP) act and known as MRTP companies and similarly foreign companies were regulated through the Foreign Exchange Regulation Act (FERA) and known as FERA companies.
(5) It was believed by the government that as a company grows in size it can resort to monopolistic and exploitative tendencies. As a result even after a licence and commencing of business, the private sector had to seek approval from the government for capacity expansion, diversification and other such business decisions.
(6) The earlier policies with a view to give public sector commanding heights and control over key industries/services also paved the way for nationalization or take over from private sector. Thus, coal mining, banking, insurance, textile mills (sick industries were taken over to protect employment) earlier in the private sector, were nationalized.
(7) The pre-1991 policies had price regulation for industrial goods with prices of steel, cement and other basic goods controlled by the government.
(8) Each and every policy had stressed on the mixed economy character of the economy which is co-existence of the public and private sector but in reality it was heavily tilted towards the public sector.

To summarize, the pre-1991 policies were highly regulated and regimented oriented, near dominance of the public sector and a very limited space but with bureaucratic control over private sector companies.

9.4 NEW ECONOMIC POLICY 1991

As mentioned previously, this policy is known to be the beginning of economic reforms in India. Though reforms were there before this also but they were as changes being effected but not seen as reforms made as explicit in the policy of 1991. It is also known as the New Industrial Policy or the New Economic Policy, and also known as the policy of liberalization or end of licence/permit raj or even end of bureaucratic control over functioning of the industrial sector, particularly private sector.

The policy aimed at greater freedom for doing businesses outside the government control, reduced the role for public sector, de-reserving areas and larger role for the private sector, doing away with MRTP/FERA act and dispensing with MRTP and FERA companies. This lifted all bureaucratic control on their functioning. Price regulation paved a way to the market determined prices for most of the industrial goods. The policy emphasized on greater competition and level playing field for all players.

It advocated liberal foreign investment policies to attract foreign investment in the country (more about this in upcoming sections). Broadly, the New Economic Policy or the Industrial Policy 1991 has three broad areas which are as follows:

(1) Liberalization.
(2) Public sector.
(3) Foreign investment.

Liberalization

Liberalization as a policy basically dispensed with the earlier licensing and the registration system providing the freedom to private sector to set up industries without either the need for a licence or a need for registration. De-licensing was the most important aspect of the policy of liberalization. Two areas, atomic energy and railways would not be open for private sector participation. Even while doing away with the licensing system certain critical areas still require a licence but opened up for private sector participation which are as follows:

(1) Any kind of fire arms and ammunition, explosives.
(2) Drugs and pharmaceuticals.
(3) Coal mining.
(4) Defence equipments.
(5) All kinds of wines, cigarettes and spirits.
(6) Hazardous chemicals.

Any environment degrading and polluting industries would not require a licence but an administrative clearance from the respective ministries of central/state government before investment. Further, as a part of liberalization there was now no restrictions on capacity expansion and diversification by the private companies. The policy thus allowed the private sector to operate as pure businesses with minimal bureaucratic control and be driven and expand operations largely by demands in the markets and opportunities available.

Why was this done? It is important to understand that even before reforms, despite the regulations, the private sector struggled, operated within the constraints of the government but survived and was not completely eclipsed by the public sector. The changing economic scenario required a different orientation focused on efficiency, productivity and profitability.

A time had come to acknowledge maturity of the private sector, their resilience, their fighting spirit and that they could now share and shoulder larger responsibilities. In fact, on the contrary, the regulations had given them the maturity of operating in a constrained environment.

It also distinguished a fundamental shift in the mindset of the government of the clear distinction between production and governance, and a separate role for both the private sector as well as the government. It also marked the shifting of responsibility of incremental investment and growth to the private sector, leaving the government freer to concentrate on addressing the larger social issues of the economy and better governance. It was also an acknowledgement of the objective of a mixed economy. It should not be seen as undermining the importance of the public sector but giving due credibility to the private sector in the economy.

Public Sector and Economic Reforms

It is widely perceived that the policy of 1991 has clipped the wings of the public sector by opening the areas which are reserved exclusively for public sector to private sector. This is not from a negative sense, but there would be a larger role for the private sector in the areas which were reserved earlier for the public sector.

The policy of 1991 reduced the areas reserved for public sector from 18 to 5 and subsequently in later years more sectors were thrown open for private sector participation, except for atomic energy, railways and those requiring a licence. Further, no new public sector would be set up and investment limited to existing companies and that to from the internal accruals or accumulated profits of public sector. No fresh budgetary allocations would be made in public sector except for loss-making and 'stressed' public sector companies.

There was a requirement for greater professional character by the public sector. Appointments to the Board of Directors of public sector would only be of professionals. The Chief Executives of public sector were made accountable for their performance. Performing public sectors were to be given greater autonomy in their day-to-day operations. First through the concept of execution of Memorandum of Understanding of commitments of performance and operational flexibility. Later giving status of Maharatna, Navrattan and Mininavrattan, of varying degree of taking investment decisions to well run PSUs.

The policy has taken a complete 'U' turn from the previous policies, in announcing that there would be no further nationalization of the private sector unless there are compelling exceptional circumstances.

On the contrary, the policy for the first time, talked of disinvestment and privatization of public sector. The third element of the New Economic Policy was the reforms in foreign investment which will be discussed in a later section.

Disinvestment and Privatization

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Disinvestment and Privatization

Both disinvestment as well as privatization is the reverse of investment. For setting up public sector, the government had to invest by subscribing in shares of the new public sector from budgetary resources. Thus, disinvestment and privatization both imply 'selling of shares of public sector by the government'. We all know that shares are traded at the stock market and the traded value of each share is decided by the buyers and the sellers in the market.

If buyers of shares of a particular company are more than the sellers of the same, the traded value of the shares would be at a 'premium' or otherwise it would be at a 'discount'. Thus, in both the cases of disinvestment as well as privatization, selling of shares of public sector would be at a premium.

To distinguish between both, ownership of companies would need to be understood. Who is the owner of a company? He/She is a person who holds majority of the shares, that is, 51 per cent. Technically, ownership is with the person holding a minimum 51 per cent shares, or even a person enjoying support of 51 per cent shareholders. This can be explained as: If you are holding 10 per cent shares of a company and you are able to convince 41 per cent shareholders to support, then you will become the owner of the company (similar as governments are formed). Hence, disinvestment is defined as selling of shares of public sector at a premium, to the public, by the government without losing ownership of the public sector. The objective here is to raise resources for the government. These shares are sold to the public as the preferred and first option of making them partners in public sector.

We have talked about ownership earlier. At a still deeper level ownership of businesses being done, as companies having shares, is always with shareholders and management is with the person having support of 51% of the shareholders. Privatization is transferring management control to the private sector by selling 51 per cent shares of public sector to the private sector or even lesser but transferring management control to a group or to a company. The objective is not so much to raise resources in as much as transferring management control from the government to the private company. It is not a logical extension of disinvestment. That is, having disinvested in a public sector does not necessarily imply that it is going to be privatized.

Why did the policy of 1991 favored privatization? The policy took a mature decision in seeking privatization of the public sector for the following reasons:

(1) The public sector as mentioned earlier had broadly delivered in terms of creating significant capacities in key areas such as self-reliance, substituting for import of industrial goods, created the platform for further industrialization and industrial growth. There is a requirement now to moving into higher gears and look at issues such as developing greater capabilities, improving productivity and efficiency, sharp focus on profitability.

(2) The policy of liberalization has opened the gates for liberal private sector investment in key areas and competition would only intensify. This requires the public sector to now run as pure businesses, as a commercial venture which is possible solely in private sector. As a public sector, there will always be a limitation of not being operate as a pure business in the same way as their counter parts in the private sector.

(3) The role of the government as a producer of industrial goods is always inter short-term and never permanent. It can be permanent producer only of those wh

direct welfare of people is affected like railways or in the national interest like atomic energy.

(4) It is also about the mindset of the government of the maturity of the private sector and their ability to deliver the requirements better than the government.

(5) As a government, it has larger responsibilities of providing good and efficient governance, creating enabled environment, addressing the welfare of the masses, which are far more important than running public sector. Especially, when today there is a maturity and competence in the private sector.

(6) Why privatize a profit making public sector? Privatization is not about profit making but for a larger reason of whether it will continue to remain profitable in future with intense and fierce competition.

(7) Thus, privatization is not for today but for a brighter future of the public sector in a privatized environment equipped better to meet the challenges.

(8) Any business requires the ability to take prompt business decisions, it is not about whether the decision was right or wrong. Such decisions will always have business risks but what is required is the ability to take the decision quickly. The structure of public sector globally is such that it suffers from delays in decision-making.

(9) Privatization is also about handing public sector to a 'visionary' who understands business, understands priorities and knows how to make the public sector grow to greater heights and help it to emerge as a global company.

Keeping the above facts in view the government went for some big ticket privatization like that of BALCO (Vedanta Group), VSNL (Tatas), IPCL (Reliance Industries), Modern Foods (Unilever), and Maruti (Suzuki). Even Round 1 of privatization was performed amidst lot of controversy ranging from the need to issues of valuation.

Why the opposition to privatization? The reasons are detailed as follows:

(1) It was feared that government owned monopolies would be replaced by private sector monopolies and could result in exploitation by the private sector. The government has clarified that no public sector operating as a monopoly would be privatized. Only those which are operating in a competitive environment would be privatized. Until they are able to operate in a competitive environment there would only be disinvestment of such public sector.

(2) It is also feared that privatization would result in a large number of workers laid off or would lose their jobs thereby adding to the pool of unemployment. It needs to be understood that public sector being specialized in nature, the workers by virtue of experience have acquired a skill set which no owner would like to lose. Rather than retrench they would be redeployed.

(3) It is also widely believed that proceeds received from disinvestment and privatization would be used to meet the budgetary deficit and not used for the benefit of the masses or used to create social assets in the economy.

   (a) The government has already set up the National Investment Fund (NIF) for parking of funds received from disinvestment.

   (b) Further, the corpus would not be used but the returns from the corpus by their investment in profitable avenues, would be used 75 per cent for creating social assets and the remaining 25 per cent in revival of loss making public sector units and also meeting the expansion needs of the profitable public sector units.

(c) The corpus of the NIF would be managed by UTI mutual fund, SBI and LIC.

(4) Given the high level of fiscal deficit it would be difficult for the government to desist from reducing the deficit through proceeds of disinvestment and privatization.

Despite the merit and the need for privatization the government rightfully is not considering any further privatization and would rather wait for consensus building amongst political parties, trade unions before privatization as it is a long protracted process spanning several decades.

Both liberalization as well as privatization are the major planks of the economic reforms. The government by pressing the 'pause button' on privatization is being criticized as slowing down of reforms or of having gone 'soft'.

Privatization should not be seen as the only aspect of reforms. Neither should one expect an end of all economic problems through privatization. A similar misplaced belief was there when public sector was set up. Privatization at its best provide only for an efficient and competitive domestic industrial base and cannot be said as the 'only' aspect of reforms. There are so many other softer reforms (relatively easy to implement through an executive order of the government), which could have been done. Despite the policy of liberalization there are still bureaucratic hurdles.

In terms of World Bank survey, on the relative ease of doing business outside government approval, regulatory clearances, India's rank is a low of one hundred and thirty-four out of one hundred and eighty-three countries. Singapore is ranked as number one among all other countries.

Similarly, 'Licence Raj' has paved way to 'Inspector Raj'. Today, as many as thirty different inspectors visit the factory premises under various Acts as against 2–3 in China. Getting an electricity connection or a no objection certificate from pollution control board is still difficult. Collection of excise duty is cumbersome.

There is still a lot of bureaucratic interface for performing business in India and that is where the government needs focusing. Thus, liberalization has helped but not to that level by global standards. It is rightly said that what India needs is 'thousands of smaller reforms' and 'big bang reforms' can wait till acceptable or till a need for them is felt.

9.5 ROLE OF PUBLIC SECTOR IN FUTURE

The NEP 1991 has given rise to certain wrong perceptions about the public sector, mentioned earlier, 'clipping of their wings', or 'diluting the status of public sector'. It needs to be clarified first that it is not the clipping of wings but only a larger role for private sector. Neither is the status being diluted given the huge investments and asset base of the public sector in the country. The policy should not be seen as undermining the importance of public sector, but role of public sector would undergo a change as mentioned below:

(1) From a welfare orientation they would shift to function as a commercial venture with profits as an objective to the extent feasible as a public sector.

(2) From production-oriented they would become productivity-oriented.

assets and the remaining 25 per cent in revival of loss making public sector units and also meeting the expansion needs of the profitable public sector units.

(c) The corpus of the NIF would be managed by UTI mutual fund, SBI and LIC.

(4) Given the high level of fiscal deficit it would be difficult for the government to desist from reducing the deficit through proceeds of disinvestment and privatization.

Despite the merit and the need for privatization the government rightfully is not considering any further privatization and would rather wait for consensus building amongst political parties, trade unions before privatization as it is a long protracted process spanning several decades.

Both liberalization as well as privatization are the major planks of the economic reforms. The government by pressing the 'pause button' on privatization is being criticized as slowing down of reforms or of having gone 'soft'.

Privatization should not be seen as the only aspect of reforms. Neither should one expect an end of all economic problems through privatization. A similar misplaced belief was there when public sector was set up. Privatization at its best provide only for an efficient and competitive domestic industrial base and cannot be said as the 'only' aspect of reforms. There are so many other softer reforms (relatively easy to implement through an executive order of the government), which could have been done. Despite the policy of liberalization there are still bureaucratic hurdles.

In terms of World Bank survey, on the relative ease of doing business outside government approval, regulatory clearances, India's rank is a low of one hundred and thirty-four out of one hundred and eighty-three countries. Singapore is ranked as number one among all other countries.

Similarly, 'Licence Raj' has paved way to 'Inspector Raj'. Today, as many as thirty different inspectors visit the factory premises under various Acts as against 2–3 in China. Getting an electricity connection or a no objection certificate from pollution control board is still difficult. Collection of excise duty is cumbersome.

There is still a lot of bureaucratic interface for performing business in India and that is where the government needs focusing. Thus, liberalization has helped but not to that level by global standards. It is rightly said that what India needs is 'thousands of smaller reforms' and 'big bang reforms' can wait till acceptable or till a need for them is felt.

9.5 ROLE OF PUBLIC SECTOR IN FUTURE

The NEP 1991 has given rise to certain wrong perceptions about the public sector, mentioned earlier, 'clipping of their wings', or 'diluting the status of public sector'. It needs to be clarified first that it is not the clipping of wings but only a larger role for private sector. Neither is the status being diluted given the huge investments and asset base of the public sector in the country. The policy should not be seen as undermining the importance of public sector, but role of public sector would undergo a change as mentioned below:

(1) From a welfare orientation they would shift to function as a commercial venture with profits as an objective to the extent feasible as a public sector.

(2) From production-oriented they would become productivity-oriented.

(3) They will operate with greater professionalism and well run public sector would operate with greater operational and functional autonomy to the extent feasible.
   (a) Many more public sector would acquire the status of 'Mini-navrattan, Navrattan and Maharatnas', yielding them a greater degree of freedom for taking investment decisions by the respective boards of public sector and not requiring government approval.

(4) There would be consolidation and likelihood of mergers amongst public sector such as oil companies, nationalized banks to enable them to achieve greater economies of scale and help them to compete with global companies.

(5) Many public sectors may opt for overseas acquisitions paving the way for public sector to become global players.

(6) There is a likelihood of public sector getting into joint ventures with private sector and greater joint participation in key areas.

(7) The chief executive officer of public sector would be considered for appointment based on merit and competence both within as well as outside the government.

(8) There would be a level playing field with the private sector allowing for healthy competition.

(9) Gradually, their monopoly status would get diluted with entry of private and foreign companies and they would not be at 'commanding heights' of the economy but operate along with private and foreign companies.

(10) Efforts would be made to address the loss making public sector by exploring all avenues for their revival through capital infusion, waiving off accumulated losses so that they can start afresh on a clean slate. However, all such revivals of the loss making public sector may come with a 'rider', that this revival would be subject to privatization subsequently.

(11) However, the biggest challenge before the profitable public sector would be their ability to be competitive, productive and efficient and remain profitable in future.

9.6 EMERGING ROLE OF PRIVATE SECTOR

The most notable feature of the Industrial Policy of 1991 is the acceptance of the maturity and the ability of the private sector and their capabilities to shoulder higher responsibilities. It can be said that the emerging role of the private sector has been crystallized by the Industrial Policy 1991.

Already, since the last two decades of reforms there have been an increased number of companies, expansion and diversification by existing companies, entering into key areas. They have been responsible for raising industrial growth and also lifting India's growth in recent times. The future will thus witness the following:

(1) A larger responsibility on the shoulders of the private sector for increasing investment, diversification, taking industrialization forward and furthering industrial growth.

(2) They will have presence in all core/critical areas which were previously reserved for the public sector such as oil, power, etc., and now provide competition to them thereby eroding their monopoly status besides putting pressure on them for being competitive.

(3) They will command greater respect from the government and have say in policy matters concerning the industrial sector. Already, they are known as the corporate sector.

(4) Traditional family run businesses would pave way to greater professionalism.

(5) Segregation of ownership from management and gradually to holding companies like Tata Sons as a holding company and other Tata companies operating independently such as Tata Motors, Tata Finance, TISCO, TELCO, etc., under a professional and not promoters/owners.

(6) Many private companies have already gone for big ticket global acquisitions. The future would envision more such acquisitions and help Indian private companies to emerge as global companies.

(7) The government having realized the competence of private sector especially in execution of projects has recently resorted to the public private sector partnership (PPP) model for infrastructure development.

(8) There would be an increasing trend towards 'corporate governance' which is complete transparency in operations, working in the interest of the company (not only owners) and seeking to maximize 'value' to the shareholders. It is also about broader overview and greater professionalism by having independent board members in the board of directors of companies, not related directly or indirectly either to the company or to the owners. Already, SEBI has made corporate governance mandatory for all listed companies and a stipulation of companies to have at least one-third directors as independent.

(9) The private sector would operate with greater responsibility with moral and ethical values towards their company, society and the country as a whole, referred in the corporate world as corporate social responsibility (CSR), of businesses cannot be confined to the realms of business only and will have a spill-over in the society.

  (a) It is self-consciousness realization, of the companies of the need to reciprocate by fulfilling the societal responsibilities, in any manner, as deemed appropriate by the company, but without any compulsions or directives from the government. Through a recent amendment to the Companies Act, CSR has been made mandatory for all listed companies,The Companies Act, 2013, has called upon companies having a net-worth of ₹500 crore or more; or a turnover of ₹1,000 crore or more; or a net profit of ₹5 crore or more to have a CSR spend of at least 2% of their average net profits of past three years.

  (b) There will be a growing realization on the part of the private sector that growth of businesses and moral responsibilities will go together in future, as distinct from the earlier perception of driven only for benefit of self.

  (c) It is hoped that the unethical operations and frauds of M/s Satyam Computers was more in the nature of an exception and not repeated by other companies.

(10) Many business houses may become philanthropic, giving their due share to society by setting up charitable trusts, hospitals, etc.

  (a) They would demonstrate to the government that the private sector can contribute in its own way towards welfare of the people and social development.

(11) Finally, the 'mixed economy' character would get further entrenched in future with co-existence of both the public and private sector working shoulder to shoulder in all the key areas and jointly increasing industrial and overall growth of the economy.

The mixed economy character has always been an avowed objective of the government since the first Industrial Policy of 1948, however, it was only seen as an intention of the government, more on paper. The future is likely to see the true emergence of the mixed economy character. The policy of liberalization has imposed great confidence on the private sector, as becoming partners to the government in developmental efforts, operating with a code of ethics, business and moral responsibilities, transparency in operations.

It is up to the private sector to rise to the occasion, meet the expectations of the government and the people and ensure that the confidence reposed is never let down. However, for the private sector to truly emerge as visualized in the policy would require the government change from a direct provider of goods and services in creating that enabling environment, to 'permit rather than prevent', to 'allow rather than stop'.

The challenge before the private sector is not only to deliver, but in a more responsible manner realizing that business and moral responsibilities go together.

Exit Policy

'It is often said that absence of an exit policy is a cog in the wheels of liberalization.' What is an exit policy? The policy of liberalization has given the freedom of entry but also given the risks of businesses that it is not necessary for all to survive, some may die a natural death, some industries may need to reorient into different businesses by closing down existing businesses and there lies the need for an exit policy.

An exit policy thus facilitates companies to close down their businesses, allowing them to reorient, restructure operations, in terms of market needs, with minimum restrictions from the government and in a quick time frame. At present, in India there is no exit policy and closure of companies is complex and cumbersome with multiple government bodies and 'acts' making closure extremely difficult and can take over several years.

Realizing its importance the government has set up the 'National Company Law Tribunal' as a one stop shop, single reference point for all sick companies either seeking revival or closure within a period of twenty-four months of the case filed with NCLT. This would bring under one roof all the multiple bodies together to work in a coordinated manner either for revival or for the closure of companies in a time bound manner. The NCLT is yet to become operational as it requires amendments to various 'acts' and also compliance of legal formalities.

An exit policy also has a ticklish issue which is labour-related and is a larger freedom to the management of companies in addressing labour-related issues. That is, if there is freedom to recruit there should also be discretion to a company to dismiss in the larger interests of the company. Unfortunately, all the labour laws have been enacted during 1920s and 1930s to protect the interests of the workers in the industrial sector and making dismissing labour as virtually impossible with fears of strikes and labour unrest.

This has given rise to complacency, non-productive workers and a complete mismatch between salaries paid and the output of workers. As long as the Indian market was sheltered, large role of public sector these could be tolerated but in today's environment with increased competition productivity and efficiency have become critical for survival of companies.

Labour has to realize that 'in the growth of the companies lies their future' and not the other way around. Thus, labour reforms would involve factoring in productivity and linking salaries to productivity. Many feel that this will bring back the 'hire and fire' policy which had forced the government earlier to enact labour laws to protect interests of labour.

Labour reform is most controversial and no political party would like to touch given the likely fall-out, even going out of power. Let us get the facts straight first. All labour laws are there to protect the interest of 6–8 per cent of the workforce in the organized sector while the remaining 90 per cent and above engaged in the unorganized sector are outside the purview of labour laws.

Which sector needs protection: the organized or the unorganized sector? Clearly it is the vulnerable unorganized sector. Second, employment in the organized sector is 'skilled' and today most economies including India are feeling the pinch of shortage of skilled manpower. Companies would like to preserve the skill set acquired out of experience. If the labour has the skills and a willing worker why will be he thrown out? Times have changed and employee retention instead is a big challenge for companies today.

Thirdly, all the labour laws have been framed much before Independence and surely working environment has undergone a sea change which is not captured by these laws. Further, there is confusion over basic definitions, such as workmen, wages, employee, etc. Factory, etc., are all defined differently in different 'acts'.

Provisions under factories act do not match provisions under minimum wages act. In fact, all these acts are not only out of time but provided for rigidity and excessive regulatory legislations in the economy and as mentioned previously only for 6-8 per cent of the workforce in the organized sector.

Fourthly, has it occurred that despite the increased industrial growth it has not led to increased employment opportunities in the organized sector as the prevalent stringent labour laws have forced the companies to substitute labour with labour displacing capital, greater automation which is ironical for a labour surplus country like India.

Fifthly, realization is required amongst labour that the priority is to first protect the interest of the company and if that is protected their interest would also get protected. Labour and management have to become partners in the process of improving productivity as well as protecting the interests of the company.

Agreed, no matter how much be the compulsion for labour reforms in the larger interest of the economy, it may be difficult to attempt given the democratic framework and fragile political set-up and cannot be pushed down as done in China.

However, at least a beginning can be made by reviewing the different labour laws, making them more comprehensive, removing duplications and ambiguities in different acts, having a uniform definition of a 'worker or labour'. That should not be difficult. The government can also initiate dialogue with political parties and representatives of various trade unions emphasizing upon the need for such reforms and arriving at a broad-based consensus.

What is appalling is the government disinterest to even start thinking on these lines. Labour reforms in India is the hardest of reforms and has the potential of unleashing a storm, a great upheaval, and can have a grave political fallouts and has to tread carefully and gradually by building consensus step-by-step. Until such a time it may delay further reforms and the correct way for going ahead is to make a modest and acceptable beginning. At the same time it should also be kept in mind, that without changing the labor environment and with present levels of protection through multiple trade unions, would only imply not getting full benefits of reforms for which reforms cannot be blamed.

CHAPTER

10

INFRASTRUCTURE DEVELOPMENT

10.1 INFRASTRUCTURE IN GLOBAL CONTEXT

Overall infrastructure basically comprises of crude oil exploration and refining, electricity generation, coal, steel, cement, communications and transport (rail, road, ports and airports). Infrastructure is also segregated as rural infrastructure (comprises of irrigation, roads, electricity and creation of social assets in villages) and urban infrastructure (comprises of public transport, up-gradation of roads and civic amenities in urban areas).

There is also reference nowadays to soft infrastructure which is education and skill development, human capital development. While all these are important but in terms of criticality it is the overall infrastructure and with increased growth there is need for more than proportionate growth in infrastructural sector investment to match the growth of the economy.

India's infrastructure can be known to be adequate solely in respect of communications and in all other areas as deficient. Infrastructure globally has certain unique characteristics as mentioned below:

(1) It is a dynamic concept implying continuous investments in infrastructure. It can never be said to be 'adequate'.

(2) Infrastructure growth has to precede growth of economies. First roads need to be re-built before cars are manufactured or factories can be set up only once electricity is there and not the other way around.

(3) Infrastructure has to be for 365 × 24 hours leaving no scope for reactive maintenance (after break-downs) but has to be proactive maintenance (before break-down).

(4) Infrastructure development requires visioning, always for the future and not for the present as otherwise given their long periods for completion they would become inadequate once completed.

(5) Infrastructure always needs to be seen from a global perspective and not from the past history.

   (a) For example, the Government of India can take pride in mentioning that in the last 10 years they have constructed 8000 km of highways a feat never achieved in the past.

   (b) However, in the same period China has constructed 25,000 km of highways. Infrastructure comparison is always global.

(6) Infrastructure has always got to be 'effective'. This can be defined with the following example: Hyderabad airport in India is world class. It has cut down time at the airport, faster check-in can handle manifold more passengers but it is located further away from the city.

Hence, what one has gained in saving the time at the airport has got lost in travel time to the airport. So what effective infrastructure implies is while building the airport simultaneously start the process of either widening the road to the airport and if it is not feasible explore an alternate entry point to the airport from the city.

10.2 ISSUES IN INDIAN INFRASTRUCTURE

(1) **Need for Long-term Resources**—it has been estimated by the Planning Commission of India that an investment of US$ 1000 billion is required in overall infrastructure alone over the next 10 years.

This will be US$ 500 billion in the next five years or an annual investment of US$ 100 billion for sustaining the present levels of growth and if we are talking about higher levels of growth, the magnitude of investment will only increase further.

This would mean that investment in infrastructure which is presently around 5.5 per cent of GDP would have to be more than double to 12.5 per cent.

Infrastructure projects have long gestation period raising such long-term resources on an ongoing basis is a major issue. Such long-term funds are usually available in insurance and pension funds both of which are relatively still evolving in India. Insurance penetration is very low and so are pension funds.

Banks are not able to take exposures given the need for long-term resources as it will result in mismatch between assets and liabilities and can weaken the banks.

(2) **Pricing of Infrastructure**—another issue is the under-pricing (pricing less than the commercial viability in terms of the market) of infrastructure which has questioned its sustainability in the long run.

(3) **Absence of Visioning**—as mentioned previously, a key feature of infrastructure is the need for visioning say Infrastructure in India 2050. No serious thoughts are being given to the requirement of infrastructure over the next 30–40 years.

(4) **Infrastructure as a National Issue**—infrastructure development continues to be driven through various governments in terms of their own priorities.

One government may favour building highways whereas another government may feel making rural roads a priority. Infrastructure has to be made apolitical or cutting across party lines as a national issue.

10.3 RECENT MEASURES TAKEN BY THE GOVERNMENT

The government realizing the importance of infrastructural sector has taken a number of steps that are briefed below:

(1) It has set up the India Infrastructure Finance Company Ltd., (IIFCL) exclusively for leveraging investment in infrastructure projects. It is expected to leverage an investment of over ₹ 50,000 crores over a period of time.

(2) IIFCL, Infrastructure Development Finance Company (IDFC), Citigroup, and Blackstone Group have jointly announced a launch of US$ 5 billion fund to finance infrastructure projects in India.
(3) IIFCL has set up a subsidiary at London with funds of USD 5 billion to fund Indian companies importing capital goods/machineries exclusively for infrastructure projects in India.
(4) The Planning Commission of India has proposed a USD 11 billion multi infra debt funds for funding infrastructure projects in India.
(5) The government has recently announced the public private sector partnership (PPP) model for infrastructure projects in India.
   (a) This model seeks to leverage on the strengths of the government (inter-ministerial clearances, environment and forest clearances, shifting of vital installations and land acquisitions).
   (b) The private sector is then entrusted the task of building the infrastructure in terms of government specifications by using their own resources in a given time period. There is an incentive mechanism for projects completed ahead of schedule.
   (c) In turn, it allows the private sector to levy pre-agreed 'Toll' (for road projects) or 'user charges' (airports) under the build-operate-transfer (BOT) model of partnership.
   (d) A slight variant to this is design-build-finance-operate (DBFO) where the competence in the 'design' of projects is also done by the private sector rather than by the government.
   (e) Recently, the government under the PPP model has also initiated levying of 'negative grants' for highly profitable road projects.
   (f) The private companies while bidding for such projects would also have to provide the amount of money from their likely future earnings they are willing to give 'Up-front' before the contract is awarded by the government, as what is known as negative grant.

10.4 INFRASTRUCTURE AND ITS KEY CHALLENGES

Despite the efforts of the government as highlighted above infrastructural development still has a few challenges as mentioned below:

(1) The World Economic Forum has ranked India in terms of infrastructure as 89 among 139 countries. Countries such as China have a rank of 50 and Brazil 62. This implies that our infrastructure is viewed as grossly inadequate by global standards.
(2) Raising long-term resources would require reforms in banking, insurance and pension funds as that is where long-term resources are available.
(3) Further, long-term resources for infrastructure can also come through foreign investment (like in case of China) and government would have to further liberalize its policies to attract foreign investment in India.

(4) The PPP model is appreciable but cannot substitute government spending given the huge magnitude of resources required. It can at best play a supportive role in infrastructure development.

(5) India's metro infrastructure of Delhi, Mumbai and Chennai are virtually collapsing despite efforts of the state government. Even the major urban centres are having severe infrastructural constraints, despite having the Jawaharlal Nehru National Urban Renewal Mission (JNNURM).

(6) That is, to say the government cannot absolve itself of its responsibilities of infrastructure development.

The twin challenges are as follows:

How would the government raise resources given the budgetary constraints? The compulsions of the Fiscal Responsibility and Budget Management Act (FRBMA) would not only allow it to raise expenditure to keep the deficit level under check. The government has a legacy of an inefficient spender in the economy with as many as three hundred government projects delayed by over eight years with a cost over-run of ₹49,000 crores.

How to make the government an efficient spender in the economy? There are myriads issues of land acquisition, inter-ministerial coordination and bureaucratic delays which is inbuilt in any government functioning.

The other is that we have to learn from the Chinese experience in infrastructure development. They have kept the scale of existing ideas, instructive and unconventional, something as unbelievable.

Globally, it was believed that trains running over 450 km per hour was technically and scientifically not possible. The Chinese have proved every one wrong. They have constructed around 17 bridges over one river which is 100 years maintenance free and many of them are the longest in the world and completed in record time.

Beijing, their capital, has an airport which is bigger than Heathrow of London and is sufficient to meet the passenger and cargo load for the next 25 years. Their rail link of 2000 km from mainland China to Tibet at a height of over 15,000 ft is an engineering feat in itself.

India is still bogged down with playing around with existing ideas, existing knowledge and technology. India requires 'innovative infrastructure', the impossible infrastructure, beyond conventional and then just do it the way China has done and thus requires infrastructure visioning, making it a-political, cutting across political parties with the objective of providing the infrastructure to support higher rates of growth and at the same time not only world class but defining newer boundaries of infrastructure.

10.5 ENVIRONMENTAL ISSUES AND INFRASTRUCTURE

A still larger issue now emerging is the environmental issues, erosion of forest cover, etc., around the infrastructure projects. The present issues being faced in Orissa and other states on projects which can not only alter the face of the state but also the nation in terms of economic development need deeper introspection.

The environmental issues raised on companies such as POSCO and the Vedanta Group in Orissa may deny an investment opportunity in the state of over ₹60,000 crores which has the potential to transform Orissa from being a backward to a progressive state.

Similarly, stalling the Lavasa project in Maharashtra, is a myopic view by the government as it has the potential to redefine the urban development and probably post-construction would be extremely environment-friendly more than any other city in the country.

The Prime Minister has indicated that there should be a balance between the two aspects. However, development should be a prime concern clearly as it involves the people, means of livelihood for them as fundamentally more important today.

It needs to be remembered in mind that improvements in welfare of people and states should be the prime consideration and 'way out' should be found for addressing the environmental issues and the way out should not be by abandoning the project but finding the ways around them.

Are these the only environmental issues? What about the issues of slum development, waste management, banning use of plastics, rural/urban habitation, polluted rivers, erosion of forest cover? Are these not major issues?

India has myriads of issues of unemployment, acute backwardness of states, development deficit, investment deficit, development divide across many states and such other divides. If it is possible for the private/foreign players to provide answers for such divides, their projects should be encouraged rather than discouraged and a way out found for them.

This is a government-related issue of being short sighted in the guise of environmental issues, over-looking positive and tangible welfare gains for the states and the country as a whole. India, thus, has a number of infrastructural related issues, which will solely get compounded with increased intensity as the growth levels begin to accelerate and also with the growing population exerting greater pressure on the infrastructure.

The government can also consider of having a separate budget for infrastructure. The railway budget could constitute a part of this budget allowing for greater complementarity between various sectors of infrastructure.

There is a need for a greater broad-based discussion on the imperatives of infrastructure in future as otherwise it will become a limiting factor for growth.

10.6 PORTS IN INDIA—AN ECONOMIC PERSPECTIVE

Globally ports are regarded as gateway for trade of goods and merchandise entry and exit from a country. They also play a pivotal role in accelerating the development of regions/economies. As an open economy, neglect of ports can solely be at the expense of development of such economies.

India's fact sheet of ports consists of twelve major ports (two additionally approved—one in West Bengal and the second at Andhra Pradesh) and two hundred odd minor ports accounting for 95 per cent of cargo movement by volume and 70 per cent by value. The present port capacity is around 1000 million tonnes (MT).

Imports of crude petroleum, iron ore, coal and other essential commodities are all through the sea route. Realizing the importance of developing our ports to handle large volumes and increase cargo movement, the government has allowed 100 per cent private sector and 100 per cent FDI participation in this sector. Further, a 'Maritime Agenda 2010–2020', a perspective plan has been prepared which has set the goals as follows:

(1) To increase India's share in global ship building to 5 per cent from the present 1 per cent.
(2) To increase the share of Indian seafarers from 6–7 per cent to at least 9 per cent in the global shipping industry during 2015.
(3) To create a port capacity of around 3200 MT to handle the expected traffic of about 2500 MT during 2020.
(4) To bring ports at par with the best international ports in terms of performance and capacity.
(5) To increase the tonnage under the Indian flag and Indian control and also the share of Indian ships in our exim trade.
(6) To promote coastal shipping as it will help in decongesting our roads and is environment-friendly.
(7) In order to promote private participation and foreign direct investment (FDI) in the country, the Government of India has allowed 100 per cent FDI under the automatic route for:
   - Captive facilities for port-based industries.
   - Leasing of equipment for port handling and leasing of floating crafts.
   - Leasing of existing assets of ports.
   - Construction/creation and maintenance of assets such as-container terminals bulk/break bulk/multi-purpose and specialized cargo berths, warehousing, container freight stations, storage facilities and tank farms, handling equipment, setting up of captive power plants, dry docking and ship repair facilities.

As way of incentive, 100 per cent exemption from income tax is also extended to companies that are investing in port infrastructure. Further, a ten-year tax holiday has been given to enterprises which are engaged in the business of developing, maintaining and operating ports, inland waterways and inland ports.

India's shipping ministry is considering in removing the tariff fixing for major ports, passing responsibility for this to the ports themselves. Instead, a new regulator for the sector will be appointed who will be responsible for setting, monitoring and regulating service levels as well as technical and performance standards. The ministry has also decided that all new major ports would be constructed through a corporate structure and will be registered under the Companies Act 1956.

Source: Consolidated FDI Policy, Department of Industrial Policy and Promotion (DIPP)

Port Development in Twelfth Five-Year Plan

According to the Planning Commission of India, the capacity of Indian ports will have to nearly double to 2302 MT over the next five years to be able to handle the fast growing cargo traffic. The total capacity of the port sector is envisaged to be 2301.63 MT, to meet the overall projected traffic of 1758.26 MT by 2016–2017, as per the Twelfth Five-Year

Plan (2012–2017) document. 'The traffic forecast by the end of the Twelfth Plan would be 943.06 MT and 815.20 MT for the major and non-major ports respectively, with corresponding port capacities of 1241.83 and 1059.80 MT respectively'.

In the Twelfth Five-Year Plan, the Government of India has proposed to invest ₹73,793.95 crores (US$ 13.55 billion) for development of various projects in port sector. In the year 2012–2013, twenty-five projects have been identified for award at various major ports in the country under PPP mode.

Recent Government Initiatives

Contract to develop the Jawaharlal Nehru Port Trust's (JNPT) container terminal at Navi Mumbai has been awarded to a Dubai-based company at a total cost of ₹600 crores (US$ 100.20 million). Gail India and the Shipping Corporation of India (SCI) have signed a memorandum of understanding (MoU) to cooperate for transportation of liquefied natural gas LNG sourced by Gail from the United States (US).

The government has approved the project for upgradation of an existing facility and the creation of a new facility at Visakhapatnam Port Trust (VPT) for iron ore handling in two phases on design, build, finance, operate and transfer (DBFOT) basis with an investment of ₹845.41 crores (US$ 153.95 million).

Three major projects, with an investment of ₹1800 crores (US$ 330.08 million), are being taken up by the VPT. The Union Shipping Ministry has started working on some of its plans such as corporatization of major port trusts. Mumbai's JNPT will be the first port to be corporatized. There are 14,500 km of navigable and potentially navigable inland waterways in the country of which the following five inland waterways have been declared as National Waterways and the details are listed below.

- National Waterway-1—Allahabad–Haldia stretch of the Ganga–Bhagirathi–Hooghly river (Total length 1620 km) in the states of Uttar Pradesh, Bihar, Jharkhand and West Bengal.
- National Waterway-2—Sadiya–Dhubri stretch of the Brahmaputra river (Total length 891 km) in the state of Assam.
- National Waterway-3—Kollam–Kottapuram stretch of West Coast Canal and Champakara and Udyogmandal canals (Total length 205 km) in the state of Kerala.
- National Waterway-4: (Total length 1027 km) in the states of Andhra Pradesh and Tamil Nadu and the Union Territory of Puducherry.
- National Waterway-5: (Total length 588 km) in the states of West Bengal and Orissa.

The government has approved projects for development of multi-purpose berths as well as merchandised berths with allied facilities on DBFOT (design-build-finance-operate transfer) basis at Haldia Dock II (North) for a period of 30 years at an estimated cost of ₹821.40 crores (US$ 151.39 million) and at Haldia Dock II (South) for a period of 30 years at an estimated cost of ₹886.10 crores (US$ 163.32 million). The projects will enable Kolkata Port Trust to enhance its capacity by 23.4 million tonnes per annum (MTPA) and meet the demand for coal and other bulk cargo in the hinterland of Kolkata Port.

CHAPTER

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(3) Infrastructure has to be for 365 × 24 hours leaving no scope for reactive maintenance (after break-downs) but has to be proactive maintenance (before break-down).

(4) Infrastructure development requires visioning, always for the future and not for the present as otherwise given their long periods for completion they would become inadequate once completed.

(5) Infrastructure always needs to be seen from a global perspective and not from the past history.

 (a) For example, the Government of India can take pride in mentioning that in the last 10 years they have constructed 8000 km of highways a feat never achieved in the past.

 (b) However, in the same period China has constructed 25,000 km of highways. Infrastructure comparison is always global.

The government has also approved licensing of land to the concessionaires for seven projects which are taken up in the PPP mode. These projects have been taken up in terms of the extant policy of the Government of India to pursue maritime development projects under the PPP mode. This will lead to efficiency in operations at major ports which will benefit trade and the economy as a whole.

Larger Issues of Ports in India

Notwithstanding the recent efforts of the government in augmenting capacities in ports in India there are certain critical issues which need to be resolved. They are as follows:

Development of port infrastructure in India is not on par with the other ports across the world. Trade in India has to face severe challenges due to inefficient port services. Shipping lines avoid touching ports in India because of the long waiting time. The capacity of various ports including Mumbai has already been exhausted and now capacities of other ports such as JNPT are on the verge of exhaustion.

Port development has to seen in a holistic and comprehensive manner and not in isolation. They have to emerge as integrated transport centers as logistics platform covering links to the hinter land with the rail road network. There has to be complementarities between rail, road and ports, seen as one and not separately.

Indian ports are not equipped to handle large containers as a result ships are re-routed and parked at other larger ports and cargos are loaded in smaller vessels to facilitate their entry/exit out of the country. This raises costs and also transit time. India is heavily dependent on Colombo as a transshipment hub which has both economic as well as political implications.

India also needs 24 × 7 custom cargo clearance facilities besides excessive paperwork and documentation requirement solely increase transaction cost. Average turn-around time of vessels of 3.5 days is very high compared to the international standards which are only in hours and not in days. This is a critical factor which delays consignments making them uncertain, unreliable and uncompetitive in comparison to other ports.

Indian ports also have a high through put and transport cost because of an inefficient, unorganized and un-coordinated truck movement which not only increase costs but also takes more time. It is also subject to frequent labor unrests, which disrupts loading and un-loading at ports.

Efforts at development of ports in India is only a recent phenomenon, however, more than development is to develop them with the future in view and how India can be made a hub for cargo movement. Rapid increasing trade will only add more and more pressure on the already created capacities which need to be augmented on a war footing.

10.7 INDIAN RAILWAYS—A CARRIER OF THE NATION

Indian Railways (IR) is known as the life line of the nation, with a total length of around 64,000 km and the fourth largest network in the world after US, Russia and China. It runs around 12,000 passenger and 7000 freight trains daily. Only recently it has achieved a landmark of crossing 1 billion tonnes of freight movement.

Indian railway has dual function one of running commercially (freight operations) and the other social responsibility of being the life line (passenger movement) of the country. Bulk of the profits of railways thus comes out of freight operations. During 1951–1952, the ratio of freight shares of railways to roadways was 79:21. The railways enjoyed total dominance of bulk cargo as well as retail parcel cargo on medium and long haul routes. However, over the last 60-odd years, the ratio has been completely reversed and now road freight has a market share in excess of 80 per cent. More interestingly, roadways now have 95 per cent share of retail parcel cargo transport. Even in bulk movement the share of rail movement is only 35 per cent and 60 per cent by road. In China, freight movement by road is only 22 per cent while in US it is 37 per cent. This essentially implies that freight movement by road is cheaper than the rail in India unlike other countries such as China and US where movement of freight by rail is cheaper than road.

This is despite the fact that the movement by roads has disadvantages, such as inclement weather conditions, fears of theft, accidents and also involves interstate movement resulting in crossing and checking at octroi check points, which could result in hold up, if papers and materials are not in order.

Problems of Rail Freight

First and the foremost reason for this is the high cost of rail movement arising out of policy of cross subsidization by IR. Passenger fares especially sleeper class are underpriced and made up through increased freight fares. In India, passenger rail fares are highly politically sensitive. However, this is also because of the social responsibility character of IR. At the same time, actual cost should be recovered. If fares are to be kept low, efforts should also be made to bring down costs at the same time. If passenger fares are to be lower than costs, then the difference should be recoverable from the government and not from freight charges.

According to the figures compiled by the World Bank, the freight rates charged by IR are extremely high compared to major freight railways such as US Railroads, Chinese and Russian Railways. In fact, the rates of US Railroads are only one-fourth of that charged by IR. Germany is the only country which has freight charges higher than India, but it is not among the major railway freight movers globally.

This is reflected in a fall in the fare-freight ratio for IR over the last five years, from 0.32 to 0.26. In sharp contrast to this, the fare-freight ratio for China is 1.2 and for South Korea 1.4. The passenger fares to freight ratio for the Chinese Railways is four times higher than that of India. This shows that even a Communist country such as China is charging remunerative fares to run their railway network, which is considered far more efficient than that of India.

Second reason is that over 60 per cent of the freight movement is through electric traction which has high initial capital cost and also high overheads, resulting in higher cost for freight movement. There has always been a debate around diesel versus electric traction. However, there has been no empirical evidence found over superiority of electric over diesel traction. It has been established that initial capital cost of electric traction is manifold more than that of diesel traction. This becomes more relevant in the case of India as it is deficit in power and electric traction of the railways will always get priority over the other users. The only positive factor is that it does not have variable price like that of diesel. The other point in this is the diesel and electric traction cannot be seen as alternates but as complements and a mix of say 50:50, given the vulnerability of supply and prices of imported crude petroleum.

One method of distribution is to allocate passenger traffic for electric traction and freight traffic for diesel traction. Allocating specific operational and geographic areas to either mode is another method. The objective is to give equal importance to both the modes.

Flexibility of diesel traction is its main advantage. Diesel traction is highly flexible and adaptable to future technological advancements such as the 'fuel cell' technology, posed as a promising alternative source of energy in the near future. Under this technology, a simple device combines hydrogen from a variety of fuels with oxygen from air to produce electricity. This requires no moving parts, and does not produce noise or smoke. Diesel locomotives can be easily converted by replacing engine with fuel cell.

According to the International Railway Journal, fuel cell trains shall be a reality in the near future. All overhead wires will then become redundant. A breakthrough has already been achieved by BHEL, Hyderabad. As and when it is imbibed all controversies around diesel versus electric traction would cease.

It is of vital importance that for the moment, we do not ignore the fact that both diesel as well as electric traction can meet the needs of the IR with equal efficiency. IF electric traction has a high capital cost, diesel traction is highly sensitive to diesel prices. Had diesel prices been that of the eighties, one could say diesel is preferable but not at today's prices. Thus, there should be no attempt at developing one mode at the cost of the other.

Whatever is the mode of movement either by road or rail, the entire logistics sector has a large number of inefficiencies, as a result the cost of logistics in India remains high at 13–14 per cent of GDP as against 7–8 per cent of GDP in developed countries including China.

Remedial Measures

First and the foremost are the passenger fares that need to be raised to cover costs of operations especially for sleeper class in general. Higher classes should be seen from the commercial angle and not as part of social responsibility. If at all, any cross subsidization should be there, it may be 'inter class', between sleeper class and the higher classes.

Secondly, it needs to streamline its freight operation and raise the share in freight movement to around 50 per cent from the present level of 35 per cent which can be done through PPP model and wherever possible through privatization. Towards this the government has taken a few steps in recent times.

Private Sector Participation

Indian railways has announced opening up of freight train and terminal operations to private firms. Under the new private freight terminal (PFT) and special freight train operator (SFTO) scheme, the ministry has allowed private firms to use the IR's network for commodity transport and to develop freight terminals. Private players will be allowed to set up PFTs and also to operate freight trains. The ministry plans to extend this to the existing registered container train operators and users having private sidings on private land. The license fee, under the SFTO scheme ranges between ₹5 crores and 15 crores, which depends on the commodity being moved.

The SFTO scheme offers a freight rebate of 12 per cent for a period of 20 years until the recovery of investment, whichever is earlier. This could prove to be beneficial to private operators. It also addresses serious issues such as empty return load, which would be exempted from freight charges by the IR. The private operator will be free to charge his customer freight and the handling charges.

The SFTO will be operated for movement of goods such as bulk fertilizers, cement, fly ash, chemicals, petrochemicals, steel, etc. A major concern with logistics companies is the fact that the automobile segment has not been included in this scheme.

Under the PFT policy, operators will be able to book and handle all the traffic excluding outward coal, coke and iron-ore traffic. The revenue sharing for green field projects would start after five years of commissioning the terminal and after two years of commissioning a brown field project. The revenue-sharing model would be of 50 per cent of the then prevailing rate of terminal charge leviable at goods sheds or ₹10 per tonnes, whichever is higher. Revenue sharing will be annually increased by indexing it to increase in whole price index (WPI).

The 'own your wagon' scheme was introduced during 2005. The scheme focused on assured supply of a guaranteed number of rakes every month to a customer based on the number of rakes procured by him with freight concessions. Private firms faced turnaround issues due to congestion and the scheme did not really take off as envisaged.

Dedicated Freight Corridor (DFC)

However, the most ambitious project being undertaken, seen as a game changer, is the dedicated freight corridor (DFC). The Prime Minister has addressed that the DFC Project costing nearly ₹1 lakh crores should be given the highest priority by central ministries and urged the state governments also to do so. The project will connect a land mass over 3300 km in the country and could prove to be a backbone of India's economic transport facility.

The western corridor from Dadri in Uttar Pradesh to JNPT near Mumbai will be 1499 km and will connect Haryana, Rajasthan, Gujarat and Maharashtra with an exclusive high speed railway track. The Eastern DFC from Ludhiana (Punjab) to Dankuni (West Bengal) will be 1839 km long and will connect Punjab, Uttar Pradesh, Bihar and West Bengal. A major part of western corridor will be funded with Japanese assistance and nearly two-third of the eastern corridor will be constructed with World Bank assistance.

With India joining the select group of billion plus club in freight movement, the focus has once again shifted on the prestigious DFC. The project will enhance the freight carrying capacity of railways by manifold leading to incremental gains, apart from freeing the existing lines on congestion. The project cost of eastern and western DFC is currently estimated at ₹95,836 crores, which also includes cost of land. Western DFC is funded by loan from Japan International Cooperation Agency. While part of Eastern DFC, of Ludhiana–Khurja–Dadri–Kanpur–Mughalsarai section is funded by World Bank.

The DFC will not only decongest the existing lines, which will in turn also help in increasing the speed of passenger trains, leading in to other benefits. The DFC though will run almost parallel with the existing lines but will not be used for moving passengers. Its aim is to provide multi-modal system for moving goods. The plan to construct DFCs across the country marks a strategic inflexion point in the history of IR that has essentially run mixed traffic across its network. Once completed, the DFCs will enable IR to improve its customer orientation and meet market needs more effectively. Creation of rail infrastructure on such a scale—unprecedented in independent India—is also expected to drive the establishment of industrial corridors and logistic parks along its alignment.

Over two hundred locomotives with 9000 horse power (HP) are being bought from Japan that will run on DFC. The carrying capacity of rakes will increase from the current 300 tonnes to over 12,000 tonnes. Even the length of the train will increase to 1500 m.

Length distribution of the corridor indicates that Rajasthan (39 per cent) and Gujarat (38 per cent) together constitute 77 per cent of the total length of the alignment of freight corridor, followed by Haryana and Maharashtra 10 per cent each and Uttar Pradesh and National Capital Region of Delhi 1.5 per cent of total length each. This DFC envisages a high-speed connectivity for High Axle Load Wagons (25 tonnes) of double stacked container trains supported by high power locomotives. The Delhi–Mumbai leg of the Golden Quadrilateral National Highway also runs almost parallel to the freight corridor. This corridor will be equipped with an array of infrastructure facilities such as power facilities, rail connectivity to ports en route, etc. Approximately, 180 million people, 14 per cent of the population, will be benefitted by the corridor's development.

This project incorporates nine mega industrial zones of about 200–250 sq. km, high speed freight line, three ports, and six air ports; a six-lane intersection-free expressway connecting the country's political and financial capitals and also a 4000 MW power plant. Several industrial estates and clusters, industrial hubs, with top-of-the-line infrastructure would be developed along this corridor to attract more foreign investment. Funds for the projects will be from the Indian government, Japanese loans, and investment by Japanese firms and through Japan depository receipts issued by the Indian companies.

This high-speed connectivity between Delhi and Mumbai offers immense opportunities for development of an industrial corridor along the alignment of the connecting infrastructure. A band of 150 km (influence region) has been chosen on both sides of the freight corridor to be developed as the Delhi–Mumbai industrial corridor. The vision for DMIC is to create strong economic base in this band with globally competitive environment and state-of-the-art infrastructure to activate local commerce, enhance foreign investments, real-estate investments and attain sustainable development. In addition to the influence region, DMIC would also include development of requisite feeder rail/road connectivity to hinterland/markets and select ports along the western coast.

Delhi–Mumbai industrial corridor is being conceived as a model industrial corridor of international standards with emphasis on expanding the manufacturing and services base and develop DMIC as the 'global manufacturing and trading hub'. The government is considering this ambitious project to establish, promote and facilitate Delhi–Mumbai industrial corridor to augment and create social and physical infrastructure on the route which is world class and will help spurring economic growth of the region.

Integrated Investment Regions and Industrial Areas (IAs) have been identified within the corridor to provide transparent and investment friendly facility regimes. These regions are proposed to be self-sustained industrial townships with world-class infrastructure, road and rail connectivity for freight movement to and from ports and logistics hubs, served by domestic/ international air connectivity, reliable power, quality social infrastructure, and provide a globally competitive environment conducive for setting up businesses. An Investment Region would be a specifically delineated industrial region with a minimum area of over 200 sq. km (20,000 hectares), while an IAs would be developed with a minimum area of over 100 sq. km (10,000 hectares).

As mentioned earlier, it is very ambitious project and once completed it will redefine freight movement, provide multipliers to increase growth, create employment opportunities and also the beginning of making IR a basis for all round development with an efficient mode of state-of-the-art transportation facilities.

Despite these recent initiatives, there are still other issues which IR needs to address over a certain period of time.

Railways have to become a part of a holistic 'national logistic policy' covering all modes of transport with linkages and complementarities between rail, road and sea. Expansion of rail network should keep the economic rather the political perspective. The government should expedite establishing rail links especially in the NE states and also with neighbouring countries. This would provide for better links and relations in and around the region.

It should also review the practice of having a separate budget for railways, a practice initiated by the British rule since 1924. Budgetary allocation made to defense, oil sector are much more than allocations made to railways. By the same token, there should also be a separate budget for defense. Or is it that IR is more important than defense. These are some aspects which the government should examine.

To conclude, railways, ports and roads have to become a part of multi modal logistics in India, for achieving efficiency, cut down time and costs, in transportation of goods from the producers to the ultimate user both in India and overseas.

CHAPTER 11

INVESTMENT MODELS

11.1 TRADITIONAL MODELS

Having discussed the public sector, reforms and infrastructure an attempt is being made to bring them all together different investment models, talked about in the previous sections together and also what can be other models for boosting the investments in an economy like India.

Contemporary macro-economic framework revolved around growth models and growth a function of both savings as well as investments but largely determined by the overall levels of savings, in the earlier concept of 'closed' economy. India in its initial years, post-independence, suffered from low savings and it resulted in low investments leading to low growth. India was believed to be caught in the low growth cycle and unable to break through this cycle, known as 'Hindu rate of growth' (refer to Chapter on Inclusive Growth). Investment was determined by the overall levels of savings and secondly the investment was largely by the government. Excess spending over and above savings, resulted in deficit in such economies.

It may be appropriate to define savings of an economy as the difference between income and consumption. It could be financial saving (money put in banks, government securities shares, bonds, debentures, insurance, pension funds, etc.,) but other than the cash held. The other is physical savings which could be assets such as real estate, gold and commodities.

Savings can be across household sector, corporate sector and even through the departmental undertaking of the government like Department of Posts, etc. However, more than 70 per cent of the savings is accounted for by the household sector. It can well be known that India is a 'household sector savings driven economy'. The recent increase in saving, post reforms, is known as a 'macro-economic fundamental strength of India'.

Investment in the macro-economic framework implies increase in capital (machinery) stock, known as gross capital formation and after accounting for depreciation (usage of machine), as net capital formation. Growth can only be increased with capital formation and thus, the importance of investments in an economy. For example, if Maruti decides to set up a new plant leading into production of more cars, and increase in GDP, it will also lead to greater employment and increased income for the people.

What investment model has been followed by India in the past?

Traditionally, there were two models of investment 'top down investment' and the other as 'bottom up investment'. The first model is to invest in basic, capital and core industries such as crude oil, steel, cement, power generation, etc. This would lead to investment in other industries and finally investment in consumer goods which would then drive more investment in the core industries. The other focuses more on small and village industries and then allowing for their scalability to higher and more capital intensive investment over a certain period of time.

India opted for the first investment model post-independence as a part of the second five-year plan through the new concept of investment through public sector (refer to Chapter on Planning in India).

Pre-reforms investment was through public sector being set up in the core areas, through budgetary allocation. The objectives were of increasing significant capacities in critical areas, achieve self-reliance and become a driver of industrialization and increase overall growth of the economy (refer to Chapter on Industrial Sector). Such investment can be known to be basic capital expenditure or as 'core investment'.

What were the limitations of the earlier public sector-led investment?

First, India in the past was characterized by low savings resulting in low-levels of investment and thus low growth. Secondly, the government always had a binding resource constraint arising out of increased social sector spending, increased subsidy on food grains, fertilizers, etc. The government was not able to raise tax revenue in the economy resulting in an ever increasing fiscal deficit (refer to Chapter on Government Finances).

Thirdly, government is an inefficient spender in the economy especially in capital formation as there is time overrun in completion of projects which results in cost overruns and higher cost of projects. This results in 'capital deepening', increasing capital intensity but not allowing for 'capital efficiency'.

Fourthly, the focus of earlier investment was on 'creation of capacities' in different areas through 'available technologies' in India or technologies from other economies following a similar investment model like erstwhile USSR.

Fifthly, this model allowed for capital formation but in a limited manner and not 'technology and knowledge intensive' driven investment.

Sixthly, with the lack of focus on profits and with other social responsibilities, public sector did not have sufficient resources to augment investment in the economy.

Finally, as a closed and regulated economy there were no alternatives to savings and public sector investment.

11.2 NEO-INVESTMENT MODELS

The concept of other investment models is a post-reforms phenomenon, post liberalization and with the beginning of transformation of India from a closed to an open economy. The economy at present requires digging deeper into investment shifting from 'quantitative to qualitative', from 'traditional to technology and knowledge intensive' and from 'capacity building to efficient capital investment'.

Private Sector Investment

Opening of the economy allowed for newer avenues of investment especially as private investment. This helped in raising the investment levels in the economy but with a difference, of investment earlier being in the public sector domain now to private sector investment. Post-reforms with larger role of private sector, a liberalized environment, allowed private sector to operate in a competitive environment and at same time with new windows of untapped opportunities, resulting in plough back of profits translating into increased investment. This led to 'supplementary core investment' and also a 'diversified capital investment' into newer areas. This model also differed from public sector investment which was more 'capacity building investment' to an 'efficient capital investment'. This contributes to leveraging of the core investment and diversification of the industrial base, capable of lifting the plain of growth, as happened in the case of India.

Leveraged Investment

Another investment model being experimented in India, is the concept of public private sector partnership (PPP) which is being used for infrastructure projects. Such investment can be known as 'leveraged investment' (refer Chapter on Infrastructure Development). Briefly, this model seeks to take advantage of the strengths of both the government as well as the private sector for execution of various infrastructure projects and operations by the private sector for a limited period.

In recent times, there were a few question marks on this model, due to lack of transparency and ambiguities in the model concessionaire agreement (MCA) executed between the government and private players. There has to be a resolution mechanism for *inter-se* disputes arising from private parties and the government. The discontinuance Delhi metro airport express line is an example. Such instances can derail the model being used in India. There is nothing wrong with the model if the areas of work, responsibility and accountability of both the private party and the government are clearly delineated and made integral part of the MCA.

Similarly, wherever 'tolls' are being levied there should be a complete display of the details of the project, toll levied, period of levy. Most tolls levied are not 'rounded off' resulting in the problem of 'change'. For example, instead of toll being say ₹22 it could be rounded up to ₹20. Similarly, toll of ₹18 can be altered to ₹20. There would be no loss of revenue to the concessionaire and this result in a lot of operational convenience also for the commuters and lesser waiting time at toll gates. The other alternative to this could be to retain the existing tolls and to introduce 'smart cards' which would allow for electronic auto debit through sensors installed at the toll gate.

The other issue around levy of toll is that each toll gate is independent of the other resulting in the payment at multiple gates during the course of one journey. Understandably, this could be because of different concessionaire for different stretches of the same journey. What is being suggested is, for example, travelling from Delhi to Chandigarh, is it possible to pay the entire toll at the first gate itself rather than at five different gates of the journey. The concessionaires could have a technology-enabled toll sharing mechanism. This would reduce waiting time at toll gates and effective use of the created infrastructure.

Yet another variant to the existing PPP model be bringing and additional 'P' standing for 'People'. In this variant, a representative body of people gets involved in the project right from the conception stage to the project building, monitoring progress thereof and also maintenance once the project is completed. This PPPP model can be used for people centric investment especially in social sector programs. It could be the Accredited Social Health Activist (ASHA) under primary health care, rural electrification, rural roads, minor irrigation projects, etc.

Foreign Direct Investment

As a result of opening up of the economy, this has allowed for inflow of foreign capital both as foreign direct investment (FDI) and also foreign portfolio investment (FPI). The government only recently as clubbed all categories of FII investment as FPI. The investment model now being talked about is FDI which is 'direct interest of a foreign investor in production or rendering of services' (having control of over 51 per cent shares). It can also be indirect if the foreign investor has a control of minimum 26 per cent shares which would give it 'management control' (ability to 'influence' production, rendering of services but not able to 'directly run' the business).

This model goes beyond the domestic savings and is envisioned as a supplement to domestic investment. This allows for scalability of investment even beyond the savings of an economy and the model used by China for increasing the overall investment and becoming the fastest growing economy of the world. It has redefined the boundaries of investment.

Various forms of FDI in India could be the following:

(1) Wholly owned subsidiary (WOS).
(2) Wholly owned company incorporated in India (WOC).
(3) Joint venture (JV) company incorporated in India (JV with an Indian partner with management control or controlling share of 51 per cent to directly manage the business).
(4) JV into an existing line of business with management control.

All options are open in India. The government from time-to-time notifies FDI caps for different sectors of 26 per cent, 49 per cent, 51 per cent and 74 per cent and 100 per cent. The government is considering increasing sectoral caps in many areas to attract more FDI into India. Changes in the sectoral caps are notified by the Department of Industrial Policy and Promotion (DIPP) under Ministry of Industry and Commerce.

FDI has two distinct advantages—one of augmenting domestic investment and the other helps in meeting current account deficit (CAD). For detailed elaboration, refer to sections on foreign investment and balance of payments.

Sector Specific Investment

Another investment model being used in India is setting up of special economic zones (SEZs) to attract investment for increasing exports from India (refer to Chapter on Export Orientation). This investment adopted by China in seventies has been responsible for China emerging as the largest exporter of manufactured goods, a position enjoyed by US in the past. Such investment can be known as 'sector specific investment models'.

Another example of sector specific investment model is setting up of National Manufacturing Investment Zones (NMIZs) which will be integrated in industrial townships. It will co-locate productions units, logistics, public utilities and residential and green environment. The prime objective is to increase the share of manufacturing sector output to around 25 per cent as a percent of GDP over the next decade. This model also aims to double employment in the manufacturing sector in the same period. Tax and other fiscal benefits as applicable to SEZs would also be applicable to NMIZ. They are now referred as Integrated Manufacturing Clusters (IMC).

Cluster Investment

While sector specific investment can be multi-dimensional, cover different industry groups, cluster investment can be there to promote specific set of industries, such as handlooms, leather, garments, brassware, electronic goods, etc. These clusters comprises of small-scale industries which enjoy certain benefits of location, of proximity to raw material, markets, availability of skills and infrastructure. These clusters are promoted by the government.

The Right Model for India

The above are various investment models which have emerged in recent times especially in post-reforms and also from experiences of emerging market economies (EMEs). These models are not alternates to each other but are only variants of investment models. At a broad level, investment in India has to be driven by private sector and FDI. However, this will require a large role of the government in providing 'policy support' with 'a partnership approach' and an 'enabling environment' to facilitate natural flow of investment to bring back India on the high growth trajectory.

The policy support will require well-drafted 'futuristic policies' in different areas especially in the areas of 'pricing and tax matters'. These are the areas of grave concerns affecting investment in the economy. Pricing should be such to induce investment and also at the same time protect the interest of the ultimate consumers. At the same time, it should also be ensured that the pricing is competitive. Similarly, there should be 'certainty' of taxes, unambiguous and provide comfort that they would not be applicable retrospectively, unless warranted in exceptional circumstances and that too it should be on a case-to-case basis. Policies should be like goal posts, which are firmly entrenched and visible to all.

Partnership approach is not to 'prevent but to allow' or finding a way of getting things performed but within the policy framework. It is not short circuiting of laid down procedures but looking at them positively. It is about giving speedy clearances through a single window approach both at the central as well as state government level.

Enabling environment lies in creating the infrastructure around which such investment can be induced. 'Reviewing' various acts which influence such investments like mining and minerals (development and regulations) act, land acquisition and various labour laws all of which date back to 1950s. There is a requirement to comprehensively review them in totality to make them more relevant to the changed present context.

India is one among the few countries today which is 'investment starved' and requiring huge levels of both resource as well as technology intensive investment and requires concerted efforts on the part of the government to play its role to facilitate both private and foreign investment in the country, to reverse the present down turn in India's growth story.

CHAPTER 12

INTEGRATED ENERGY POLICY (2031–32)

12.1 IMPORTANCE

The importance of this policy lies in the fact that for the first time the entire energy sector is brought together in one policy and developing a long term vision. Energy is a key requirement and as investment is scaled up so do energy needs of an economy. Today every sector needs energy be it agriculture, industrial activities or even service sector. The policy gives out energy needs, their sources and the way going forward. Its other importance lies in the fact it is bold in accepting realities and the challenges for the government in future.

12.2 THE POLICY

In terms of the policy, power demand is likely to be a mammoth 8,00,000 MW by 2031-32 as against an existing capacity of 2,00,000 MW (actual generation is only around 1,50,000 MW), requiring an investment of over ₹2,50,000 crore in the power sector only. There has to be exponential increase in additions to the power generation capacity. India has taken 66 years to build its present capacity and it will have to add over 6,00,000 MW in the next 20 years, over more than 1.5 lac MW in each of the nest 4 five year plans, beginning with the twelfth five year plan.

Besides the huge resources required there are structural issues like, one of the highest Aggregate Transmission and Distribution (AT&D) losses of 25 per cent the highest in the world. There are other issues like power thefts which along with distribution losses result in losses to the State Electricity Boards (SEBs), under pricing, mounting losses of the State Electricity Boards and concept of free power.

The Policy has mentioned dependence on coal based thermal energy. 'Coal' would the '*primary*' source of energy accounting for 60 per cent even by 2031-32 and thermal power generation alone accounting for 47 per cent. The proven reserves are not an issue for the present, but quality is a matter of concern. Our present coal reserves are not that which is required in the power plants.

The other issue around coal is complete monopoly of Government in mining and thus the policy favoured reforms in the coal sector opening to private and foreign participation, pricing to be market determined so that scarcity value of coal gets reflected and there is optimization and efficient use. There was a need to step up 'coal forecasting' as it is widely believed that 'coal potential' in India is over 100 years.

The other source to meet the energy requirement is petroleum which would account for 25 per cent. But the problem here is that it is also non renewable. Besides there is heavy import dependence of presently 70 per cent which is likely to go up to 90 per cent by 2030 making India the third largest importer of crude petroleum after US and China. This would make the economy extremely vulnerable to global price fluctuations besides supply factors in the wake of adverse developments in West Asia.

There is an urgent need to free up pricing of retail petroleum goods in the domestic market so that their scarcity value gets reflected. The government should spread awareness on the need for energy conservation, increasing energy efficiency and lowering energy intensity. There was a need to step up efforts at developing viable alternatives to the growing dependence on oil through R & D. The government should set up a National Energy Fund by levying a cess of 1 per cent on turnover of all companies in the energy sector. Many countries in Europe have already announced a zero dependence on crude petroleum in a given time frame. India needs to do the same. Given the volatility in the international crude petroleum prices the policy has suggested creating strategic reserves of crude petroleum of at least 90 days.

With respect of Hydro power, the policy cautioned on its high cost of power generation and should be promoted after evaluating its impact on ecological imbalances, habitation etc. In any case the full potential is limited to only 1,50,000 MW about 20 per cent of the energy requirement by 2031-32.

Nuclear energy was the source for the future but given the long gestation period in commissioning of such plants, availability of nuclear fuels from other countries and uncertainties in inking nuclear deals, one can expect optimistically any change in the energy mix only beyond 2050. But one should also be aware of its high capital intensity and high cost of power generated, besides the potential dangers of radiation leakages, nuclear waste and their long term impact. It will not be able to meet more than 5 per cent of the energy requirements by 2031-32.

There is a lot of focus on renewable sources of energy like fuel wood plantation, bio-gas, bio-mass, ethanol as they can meet local agricultural and domestic needs cheaply. Wind energy and solar energy are capital intensive with high per unit power cost and would require additional resources. But again they would be able to meet only local requirements, their promotion is precisely for this reason, besides it will promote local entrepreneurs, create local employment and are environment benign. But at the same time their large scale integration in the broader energy requirement framework may not be possible for a foreseeable long time in the future.

12.3 GOVERNMENT INITIATIVES

Planning Commission has been aware of the of this impending need and has begun to give as decisive thrust for increasing power generation capacity since the ninth five year plan. Each subsequent plan has only scaled up planned expenditure for creation of power generation capacities. But unfortunately the targets set out were never achieved. The Ninth five year plan could achieve only 47 per cent of the targeted level of power addition. The later plans including the eleventh five year plan could not go beyond meeting 50 per cent of the targets. The twelfth five year plan is highly ambitious of adding 88,000 MW in the next five years.

The Government at its level has shown some urgency by announcing setting up of Ultra Mega Power Plants (UMPPs), by the private sector each with a capacity of 4000 MW.

Realizing the importance of coal as a raw material for thermal power plants, it has asked Coal India Limited (CIL), the sole authority to do mining of coal to sign Fuel Supply Agreements (FSA) with power plants to ensure steady supply of coal to them.

The Government has also focused on solar energy, besides exploring the prospects of shale gas as a potential source in the future.

12.4 STRUCTURAL BOTTLENECKS

Thermal power generation, as mentioned earlier, has a major structural problem. The relatively larger role of the State governments through their respective State Electricity Boards (SEBs) where generation, transmission and distribution are all bundled together. Power sector needs unbundling these as separate, distinct and independent activities. There also a need to have market related pricing and a strict power discipline. Power sector has to be kept at arm's length distance from both the State and Central government.

Coal mining has to be opened up to private and even foreign investors to get the state of the art technology, improving mining skills besides moving into a market determined pricing for coal.

Increasing dependence on imported crude oil, needs to be reduced. Amongst the larger economies of US, China and others, India is the most vulnerable to supply shocks and price volatility. What makes it worse is their direct transmission on domestic prices.

Another worrisome factor for India is the low level of awareness of energy conservation and preservation resulting in their excessive use only compounding the problem of growing dependence.

The energy sector has to be viewed seriously by the Government. As and when growth accelerates, energy constraints would become binding. On the whole the policy has sounded pessimistic but then that is the ground reality of the seriousness of the energy sector and would require the government to introspect of the possible solutions to the likely 'energy crisis' of the future.

CHAPTER

13

GOVERNMENT FINANCES

13.1 FISCAL POLICY IN INDIA

The government does not perform any business so it cannot earn money to spend. Hence, the government has to raise the money from the economy to enable it to spend that money in terms of requirements and national priorities. The government raises money primarily through 'taxes' and the spending known as 'public expenditure'. A policy which affects either the manner in which the government raises resource or spends is known as 'fiscal policy'. The objectives of any fiscal policy of a country are as follows:

(1) To ensure that the expenditure in an economy is in terms of national priorities, to boost growth for the welfare of the people.
(2) Expenditure being incurred should not lead to a price rise situation.
(3) There should be efficiency in the way of resources that are raised and spent.
(4) Efforts are to be made to avoid wasteful expenditure in the economy.
(5) Resources being raised by the government through taxes should not create burden on the common man.
(6) Taxation should be 'just' and helpful in reducing income inequalities.
(7) The policy should aim for overall improvement of the welfare of the economy.

In India, there is no fiscal policy by the name; however, the objectives of those are being achieved by the annual financial statement popularly known as the budget which is tabled in the parliament. Hence, budget is not merely the details of expenditure and taxes but is also a policy tool to sub-serve objectives of a fiscal policy. The budget, thus, is more than a balance sheet of government receipts and expenditures presented to the parliament.

13.2 PUBLIC EXPENDITURE OF GOVERNMENT

Public expenditure is spending by the central government. Broadly, there are two kinds of expenditure—one is plan expenditure, which is expenditure ear marked for investment in different areas, in the five-year plans for various sectors of the economy. These could be either capital or revenue in nature. Capital expenditure represents creation of assets in an economy and is thus desirable for growth. For example, money spent for setting up power plant is a capital expenditure. Revenue expenditure is recurring in nature, for maintenance, etc.

The other is the non-plan expenditure which is an expenditure not covered in the five-year plan but yet has to be incurred and could again be either revenue or capital. In India, non-plan expenditure is 70 per cent of the total expenditure whereas plan expenditure is only 30 per cent. The highest expenditure is non-plan revenue expenditure accounting for 63 per cent of total expenditure.

What are the components of non-plan revenue expenditure? The first is the interest payments (servicing of the loans taken by the central government both internal and external) accounting for over 25 per cent of the total expenditure. Secondly, subsidies (food, fertilizers and retail petroleum goods). Thirdly establishment expenses of defense. Fourthly, loans to state governments/UT, establishment expenses of central government, pension to defence/central government retired personnel. Expenditure on these heads would account for over 90 per cent of non-plan revenue expenditure. These expenses are also known as consumption of the government as no assets are created.

13.3 RECEIPTS BY THE GOVERNMENT

The expenditure in an economy is met out of receipts by the government through various sources. The receipts could be revenue (which do not create any interest liability for the government, regularity in their receipts and not representing borrowings) and the other as capital (either creating a liability for the government or less certain of their receipt or borrowings). Of the total receipts, 90 per cent is revenue and 10 per cent is capital receipts. The primary source of revenue receipts is tax revenue (84 per cent of total receipts). Taxes could be either direct or indirect.

How to distinguish direct tax from indirect tax? Direct tax is a tax where the subject on whom the tax has been levied is identifiable, who has to pay the tax and the tax burden cannot be shifted. Examples can be income tax, corporate taxes, wealth tax, etc. In case if the subject is not identifiable or if the burden can be shifted it is an indirect tax. Common examples are excise duty (payable by companies on manufacturing activities), customs duty (duty on import of goods), service tax (tax on services being rendered by service providers), etc.

Fifty-five per cent of the tax revenue arrives through direct taxes while 45 per cent of the revenue is from indirect taxes. The base on which the tax is applied for indirect taxes could either be on value (*ad valorem*) or specific on a particular attribute (length of staples in cotton). India primarily follows an *ad valorem* indirect tax structure.

Certain taxes are levied by the central government and at the same time it is also collected by the central government (income tax, customs duty, excise duty and service tax), certain taxes levied by the central government but collected by the state governments (central sales tax levied on inter-state movement of goods). A few other taxes are levied and collected by the respective state governments (sales tax, octroi, municipal taxes, road tax, entertainment tax and agriculture tax).

The basis of sharing the tax revenue between the centres and the states are decided by the finance commission. The thirteenth finance commission under the chairmanship of Shri Vijay Kelkar has since submitted its report and is effective from 2010 to 2015.

There are two additional taxes—one is the surcharge which is imposed for additional revenue considerations by imposing an additional percentage on the absolute amount of tax payable. Suppose surcharge on a tax is 5 per cent and the tax payable is ₹ 100 then the total tax liability including surcharge would be ₹ 105.

The other is cess which is similar in application as the surcharge except that the amount collected by way of cess is meant solely for specific funding/cause like education cess, the amount collected would go for funding of education only.

Components of revenue receipts other than taxes are dividends received by the government from public sector, payment of interest by the state governments etc. Similarly, capital receipts of the government comprises of recoveries of loan, grants, assistance received by the government etc.

13.4 WAYS AND MEANS ADVANCES

An interesting characteristic of expenditure and the receipts of an economy is that, all the receipts come with a lag over a period of time like direct taxes would be by the end of each quarter while committed expenditure as to be incurred immediately.

That is, for example, if there is a temporary mismatch between government's receipts and expenditure in a financial year and to meet this mismatch the Reserve Bank of India provides temporary overdraft to the government through the 'ways and means advances'.

This overdraft facility is for a time period of 90 days and the amount of overdraft is ₹20,000 crores during April to September and ₹6000 crores during October to March.

13.5 NATURE OF GOVERNMENT BUDGET

Thus, so far we have discussed the expenditure and receipts. What happens if expenditure exceeds receipts? It would result in a deficit or otherwise in a surplus and if both match then balanced.

What is good for an economy—a deficit, surplus or a balanced budget? To answer this question, a few aspects should be understood. There is a difference between personal and government budget and that being in a personal budget, spending is strictly in accordance with income. However, in a government budget, it is important to understand that expenditure is seen first and the reason for receipt is because of the need for spending in the economy. That is, a government budget by its very structure is deficit-oriented.

Only in an economy where receipts surpass spending can there be a surplus or the government scales-down spending to match the receipts. This could drag down growth as lesser expenditure is taking place. More so in India, given the inflexibility to bring down non-plan expenditure, any reduction in expenditure would imply lesser capital expenditure and expenditure on social sector.

A balanced budget is good only if the budget is seen as a balance sheet or a statement of accounts of the government of India. A better thing can be a balanced budget multiplier which is an incremental increase in expenditure in any given year is met out of incremental increase in receipts in a given year.

13.6 NATURE OF DE

Different components of ex
of deficits in the budget.

	Receipts
1.	Revenue receipts
2.	Capital receipts (of which market borrowings of the government)
3.	Total receipts (1 + 2)

From the above exampl

(1) Budgetary deficit
(2) Fiscal deficit is tot
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(3) Revenue deficit is
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13.6 NATURE OF DEFICITS

Different components of expenditure and receipts are explained for a better understanding of deficits in the budget.

	Receipts	₹ in crores		Expenditure	₹ in crores
1.	Revenue receipts	90,000	4.	Non-plan revenue expenditure a) (interest payment)	90,000 (50,000)
2.	Capital receipts (of which market borrowings of the government)	(10,000)	5.	Non-plan capital expenditure	25,000
			6.	Plan capital expenditure	50,000
			7.	Plan revenue expenditure	10,000
3.	Total receipts (1 + 2)	1,00,000	8.	Total revenue expenditure (4 + 7)	1,00,000
			9.	Total capital expenditure (5 + 6)	75,000
			10.	Total expenditure (8 + 9)	1,75,000

From the above example, we acquire to know various kinds of deficit.

(1) Budgetary deficit is total receipts (3) less total expenditure (10) ₹75,000 crores).
(2) Fiscal deficit is total receipts (but excluding government market borrowings) less total expenditure (₹85,000 crores).
(3) Revenue deficit is revenue receipts (1) less revenue expenditure (8) (₹10,000 crores).
(4) Primary deficit is fiscal deficit less interest payments (4a) (₹35,000 crores) (A negative sign before the deficit would indicate surplus).

Since economies have begun targeting the fiscal deficit, usage of budgetary deficit has been discontinued. Of the remaining three, fiscal, revenue and primary which can be said to being potentially most dangerous? 'It is not the fiscal but the revenue deficit'. As revenue deficit implies borrowing money for meeting the consumption of the government and not to create assets. Borrowings *per se* are not bad as long as assets get created and the assets can service the borrowings.

In India, 70 per cent of the fiscal deficit is accounted for by revenue deficit. The primary deficit, on the other hand, tests for the sensitivity of interest payments towards fiscal deficit or how far the interest payments are responsible for the fiscal deficit.

A high primary deficit would mean that fiscal deficit is on account of factors other than the interest payments and structural in nature. A low primary deficit indicates that the high fiscal deficit is on account of interest payments, which is the case in India.

Hence we started by saying that the nature of government budget is deficit-oriented but too much of deficit is also bad as it contributes to inflation. It is difficult to say as what could be the 'safe' level of fiscal deficit.

A basic thumb rule is it should be under 3 per cent of GDP with a balanced budget multiplier. There are various compulsions of the government which make expenditure control difficult especially given their responsibilities for socio-welfare schemes, infrastructure development, etc.

Still the government in line with the above had set definite time frame for reducing the fiscal and revenue deficit under the Fiscal Responsibility and Budget Management Act (FRBMA) for gradual reduction of revenue deficit by 0.5 per cent every year to be brought down to zero by 2007–2008. In respect of fiscal deficit the aim was to reduce it by 0.3 per cent every year beginning from 2004 to 2005. Clearly, the targets have not been achieved.

The global crisis initiated during 2007 required a fiscal stimulus package to ensure that the Indian economy does not slip into a recession and a conscious decision taken to relax the FRBMA provisions until the situation is improved.

If the expenditure needs are inflexible and deficits have to be checked the only way is to augment the receipts and this is where the government has focused through tax reforms with the taxes being a major source of receipts for the government as it offered great potential. There is a need to increase the tax to GDP ratio which is presently around 10 per cent especially given the growth of the economy there should be proportionately larger increase in tax revenue.

13.6 TAX REFORMS—INDIRECT TAXES

It was mentioned previously that indirect taxes contribute about 45 per cent of the tax revenue. A major source of indirect taxes is excise duty which is payable on value of manufacturing activities in the economy. Excise duty like other indirect taxes by its inherent structure is regressive in nature.

For example, the excise duty on salt is 10 per cent on a factory price of ₹10 which means the retail price for a packet of salt is ₹11 with an excise of ₹1 per packet going to the government. The price of ₹11 is being paid by a person who is earning ₹5000 per month and also even by a person whose earning is ₹1,00,000 per month. The tax burden is higher on the people with lower income and that is what is meant by regressive.

Secondly, multiple excise structure with multiple rates giving rise to different interpretation on tax payable giving scope for evasion, litigations and revenue loss to the government.

The third issue in excise is the cascading effect of taxes. For example, Maruti buys tyres from MRF company. The purchase price of tyres from MRF would have a component of excise duty, which becomes the input price for Maruti and excise duty has to be paid on the full value of car. This is known as the cascading effect, that is, taxes increase the manufacturing cost and get again taxed.

The government has tried to address the issue by reducing the slabs of excise duty and lower excise duty on essentials or mass goods to minimize the regressive character. With regard to the cascading effect, the best way to prevent it is by introducing value added tax (VAT) which is a tax on the value additions at each stage of production rather than on the finished goods. Provided the federal structure both centre and state government VAT would have to be at both levels.

An initiation was made with the government by first introducing the modified value added tax (MODVAT) scheme which allowed partial adjustment of duties on capital goods purchased, however, it was restrictive in nature. The government replaced MODVAT with a wider scheme of input credit for the excise duties inputs (raw materials, capital goods and services) purchased for direct use in production known as central value added tax (CENVAT) at the central level during 2004.

A major reform has been at the state level with the replacement of sales tax with state VAT. The credit for this goes to Shri. Asim Das Gupta the then Finance Minister, West Bengal and can be hailed as a landmark in tax reforms.

'Why' it is a major reform? First to make all the state governments to agree for the replacement of sales tax with a state VAT. The sales tax regime was very complicated with different sales tax rates for same products in different states. A state VAT required 'one product one tax rate' across all states and to drive a consensus for this was herculean effort as some states would stand to gain and others would tend to lose.

If in a particular state sales tax was a high of say 24 per cent but the consensus under a state VAT was only 12.5 per cent for that good clearly there would be revenue loss for that state government.

State VAT made effective from 1 April 2005 has the following salient features:

(1) State VAT is not a new tax but only a change in the way of collecting tax from the final stage to the value addition stage.
(2) This allows for set-off of duties from the tax payable but against original invoices/challans of the tax paid on the inputs purchased.
(3) There would be a uniform 4 per cent state VAT on 270 mass-consumed goods across all states, a uniform VAT of 12.5 per cent on 280 goods and 1 per cent on gold and silver ornaments across all states.
(4) Those with a turnover of ₹5 lakh and less would not be liable for any VAT, from ₹5 to 50 lakh a composite tax but with no set-off. VAT is payable for turnover exceeding ₹50 lakhs.

The state VAT has helped in checking tax evasion by introducing a 'bill culture', transparency in tax administration and collection, increased revenue for the state government. Further, as part of deeper reforms, the government is proposing to integrate taxing of goods and services at differential rate separately into one tax with one tax rate as goods and services tax (GST) with both the centre and states taxing concurrently as the central government GST (CGGST) and the state government GST (SGGST).

This would considerably simplify the indirect tax regime, enlarge the tax base for larger resource generation and thus lower GST rate resulting in lower prices does of goods and services but also in ensuring the revenue for the government not to suffer. The government proposes to implement the GST regime as soon as there is broad based consensus with the states and technology put in place. Reforms in indirect taxes are commendable and the government's proposal of propelling to GST would place India with an efficient indirect tax regime at par with other mature economies of the West.

13.7 TAX REFORMS—DIRECT TAXES

Direct taxes as seen earlier contribute 55 per cent of the tax revenue and it is a better way of taxation as it is progressive in nature and based on 'ability to pay', higher the income, progressively, more the tax rate leading to greater revenue with least burden on the masses or those with low income. Direct taxes particularly income tax is progressive and in contrast to other taxes which are regressive in nature.

The progressivity of income taxes in periods of inflation pushes people up the tax bracket, as pay packets get inflated due to inflation resulting in higher taxes paid and reduced spending by the individuals. On one hand, the coffers of the government fills up because of people moving up the tax bracket and on the other there is a reduced spending. This phenomenon is known as 'Fiscal drag'.

How many people do you think are tax payers in the economy?

At present, 3.5 per cent are tax payers in the Indian economy, about 31.5 million in a population of over one billion people. This number is low especially considering the fact that India in its growing economy, with increased income, rising middle class, the affluent class and large number joining the elite billionaire club. In comparison, the number of tax payers has only increased by 11 per cent.

What are the ways through which tax payers and tax revenue can be increased? There could be three ways through which it can be increased and are as follows:

(1) Increase in the direct tax rates.
(2) Increase in the tax base.
(3) Enforce tax compliance.

Increase in Tax Rate

Any increase in tax rate is seen negatively and resented by the people. There is also a relationship between the direct tax rate and revenue generated. Starting from a low tax rate and gradually increasing it, is positively related and increases tax revenue. However, beyond a level, any increase in tax rates becomes counter-productive as it lowers tax revenue rather than in increasing it. This is popularly known as the 'Laffer curve'.

An economy being on the Laffer curve implies that any increase in tax rates would lower the tax revenue and on the contrary lowering of tax rate would lead to increased revenue for the government. It is widely believed that India is on the Laffer curve with limited prospects of raising taxes.

This is because high tax rates lead to tax evasion, non-disclosure of income and generation of black money (taxes not paid). All efforts are made to minimize the incidence of taxes legally and illegally. It serves as a disincentive in the economy leading to lowering of income and the output. Hence, raising tax rates is not an option available in India.

Increase in Tax Base

Tax base refers to that threshold level of income on which taxes become applicable. India has an exemption level, that is, if income is less than ₹ 1.6 lakh (₹ 1.9 lakh for women) per annum taxes are not payable. So one way could be to lower the exemption level so that more people are drawn in the tax net and thereby an increase in tax payers and tax revenue.

At present, the exemption level is very low given the present inflation. Besides the inflation does not factor in cost of education, transport and property prices all of which have increased manifold in recent times creating hardships and making it difficult for the middle class to make both the ends meet. Lowering the exemption would further burden the middle class and more so by this way it may be possible to increase the 'number of tax payers' but 'not necessarily tax revenue' as many would be marginal tax payers.

The other way to increase the tax base is to bring in untaxed sectors under the tax net. All sectors with the possible exception of the agricultural sector are already under the tax net. Agriculture being a state subject can be taxed only by the state government and not by the central government. Thus, like increasing tax rate, even increasing tax base is not a feasible option for raising direct tax revenue in India.

Ensuring Tax Compliance

This is to ask the question that, is every person who ought to pay taxes is paying his/her taxes in terms of existing laws and the second are the people who are not paying should actually be paying taxes. This is what is meant by tax compliance. The government has made an initiation by making the income tax return form user friendly and easy to fill up by an individual and it is known as 'Saral'.

The problem in India is that of tax compliance with lot of leakages, large-scale tax evasion and black money. It is estimated that over 40 per cent of GDP is black money which is circulating in the economy on which no taxes are paid.

13.8 BLACK MONEY

Black money has nothing to do with the colour except to convey that it is necessarily an evil. It is an unaccounted income, earned through illegal channels and put to unproductive anti-national use and conspicuous consumption. Checking black money and tax evasion are the critical aspects of tax compliance.

Black money gets generated when big transactions are performed in cash, source and end use not possible to ascertain. For example, a friend gives you cash of ₹1000. Technically, it is black money, may be not so in your case because the amount is small. However, say somebody gives ₹10 lakh in cash it is definitely black money.

In other way, all transactions where payments have to be made or received beyond a level of say ₹10,000 and above if done in cash is black money. Or still differently, transactions performed other than by way of cheques, drafts, credit cards, debit cards, direct transfers of money in bank accounts would be black money.

If you deposit ₹10 lakh in cash in your bank account it is black money (unless and until if you show the source from where you got it). If your father sends you a cheque of the same amount and you deposit it in your bank account it is a 'white transaction'. Thus, transactions performed other than through banks and post offices would generate black money.

Why does black money get generated? The primary reason for the black money generation is high tax rates, complex tax laws and provisions, strict controls on transactions, large amount of cash dealing, people not having bank accounts, land and property deals in cash, need for money to get jobs performed through various government departments, donations required for admission in schools and colleges, meeting dowry needs, compulsions of social functions and also for doing illegal activities both within and outside the country.

What has the government done to curb black money? Not much except the voluntary disclosure schemes and giving amnesty for the amount disclosed and demonetization of higher denominated currencies. (Recall India had earlier ₹5000 and ₹10,000 notes which have now been discontinued and cease to be legal tenders.)

The government has also declared that all transactions over ₹10,000 should be done through cheques/drafts. Drafts would not be made by banks against cash exceeding ₹50,000 in one day. A permanent account number (PAN) has been issued to all tax payers and it is mandatory to quote the PAN number for all transactions over ₹50,000.

The income tax offices at the four metros have been computerized and networked, creating a database of tax payers and transactions being performed by them. All Registrar offices registering land deals, credit card companies, automobile manufactures, etc., are required to furnish information beyond a cut off level.

The government with a view to have better tax compliance, lesser tax evasion, is proposing the direct tax code which would simplify tax laws and provisions, plug leakages, raise exemption levels and consider further lowering tax rates. However, till then tax compliance will be a major constraint to further raise tax revenue for the government.

13.9 VIEWS ON TAX COMPLIANCE

(1) Has it ever occurred why people do not want to pay taxes? Paying taxes globally is a matter of pride and joining hands with the government to provide better for the masses and improved civic amenities. Not so in India.

(2) That is, because, people doubt the intentions of the government in using it productively for the masses. Tax compliance would thus require austerity measures on the government lesser lavish spending and more responsiveness and sensitiveness towards the spending for masses.

(3) Tax compliance should be top-driven. Have you ever seen any top political leader, bureaucrat going to file his income tax return at the IT office in-person. No! it is not required officially but it sends the right message to people that how it is of high priority despite their busy schedule. Who is the first person seen as voting in an election? It is the President, Prime Minister and other top leaders. 'Why?' Just to send the right message to the people to come out and cast their vote.

(4) Hence tax compliance should start right from the top. The President, PM, Chief Ministers and senior leaders all of them filing their tax returns in-person.

(5) Who is the highest tax payer in the country? It is difficult to say or even more difficult to say who are the top 100 tax payers in the country. What prevents the government from honouring them at a public ceremony acknowledging their contribution to the

national cause? It will transmit positive signals and encourage people to pay their taxes.

(6) What if one is seen by one's friend or relative at the income tax office? It would definitely not be positive. The perception of the income tax officials has got to change from treating everyone as a tax evader to that of trust, a friend guiding and supporting the people. Let them have 'May I help you counter' at their offices for any assistance people may want. They could send out staff to assist tax payers in correctly filing their returns. It should not be difficult but could go a long way in increasing the compliance.

(7) It is not difficult to find out regular tax payers, a small well-worded thank you card can be sent to them each time after they have filed their return. Today, technology support is available to generate such computerized letters. What is being meant here is that the incentive for a tax payer to pay his taxes, a mere token of appreciation can work.

(8) Our policies for tax evasion can be said to be 'soft'. What is required is strong punishment for tax evaders, those generating black money uniform for all irrespective of whether political leader, bureaucrat, private organization, etc., to serve as a lesson and a source of discouragement.

While tax compliance would remain an issue, still there are some other issues which can help augment revenue to the government like completely simplified tax regime based on income at low rates with no exemptions easily enforceable and minimizing leakages.

What is a an efficient tax system? An efficient tax system should allow for raising revenue without burdening the common man. It should provide for BECN briefed as below:

B buoyancy (raise tax revenue with increased growth of an economy rather than by changing the tax rates).
E effectiveness (promoting tax compliance).
C cost-effective (lower cost of collection with increased tax revenue).
N-neutral to economic decisions (not influencing location of businesses).

The present tax structure in India is still evolving and moving in the right direction of a GST for indirect taxes and direct tax code for direct taxes. While all these efforts at increasing tax compliance are appreciable there are other issues which should also get adequate attention of the government and that is cost of collection of taxes is continuously increasing. There is a requirement to arrest this trend and ensure higher collections at lower costs.

The other is given the inflexibility of expenditure, there is scope for rationalizing government expenditure by reviewing the requirement for so many ministries, merging ministries for sharper focus, abolition of vacant posts, greater austerity in government spending and small expenditure cuts wherever feasible. It is these small cuts which would make the picture larger. And for once economics should prevail over political compulsions in the larger interests of the economy.

Typical Budget in India

We have covered public expenditure, taxes and different kinds of deficits as part of the budgetary process. A typical budget presentation initiates with a review of the economy in terms of the Economic Survey presented in the Parliament (a few days before the budget is presented), which is followed by the expenditure proposals and finally the tax proposals which most anxiously awaited by all.

All receipts in the economy are retained in the consolidated fund of India and money can be utilized only after the budget is passed by both the Houses of Parliament, which is that Parliament provides approval for various expenditure and permits withdrawal of funds for various expenditure needs of the economy. Certain expenses can be incurred by the government without the approval of Parliament and are known as 'charged expenditure' such as meeting interest obligations, salaries and emoluments to constitutionally appointed heads such as chief justice of India, CVC, CAG, etc.

There are two other kinds of budgets interim and vote on account. Interim is a kind of budget addressed for a period less than a full year. Vote on account is not a type of budget strictly, but seeks approval for ongoing expenditure needs, no fresh expenditure or tax proposals. This is normally presented when the government is about to face elections or when the time period is too short even for an interim budget to be presented. In any case, the choice of the type of budget to be presently lies with the government.

In case, election date has already been announced the election commission is empowered to restrain the government from presenting an interim budget but present a vote on account only. Traditionally, budgets are shrouded with secrecy and it lacks transparency. There should be greater and broader participation of people from all walks of life to ensure budgets being prepared are not only of the government but also of the people.

The budgets are focused on 'outlays' or spending under different heads but no provision is made to know the 'outcome' of such spending. The other aspect is the outlays are not linked to the actual need. For example, the budget might propose increased outlay of say ₹100 crores on education in comparison to an increase of only ₹50 crores in the last budget. However, there is no mention of how much actually needs to be spent on education in total.

The budgets year after year get engaged in micro issues for example taxes on tooth pastes, etc., which is not required. The budget may address broad issues of the tax rates in general rather than go into the minutest of details or should be more macro-oriented and micro-detailing done through annexures, for a better understanding of the underlying macro-issues in a budget.

Such reforms in the budgetary process itself also need to be integrated as part of the larger reforms. All the reforms in the country are around the government but not in the government.