Dr. Mounica Vallabhaneni
Yelahanka Lokesh

# INTRODUCTION TO INDIAN ECONOMIC POLICY

ALEXIS PRESS
JERSEY CITY, USA

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*Published by*: Alexis Press, LLC, Jersey City, USA
www.alexispress.us



First Published 2022

*A catalogue record for this publication is available from the British Library*

*Library of Congress Cataloguing in Publication Data*

Includes bibliographical references and index.

Introduction to Indian Economic Policy by *Dr. Mounica Vallabhaneni, Yelahanka Lokesh*

ISBN 978-1-64532-772-1

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# CHAPTER 1

# INDIAN ECONOMY ON THE EVE OF INDEPENDENCE: CHARACTERISTICS

Dr. Mounica Vallabhaneni, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: mounicav@presidencyuniversity.in

**ABSTRACT:**

The Indian economy was characterised by different traits that impacted the nation's economic environment during its transition from colonial control to independence in 1947, just before the country gained its freedom. The main characteristics that at the time characterised the Indian economy are summarised in this abstract. The economy of India was mostly agricultural, with agriculture acting as the foundation of all economic activity in the country. A large portion of the people relied on agriculture for their living, and the industry made important economic contributions to the nation. However, the feudal landholding systems, antiquated agricultural methods, and widespread rural poverty were features of the agrarian framework. The British colonial government heavily exploited and controlled India's economy. With the establishment of a system that supported British interests under colonial rule, India's resources and riches were taken. Due to the economy's design for the imperial authority, there has been little industrial growth, reliance on imports, and repression of local enterprises. India's industrial sector was still developing and in its infancy. The colonial policies that prioritised the export of raw resources and stifled the development of local businesses were to blame for the absence of indigenous industrialisation. As a result, India's infrastructure, technical development, and manufacturing capacity were insufficient to enable industrialisation.

**KEYWORDS:**

Economic, Economy, Government, Indian Economy, Trade.

## INTRODUCTION

Pre-British India's economy was made up of cities, which served as centers of government, trade, pilgrimage, and handicrafts, and isolated, self-sufficient villages. The market was quite tiny since there were few reliable means of transportation and communication. It is crucial to examine the village community structure, the nature of cities, the nature of domestic and international commerce, and the status of the means of transport and communications if one is to comprehend pre-British India. Before the British, other invaders had also taken India, but they had made India their home. The British invasion was unique in that it resulted in the formation of a new political and economic system whose interests were firmly established in a foreign land and whose actions were completely determined by those interests.

The British attempted to maintain a gap between themselves and the Indian people, in contrast to the early conquerors who Indianite themselves, and as a result, they established the division between the foreign rulers and the Indian subjects—a distinction that had previously not been recorded in Indian history. After 1850, India's creation of a complex rail network accelerated the process of commercial agriculture that the Industrial Revolution made necessary. Indian agriculture was commercialised and the country's new land structure had highly negative

economic effects on the country. In addition to creating "built-in depressors" in agriculture and delaying, if not halting, the industrialization of the Indian economy, these factors also contributed to famines there. Industrial growth in the 19th century and industrial advancement in the 20th century are two main categories used to describe the industrial transition process in the British era. Industrialization was mostly advanced by the private sector, whether it was domestic or foreign. Indian businesses didn't have any protection until after the First globe War; before to that, they were forced to weather any adversity and compete against the rest of the globe on their own [1], [2].

The collapse of traditional industries and the emergence of expansive modern industries were the major industrial developments of the 19th century. Private business is responsible for this shift. By the end of the 19th century, the development of large-scale industries had accelerated from its initial, plodding pace. The nation now has more than 70 cotton mills and around 30 jute mills. There was a greater than doubling in coal output. At a pace of around 800 miles annually, railway expansion was still ongoing. This time period saw the final laying of the iron and steel industry's basis.

Trade was the primary method of exploitation of India. Later, the British began investing in Indian companies, and as a result of the returns and earnings from these investments, the process of economic drain began. India was also required to pay house charges, which represented the expenses of British administration. In addition to interest payments on pound debt, they also covered the wages of British officers as well as the payment of pensions, furloughs, and other perks. The East India Company and later the British Government used trade policies against India to drain its wealth, provide raw materials for the burgeoning British industry, and to promote the trend of commercialising agriculture.

This allowed India's economy to be transformed into a dependent part of the British colonial system. Trade served as the primary means of exploitation throughout the early stages of colonialism, but the British eventually considered promoting investment in India. The investments were made with three main goals in mind. The initial realization by the government came after the first war of Indian Independence, which the British referred to as the Mutiny, that a reliable transport and communication infrastructure was vital for the successful control and administration of the nation. Indian businesses lacked any knowledge on how to set up joint stock companies for the purpose of organizing the modern industrial sector. In various sectors, like jute, tea, and coal, the British merchants who had previously established trade enterprises served as innovators and promoters. As managing agents, these people were known. For the country's military and civil administration, the British engaged a sizable number of British officers. As opposed to their Indian colleagues, British army officers received a distinct cadre and received substantially greater salary and benefits. British officers had a monopoly on all of the senior ranks.

India exported to Britain more goods than it imported during both World Wars. With regard to this favorable trade balance, Britain gave the Indian government permission to print additional money with the backing of the Sterling Balance maintained in England. In India, there were more exports than imports. Dadabhai Naoroji, a renowned economist from India, stressed in his famous work on the "Poverty of India" that the lack of economic progress in India was caused by the exodus of wealth and money that began after 1757. British economists have always maintained that the value system, such as spiritualism, asceticism, the caste system, joint

families, etc., is a major factor in the Indian economy's reticence to modernise and its economic backwardness. The history of British rule is a lengthy one of an imperialist government's systematic exploitation of a population it had divided and conquered in order to serve its own ends. If any, they were just accidental advantages of British control. England's interests were the primary consideration in all British policy. Consequently, we were left with a crippled economy, a sluggish agricultural sector, and a peasantry that was deeply impoverished when the British handed over sovereignty to India in 1947.

When India's colonial economic linkages in terms of global commerce and the entry of foreign money were broken, the Indian economy made significant leaps towards industrial growth, according to a detailed examination of the economic history of India throughout the British era. The colonial economic ties were severed three times throughout the 20th century: first, during the First World War; second, during the Great Depression; and third, during the Second World War. In other words, the unrestricted flow of international commerce and money caused India's economy to stagnate, but their absence gave Indian capital the chance to open up avenues for industrial expansion in regions that were stifled by imports.

**Features of the Indian Economy**

The pre-British Indian economy was made up of remote, self-sufficient villages on the one hand, and cities, which served as centers of government, trade, pilgrimage, and handicrafts, on the other. Because the means of transportation and communication were so poor, the market was quite tiny. Studying the form of village communities, the nature of cities, the nature of domestic and international commerce, and the condition of the means of transportation and communications are all crucial to understanding pre-British India [3], [4].

**Village organization and structure**

The village's social structure was built on a straightforward work division. The farmers looked after the animals and worked the land. In a similar vein, there were groups of individuals known as weavers, goldsmiths, carpenters, potters, oil pressers, washer men, cobblers, barber-surgeons, etc. All of these professions were inherited and handed down from father to son by custom. In lieu of the services rendered, these artisans received a stipend from the crops during harvest time. The inhabitants of the settlement devoured the majority of the food that was produced there. Primary industries' output of raw materials served as the handicrafts' feedstock. Therefore, the little village republics' ability to exist without the help of the outside world was made possible by the interdependence of agriculture and hand industry. According to Sir Charles Metcalfe, village communities are "little republics" with practically everything they need and are essentially independent of external connections.

They seem to endure when nothing else does. Their contentment and enjoyment of a significant amount of freedom and independence are both greatly facilitated by this union of the village communities, each of which functions as its own tiny state. By paying a share of the agricultural production ranging from one-sixth to one-third or even in some instances one-half as land income, the villages did recognise some outside authority, maybe that of a local princeling who in turn may be under a Muslim Nawaz or a Hindu king. The government was supported by land income. Farmers might be further broken down into landowners and renters. The producers themselves provided the labour and capital required out of their own savings, or the villagers' landowner or moneylender provided it.

**The cities' layout and personality**

The following three factors were mostly the cause of towns' creation: Towns served as holy sites or as important religious hubs. These towns included Allahabad, Banaras, Gaya, Puri, Nasik, etc. as notable examples. Towns served as the capital of a province or the location of a court. The cities of Delhi, Lahore, Poona, Lucknow, Tanjore, etc. may fall under this group. Towns were trade or commercial hubs that lost their significance after the court's prop was removed. These settlements were located along busy trade routes. Examples in this category include Mirzapur, Bangalore, Hubli, etc. Compared to villages, life in towns was quite different. In towns, there were many different professions and trades. They served a broader market.

**Pre-British India's industries and crafts**

Contrary to common assumption, India has never been an industrialised nation. Though her people were mostly farmers, the goods produced by Indian businesses were well-known on a global scale. The Europeans were familiar with the muslin of Dacca, the calicos of Bengal, the sarees of Banaras, and other cotton textiles. Mummies from ancient Egypt, dated to 2000 B.C., were covered with Indian muslin. Similar to this, the Greeks called the muslin from Dacca Gangetika. Textile handicrafts were the main industry across the whole nation. This statement provided by T.N. Mukherjee illustrates the great level of creative expertise of Indian craftspeople: "A piece of the muslin 20 yards long and one yard wide could be made to pass through a finger ring and required six months to manufacture."Along with the muslins, other textile arts from these cities included chintzes from Lucknow, dhotis and dopattas from Ahmedabad, and silk, bordered fabric from Nagpur and Murshidabad. Along with cotton textiles, Ludhiana, Amritsar, and Kashmir were well known for their shawls. Additionally, India was well-known for its creative industries, which included wood carving, marble work, stone carving, jewellery, brass, copper, and bell metal products. The cast-iron pillar close to Delhi is proof of how advanced India's metallurgy was at the time.

## DISCUSSION

The Indian economy "not only met all domestic demand, but also allowed India to export its finished goods to other nations."As a result, the majority of Indian exports were manufactured goods including silk and woollen clothing, calicos, artistic goods, and cotton and silk textiles. In addition, there were various goods for sale, such as pepper, cinnamon, opium, indigo, etc. In this fashion, throughout the 17th and 18th centuries, India served as a supplier of goods to Europe. The Industrial Commission noted that India had a superior industrial status in the pre-British era, noting that: "At a time when the West of Europe, the birthplace of the modern industrial system, was inhabited by uncivilised tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen. And even much later, when the first commercial explorers from the West arrived in India, this country's industrial growth was, at least, not inferior to that of the more developed European countries.

**Agriculture's Commercialization**

The commercialization of Indian agriculture, which occurred between 1850 and 1947, is another notable development. Agriculture that is commercialised produces goods for market rather than for personal use. Every stage of the country's economic development has seen some agricultural product generated for the market. So what made commercial agriculture different from regular

sales of marketable surplus? It was a planned strategy developed in response to demand from British industry. midway through the nineteenth century. In England, the Industrial Revolution was accomplished. For the British industries, there was a huge need for raw materials, particularly cotton, jute, sugarcane, and groundnuts. The peasants were persuaded to switch from food crops to commercial crops since the former paid more than the latter by providing a larger bait of market price. As a result, the peasants began growing industrial crops, and in certain regions, the drive for commercial agriculture grew to the point that the peasants began purchasing food from the mandis for their household needs. This resulted in a decrease in food production, and as a result, this time period is known for having the worst famines in India's economic history. Commercial agriculture was partly a response to the state's growing need for land income as well as the landowners' exorbitant rent demands on the peasants [5], [6].

The Industrial Revolution made commercial agriculture necessary, and from 1850, the establishment of an intricate railway network in India accelerated this process. Indian agriculture started to produce for international markets as a result of railway connections between the interior of the nation and urban marketing hubs, ports, and harbours. Wheal from Punjab, jute from Bengal, and cotton from Bombay all arrived in large numbers for sale to England. The same railroads that transported commercial crops from different regions of the nation also brought back to India items manufactured outside. In order to strengthen commercial agriculture on the one hand and increase rivalry between machine-made items and Indian handicrafts on the other, links and trains linking the country's hinterland with commercial and trade cities were crucial. These causes caused Indian industry to collapse.

**India's Famines and Famine Relief**

The commercialization of Indian agriculture and the new land system had a tremendously negative impact on the country's economy. These factors caused "built-in depressors" in agriculture, slowed down or even stopped the industrialization of the Indian economy, and were to blame for famines there.

**How Famines Occur in India**

Prior to the development of modern transit, particularly the railroads, food shortages in India were confined to areas where crops had declined due to unfavourable rainfall. Famines saw a significant transformation after 1860 as a result of the development of railroads as well as the expansion of commerce. In the past, a famine meant that the people would suffer from severe hunger since there was no way to transfer the extra food, even if it was available in other areas of the nation. After 1860, it was believed that the quick methods of transportation made it feasible to transfer food from one location to another without suffering significant time losses. Famines, however, were always accompanied by high food costs and widespread agricultural unemployment. As a result, the majority of the impoverished people were unable to buy food. As a result, later famines are better referred to as buying power famines than earlier ones, which were formerly referred to as food famines. When the Famine Commission emphasised that food was "always procurable in the market though at high and in some remote places at excessively high prices," it was crystal evident. Food cost increases were caused by two factors: First, a looming food scarcity led to stockpiling and speculation, which helped to quickly raise prices. Second, even during hard times, the government did not permit a drop in food grain exports. As a result, both the speculator and the government emphasised how serious the issue was.

**Famines' root causes**

There is no question that the absence or unseasonability of rainfall was the direct cause of famines. It is well known that rainfall was a major factor in agricultural productivity and that irrigation systems were underdeveloped. In locations with a range of 15 to 60 inches of rainfall and in dry regions, famines were a frequent occurrence. Bihar, West Bengal, Orissa, and Rajasthan were the regions most severely impacted by famines. Thai Nadu. Andhra Pradesh, Karnataka, and Maharashtra. Extreme famines were brought on by the absence of rain, but the unseasonability of the rain also proved to be harmful to crops, leading to a lack of food. The behaviour of the monsoons was regarded as the most important element affecting agricultural productivity in a nation that depends entirely or mostly on rainfall [7], [8].

Understanding the economic and cultural changes that occurred during British rule is very essential if one wants to comprehend the true causes of the repeated famines in India, which occurred while they were eradicated from Europe after 1850. The Indian agricultural society during the British era may be explained by three factors:

Indian handicrafts are being destroyed: Indian handicrafts were destroyed as a consequence of fierce competition from British industries. It deprived the craftsman, weaver, and artist of their means of support. The strain of a people depending on the land intensified as a result of the jobless. This resulted in excessive land subdivision and fragmentation, the emergence of a class of illiterate workers, and a rise in land rent. While Sir Thomas Munro thought it was unnecessary to statistically count the number of landless labourers in 1842 because they made up such a small percentage of the Indian agricultural population, the Census Commission estimated that number to be 18% in 1872. The most susceptible segment of Indian rural society was exposed to weather risks due to the agricultural proletariat's fast growth during a 30-year span.

The revised zoning scheme: To assign responsibility for land income, the British established a class of landlords, but they left the process of rent fixing to the workings of the free market. Rents skyrocketed due to the rising demand for land from an expanding agricultural population. This procedure turned the land into a desirable capital asset. The moneylending classes thus had a strong urge to buy property. The value of the security provided by the land, which peasants could borrow against, increased as land values increased. As a result, the Indian peasantry's agricultural debt increased and they were continually exposed to risk. Gradually, lands were transferred to the moneylending elite; the exorbitant rates of interest levied by the moneylending classes made it difficult for the peasants to repay their obligations. The moneylenders' eviction of the peasants hastened the pauperization of the farming classes [9], [10].

The new land relations that represented the emergence of a class of land owners and a class of farmers separated ownership from agriculture. Landlords wanted to collect hefty rents and leave growers with a meagre sum. The farmers had to give up a significant share of their harvest in the form of rent to landlords and interest to moneylenders, which caused the investment in land to fall rapidly. As a result, Indian agriculture developed a built-in depressant. As a result, the growth of agriculture was slowed by the new agrarian relations, which were disincentive-ridden.

**Colonial rule's effects:** The frequent incidence of famines in India was also significantly influenced by colonialism. Rural communities saw a rise in unemployment as a result of the loss of Indian handicrafts. Contrary to England, where excess rural labour from the process of industrialization was promptly absorbed by new industries, nothing of the kind occurred in India.

The colonial interests were opposed to the establishment of manufacturing in India because it would have denied England a ready market for its products. A subsistence agricultural was thus burdened more as a result of workers being forced out of conventional industry.

Agriculture, meanwhile, was expected to carry the weight of colonialism. The cost of the costly and opulent British administration, the price of the imperial wars in Burma and Afghanistan, the decline in the value of the Indian rupee since 1873, and the rising weight of domestic expenses were all to be covered by the Indian people. The main levies were opium, excise, salt tax, stamps, and land income. Because it produced so little revenues, the income tax that was imposed in 1886 was repealed. Besides the opium tax, all other taxes were imposed on the rural classes. The main source of money came from land, which put a greater strain on the peasants [11], [12].

India was compelled to maintain a positive trade balance with England as a result of these circumstances. However, food and agricultural raw materials made up the majority of her exports. In order to generate an export surplus on the merchandise account, foodgrain shipments had to continue during famine years. There is evidence that after 1870, exports of foodgrains rose as a result of the railroads' usefulness in mobilising the food surplus. In order to preserve an export surplus, raise taxes on the peasants, and increase the agricultural population, colonialism was forced, which resulted in the poverty of the rural classes.

## CONCLUSION

There were enormous economic disparities and poverty in India. The exploitation of resources led to a widening wealth disparity between the affluent and the poor, which was exacerbated by the lack of prospects for socioeconomic mobility. The majority of people were socioeconomically disadvantaged, lived in extreme poverty, and had no access to basic essentials. The Indian economy also showed regional differences. The country's many areas saw differing degrees of development and economic expansion. While certain areas of India had significant industrialisation and economic activity, like Bombay (now Mumbai) and Calcutta (now Kolkata), many other districts remained undeveloped and destitute. In summary, the Indian economy on the cusp of independence had a number of distinctive traits, including its agricultural origins, colonial exploitation, undeveloped industrial sector, pervasive poverty, income inequities, and regional differences. These distinguishing characteristics prepared India for the economic difficulties it faced and overcame in the years that followed its independence.

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# CHAPTER 2

# INDIA'S INDUSTRIAL TRANSITION PROCESS

Mr. Yelahanka Lokesh, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: lokesh.yr@presidencyuniversity.in

**ABSTRACT:**

The process of India's industrial transition has been a crucial part of the growth and transformation of the nation's economy. An overview of the major events and phases that influenced India's transition from an agrarian-based economy to an industrialised one is given in this abstract. India's industrial transition process began during the post-independence period, which was characterised by a change in economic goals and policies. The government established an industrialization strategy centred on import substitution with the goal of reducing reliance on imports and fostering home production. Protective tariffs, licencing rules, and state-led programmes to develop and promote local sectors were all part of this policy framework. The emergence of heavy industries and capital-intensive sectors was a defining feature of India's first phase of industrial transformation. In especially in sectors like steel, electricity generation, and heavy equipment, the government had a substantial role in the establishment of large-scale public sector firms. The objectives of these programmes were to create a strong industrial basis, create jobs, and promote independence. The economy gradually began to liberalise and become more market-oriented throughout the following period. Beginning in the 1990s, India started implementing economic reforms with the goal of opening its market to foreign commerce and investment. During this time, the licencing system was abolished, trade barriers were lowered, and foreign direct investment was encouraged. The reforms encouraged innovation, efficiency, and competitiveness, which sparked the growth of a vibrant private sector and India's incorporation into the global supply chain.

**KEYWORDS:**

Development, Economic, Industrial, Private, Trade.

## INTRODUCTION

The 19th century's industrial expansion and the 20th century's industrial advancement are the two main phases of the industrial transition in the British era. The private sector, whether domestic or international, was primarily responsible for advancing industrialization. Indian industries were only given some protection until the First Globe War; before to that, they were forced to weather every storm and compete against the rest of the globe on their own strength. This explains why industrialization is growing so slowly.

### Industrial development and private industry in the 19th century

The demise of indigenous industries and the emergence of sophisticated, large-scale industries were the major industrial developments of the 19th century. Private business was responsible for this transformation. Large-scale industries started off slowly, but towards the end of the 19th century, they were developing more quickly. The first cotton mill, first jute mill, and first coal mine were all established between 1850 and 1855. The first railway line in India was built at this

time. By the last quarter of the 19th century, there had been 25 years' worth of growth, or 51 cotton mills and 18 jute mills. India generated a million tonnes of coal annually during that time, and its railroads covered 8,000 km. There were 194 cotton mills, 36 jute mills, and over 6 million tonnes of coal were produced annually by the end of the 19th century. Despite India's very rapid industrialization and the fact that by the end of the 19th century, the groundwork for the development of modern industries for the exploitation of coal and iron resources had been laid, India was gradually becoming a British agricultural colony. By 1900, India was a significant exporter of goods including rice, wheat, cotton, jute, oilseeds, and tea, as well as an importer of British goods. India had therefore evolved into a dependent component of the British colonial order [1], [2].

It was only natural for British company to lead industrial development in India throughout the 19th century. The British people were used to managing enterprises at home. British businesses got the most government assistance. Additionally, a large portion of the business that was formed in India was either associated to the government or to interests that were somehow linked to Britain. Although the British initiated industrialization in the 19th century, they were more focused on increasing their own profits than they were on promoting India's economic development. Along with the British, other notable groups were the Jews, the Parsis, and the Americans, who rose to prominence as industrialists later. They were progressive, close-knit neighborhoods. The Parsis were especially forward-thinking in their haste to embrace European economic practices.

Conditions for the establishment of industrial leaders within the Indian community were unfavorable, in part due to the odd manner that factory manufacturing arrived in India in comparison to how it developed in England. The merchants and the master artisans were the two main groups in the West who were prepared to build factories. The merchants had financial resources, marketing know-how, and labour management skills. The skilled artisans lacked resources but were knowledgeable about the materials and how to use them. Both Indian artisans and merchants were uninterested in the industrial system due to a few distinctive aspects. The Baniya, or community of moneylenders, comprised the majority of Indian traders. They had money and were always seeking its safety and gains. But the merchant class saw more prospects for commerce when the British developed the factory system in India. Larger commerce, both domestically and internationally, was the consequence of the growth of ships and the construction of railroads. Additionally, there were more chances to borrow money. The merchants did not abandon their conventional jobs and go to the industrial industries because they saw more potential for profit there.

Due to their lack of access to sufficient finance, Indian craftspeople were also unable to contribute as much to industrialization as their Western counterparts. In addition, they lacked the necessary instruction and training. But early in the middle of the 19th century, Indians began to join the ranks of industrialists, and their significance increased throughout the course of the century, continually and gradually.

The British also used a management agency structure. They were playing a more and bigger role in the British-founded businesses. The Parsis, the Gujaratis, the Marwaris, the Jains, and the Chettiars were among the indigenous commercial groups that abandoned their traditional vocations and turned to industrial endeavours [3], [4].

## DISCUSSION

Industrial development and private industry in the first half of the 20th century. In the nation, more than 70 cotton mills and about 30 jute mills were built. The amount of coal produced more than doubled. Railway expansion continued, adding around 800 miles annually. During this time, the iron and steel industry's basis was finally set. In India, the 1914–18 war sparked a huge demand for manufactured products. English and other foreign imports significantly decreased. In addition, the government's need for items for military reasons also rose. As a consequence, the manufacture of iron and steel, jute, leather products, cotton, and woollen textiles received significant encouragement. Indian industries and mills expanded their output and operated at full capacity. However, they were unable to advance quickly enough due to the lack of heavy industries and the machine tools sector.

The reasons for private enterprise's delayed expansion during India's industrialization. It's crucial to understand why, in the century leading up to Independence, Indian manufacturing did not grow much in comparison to the rest of the economy. As follows: Unoriginal private business: The insufficiency of entrepreneurial aptitude is one significant factor that is commonly cited. Indians were hesitant to join the industrial sector since trade and moneylending offered a more secure and convenient opportunity for profit. The British were the ones who spearheaded India's industrial revolution, but they weren't particularly interested in the industrialization of the nation as a whole. But back then, Indian manufacturers were just as pessimistic; they hardly ever thought about the future and showed little interest in upgrading or replacing their equipment. They chose their employees based more on nepotism than on aptitude. Additionally, they were affected by their trade history, which favoured high pricing and big profit margins above cheap prices and greater sales. Sales were prioritised above manufacturing. Therefore, the sluggish expansion of industrialization in this nation was partially the fault of uninspired private industry.

Private industry and the capital problem: Indian entrepreneurs experienced financial hardship in the 19th and 20th centuries due to a lack of sufficient capital. Similar to how British business was well-known, British Capital played a big role in India's industrialization. The majority of the total capital spent in contemporary Indian firms came from imports from Britain. Because the country's resources were undeveloped and there were limited opportunities for investing excess riches, capital was scarce. There were no corporate stocks, debentures, or government loans. As a result, individuals stored their money as gold and silver.

Financial institutions that might have assisted in the conversion of savings into industrial investments were completely absent. The indigenous financial institutions focused on funding domestic commerce and lending to rural areas. Institutions that focused on rural savings for a fairly long time were completely ignored. People were often reluctant to commit their money to the owners of companies during the early stages of industrialization. Government's involvement in the economy and in the private sector: The absence of government backing was one of the major factors according to some analysts, the main factor in the sluggish expansion of the Indian economy. The government did provide certain overhead investments that benefited private industry in the 19th century. The railroads and communications are two examples. The government did not, however, supply the other prerequisites for private entrepreneurship. It's crucial to keep in mind that throughout India's crucial boom years, private sector was being run by a foreign government that had little sympathy for domestic companies.

**Forms and Repercussions of Colonial Exploitation**

Trade was the main method of exploitation used in India. Later, the British began investing in Indian companies, and as a result of investment revenue in the form of dividends and profits, the process of economic drain began. In addition, India was required to pay house charges to cover the expenses of British administration. They also included interest payments on the pound debt, salary for British personnel, and payments for perks like furloughs and pensions. The primary methods of colonial exploitation included encouraging British capital to invest directly in Indian consumer goods industries, encouraging financial capital to use the managing agency system to improperly appropriate a significant portion of the profits, and coercing colonial governments to impose trade policies that would make India an exporter of goods and raw materials and an importer of manufactured goods.

**Taking advantage of Trade Policies**

The East India Company and later the British Government used trade policies against India to drain its wealth away, providing raw materials for the burgeoning British industry while also encouraging the trend towards commercialising agriculture. This allowed India's economy to be transformed into a dependent part of the British colonial system. Trade policy were therefore a very practical yet effective source of exploitation.

1. The East India Company sought to promote indigo export, thus it took advantage of growers. Bengal has several European plantation owners. At a relatively low cost, they were granted land. They compelled the farmers on their property to grow the indigo plant and sell it for a pitiful sum. Even other zamindars had to set aside a part of their property for indigo farming. As soon as a contract was signed and a zamindar or aryot agreed to take the advance for cultivation, he was forced to endure the merciless exploitation of the indigo planters who earned enormous profits from the export of their product [4], [5].

2. Exploiting craftsmen via Company agents to export high-quality Indian cotton and silk garments at prices substantially below market rates: In the 18th century, the East India Company hoped to profit from the sale of these products, which were well-known across the globe. The Company used so-called Gomasta agents to do this. The gomastas, who were Indians working for the Company, would visit the hamlet and compel the craftsmen to sign a bond promising to supply a certain amount of items at a predetermined price. The set price was at least 15% and, in some circumstances, even 40% less than the going rate. An artisan would be spanked and, in some circumstances, imprisoned if he refused to take the advance that the company's gomasta gave. In this fashion, the East India Company was able to acquire cotton and silk materials for very inexpensive costs because to the Company's gomastas. As a result, the impoverished craftsman was undercut in order for the East India Company to earn greatly from the export of these textiles. The Company's harshness was so terrible that the craftsmen laboured like slaves, which explains why they became more and more destitute.

3. Exploitation by manipulating import and export duties: Although Great Britain claimed to be a proponent of free trade, her trade practises with Indian commodities only served to demonstrate that she never did. the eighteenth century. Indian commodities, particularly cotton and silk textiles, had an advantage over British goods. The goal of

British trade policy was to undermine Indian products' dominance, safeguard British industry interests, and finally succeed in gaining market share for machine-made goods in India.

**Exploitation by sending British money to India**

The main method of exploitation during the early stages of colonialism was commerce, but subsequently the British considered promoting investment in India. These investments served three main objectives. First, the government recognised that the development of an effective transport and communication infrastructure was crucial for the control and administration of the nation after the first war of Indian Independence, which the British referred to as the Mutiny. Second, the development of public utilities like power production and water works was crucial for the efficient use of India's natural resources. Thirdly, the British considered it necessary to connect the railways with the major ports on the one hand, and the marketing centres on the other, in order to promote foreign trade and ensure that the food and raw materials collected in various mandis are quickly transported abroad and the manufactured goods imported in India are quickly distributed in various markets. This explains why the colonial interests were considered while planning the railway expansion in India. Consequently, the following were the main sectors for DFI:

**Direct foreign investment industries**

To promote commercial agriculture, investments in tea, coffee, and rubber plantations; to make investments in consumer goods industries like cotton and jute textiles, matches, woollen textiles, paper, tobacco, sugar, etc.; and investments in banking. Economic overheads and infrastructure include railways, ports, shipping, generation of electric energy, water works, roads, and communications. The British multinational corporations made all of these investments via their subsidiaries. Some of these investments took the shape of loans in the form of pound obligations made to the British government in India [6], [7].

**Two main types of investing**

Direct private foreign investment has been made in India's sugar, jute mills, tea, coffee, rubber, and mining industries. British governments in India and public and semi-public entities received loans in sterling to finance projects in ports, railroads, electricity companies, and other public utilities. These loans constituted debt in sterling.

**Financial capital exploitation using the managing agency system**

Indian businesses lacked any expertise with setting up joint stock corporations to organise the contemporary industrial sector. The British traders who had previously established trading companies served as innovators and promoters in a number of industries, including jute, tea, and coal. These individuals were referred to as managing agents. The management agency firms may be thought of as partnerships of businesses established by a number of people with substantial financial means and business expertise. Unless otherwise specified in the agreement, the managing agency company shall have the right to manage all business matters of the Company. The managing agents' main responsibilities included the following: acting as agents for the purchase of raw materials, stores, equipment, and machinery; acting as agents for the marketing of the produce; and managing the affairs of the business. The managing agents also provided their own funds and acted as guarantors to arrange for financing.

**Exploitation via the payment of British administrative charges**

For the nation's military and civil administration, the British hired a lot of British officers. British army officers received a different cadre and received substantially greater pay and benefits than their Indian colleagues. The British officers controlled every position of authority. The civil administration had a similar problem. British officers filled every important post and held all of the highest levels. They received lavish wages and benefits as well. They also received various incentives for the upkeep of their children in addition to this. These officials possessed a great deal of executive authority. They had the authority to grant contracts for stores and supplies, and as a result, the contractors compensated them with commissions. These unlawful profits were now included in the system. These officers were eligible for pension payments after a set amount of service and after they sought retirement. Family remittances are the payments made from the savings of the officers who were living in India as well as pension and other perks that were sent to England. These payments took a significant financial toll on us. In addition, interest on pound loans obtained for the development of irrigation and railway projects was also owed by India. Home Charges were the total amount of pensions, gratuities, furlough allowances, and payments for goods bought in India that were collecting interest on debts made by India and those related to civil departments in India. The payments due to Britain in 1931 on account of house charges were 43 crores.

In addition, India was made to pay for the East India Company's many conflicts, including the Afghan and Burmese conflicts, the Mysore and Maratha Wars, and others. For their excursions to Prussia, Africa, etc., the British compelled the Indian people to pay exorbitant prices. India was responsible for paying the whole cost of the telegraph connection between England and India. India sent more goods to Britain than it imported throughout the two World Wars. In response to this favourable trade balance, Britain gave the Indian government permission to print additional money with the support of the Sterling Balance maintained in England. India bought less goods and exported more. Therefore, the Sterling Balances reflected the blood, sweat, and toil of the millions of underprivileged Indians. But Great Britain simply exported inflation to India as a result of its policies. Due to this, India's price level increased much more throughout the conflict. It placed a significant load on the Indian populace.

The results of the different exploitation techniques were that India continued to be predominantly an agricultural nation, and its agriculture was commercialised to suit the interests of Great Britain by exporting, in addition to other raw resources, tea, coffee, spices, oilseeds, sugarcane, and other commodities. India, which had a highly developed industrial system in the 16th and 17th centuries, was not allowed to modernise it in the 18th and 19th. After her handmade wares were ruined, she started importing manufactured goods. To have total control over the Indian market, the British used a discriminatory protection and imperial preference strategy. Additionally, it helped to provide British investors in India safe and secure routes. In order to encourage international commerce and take use of India's natural riches, the British built the country's economic infrastructure, including railroads, irrigation systems, and electrical grids. Although there was little attempt made to build heavy and fundamental industries, direct British investment was made in consumer goods sectors including tea, coffee, and rubber plantations.

In the beginning, the Managing Agency System did aid in promoting the consumer goods industries, but later on it took on an exploitative tone. It used about 50% of the gross earnings as management compensation. The British took advantage of India by draining its economy via

home levies. India had to foot the bill for a number of conflicts, including the Afghan and Burmese conflicts. This demonstrated the profoundly exploitational nature of British authority. The overall impact of British policy on India was poverty and economic stagnation [8], [9].

**Mass poverty and the drain on the economy**

The eminent Indian economist Dadabhai Naoroji stressed in his famous article on the "Poverty of India" that the lack of growth in India was caused by the exodus of wealth and money that began after 1757. So says Dadabhai Naoroji. The drain consists of two components: first, that resulting from the remittances by non-official Europeans of their savings, for their expenditure in England for their various needs both there and in India; and second, that resulting from pensions and salaries paid in England. This suggests that in order to offset the effects of the economic drain, India had to export far more than she did import. In the guise of gift exactions and tributes, blatant pillage was committed during the time of the East India Company. Father Naoroji. The yearly drain has been calculated by Y.S. Pandit and S.B. Saul for different time periods. Saul's estimate for 1880 equals 4.14% of the Indian national income if estimates based only on the balance of payments are used. Therefore, Irfan Habib writes: "When economists speak of the lack of internal capacities for development, or the low per capita income base, from which the British could not lift the Indians, regardless of how hard they tried, it must be remembered that India had to have a rate of saving of 4% of its national income just to pay the Tribute.''

Economic wealth extraction prohibited India from creating new capital, but the British brought the money back and established British-owned industrial companies there. Because the government looked out for their interests, the British were able to virtually control all commerce and major industries. The British-run businesses that were formed in India further depleted the country's riches by sending back earnings and interest. Thus, the economic drain that started as soon as the British took over slowed down economic growth until 1947.

**Modernization and Colonialism**

The British economists have always maintained that the value system, such as spiritualism, asceticism, the caste system, joint families, etc., is much to blame for the Indian economy's sluggishness and inability to modernise. In a similar vein, British economists have long maintained that Indian capital was stereotypically timid, constantly looked for secure investment opportunities, and hence lacked the fundamental element of adventure that is a need for dynamic entrepreneurship. Both of these denials of modernisation are rejected by Dr. Bipan Chandra, who has studied how colonial rule affected India's modernization, as simple dogma. It is a historical error, he claims, to believe that India under British control did not experience a significant transition or that it remained mostly traditional. The colonial ties between India and Britain led to the advancement of the Industrial Revolution in Britain while also resulting in the modernization of those sectors of the Indian economy that strengthened the process of integration of the Indian economy with British capitalism. However, modernization of India was brought within the political parameters of a colonial economy. "India's integration into global capitalism without reaping any of its advantages or taking part in the industrial revolution was thus neither an accident nor historically anomalous. It was both undeveloped and modernized at the same time.

It is likewise incorrect to claim that the British capital had an adventurous attitude. Under the Guarantee System, which guaranteed a minimum return on whatever money they committed, the British built the railroads in India. Similar to this, British investors only developed tea and coffee

plantations or invested in the jute business when they were drawn to the enormous profits offered by these regions. Additionally, the protection strategy as a whole served to safeguard British business and industrial interests. The insertion of the most-favorable-nation clause made it further clearer that, in addition to profit maximization, the British also exploited the state's power to achieve security maximization. Therefore, the claim that British capital was more daring than Indian capital lacks support [10], [11].

The lengthy history of British rule is one of an imperialist government's relentless exploitation of a population it had divided and conquered. The advantages of British rule were, at best, incidental. All British policies have one primary goal in mind: to further England's interests. So, when the British handed over authority to India in 1947, we inherited a crippled economy with a stalled agricultural sector and a peasantry that was very impoverished. According to Jawaharlal Nehru, "India was under an industrial capitalist administration, but here economy was mostly that of the procapitalist era, lacking many of the wealth-producing characteristics of that pre-capitalist economy. She turned into a helpless victim of contemporary industrial capitalism, receiving all of its drawbacks and very few of its benefits.

## CONCLUSION

India's industrial base underwent diversification throughout the period of industrial transformation. The focus on industries including information technology, telecommunications, pharmaceuticals, the automobile industry, and services increased even as heavy industries continued to play a vital role. This diversification aided in the rise of the middle class, the urbanisation of the country, and the expansion of non-agricultural work prospects. In conclusion, the process of India's industrial transition has been a transformational one that has spanned many decades and been marked by changes in economic policy, industry diversification, and integration into the global economy. This procedure has been crucial to the improvement of living conditions, job development, and economic growth in India. To solve the remaining issues and promote a diverse and sustainable industrial sector, ongoing efforts are required.

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# CHAPTER 3

# EVALUATING DEVELOPMENT STRATEGIES IN INDIA

Dr. Mounica Vallabhaneni, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: mounicav@presidencyuniversity.in

**ABSTRACT:**

The economic and social environment of a country is greatly influenced by development methods. This abstract offers an assessment of the development techniques put into practise in India, highlighting their successes, problems encountered, and prospective directions for further growth. India's economy has expanded significantly in recent years, helping millions of people escape poverty and making significant strides in a number of different fields. Liberalisation, privatisation, and globalisation are examples of pro-market policies that have been put into place, and they have encouraged entrepreneurship, drawn foreign investment, and strengthened the nation's integration into the global economy. Additionally, with advancements in healthcare, education, and poverty eradication, India has achieved substantial social development progress. The expansion of access to education, healthcare, and job possibilities, especially in rural regions, has been made possible by programmes like the Sarva Shiksha Abhiyan, National Rural Health Mission, and Mahatma Gandhi National Rural job Guarantee Scheme. The assessment, however, also draws attention to the difficulties still facing India's progress. Persistent poverty, geographical differences, and income inequality continue to be major issues. Despite the fact that economic progress has helped many people escape poverty, a sizable percentage of the population still struggles with socioeconomic disadvantages and has restricted access to essential services. Targeted initiatives, equitably distributed resources, and inclusive development strategies are required to address these issues.

**KEYWORDS:**

Development, Economic,Education, Growth, Market.

## INTRODUCTION

India adheres to the idea of a mixed economy, in which the public and private sectors play complementary roles and continue to be active collaborators on development-related activities. India has planned for its social and economic growth ever since it attained freedom. This indicates that the government actively participates in choosing "what, how, how much, where, and whom" in the system's economic and social operations. At the same time, it also generally respects market and private property institutions. While asking the State to interfere in the market's operation, the Indian Constitution itself allowed for the market to operate. India's democratic planning aspires to produce a high and sustained rate of development, a gradual increase in the quality of life for its people, the elimination of poverty and unemployment, and to set the stage for an independent economy. It should be emphasised that during the 1990s, the planning approach that considers the role of the state in relation to the market has radically altered in favour of the market.

**Indian planning**

The mixed economy is the result of a compromise between the two polar opposing schools of thought one that supports capitalism and the other that vehemently advocates for the socialisation of all means of production and for government regulation of the whole sector. Private entrepreneurship was a major factor in the economic growth of the UK, the USA, and many other free countries in Europe and America. This explains why the idea of a mixed economy does not appear in the works of economists from the 18th and 19th centuries, since economic liberty and the state's non-interference in economic activities were then considered to be fundamental values. The English classical and neo-classical economists believed that the economy functioned smoothly and that what was most advantageous for the individual was also most advantageous for the general economic welfare of the society. The invisible hand of self-interest might be accepted, and the forces of supply and demand in the market could be used to create perfect harmony in the economic system [1], [2].

According to Karl Marx, the capitalist system allows a small number of wealthy businesspeople and manufacturers to exploit the great mass of workers. Marx advocated the socialisation of all production technologies and the government's control of the economy. He wouldn't have a private business system that relies on maximising personal profit for each individual, private property, market forces of supply and demand, and self-interest. Marxist concepts had a direct influence on the establishment of communist governments in the USSR in 1917 as well as subsequently in eastern European nations, Communist China, Vietnam, Cuba, etc.

**Goals of Indian Economic Planning**

The Committee produced a number of studies on various topics relating to economic growth. According to the Committee, the State should possess or control all important businesses and services, as well as all mineral resources, railroads, rivers, ships, and other public utilities, as well as any large-scale enterprises that were prone to take on monopolistic characteristics. Eight prominent Indian entrepreneurs, in addition to the National Planning Committee, created "A Plan of Economic Development," often known as the Bombay Plan. Additionally, Shriman Narayan created the Gandhian Plan. The People's Plan was created by M.N. Roy, a prominent revolutionary. Due to the fact that they were only paper blueprints that were never put into action, all of these schemes were only significant historically. However, they sparked discussion about the numerous facets of planning in India. In 1950, shortly after the country gained independence, Prime Minister Nehru established the Planning Commission to evaluate the nation's requirements for people and material resources and to develop economic plans for their more balanced and efficient use. A succession of five-year plans were implemented after the First Five Year Plan, which began in 1950–1951.

According to our Constitution's Directive Principles, "The State shall, in particular, direct its policy towards securing - that citizens, men and women equally, have the right to an adequate means of livelihood; that ownership and control of the community's resources are distributed so as to best serve the common good; and that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment." Thus, the Directive Principles of the Indian Constitution represent the desire of the Indian people for quick economic development. As a result, the Indian government chose planning as a strategy for promoting economic growth. The Planning Commission outlined the following four long-term planning goals: to maximise production in order to increase national and per capita income; to

achieve full employment; to lessen income and wealth disparities; and to establish a socialist society based on equality, justice, and the absence of exploitation [3], [4].

## DISCUSSION

The following are the long-term aims of economic planning in India as stated in the First Five-Year Plan: Maximum output and full employment, achieving economic equality or social justice, which represent the recognised planning objectives in the modern world, are essentially merely a number of interconnected goals that the nation must pursue. A development plan must give each of these goals a fairly equal amount of attention; no one of these goals may be pursued at the expense of another.

"Planning and the Poor" is his book. "Securing rapid economic growth and expanding employment, reducing income and wealth disparities, preventing the concentration of economic power, and creating the value and attitudes of a free and equal society have been among the objectives of all our plans," claims B.S. Minhas, a former member of the Indian Planning Commission. The socioeconomic goals listed above are categorised as Economic planning and poverty alleviation and Economic planning and social transformation.

### Poverty Reduction and Economic Planning

Rapid economic growth: The main goal of economic planning in India is to achieve rapid economic growth via the development of all economic sectors, including agriculture, industry, electricity, transportation, and communications. The main indicator of economic growth in a nation is the real national income and real per capita income's consistent increase year after year. Growth in the economy should also result in improvements in the standard of living, including increases in life expectancy, infant mortality, literacy rates, etc. A little thought will reveal the interconnectedness of all these development indicators in that rising real national income serves as the foundation for rising per capita income and rising quality of life. An rise in national income is not sufficient for a poor country like India with a big population that is mired in poverty and suffering. The criterion to measure India's economic progress is the country's steady per capita income growth through time, together with improvements in quality of life.

On the theory that persistent growth in these incomes will lessen and finally eliminate poverty and suffering and enhance the quality of life for the majority, Indian planners sought to boost national and per capita incomes. But after our planners discovered that a rise in national income was not accompanied by a decrease in poverty in the nation, the Fourth Plan onwards set as its goal not just economic growth but also raising the standard of living for those who had endured centuries if not generations of abject poverty. The Fourth Five-Year Plan states that "the basic goal is a rapid increase in the standard of living of the people" and once again "emphasis is placed on the common man, the weaker sections, and the less privileged." In reality, the catchphrases "garibi hatao" and "growth with justice" were created in the early 1970s to make it very apparent that the focus will be on ending poverty rather than merely increasing national wealth.

**Greater Employment:** In India, unemployment and underemployment are significant contributors to poverty. Therefore, eliminating underemployment and unemployment has been a key goal of the nation's economic planning from the outset. The Planning Commission has always believed that an increase in investment would result in a rise in employment and the

nation's gross domestic product. In the Third Plan, the Commission made a clear case that as national income rose in response to investment and development expenditures, labour demand would also grow and more jobs would be generated.

Additionally, the elimination of unemployment would raise the gross domestic product on the one hand and peoples' standards of life on the other. As a result, all of the five-year plans included plans for economic expansion, with plans for more employment coming naturally from development plans. No plan contains separate employment plans framed for each of the sectors and regions in order to increase employment on the one hand and national income on the other, even though employment has been mentioned as one of the objectives of economic planning in each of our Five-Year Plans. This explains why there has been a rise in unemployment throughout time. For the first time, the Planning Commission acknowledged the potential for a genuine conflict between employment and economic development in the Janata Party Sixth Plan and gave employment a prominent position in the document. But with the Sixth Plan, which the Congress Party ultimately endorsed and put into action, the emphasis shifted back to the conventional development strategy, with the standard premise that, regardless of the technology used, employment would expand as investment rose. Therefore, not a single plan has been created with job creation as its main aim, and the full employment goal has merely received lip service [5], [6].

**Social Justice and Economic Planning**

Different sorts of regressive factors, such as economic disparities, poverty, the lack of equitable possibilities for advancement, etc., operate in an unplanned society. India's economic policies made a deliberate attempt to counteract all these backward factors and promote both societal and individual growth. Everyone will have equal possibilities in terms of education and employment after economic disparities have been reduced and a socialist society has been established. Additionally, there won't be any economic power concentration or individual exploitation.

reduction of income inequality in India, only a very tiny minority of people are better off and have not known affliction and suffering. These include wealthy rural landowners, businessmen, financiers, industrialists, and high government officials, among others. But due of their very low income, the great majority of people live in extreme poverty. Extreme income and wealth disparities exist in India because of the country's historic social structure; as a result, eliminating the semifeudal relations of production in our villages would be the only way to reduce these disparities. The Planning Commission provided a list of strategies for reducing wealth and income disparities in rural regions, including the elimination of all middlemen and a cap on land ownership.

The stark differences in income between rural and urban areas in India are another factor contributing to income inequality, and these differences are only going to become worse over time as a result of industrialization and economic expansion. The Planning Commission has recommended actions to increase agricultural output, foster the growth of agro-based companies, pay farmers fairly for their goods, etc.

Even while reducing income inequality has always been included as one of the plans' goals, it has consistently received a very low priority ranking. This may be the case because Nehru, the father of Indian planning, did not think that redistribution alone could ever address the issue of economic inequality of income and wealth. In a wealthy nation, more equality might be attained

through transferring income via laws affecting prices, taxes, and other factors, according to the Fourth Plan. Such actions won't provide any notable consequences in a developing nation.

**Planning Techniques and Evaluation**

Our Five-Year Plans had as their main goals the development along socialist lines to secure rapid economic growth and expansion of employment, reduction of disparities in income and wealth, prevention of economic power concentration, creation of values and attitudes of a free and equal society, and reduction of income and wealth disparities. The planners developed a strategy of planned economic growth to accomplish these goals.

**Model of Growth using Mahalanobis**

Only with the Second Plan were Indian planners able to articulate a defined development strategy. The introduction of a defined development plan based on Russian experience was the responsibility of Prof. P.C. Mahalanobis, who was the true architect of the Second Plan. The focus of this policy was on significant industry investment to accomplish industrialization, which was seen as the prerequisite for quick economic growth. The growth of heavy industry was seen as a sign of industrialization by Jawahar Lal Nehru, India's first prime minister. According to him, having heavy industries that produce machinery is crucial if we are to industrialise. Again, "there are many who contend that we should pursue lighter industries rather than heavier ones. Without focusing on the fundamental industries that generate industrial machinery used in industrial growth, it is impossible to industrialise the country quickly.

Of course, we also need to have light industries. Thus, Nehru was quite direct in stating that the expansion of heavy industries constituted industrialization. This was explicitly stated in the Second Plan's plan framework: "In the long run, the rate of industrialization and the growth of the national economy would depend upon the increasing production of coal, electricity, iron and steel, heavy machinery, heavy chemicals, and heavy industries generally-which would increase the capacity to for capital formation. Making India as fast as possible independent from foreign imports of producer goods is a key objective in order to prevent obstacles to capital accumulation arising from the inability to get supply of crucial producer products from other nations. Therefore, rapid expansion of the heavy industry is required. Rapid industrialization by haphazard investment in the heavy, basic, and machine-building sectors was therefore the main plank of the policy used by Indian planners for the Second Plan, and with slight modifications for the next three Plans [7], [8].

**The Need of Rapid Industrialization**

Planners used quick industrialization to support their goal for fast economic growth.India was mostly agricultural at the time of its independence, despite having abundant natural and human resources that made it well-suited for industrialization. The nation would benefit from resource diversification from the perspectives of production, employment, and defence, according to the planners. Therefore, resources should be directed more towards the growth of industry than towards agriculture. Indian agriculture was already experiencing severe population pressure on the country's limited amount of arable land, and worker productivity was relatively low; it was even speculated that marginal labour productivity on arable land may even be negative. Reducing the amount of people living on land and shifting the excess population to industry were two strategies for easing this load on the environment and increasing agricultural production.

Thus, in order to increase the national output in general and to further agricultural growth in particular, the industrial sector had to be established and expanded. A quick industrialization was necessary for the growth of all other sectors of the economy in addition to agriculture. For instance, the demand for foodgrains and agricultural raw materials would rise with the development of industries and the relocation of workforce from rural to urban regions. The rise of agricultural productivity would also benefit from greater production and supply of agricultural equipment, insecticides, and fertilisers, among other things. There would be an increase in trade and commerce, transportation, banking, and finance, among other industries, with fast industrialization and market development.In contrast to agriculture, industry has a substantially greater worker productivity. In contrast to agriculture, the growth rates in industry are substantially greater. Only fast industrialization would allow for a quick rise in national and per capita income.Industrial products had significantly greater income elasticity of demand, and manufactured goods also had much more chances for export. All of these factors contributed to the Indian planners' focus on industrialization.

**Heavy Industry Strategy Implications**

Here, it is possible to underline the strategy's significant ramifications. Small-scale businesses and the production of consumer goods: The increase of consumer products in the home sector would be a constraint on the development of heavy industries, according to the planners of the Nehru period. The Second Plan framework, for example, stated: "The greater the marketable surplus of consumer goods in the household or hand industries, the greater will be possibilities of investments in heavy industries with any fear of inflation." This shows that they did not ignore or neglect the growth of the small sector [9], [10].

For starters, the expanding population has fed and clothed people; in fact, as the population expands, so will the need for manufactured commodities. Another factor is the rising pace of investment in sectors with lengthy gestation periods, which will lead to a rise in the general public's money supply and, in the absence of a supply of consumer products that matches demand, an inflationary pressure. The Nehru-Mahalanobis model helped tiny and cottage industries that produce consumer items. It was claimed that small-scale cottage businesses would have a low input-output ratio and a short gestation time, and that the tiny sector was plainly best fitted to expand the supply of consumer goods. Additionally, Professor Mahalanobis maintained that because the cottage and small sector will also be using contemporary equipment and power, the co-production in the sector need not be greater than that of the manufacturing sector.

Additionally, Nehru placed a high value on agriculture and the minor businesses that supplied consumer products. In his own words, "Heavy industry not the little enterprises that may be put—is the test; country's development in industrialization. This does not imply that small businesses should be disregarded. They are very significant for employment and for output in and of themselves. "The strategy requires all-out efforts for the maximum utilisation of capacity in existing industries and for the development of additional production in the capital light small sector of industries," the Second Five Year Plan's framework said.

Agriculture's position in the development strategy: "We shall that this industrial progress cannot be achieved without agricultural advance and progress," said Nehru in reference to agriculture. Everyone is aware that we cannot progress industry until our agricultural sector is self-sufficient. In terms of advancement, if we must import food, we are doomed. We are able to import both food and equipment. Thus, it is evident that the Mahalanobis strategy, which relies on heavy

industries to maintain growth, does not downplay or disregard the development of small and cottage businesses in order to increase the supply of consumer goods. Professor Mahalanobis did foresee a scarcity in the supply of consumer products as well as potential increases in prices and expenses jeopardising the planning process, despite the fact that there were many positive circumstances for boosting the supply of consumer goods. Therefore, he included rationing as part of his physical and financial controls in his development plan to keep prices in line.

Public Sector's Role: The Mahalanobis investment plan gave the public sector a starring position. The government believed that heavy industries should be mostly in the public sector because of the high level of investment required, the lengthy gestation time, and poor profitability. The business sector, with few exceptions, was also reluctant to provide infrastructure facilities. Additionally, the government would have authority over the commanding heights if the public sector were under its control, which would aid in the growth of a socialist economy. The public sector would, above all, stop the development of monopolistic ownership and exploitation, which are inherent in the private sector. These factors were the driving forces for the Government's aggressive growth of the public sector beginning with the Second Plan.

The private sector's function: The development plan anticipated that the private sector would grow and diversify its operations over a wide range of economic activity, while giving the public sector direct responsibility for infrastructure investment and the growth of heavy industries. In reality, the Indian mixed economy has given the private sector a significant role. However, it was believed that the operations of the private sector were fundamentally complementary to a governmental sector that was expanding quickly. The general objectives and guiding principles of economic planning were also expected to be followed by the private sector. The planners foresaw a growing trend towards economic power being concentrated in the private sector, and in order to buck this trend, they increased opportunities for new entrants for medium- and small-sized units as well as made extensive use of controls, regulations, and appropriate fiscal measures.

international assistance and international trade have important roles to play. At first, the Planning Commission heavily depended on foreign aid to satisfy India's needs for capital goods since our foreign currency revenues were insufficient. The pace of domestic savings fell short of the greater rate of investment that was anticipated, so the planners also had to account for foreign help. They also underlined the need for fast industrialization to coexist with the development of export surplus and export promotion. However, even throughout the first 10 years of planning, this part of the strategy was overlooked in daily operations. This was well shown in the Third Plan: One of the key issues in the past was that the export strategy wasn't seen as a crucial component of the nation's development efforts.

## CONCLUSION

Analyzing India's development strategy shows substantial accomplishments, enduring difficulties, and opportunities for advancement. India can build on its successes and construct a more just and affluent society by tackling issues like economic inequality, regional differences, environmental sustainability, and prioritizing inclusive and sustainable growth. To ensure the success of development initiatives and move India towards a path of sustainable and equitable growth, effective implementation, policy consistency, and ongoing monitoring and assessment are essential. Future advancement in India's development methods is suggested by the examination along a number of different paths. For inclusive growth to occur and disparities to

decrease, social infrastructure must be strengthened, human capital must be invested in, and skill development must be encouraged. Encouragement of innovation, research, and development across industries may boost output, provide job opportunities, and spur technical advances.

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# CHAPTER 4

# AN EVALUATION OF THE HEAVY INDUSTRY DEVELOPMENT STRATEGY

Mr. Yelahanka Lokesh, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: lokesh.yr@presidencyuniversity.in

**ABSTRACT:**

A key element of many nations' economic strategies, the heavy industry development plan aims to foster industrialization, economic growth, and technical progress. An assessment of the heavy industry development plan is given in this abstract, together with information on its advantages, disadvantages, and implications for the future. In order to evaluate the heavy industry growth plan, one must first look at its successes. With the growth of capital-intensive industries like steel production, the manufacture of heavy equipment, and power generation, the plan often results in the development of a strong industrial foundation. These sectors have aided in creating jobs, advancing technology, and building the infrastructure necessary for economic success. Additionally, the heavy industry development plan has helped crucial industries become more independent and less reliant on imports. Countries have attained a certain level of autonomy in supplying their industrial requirements and have lessened their vulnerability to changes in the global market by increasing local manufacturing of heavy equipment and infrastructure components. However, there are obstacles and possible downsides to the heavy industrial growth approach. Heavy industries' capital-intensive nature, which requires huge expenditures in infrastructure, equipment, and trained labour, is one major barrier. This need for money may put pressure on government budgets and make it more difficult to allocate money for other vital industries like healthcare, social welfare, and education.

**KEYWORDS:**

Development, Economic, Industry, Social, Strategy.

## INTRODUCTION

The main goal of the Mahalanobis planning strategy was to invest in the heavy industry in order to accomplish the goal of self-sustaining long-term development. The Mahalanobis plan saw the growth of "fundamental industries and industries which create machines to make machines required for future development as the important ingredient for "rapid industrialization and diversification of the economy." Naturally, this tactic ran counter to our plans' employment goal. Because emphasis on capital-intensive production specifically, "by building of economic and social overheads, exploration and development of minerals, and promotion of basic industries like steel, machine building, coal, and heavy electricals" is the only way to bring about quick and self-sustaining economic growth. The Mahalanobis strategy adopted a "policy of encouraging labor-in-tensive techniques in consumer goods industries even as the capital-intensive sector of heavy industry was being expanded rapidly" to resolve the conflict between rapid growth on the one hand and an immediate increase in employment opportunities on the other [1], [2].

Fiscal policy is a method for achieving social goals. A key tenet of the Mahalanobis investment strategy was that improved and more equitable wealth and income distribution would follow an

increase in output. Aside from this presumption, Indian planners relied on the Fabian socialist strategy, which involved using taxation and public spending to accomplish the two social planning goals of eliminating income and wealth disparities and creating a socialist society based on equality and justice.

Two parts of fiscal policy were intended to lessen income and wealth disparity. To cut off the rich earnings over a particular threshold, a highly progressive income tax was to be implemented. In order to take a percentage of enormous estates, estate duty had to be very progressive. Other taxes that only applied to wealthy members of society were wealth tax, capital gains tax, and gift tax. Public expenditures were explicitly utilised to enhance the welfare of the lower income groups and weaker elements of the society, whilst direct taxes tried to transfer a portion of the income and wealth of the wealthy to the Government.

Greater opportunity equality for various groups of the population was to be attained via the quick and coordinated growth of education. To accomplish "some redistribution in the consumption of basic needs like as health and medical treatment, sanitation, water supply, and affordable housing, public spending on public health and sanitation, housing, etc. was utilised. Under specific schemes, tribes, Dalits, and other underprivileged castes were to get preferential treatment. In order to reduce income and wealth inequalities and avoid the consolidation of economic power, the planners did not adopt any measures for the direct transfer of property and wealth other from the employment of fiscal policy. The meagre efforts at land reform and the cap on land ownership in rural regions were the sole exceptions.

With the exception of the brief window of about two years, 1977–1979, when the Janata Party attempted to shift the economy in favour of small business and consumer goods, the "heavy industries" investment strategy developed during the Second Plan served as the foundation for the development of the Indian economy over the last five decades. During the Second and Third Plans, the heavy industries approach was praised, but afterwards received harsh criticism. It received praise for the country's smart increase in saving and investment rates, for the impressive development of economic infrastructure, particularly in irrigation, energy, transport, and communication, for the substantial expansion of the capital goods sector through the predominance of the public sector, for self-sufficiency in consumer goods and in basic commodities, for industrial capacity diversification and growth, and for the impressive advancement of science and technology. This development strategy, however, has come under heavy fire for its inadequate focus on agriculture and small-scale and cottage industries, the emergence of persistent trade deficits, the country's rising unemployment rate, and most importantly, the widening gap between income and wealth inequality on the one hand and the very slow decline in poverty on the other.

**Nehru vs. Gandhi as Economic Development Models**

When the Second Five Year Plan was created in the middle of the 1950s, the Nehru-Mahalanobis model of development emerged as the main inspiration. With the exception of a brief break of around 2-3 years from 1977 to 1980, while the Janata Party was in power, this method was used up to the 1980s. The Nehru-Mahalanobis model was based on a long-term development strategy that gave higher importance to long-term development objectives over short-term and urgent ones. Thus, the approach was highlighted:

1. A high rate of saving in order to increase investment,

2. To establish the industrial foundation of the economy, it advocated a strong industry tilt,
3. In order to defend the baby business, it chose the protectionist route.
4. It promoted import substitution to help people become independent, and
5. It attempted to increase chances for all privileged groups in society.

Since the Nehru-Mahalanobis model aimed to promote a self-generating path of development with an assurance to the common man that poverty, unemployment, disease, and ignorance would be removed so that people could realise their potential with the expansion of social and economic opportunities, growth wave social justice was thus its intended goal. A considerably larger role was given to the State in the 1950s since it was believed that the market mechanisms could not provide the wise allocation of resources necessary to achieve the goal of development with social justice. The creation of social and economic infrastructure was one of the government's main roles in the economy. The economic infrastructure was expanded in the areas of irrigation, electricity, transport, and communications in order to increase markets and eliminate restrictions on industrial expansion and agricultural development due to power and irrigation, respectively. By improving social infrastructure such as health care and education, the State aimed to create a trained workforce that could provide the essential skills for the operation of the new enterprises. The State nationalised important banks in order to direct investment into socially desirable manufacturing lines. As a result, under the Nehru-Mahalanobis paradigm, the State was in charge of the economic apex via the public sectors.

**Growth Gandhian Model**

The "Gandhian Plan" was introduced by Acharya S.N. Agarwala in 1944, and it was reiterated in 1948. Gandhian planning or the "Gandhian model of growth" is based on these writings. The primary goal of the Gandhian model is to provide the Indian population a basic quality of living through raising their material and cultural level. It places the most focus on the scientific advancement of agriculture and the quickening development of cottage and village industries since its primary objective is to improve the economic circumstances of India's 5.5 lakh villages.

**Agriculture**

The Gandhian model seeks to modernise India's agriculture, which is the country's most vital economic sector. Maximum regional food self-sufficiency and national food self-sufficiency are the main goals of agricultural growth. This has to be accomplished by land reforms, such as a change in the system of tenure, the elimination of the proprietary rights on land, the consolidation of holdings, the establishment of co-operative farms, etc., in addition to bigger and better inputs. The practise of lending money should be outlawed, and financing options for farmers should be expanded. Dairy farming is given particular attention in the Gandhian model as a profession and agricultural auxiliary [3], [4].

**Industries in cottages and villages**

The Gandhian plan's main objective is for rural communities to become as self-sufficient as possible. As a result, the strategy places a strong focus on expanding and revitalizing cottage businesses alongside agriculture. Weaving and spinning are given priority. Khadi production is significant and almost comparable to the output of rice and wheat. "Villagers must manufacture their own khadi for personal consumption, just as they prepare their own roti and rice. The Gandhian plan provides a strategy for having every village self-sufficient in fabric. If there is any

excess, they may sell it. The Gandhian plan also calls for the State to prioritise the development of rural cottage businesses as the cornerstone of its industrial strategy.

## DISCUSSION

Gandhi emphasized the tension between capital-intensive industrialization patterns based on high levels of urbanization and rural industries. E. "The twin imperatives of rebuilding the economy and achieving rapid economic development after Independence, prompted India's rulers to adopt a model of development based on the experience of the West: the implicit emphasis on capital-intensive industrialization and urbanisation," writes Haribabu of the Indian Institute of Technology. Over time, it became clear that there was a bias in favour of metropolitan areas in general and large cities in particular.

The late Annasaheb Sahasrabudhe explained how rural areas played a crucial part in India's industrial development in the years following independence by writing: "The rural areas were encouraged to start such industries which provide urban population with things like milk, vegetables, oil seeds, cotton and foodgrains and purchase from the urban areas items like cloth, oil and other manufactures." In order to provide the organised urban sector with low-cost raw materials and semifinished goods, the villages have been reduced to second-class citizens. The relocation of all but the most basic employment to urban areas is the main component of this approach. Village industries employed 40% of the workforce force in 1910. The percentage fell to 10% by 1946. Claude Alvares, in a very sharp way, asks: "How long can we continue to assume the illusion that when the British destroyed local industries, that was wicked, but that when we do so, it is desirable." Today, they are still at 2%.

### Primary Industries

Gandhi is sometimes misunderstood as being opposed to the growth of large-scale enterprises. In actuality, the Gandhian Plan acknowledges the need and significance of a few critical and fundamental sectors in India, including the military sector, thermal and hydroelectric power production, mining and metallurgy, equipment and machine-tools, heavy engineering, and heavy chemicals. According to the Gandhian Plan, the expansion of cottage industries shouldn't be hampered or interfered with by the development of basic industries. The Gandhian model's most exciting scientific component is that the state would control and administer the fundamental and important industries, placing them in the public sector. There is no distinction between the Nehruvian and Gandhian models of development in this regard.

People often believe Gandhi's concentration on small businesses and handicrafts is a blatant sign that he was opposed to modern machines. This is untrue. Gandhi is not opposed to all types of equipment since even a spinning wheel is a form of machinery. However, he objects to the obsession with machines and its uncontrolled expansion. He thinks that the use of heavy equipment in factories has led to the exploitation of workers by a small number of capitalists. In cases when they reduce the load on the people without replacing human effort, he praises automation and contemporary conveniences. When it serves the interests of the many, machinery is good; when it serves the interests of a select few, it is bad.

The Gandhian model's goal is to grow industry and agriculture simultaneously and to combine them, according to a rigorous analysis. The importance of handicrafts and cottage industries is underlined both from a production and employment perspective. after Independence. Gandhi and

his economic theories were disregarded as Nehru ruled the Indian scene. Some of these concepts were included in the Draught Sixth as well as during the brief Janata administration from 1977 to 1979. In regards to the current planning system, the Gandhian model of development asks for the adjustments.

The main premise of employment-oriented planning, to repeat that of production-oriented planning, is that unemployment is our worst adversary and that the solution to it holds the key to the issues of poverty and inequality. Therefore, it would be wise to switch to employment-oriented planning from production-oriented planning. The delineation of locations with a high employment potential is required for this job, which also guarantees high and effective output.

**Agriculture and employment potential:** Agriculture has a lot of room for expanding employment in rural cottage industries, animal husbandry, composting, sanitation and gobar gas, as well as new projects like irrigation systems and land reclamation and reforestation. A far greater number of labourers can be supported on a site that is being farmed intensively. According to an easy match, India was classed as a low-performance nation in 1971 since only 39 employees were engaged per 100 acres of land there. In contrast, between 87 and women were employed per 100 acres in Japan, South Korea, Taiwan, and Egypt in 1965. These nations are high-performance examples of tiny farms and labor-intensive production methods. The experience of these nations demonstrates that India can improve overall production while employing additional 50 to 60 million people in agriculture. If there is just limited mechanisation, or the use of machines that complement human work and make it easier or less taxing rather than replacing it—"the Japanese style of farm machinery" the employment potential in the newly integated regions may grow by 60%.

**Large vs. Small enterprises:** The Gandhian model of development is opposed to large scale enterprises that produce consumer goods and is in support of small-scale and cottage industries. Adamant advocate of the Gandhian model of economic development Charan Singh declares: "No medium or large-scale enterprise shall be allowed to come into existence in the future which will produce goods or services that cottage or small-scale enterprises can produce. No small scale industries shall be allowed to be established which will production goods or services that cottage enterprise can produce [5], [6]."

**Equitable Distribution:**Despite the profession of Socialism under the Nehru model of economic development, the two main economic evils of the Indian economy are the growing concentration of economic power in the hands of a select few and income disparity. The centralization of the means of production and centralised large-scale manufacturing are the primary causes of the accumulation of wealth and the concentration of economic power. Gandhi has come up with what is perhaps the finest and most organic answer to the distribution issue. Small-scale, decentralised manufacturing is the obvious answer since it attacks the source of wealth accumulation. Wherever mass manufacturing is unavoidable, it should be managed and owned by the government. According to the Gandhian approach, the distribution issue is resolved at the production stage rather than the consumption stage. The Gandhian model of development strives for growth with stability and the elimination of income and wealth concentration in order to reach a national minimum standard of living in the shortest amount of time [7], [8].

The mixed economy is the result of a compromise between the two polar opposing schools of thought one that supports capitalism and the other that vehemently advocates for the socialisation of all means of production and for government regulation of the whole sector. India is seen as an

excellent illustration of a mixed economy. The State should work "to promote the welfare of the people by securing and protecting as effectively as it can a social order in which justice, social, economic, and political, shall inform all the institutions of national life," according to the Directive Principles of the Indian Constitution.

A planned economy must be a diversified economy. The public sector must be run in accordance with certain priorities in order to accomplish certain predetermined social and economic objectives. For more than 60 years, India has been experimenting with a mixed economy. India's national and state governments have established a number of PSEs in a variety of industries including manufacturing, commerce, and banking. Additionally, the private sector has been steadfastly working to circumvent and, in many ways, manipulate the planning process. The government and the current crop of elected officials have been tainted by the business sector.

Jawaharlal Nehru served as an inspiration to the India National Congress when it established the National Planning National Planning Committee near the end of 1938.According to our Constitution's Directive Principles, "The State shall, in particular, direct its policy towards securing - that citizens, men and women equally, have the right to an adequate means of livelihood; that ownership and control of the community's resources are distributed so as to best serve the common good; and that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment." In India, unemployment and underemployment are significant contributors to poverty. Therefore, eliminating underemployment and unemployment has been a key goal of the nation's economic planning from the outset. Different sorts of regressive factors, such as economic disparities, poverty, the lack of equitable possibilities for advancement, etc., operate in an unplanned society. India's economic policies made a deliberate attempt to counteract all these backward factors and promote both societal and individual growth.

On paper, India's long-term planning goals seem to be absolutely reasonable and doable. The latter two goals are social goals that relate to wealth and income distribution as well as the creation of an equal society in the nation. The first two goals are economic goals that pertain to increasing income and employment. But there is little doubt that these two sets of goals are incompatible. For instance, the goal of accelerating economic growth based on significant investment and the expansion of labor-intensive manufacturing may increase national income but was inevitably going to result in income concentration and amplification of income inequalities.

Our Five-Year Plans' main goals were "development along socialist lines to secure rapid economic growth and expansion of employment, reduction of income and wealth disparities, prevention of economic power concentration, and creation of values and attitudes of a free and equal society." To meet these goals, the planners developed a strategy for planned economic development. When the Second Five Year Plan was created in the middle of the 1950s, the Nehru-Mahalanobis model of development emerged as the main inspiration. The LPG Model of Development was meant to set the course for a new approach that placed a strong focus on liberalisation, privatisation, and globalisation. It was first launched in 1991 with a huge boom by the then Finance Minister, Dr. Manmohan Singh. There were a number of significant domestic reforms made [9], [10].

Since taking office as president of India, Dr. A.P.J. Abdul Kalam has promoted his Vision 2020 and stressed the implementation of PURA in order to end poverty in India. He described the idea and plan of PURA as the tool for the villages' economic uplift in his speech at the Food Security

Summit on February 5, 2004. PURA seeks to accelerate economic growth without population transfers. In the words of the late Professor A.M. Khusro, "It is better to take infrastructure to villages where people live rather than moving people where infrastructure exists." The PURA idea was developed in response to the demand for social and economic infrastructure that would foster private sector investment in rural regions.

## CONCLUSION

Both successful results and difficulties are shown by the examination of the heavy industry growth plan. Despite the crucial role that heavy industries have played in economic development and industrialization, financial ramifications, environmental sustainability, and diversification must all be carefully considered. Countries may capitalise on the advantages of heavy industry while addressing any possible downsides and laying the foundation for a successful and sustainable future by embracing innovation, sustainability, and a balanced approach to economic growth. Additionally, integrating automation and digitization in heavy industries may boost output, save costs, and increase competitiveness. To improve technology and maintain a competitive advantage in the global market, it is essential to invest in research and development, support skill development initiatives, and encourage partnerships between academic, industrial, and research organizations.

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# CHAPTER 5

# A BRIEF DISCUSSION ON ELEVENTH FIVE YEAR PLAN

Dr. Mounica Vallabhaneni, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: mounicav@presidencyuniversity.in

**ABSTRACT:**

The Eleventh Plan has set the correct goal in the form of moving 'Towards Faster and More Inclusive Growth' but it intends to chart out a course which is basically antilabour and pro-corporate sector. This is precisely in conflict with the goal of providing secure income and employment for 'aam admi'. The best way to achieve this is to promote small and medium enterprises and small peasant agriculture. But there is no clear policy of promoting SMEs. It sidetracks the issue of small peasant agriculture and pleads for contract farming which is capital-intensive and not labor intensive. The Planning Commission's target of creating 58 million jobs during the Eleventh Plan is inadequate and it would have been much better if the Commission had adhered to the target of 65 million jobs as suggested by the Approach Paper. Describe the Eleventh Five Year Plan's goals. Know the Eleventh Plan's Microeconomic Dimensions. Understand the eleventh five-year plan's financing.

**KEYWORDS:**

Agriculture, Agricultural, Development, Growth, Poverty.

## INTRODUCTION

The National Development Council approved the "Towards faster and more inclusive growth" Approach to the 11th Plan document in December 2006 and instructed the Planning Commission to create a comprehensive plan to determine the resources needed to achieve the overarching goal outlined in the Approach Paper. The National Development Council adopted the eleventh five-year plan's comprehensive version in December 2007.

### 11th Five Year Plan

In outlining its vision, the Eleventh Plan emphasised that during the last four years of the Tenth Plan, average GDP growth was 8.6%, making India one of the fastest growing economies in the world. It also noted that during the Tenth Plan period, "the economy accelerated to a record average of growth of 7.6 percent - the highest in any Plan period so far." Rates of investment and saving have also gone up. The industrial sector has done a good job of adapting to the competition in the international economy. The Indian economy is attractive to foreign investors. However, "a key shortcoming in the economy is that many groups, notably SCs, STs, and minorities, do not view development as being sufficiently inclusive for them. The statistics on a number of performance parameters support the lack of inclusion.

1. "The population's share living in poverty has decreased from 36% in 1993–1994 to 28% in 2004–2005. But in addition to being high, the pace of poverty reduction has not advanced in tandem with GDP development, and the prevalence of poverty among

certain marginalised groups, such as the Scheduled Tribes, has scarcely changed at all. The absolute number of impoverished people has decreased from 320 million in 1993–1994 to 302 million in 2004–2005 due to population growth, although only slightly. Since the poverty level on which the estimate of the poor is based is the same as in 1973–1974 a period in which per capita earnings were significantly lower this performance is all the more depressing [1], [2]. "

2. Deprivation indicators point to a substantially larger percentage of the population being denied a basic standard of life. The National Family Health Survey found that 46% of children in the 0–3 age range were malnourished in 2005–2006, but what's more alarming is that there hasn't been any improvement from the 47% level seen in 1998.Indicators of human development including rates of maternal and newborn mortality and literacy reveal that India is making moderate progress and is behind a number of other Asian nations. India is the nation with the highest percentage of illiterates, even though the literacy rate increased to 64.8% in 2001. There are still more than 304 million people who are not literate. China's life expectancy, which was below 72 years between 2001 and 2006, was 63.9 years for men and 66.9 years for women. Another issue is the unfavourable sex ratio, which is just 933 women for every 1,000 males. More troublingly, from 962 in 1981 to 927 in 2001, the child sex ratio fell precipitously. The infant mortality rate is greater than that of East Asian nations.
3. Despite a goal of 4% growth, agriculture growth remained slow and was at 2.1% throughout the 10th Plan.
4. Despite the higher GDP growth of 7.6% under the 10th Plan, the current daily status unemployment rate grew from 7.3% in 1999-2000 to 8.3% in 2004-2005. Additionally, the unorganised sector has seen the whole rise in employment. "Permanent employment in the organised sector has decreased, although organised sector firms may be increasing their informal employment," which points to a decline in the quality of work, is a particularly alarming aspect of the employment situation.

**The Eleventh Plan's Goals**

The Plan calls for a significant increase in GDP of about 9% for the whole nation. According to this, the GDP per capita would double in ten years at a rate of roughly 7.5% annually. The Plan document hastily adds, however, that the goal is inclusive development rather than merely quicker growth, which guarantees a general increase in the quality of life of the populace, particularly the impoverished SCs/STs, OBCs, and minorities.

**The Eleventh Plan's vision**

The 11th Plan's overarching concept consists of a number of interconnected parts, including:

1. Rapid development that alleviates poverty and generates job possibilities;
2. Access to crucial health and education services, particularly for the poor;
3. Empowerment through education and the development of skills;
4. Utilising the national rural employment guarantee programme, increase employment possibilities;
5. Environmental resilience;
6. Decrease in gender disparity;
7. Governance improvement [3], [4].

## DISCUSSION

According to the Eleventh Plan, "Generation of productive and gainful employment, with decent working conditions, on a sufficient scale to absorb our growing labour force form a critical element in the strategy for achieving inclusive growth."

### Limitations of Prior Experience

"The fundamental weakness in our employment performance is the inability of the Indian economy to generate enough new, high-quality jobs to absorb new workers while also facilitating the transfer of the surplus labour that is currently present in the agricultural sector into higher-paying non-agricultural employment," states the report. The Eleventh Plan had the following significant flaws:

1. From 6.1% in 1993-1994 to 7.3% in 1999-2000 and then to 8.3% in 2004-2005, the unemployment rate has risen.
2. The unemployment rate for households with agricultural labourers increased from 9.5% in 1993–1994 to 15.3% in 2004–2005.
3. Between 1999-2000 and 2004-2005, non-agricultural employment increased at a strong pace of 4.7%, although this development was mostly in the unorganised sector.
4. Despite quite strong GDP growth, organised sector employment actually decreased, which frustrated educated millennials.
5. Although real earnings for casual workers in agriculture have continued to climb from 2000 to 2005, growth has slowed significantly from 1994 to 2000, reflecting the sector's underwhelming performance.
6. There has been very little real pay growth in non-agricultural jobs from 1999-2000 to 2004-2005.
7. Even for employees in organised industries, real earnings stagnated or fell, while management and technical personnel did see significant increases.
8. Since the 1980s, the organised sector's wage share has decreased by half and is now one of the lowest in the world.

### Projections of Employment under the Eleventh and Twelfth Plans

52 million more workers were expected to enter the labour force throughout the plan period, according to the Approach Paper of the Eleventh Plan. However, in light of the most recent population forecasts produced by the National Commission on Population and the work done by the Eleventh Plan Working Group on Labour Force and Employment forecasts, the predictions of labour force growth have been changed. The Eleventh Plan is expected to result in a 45 million increase in the work force. The concept of employment elasticity is at best a mechanical device to project employment on the basis of projected growth of output and past relationships between employment and output, which can change as a result of changing technology and change in real wages. The labour force participation rate is another important factor that must be kept in mind when making these projections.

Data about additional employment opportunities created in agriculture during the Tenth Plan, the Eleventh Plan contemplates zero additional employment. To assume zero employment elasticity in agriculture when the rate of GDP growth in agriculture is sought to be stepped up from 2% to 4%, is to say the least, preposterous. This is more so when the Eleventh Plan itself recommends

encouragement to employment generating sectors in the economy. If 8.84 million employment opportunities could be generated in the Tenth Plan in agriculture, it passes one's comprehension why the same order of employment opportunities, if not more, be generated during the Eleventh Plan, more so when its growth rate is to be doubled. Agriculturally backward states like Bihar, Orissa, Chhattisgarh. Rajasthan and Uttar Pradesh can certainly create more employment opportunities via extension of irrigation and watershed development. If the target of additional employment in agriculture had been kept at the same level as in the Tenth Plan i.e. 8.8 million, the employment generation in the Eleventh Plan would have reached the level contemplated by the Approach Paper. It appears that the Planning Commission intends to develop agriculture via contract farming and treating the corporate sector as the main source of agricultural growth. If that is so, it goes against the philosophy of inclusive growth [5], [6].

It would be worthwhile to contrast this cautious optimism with the observations made in the Approach to the Eleventh Five Year Plan: "On the supply side, the labour force will increase by about 52 million during the Eleventh Plan if it grows at the same rate as current projections of the working age population. The increase could be much higher, around 65 million if female participation rises at the pace observed during 1999-2005. Since the labour force will increase by about 52 million during the Eleventh Plan if it grows. The fact is that profits of enterprises in the organised sector are rising fast, and wage share is declining. The Planning Commission has not applied its mind to generate a process by which wage share in the organized sector should improve. Failure to do this will mean "growth at the expense of social security measures," which have been elaborated by the Government due to the large labour force in the country.

Moreover, the Planners themselves admit, "Permanent employment has decreased, although organized sector firms may be increasing their informal employment." The fact of the matter is that even without any change in chapter VB of the Industrial Disputes Act, organized sector firms have succeeded in increasing the share of informal employment to about 23 percent, which is a tacit admission of the fact that the labour laws are observed more in their breach than in compliance, but the Planning Commission is not tired of in recommending amendment of labour laws to enlarge and improve employment. But as facts stare us in face, in a labour surplus economy, the tendency to employ contract labour or casual employment is intended to enhance profits at the cost of cutting wage share in value added. This is what has happened during the last decade. Inclusive growth requires an improvement in the share of permanent jobs in the economy and increase in wage share, but what we witness and what is proposed to strengthened, is precisely the opposite.

**The Eleventh Plan is criticised**

The 11th Plan sets "Faster and more inclusive growth" as its goal, which is in and of itself a welcome development given that, after a period of a decade and a half of reforms begun in 1991, it is being realised that the reform process has widened disparities between the rich and the poor, slowed down reduction of poverty to a modest figure of 0.74 percent for a period of 1993-94 and 2004-05, and resulted in a rise in unemployment from about 6 Eleventh Plan has fixed a target of pushing up overall GDP growth to an average rate of 9.0 percent, this will be achieved by boosting growth of agriculture to about 4 percent after a disappointing growth of 2.1 percent during the 10th Plan, and by pushing up growth of industry to 10-11 percent and services to 9-11 percent. It would be good to recall that industry indicated a growth rate of 8.3 percent and services to 9.0 percent during the 10th Plan. Obviously, in industry and services, the 11th Plan

intends to improve growth rates only marginally, it is only by doubling growth rate in agriculture that its target of 9 percent growth is likely to be achieved. This implies that the success of the 11th Plan will be determined by the success in achieving growth target in agriculture, moreso, when agriculture still continues to provide livelihood to 58 percent of our population. To that extent, the strategy indicates that the concept of 'inclusive growth' is a part of Eleventh Plan framework.

The primary concern is reducing poverty. The Eleventh Plan mentions the following when addressing the issue of setting a target for poverty reduction: "The Plan document has admitted that the percentage of poverty in 2004-05 is approximately 28 percent and therefore, the 11th Plan intends to reduce it by 10 percentage points by 2017. This would imply a rate of reduction of poverty by about 1 percent. The current official poverty line is based only on calories and thus only takes into account the satisfaction of one's hunger, according to Mohan Guruswamy et al. "While the definition of hunger in terms of calories can remain constant, the definition of poverty is relative to the present levels of general prosperity," they write [7], [8].

It would have been more accurate to define this as a starvation line, as that is exactly what it is." The Planning Commission, thus, intends to reduce starvation line up by 10 percent by 2017. For providing a basic minimum, poverty line needs to be redefined in terms of basic needs approach. While India is aiming to become a super-economic power by 2020. it will only reduce starvation by the date. In the light of this. India should adopt the International Poverty Line of $2 per day as the basis of determining the percentage of people in poverty. As per the Human Development Report , on the basis of $1 per day, for the year 1999-00, people below the poverty line in India were of the order of 34.3% and if we use the norm of $2 per day, then 80 percent of the Indian population was below the poverty line. The present poverty line on the basis of calories does not even meet the rock bottom standard of poverty set at $1 per day, not to speak of reaching the standard of $2 per day basis on basic needs approach. The Planning Commission should, therefore, upgrade the poverty line to reach international standards as it intends to do in other sectors of manufacturing, services and yield of output in agriculture. It should not seek a false sense of satisfaction that it has been able to effectively reduce poverty. It is heartening to note that the Planning Commission has appointed an expert group to revise the poverty line.

**Decreese in unemployment**

By providing the target of 58 million employment opportunities, the rate of unemployment has been reduced from 8.36% in 2006-07 to 4.83% in 2011-12. The Planning Commission is itself unsure of the projection. The Planning Commission has reduced the estimate of new entrants to the labour force to 45 million instead of 65 million as indicated by the Approach paper and with a backlog of 35 million unemployed.

**Flexibility of Labour Market Issue**

Shorn of its frills to pay homage to inclusive growth, the 11th Plan is a new avatar of the Report of the Task Force on Employment Opportunities headed by Dr. Ahluwalia in 2001. It mentions. "It must be emphasized that labour flexibility does not mean "hire and fire". There are many aspects of labour laws where greater flexibility is needed and would be in the interest of labour as a whole in the sense that it would actually generate large volumes of employment in the organized sector by encouraging employers to expand employment. This flexibility is especially needed if we want to exploit the enormous opportunities offered by export markets...we should

evolve a consensus on the scope of reforming key labour laws including especially the industrial Disputes Act and the Contract Labour Act." The statement very admirably clothes the hidden agenda of the Planning Commission. This is due to the developments taking place in the organized sector in recent years. The Textile Minister wants raising of working hours from 48 to 60 per week, allowing women to work in night shifts, permitting contract labour, easy exit norms and treating export industry as a public utility for the purpose of Industrial Disputes Act. To add to it. Commerce and Industry Minister wants Special Economic Zones to be exempted from labour laws. Obviously, the direction in which the UPA government intends to push labour laws is amply clear, however, it may camouflage its policy in the 11th Plan by soft words [9].

The Planning Commission has set the goal of inclusive growth. It notes the fact that despite sharp increase in productivity, real wages of labour have declined. ILO report on Labour and social Trends in Asia and the Pacific brings out the hard reality that between 1990 and 2002. there was a decline in real wages in manufacturing in India by 22 percent, despite an increase in manufacturing labour productivity of over 84 percent over the same period. Obviously, this implies that the fruits of economic reforms are pocketed by the corporate sector, while labour is denied its due. Ironically, the salaries of managerial and technical personnel have been increasing at the rate of 15% per annum. The Planning Commission's 'inclusive growth' fails to provide any strategy for improving the share of labour in the surplus generated by faster growth. Critics have serious doubts about the sincerity with which the equity objective is sought to be achieved by the 11th Plan. The determination of wages by market forces and taking away even the modicum of protection by labour laws will give the organized sector business magnates unbridled power to freely exploit and pauperize labour.

## CONCLUSION

The removal of poverty requires targeted attention to the poor. The Planning Commission has given a long catalogue of schemes such as National Rural Employment Guarantee Scheme, Swaran Jayanti Rozgar Yojana, slum improvement programme, housing for the poor and skill development programmes etc. The effectivity of implementation will indicate the extent to which the targeted beneficiaries are helped. The Planning commission is silent on some issues like food security, strengthening price support systems, creation of price stabilization fund for agricultural commodities, universalizing crop insurance, protection to peasantry from subsidized imports of agricultural commodities and land reform. Eleventh Plan is a very ambitious plan which seeks 125 percent increase over resources over the Tenth Plan. Its initiative in providing over 30 percent resources to improve the quality of social services deserves a word of appreciation. The country may able to reach the target of 9% GDP growth. However, its success will be judged by the extent to which, it is able to convert the growth process into pro-poor growth and reduce the urban-rural divide and the rich-poor divide.

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# CHAPTER 6

# A STUDY ON ECONOMIC REFORMS IN INDIA SINCE 1991

Mr. Yelahanka Lokesh, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: lokesh.yr@presidencyuniversity.in

**ABSTRACT:**

India's economic environment has seen a considerable change as a result of the economic reforms that have been put in place there since 1991. This abstract offers a summary and assessment of the most important economic changes implemented during this time, stressing their effects on different industries and the general trajectory of the Indian economy. The central planning and protectionism of the earlier period were abandoned with the 1991 economic reforms. In response to a balance of payments problem and slow development, the government implemented a number of policy changes aimed at liberalising the economy, welcoming foreign trade and investment, and encouraging reforms that were more market-oriented. A more competitive and business-friendly environment was the goal of these changes, which covered a variety of sectors including industrial, trade, fiscal, and financial. These measures have had a substantial and extensive influence. In particular, industries like information technology (IT), pharmaceuticals, and automotive manufacturing saw a rise in export-oriented businesses as a result of trade liberalisation and FDI encouragement. As a result, India became a major participant on the international stage in these industries, boosting job opportunities and driving economic development. Additionally, FDI inflows were essential for transferring technology, encouraging innovation, and raising the overall level of competitiveness of Indian industry.

**KEYWORDS:**

Development, Economic, Poverty, Social, Trade.

## INTRODUCTION

The reform process was started in 1991, which is now nearly 15 years ago. Political parties agree on the need to conduct economic changes with a high degree of consensus. Economic reforms are a priority for both of the country's main political parties, the Congress and the BJP. Economic reforms are not even opposed by the left-leaning CPI, CPI, and Janata Dal parties. They emphasise that the reform process shouldn't be guided by capitalist lobbyists, but that the interests of workers and the average person should also not be disregarded.

Similar to this, regional parties have also been courting foreign investment to make investments in their states. As a result, all political parties are committed to quickening the pace of economic reforms in order to boost GDP growth, increase infrastructure investment, and convince Indian big business and multinationals to encourage investments. Unless the economic process is sped up and the nation achieves continuous GDP growth of 7-8% for more than a decade or two in the future, it is thought that the standard of life of the people cannot be improved.

**Since 1991 India's economic reforms**

Major political parties agree almost unanimously that economic changes should be put into place. Economic changes are at the top of the two main political parties' agendas, the Congress and the Bhartiya Janata Party. The reform package has been endorsed by Janata Dal, CPI, and CPI notwithstanding some subtle differences. The DMK and AIDMK are two regional parties. Additionally, the Samata Party, Samajwadi Party, and Rashtriya Janata Dal solicit foreign investment for their respective states. In summary, it should be noted that there is now national agreement to initiate and carry out economic changes in order to hasten the nation's growth. In order to evaluate the effects of economic changes, a 17-year period after the completion of the reform process cannot be deemed too short. To determine if the nation is heading in the right way or whether the reform process started in the 1990s needs to be improved, it would be appropriate to conduct an assessment of the successes and weaknesses of economic reforms [1], [2].

It would be preferable to identify the objectives of the economic development process prior to evaluating the economic changes. The reform process should have the following outcomes while accelerating economic development: a higher rate of growth; an expansion of employment potential leading to full employment; a decrease in the population living below the poverty line; a promotion of equity leading to a better deal for the poor and less fortunate sections of our society; and a decrease in regional disparities between the rich and poor states of India. In light of the aforementioned society's objectives, it would be interesting to evaluate economic changes.

**GDP expansion and the fight against poverty**

The ability of economic changes to support a comparatively higher growth rate is without a doubt. After the first two years, 1991–1992 and 1992–1993, when there were teething problems, the growth rate from 1993–1994 through 1997–1998 has averaged more than 7% annually. The economic momentum that persisted beyond 1991–1992 provides more and more proof that the changes put into motion in 1991 have increased the country's capacity for development.

If we compare the post-reform decade's average annual growth rate of 5.8% of real GDP to the pre-reform period's average annual growth rate, which was in the range of 5.2% per year, it is also somewhat higher. The GDP growth rate did noticeably increase over the course of the five years, however, rising to an average of 6.0% and then 8.7% in the next five years, from 2004–05 to 2009.

**Reduced Poverty and Economic Reforms**

In his essay "Has Poverty Declined Since Economic Reforms?" Dr. Gaurav Datt of the World Bank compared the drop in the head-count index, poverty gap index, and squared poverty gap index for rural and urban India in the pre-reform and the post-reform periods. The investigation came to the following key conclusions:

1. In India's progression of living standards, the mid-1980s seem to represent a crucial watershed. Although the rates of poverty in both urban and rural areas significantly decreased between 1973–1974 and 1986–1987, no indication of something like can be seen now.

2. The findings for the rural sector show that while there was a substantial trend drop in all three poverty indicators up to mid-1991, the pace of fall since then is not statistically different from zero.
3. In the urban sector, the data show a downward trend in all three poverty measures up to mid-1991. This tendency is continuing even in the post-reform era, and all three poverty measures show a drop.
4. While the urban sector seems to have maintained its trajectory of development and poverty reduction during the 1990s, poverty reduction in rural areas was stymied by a lack of rural growth [3], [4].

**Poverty, GDP Growth, and Employment Growth**

The reason why there hasn't been a matching decline in poverty is a mystery given the recent years' very high GDP growth rates. Studying the difference in the employment situation between before and after the economic changes would be interesting if poverty indicates either unemployment, underemployment, or a lack of high-quality employment. According to information, overall employment rose from 3,026 lakhs in 1983 to around 3,568 lakhs in 1990–1991 and then improved to nearly 3.829 lakhs in 1997–1998. Between 1983 and 1990–1991 the rate of increase of employment was at 2.39 percent annually, which was almost exactly the same as the rate of growth of the labour force during this time. The nation could be able to drastically decrease the backlog of unemployed people, however, if this pace of job growth is maintained over the course of the following ten years. Unfortunately, the period of reforms shows that the total growth rate of employment was just about 1.0%.

It should be noted that the growth rate of employment in the organised sector also slowed down from 1.73 percent per year during the seven-year pre-reform period of 1983 to 1990-91 to 0.60 percent from 1990-91 to 1997-98. This is because the reform process is only limited to the organised sector, and particularly to the large corporate sector. It was just a third as fast as the employment growth rate that had been seen before. In addition, there was a marked reduction in the unorganised sector's job growth rate, which fell to only 1.1% from 1990–1991 to 1997–1998 from a pre–reform period of seven years of employment growth of 2.41 percent. One may thus infer from this that the impoverished did not benefit from the growth process' trickle-down consequences. Therefore, Dr. S. P. Gupta says: "All these developments make one reassess the value of an exclusive strategy on 'GDP growth' in addressing poverty or employment. However, it has been noted that in India, rapid job development has virtually always been accompanied with a decrease in poverty. For instance, there was a large decline in poverty during the 1980s, when employment grew rapidly despite a relatively slow GDP development. Low employment growth is observed to be related to a rise in poverty in the 1990s, as was hypothesised.

**Changes in Organisational Sector Employment**

It would be beneficial to study the increase of employment in the organised sector because the organised sector employment is the focus of the reform process.

**An improvement in productivity and real wages**

Labour has often been accused by industrialist lobby groups of imposing a rise in the real wage of wages for workers rather than increasing labour productivity. Increases in labour productivity and real wages of regular wage and salaried workers are an issue that Shariff and Gomber have

explored. Their research reveals that while overall real labour productivity increased from 1983 to 1988 by 3.16 percent and from 1988 to 1994 by 3.32 percent, real wages for workers increased at an appallingly low annual average rate of just 0.1% from 1983 to 1987 and 1988 to 1993 to 1994. Even though it hasn't been long enough to draw any firm conclusions, the post-reform period does provide some evidence of the thin threads in the wind, showing that only 1% of the 3.32 percent increase in productivity between 1988 and 1994 was distributed to the workforce, with the remaining 90% going to the employers. Workplace wellbeing suffered as a result of this [5], [6].

## DISCUSSION

The study above concludes that treating labour as a simple tool that can be dispensed with when, in the employer's opinion, it is no longer necessary is the fundamental flaw in economic reforms, as opposed to treating it as an asset. Trade unions and the courts, on the one hand, and oppose this essentially mechanistic vision of work, respectively. Although the person loses their job, the company attempts to downsize in order to save costs. Downsizing is much less painful in developed nations where social security systems have been extensively developed because workers can at least receive some unemployment benefits and are therefore not deprived of a basic minimum essential for survival. However, in developing nations like India, where the economy is still growing, downsizing and restructuring that results in retrenchment or closure deprives workers of their means of subsistence.

The way that economic changes have neglected agriculture is a key point of contention. The output of foodgrains grew from 129.6 million tonnes in 1980–81 to 176.4 million tonnes in 1990–91, resulting in an annual compound rate of 3.1%. However, over the 18-year period of economic reforms, the output of foodgrains climbed from 176.4 million tonnes in 1990–1991 to 234 million tonnes in 2008–2009, suggesting an average annual growth rate of 1.6%, which was lower than the growth rate of the population. The country might pay a very high price for complacency in the foodgrains sector during the next ten years. For this circumstance, many explanations have been given. First of all, the reform process has ignored agriculture by focusing on the expansion of the industrial and service sectors [7], [8].

The previous ten years have seen a stagnation in agricultural growth of around 2%. In line with estimates, it will be 2.3 percent in the tenth plan, up from the ninth plan's 2.1 percent. "The structural weaknesses of the agriculture sector were manifest in low level of investment, exhaustion of the yield potential of new yielding varieties of wheat and rice, unbalanced fertiliser use, low seed replacement rate, an inadequate incentive system, and post-harvest value ad-dition during the new millennium," states an economic survey outlining the situation.

Only 2.8% of the GDP was spent overall on agriculture in 1999–2000. It decreased to 2.4% of GDP in 2003–2004, somewhat increased to 3.34 percent in 2008–09, but decreased once more to 2.97 percent in 2009–2010. The economy has seen a substantial rise in investment, reaching 36.5% of GDP in 2008–09. Considering that 58 percent of the population depends on agriculture for their living, the proportion of investment in agriculture as a percentage of GDP, which stands at 2.97%, is much too low. It should also be noted that public sector investment in rural infrastructure, flood control, water harvesting, irrigation, restoration of degraded areas, etc. has a considerably higher impact on the whole community. A private sector investment in harvesters, tractors, and tube wells, on the other hand, solely raises the revenue of the landowning classes. Employment has been harmed by it.

Withholding public sector investment in the irrigation sector in the hopes that private sector investment would increase irrigation did not result in the expansion of irrigation infrastructure. Particularly in underdeveloped areas like Bihar, Madhya Pradesh, and Orissa was this the case, which shows "very poor growth rates in foodgrains production - even lower than the national average." Last but not least, the government was unable to increase yields in underdeveloped areas, despite the fact that green revolution states like Punjab, Haryana, and Uttar Pradesh have plateaued. In their research, Dr. G. S. Bhalla and G. R. Singh noted that "a striking increase in area under irrigation triggered by a substantial private investment in pumpsets and tubewells has been facilitated by a sharp pick-up in agricultural growth experienced by the Eastern Region."

If we look at the application of the Water-Seed-Fertilizer technology, the irrigated area showed an average annual growth rate of 3.6% from 1970 to 1981, which fell to 2.7% from 1980 to 1990 and then to just 1.9% from 1990 to 1997. We also find decreasing growth rates in the irrigated area under rice and wheat from the 1970s to the 1980s and 1990s. This is because irrigation is the fundamental input that aids in the greater utilisation of other inputs, such as seeds and fertilisers. The irrigated area increases for pulses saw a negative growth rate of around 1.5% every year. When the area covered by HYV for paddy and rice, a similar pattern was seen. Indicated by fertiliser usage, yearly average growth rate fell sharply from 8.5% in the 1980s to only 3.7% in the 1990s. Consideration of the trend in major and minor irrigation is pertinent in this context. In order to maintain a high water table, major irrigation supplements minor irrigation, while the latter ensures the peasant's access to water in the event of a rainy season's absence. Another factor affecting the slowdown of overall agricultural development is the decline in the growth rate of the irrigated land under minor irrigation, which fell from 3.5% in the 1980s to 2.3% in the 1990s. A fundamental mistake that led to the poor increase of agricultural productivity and output throughout the 1990s was the inadequate attention given to irrigation expansion by economic reforms.

The implementation of steps to modernise and enhance banking, capital markets, and regulatory frameworks resulted in considerable financial sector changes. Greater openness, increased investor trust, and easier capital mobilisation were brought about by the founding of organisations like the Securities and Exchange Board of India (SEBI) and the Reserve Bank of India (RBI). These changes aided in the creation of a more dynamic and robust financial system, improved loan availability, and financial sector growth. The changes also promoted entrepreneurship and the expansion of the private sector. A favourable climate for economic growth, innovation, and competition was established by the elimination of the licence raj and the removal of administrative barriers. Economic diversification and employment creation have been boosted by the rise of new businesses, notably in the services sector like banking, retail, and telecommunications [9], [10].

The conclusion of the whole research is that the biggest sin of economic reforms—the primary source of income for more than 60% of the population—is the egregious neglect of agriculture. This is especially true given that, despite India having seven consecutive years with favourable monsoons, agricultural productivity showed year-to-year variations. This raises questions about whether agricultural expansion can be sustained unless priorities are rearranged to place a considerably larger focus on agriculture and rural industrialization. The state should increase public sector investment in agriculture, irrigation, and rural infrastructure rather than discontinue it.

## CONCLUSION

The need for tailored policies and inclusive growth initiatives arises from the continued importance of income inequality and geographical differences. For sustainable economic growth and to ensure that the advantages of growth are felt by all facets of society, it is essential to address problems connected to land acquisition, labour market changes, and skill development. Further changes are required to keep up the pace of economic development and seize new possibilities. Enhancing productivity and competitiveness will depend on policies that support innovation, R&D, and technology adoption. Growth will be more equitable and sustainable if social infrastructure is strengthened, money is put into healthcare and education, and environmental sustainability is addressed. As the economic changes that have been put in place in India since 1991, a new age of liberalism, globalisation, and market-oriented policies has begun. These changes have boosted competitiveness, sparked investment, and accelerated economic development. But to guarantee that the advantages of development are distributed fairly and to maintain India's economic trajectory over the long run, it is crucial to address income inequality, regional imbalances, and unresolved structural issues.

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# CHAPTER 7

# EXPLORATION OF ECONOMIC REFORMS IN INDIA SINCE 1991

Dr. Mounica Vallabhaneni, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: mounicav@presidencyuniversity.in

**ABSTRACT:**

India's economy has undergone significant change as a result of the economic reforms implemented since 1991, which have also changed the country's growth trajectory. The important economic changes carried out during this time are examined in this abstract along with their effects on different industries and the difficulties and prospects they provide for future development. The examination starts by looking at how economic changes affect macroeconomic stability and economic development. The trade liberalisation, fiscal reforms, and banking sector reforms, among other liberalisation measures, have sped up economic development, boosted foreign direct investment (FDI) inflows, and strengthened budgetary restraint. A noticeable rising tendency in the Gross Domestic Product (GDP) growth rate has stimulated the rise of industries including services, manufacturing, and information technology. This emphasizes how economic changes may affect social advancement and the eradication of poverty. Despite the fact that economic progress has helped many people escape poverty, issues with income inequality and geographical discrepancies continue. In order to provide a foundation for more equitable growth, the reforms have placed a focus on social welfare programmes, rural development efforts, and programmes to combat poverty. To guarantee that the advantages of expansion reach disadvantaged groups and isolated locations, however, ongoing efforts are required.

**KEYWORDS:**

Development, Economic, Poverty, Social, Trade.

## INTRODUCTION

Economic reforms were primarily designed to get rid of the bottlenecks that hampered industrial development. Industrial licencing was eliminated in all industries except 18 in order to achieve this aim. The authorities later cancelled the licences of numerous others. Three industries—coal and lignite, petroleum, and sugar had their licences revoked during the 1998–1999 academic year. As a result, there are now just six industries that need mandatory licencing. The list of industries designated for the public sector was reduced by the removal of two, namely coal and lignite. There are now just four industries that belong to the public sector. Or, to put it another way, the reform process eliminated the Industrial Licencing system, which was seen to be a major barrier to the advancement of industrial growth.

During the period from 1993–1994 to 2009–2010, the growth rate of the general index of industrial production (IIP) dropped to 7.2 percent annually on average. Manufacturing saw a gain from 7.6 to 7.7 percent in the 1980s, while power saw a decrease from 9 to 5.5 percent and mining and quarrying had a rise from 8.3 to barely 3.9 percent. As a result, anticipation that IIP expansion would be encouraged did not come to pass. Further, if we divide the 1993-94 to 2009-10 period into two sections, 1993-94 to 2000-01 and 2000-01 to 2009-10, we find that the growth

rate for electricity slowed down in the second period while it increased for mining and quarrying. In the industrial sector, it stayed the same [1], [2].Based on use-based categorization, the growth rates of industrial output. The data show that, with the exception of intermediate goods, which saw growth rates of 6.3% in the post-reform period compared to 5.9% in the eighties, all other sectors saw higher growth rates. In the capital goods sector, growth rates declined to 10.7% in the post-reform period from a robust growth rate of 11.5% in the eighties.

Even in the consumer durables sector, the yearly average growth rate fell to 9.2% from an earlier peak of roughly 13.9 percent in the 1980s. The index of industrial output growth rates makes it clear that the industrial sector's performance between 1995–1996 and 2009–2010, which is often seen as a time of extensive changes, did not meet expectations. It failed to improve performance as a result of the reform process in the post-reform era, much alone match the performance shown in the 1980s. The effectiveness of the reform effort was seriously called into doubt by the collapse of the capital goods and basic goods sectors.

**Efficiency of Public Sector Organisations**

According to data on the performance of the infamous Central Public Enterprises, gross profit as a proportion of capital employed was 11.61% in 1993–1994; 15.88% in 1995–1996; and 21.50% in 2004–2005. Similar changes were seen in net profit, which increased from 2.84 percent in 1993–1994 to 12.1 percent in 2005–2006. Value added per capital unit, which measures the effectiveness of capital employed, increased from 0.26 in 1993–1994 to 0.44 in 2001–2002. During the 12-year era of reform, Central Public Sector Enterprises have undoubtedly performed better. The fundamental issue that has to be asked is: Is it desirable to start the process of disinvesting in these companies if the ground facts show that the Central Public Sector Enterprises are doing better? Would it not be preferable to implement change into public sector businesses so they may continue to perform better? The government has agreements in place with 102 PSEs by 2005–2006. 44 of them received exceptional ratings, 36 received very good ratings, and 14 received decent ratings when their performance was evaluated. If 94 out of 102 PSEs have improved, there is a rationale for innovative approaches to enhance PSE performance rather than demonising and hanging them.

**Economic Reforms and WPI and CPI Movement**

When we examine the relative movement of prices over an 11-year period and ignore the first two teething problems of the post-reform era, the following objective fact becomes apparent. As opposed to the capitalist classes, who benefit disproportionately from an increase in prices, the worker classes suffer when prices rise. In the pre-reform period, the annual average growth in WPI was of the kind of 6.9%, while in the post-reform period, it was of the scale of 6.21 percent, according to the movement of the wholesale price index. It is obvious that throughout the post-reform era, the situation regarding the growth of WPI improved.

But tracking the changes in the consumer price index would be a more accurate indicator of wellbeing. According to the statistics, the CPI for Industrial Workers showed an average yearly growth between 1993–1994 and 2010–2011 of 7.1%, which is larger than the increase in the WPI. In the post-reform era, the CPI for agricultural workers climbed yearly by 6.9%, which also suggests a substantially bigger growth than WPI. The analysis's conclusion is that the movement of the CPI was marginally greater than the movement of the WPI during the post-reform era.

This suggests that retail inflation was somewhat greater than wholesale inflation throughout the post-reform era [3], [4].

**Increasing Infrastructure Trend**

According to the research, growth rates for saleable steel and cement were greater in the post-reform era than they were in the pre-reform period. When it comes to steel, the growth rate of output climbed by 8.1% between 1993–1994 and 2010–2011, compared to only 4.9% during the pre–reform era. In a similar vein, the rise of cement output also showed a high increase, rising by 8.3% from 1993–1994 to 2010–2011, as opposed to only 4% during the pre–reform era. It should be noted, however, that the momentum gained in the post-reform period for an increase in cement production was a result of dual pricing being implemented in the case of cement in 1982, with a progressive decrease in the percentage of controlled cement leading to the eventual liberation of cement prices from state control. The production and capacity of cement were greatly increased as a result. Similar to that, the government agreed to a gradual loosening of steel price restriction in 1983. But since all of these actions were done before the reform, they contributed to create a situation in which these industries could increase their capacity and production without encountering any obstacles.

## DISCUSSION

The post-reform era was not good for other infrastructure industries, such as power, coal, and petroleum. In the case of electricity, the growth rate of generation fell from over 9.1 percent in the 1980s to barely 5.5 percent after the reform. Similar declines occurred in coal output, which went from 6.4% in the 1980s to barely 4.0% from 1993–1994 to 2010–2011. Petroleum had a decline in growth rate from 12.2% in the 1980s to barely 1.5% from 1993–1994 to 2010–2011. While the state withdrew from these industries and refrained from making infrastructure investments, both the Indian and international private sectors were unable to fill the void. Evidently, over-reliance on the private sector during the post-reform era did not provide the much-hailed and intended outcomes.

**India's Balance of Payments and Foreign Trade**

Although trade liberalisation policies were introduced in 1985–1986, their effects were only gradually felt from 1986–87 to 1990–1991; instead, after 1991, new economic reforms aimed to accelerate the globalisation of the Indian economy by reducing or eliminating trade barriers such as tariffs and quantitative restrictions. The major effects of reform initiatives were designed to increase exports as well as enable imports of raw materials or those that were necessary for boosting industrial output. Therefore, it would be acceptable to examine the foreign trade trend between the pre-reform eras, from 1980–81 to 1990–91, and the post–reform periods, from 1991–92 to 2004–2005.

The Reserve Bank of India just updated the information on India's balance of payments in US dollars. Therefore, using this most recent information, it would be fair to examine the state of international commerce. Two sub-periods of the decade have been identified. India saw 2.3 percent increase in exports over the first five years, but only 2.0 percent growth in imports. During this time, India had a tight import policy. As a result, average annual imports were at $ 16,404 million compared to average annual exports of $ 9,514 million. The average trade imbalance as a consequence was $6,890 million. Since net invisibles were positive, this head's

surplus typically totaled $3,474 million. As a result, the surplus from invisibles was able to offset the trade deficit by 50.4%. As a result, the current account balance of payments deficit may be limited to $3,416 million. Only 58% of imports during this time period were exported, making the situation very unsatisfactory [5], [6].

**Overseas Investment**

Data show that throughout the course of the 16-year period, foreign investments totaled US$136.5 billion, of which $72.09 billion came in the form of direct investment and $64.44 billion came in the form of portfolio investment. According to segmented data, direct investment flows remained muted from 1991–1992 to 1994–1995; during this time, portfolio investment held a larger share of the market. However, from 1995–96 to 2002–2003, direct investment flows picked up and held a sizable share of the market, and from 1997–98 and 1998–99, direct investment took over. Additionally, it should be remembered that portfolio investing is very unpredictable and volatile. The fact that portfolio investment fell to US $ 1.83 billion in 1997–1998 from $3.31 billion in 1996–1997 and became negative in 1998–1999 is evidence of this. The overall inflow dropped from US$ 6.13 billion in 1996–1997 to US$ 2.40 billion in 1998–1999 as a consequence of the abrupt decline in portfolio investment to a negative level.

This just serves to underscore the fact that, although foreign investment is welcomed, relying on inflows of foreign direct investment would be preferable. Portfolio investments have a volatile and unreliable character, as seen by their abrupt decrease from $3,026 million in 1999–2000 to a low of $979 million in 2002–2003, sudden surge to $11,377 million in 2003–2004, and subsequent decline to $ 9,315 million in 2004–2005. Again dramatically increasing to $ 12.492 million in 2005–2006, portfolio investment again decreased to $ 7,003 million in 2006–2007, accounting for only 24 percent of all foreign investment, and then surged to $ 27,271 million in 2007–2008. However, during the 2008–2009 recession, it went negative SI3.855 million. Foreign portfolio investment reached a record high of $70,139 million in 2009–10, while direct investment was likewise at an all-time high of $37,763 million. The estimated amount of foreign investment in 2010–11 was $5,84,95 million.

**Reduced Regional Inequalities**

Regional inequalities reduction is one of development's main goals. State initiatives to aid the underdeveloped areas have been designed with this goal in mind. In order to reduce regional imbalances, it was also incorporated in the devolution of funding, and bigger allocations were given for the underdeveloped states. The 1991 reform process placed a strong focus on using market forces, which draw investment to areas with better established infrastructure, both economically and financially. It gives the issue of regional imbalance no consideration.

Understanding how different states are affected by economic changes would thus be beneficial. In advance states, the Net State Domestic Product (NSDP) revealed an annual average growth rate of 5.6% between 1990–1991 and 2002–2003, according to an examination of the growth of the NSDP during the post–reform period. But the growth rate of the NSDP was just 1.7% compared to those in the underdeveloped states. The obvious truth that the reform process benefited the advancing states far more than the backward states and may be held accountable for escalating regional imbalances is only highlighted by this. It should be remembered that during a 12-year period, the per capita NSDP growth in Bihar was negative to the tune of 0.9% per year, while in Uttar Pradesh, it was only 0.4%. The average rise of NSDP per capita

throughout all of India was slowed down by these two states, which make up around 27% of the total population. The ratio of maximum to minimum per capita NSDP grew from 2.7 in 1990–1991 to 4.73 in 2004–2005, further demonstrating that the reform process extended state-by–state income inequalities. However, the performance of backward states began to improve from 2004–2005, and this ratio fell to 4.2 in 2008–2009 [7], [8].

More than two-thirds of investment proposals in the post-reform period were concentrated in the forward states, according to Dr. N. J. Kurian of the Planning Commission, who conducted a thorough study on the "Widening Regional Disparities in India". A similar situation prevailed in terms of financial assistance disrupted by All-India Financial Institutions as well as State Financial Corporations. Up till the end of March 1997, the All India Financial Institutions IDBI, IFCI, ICICI, UTI, LIC, GIC, IRBI, and SIDBI distributed 67.3% of the total financial aid to forward-looking states. Four states, namely Maharashtra, Gujarat, Tamil Nadu, and Andhra Pradesh, were able to appropriate almost 51% of the overall aid, even among the nine advanced states. Even in the case of State Financial Corporations, advanced states got 70% of the overall support. This research emphasises how the reform process has rewarded the forward-thinking governments in terms of the acceptance of investment proposals and financial support. As a result, the already prosperous nations may continue to expand faster than the less developed ones that get unfair treatment would see their development slow down. This explains the widening gaps in NSDP growth, both overall and per person. Later, it seems that the situation became worse.

**The development of social infrastructure and people**

Information on a few human development metrics, such as life expectancy, literacy rate, and infant mortality rate. Human development indicators are the process's byproducts if the overall goal of development is to raise people's quality of life. There are significant differences across states. Kerala and, to a lesser degree, Tamil Nadu have shown that greater levels of human development are feasible even with little economic progress. But generally speaking, greater levels of human development are linked to better NSDP per capita levels. It is essential that infrastructure investments in education and health be increased if greater levels of human development are to be attained. one of the developed countries. Bihar and Uttar Pradesh. The literacy rates in Madhya Pradesh and Rajasthan are very low, especially for women. Additionally, they failed to invest in the necessary infrastructure for a healthy population, which has led to shorter life expectancy, increased infant mortality, and higher birth rates. In order to fulfil the need of the upper middle class and wealthy sectors, the private sector, which is the leader of economic changes, may establish nursing homes or elite educational institutions with higher levels of charges or fees, but it makes no provisions for the welfare of the poor. Either the state should make more investments in the infrastructure for education and health, or the private sector should take on a higher social purpose.

It must be accepted that since the private sector is just interested in making a profit, the reform process will not be able to fulfil its socioeconomic goal. While the process of liberalisation has diminished the role of public sector investment, it has not been able to fill the void left by the cessation of public sector investment in infrastructure, particularly in the developing nations. This obviously necessitates reforming the reforming process. When discussing the need to use new technologies, such as information technology, to eradicate poverty in Hyderabad on March 24, 2000, President W. J. Clinton underlined that "millions of Indians are connected to the

internet, but millions more are not yet connected to fresh water." India is home to 25% of the world's undernourished people and 30% of the world's software developers. Mr. Clinton emphasised that while it was good that a lot of 25-year-old multi-millionaires were being created and the newest Indian start-ups were shooting up the Nasdaq, "this whole enterprise cannot just be about higher profits, there must also be a higher purpose." So our challenge is to turn the most recent discoveries into the best weapons humanity has ever had to fight poverty [9], [10]. The former president K R Narayanan made the most outspoken criticism of the reform process when he stated: "The fury of the patient and long-suffering people would be unleashed if the three-way fast lane of liberalisation, privatisation, and globalisation failed to provide'safe pedestrian crossings' for the unempowered in India." This indictment of the reform process only highlights the scant care the market for reform is showing. In the following lines, Mr. Narayanan has called attention to the sad paradoxes in our society, notably the significant geographical and class inequalities:

"We have the greatest middle class in the world, but we also have the largest number of people living in poverty, the highest number of malnourished children, and one of the largest pools of technical workers in the world. While justifying the paths of modern progress, such as factories, dams, and satellites, Mr. Narayanan warned against ecological and environmental destruction leading to the uprooting of human settlements, especially of the poor and the tribals. "One half of our society guzzles aerated beverages while the other has to make do with palmfuls of muddied water." As a result, he stated, "Ways and methods could be found for countering the detrimental impact of modern technology on the lives of the populace both by the government and civil society." Pointing to the regional and social inequalities accompanying the country's economic growth, Mr. Narayanan cautioned: "Many a social upheaval can be traced to the neglect of the lowest tier of society, whose discontent moves towards the path of violence." The most impacted groups by all of this are Dalits and Tribes.The task before us is to integrate the economics of growth with the economics of equality and social justice, according to Prime Minister Manmohan Singh.

## CONCLUSION

India has made progress, but there are still barriers to investment and corporate growth connected to bureaucratic red tape, infrastructural deficiencies, and regulatory impediments. To fully realise the promise of economic changes, other challenges including land acquisition, labour market reforms, and skill development must be addressed. Future views and goals for maintaining the pace of economic changes are suggested by the research. For luring investment and fostering job growth, it will be essential to improve the ease of doing business, expand the infrastructure, and solve issues with the labour market. A competent workforce will be provided, innovation will be encouraged, and sustainable growth will be fueled through investments in education, healthcare, and human capital development. This shows that since 1991, India's economic reforms have resulted in a number of beneficial developments, including better economic growth, more foreign investment, and a decrease in poverty. But issues like economic inequality, geographical differences, and structural impediments continue to exist. India can further unleash its growth potential, achieve equitable development, and create a favourable climate for sustainable economic prosperity in the years to come by resolving these issues and concentrating on important objectives.

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# CHAPTER 8

# A STUDY ON TRENDS AND STRUCTURE OF NATIONAL INCOME SINCE 1951

Mr. Yelahanka Lokesh, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: lokesh.yr@presidencyuniversity.in

**ABSTRACT:**

The National Income Committee states that "A national income estimate measures the volume of commodities and services turned out during a given period, counted without duplication." Consequently, a country's total national income gauges the movement of products and services within its economy. National Income is not a stock but a flow. National income assesses an economy's capacity to produce products and services during a certain time period in order to satisfy consumer demand, as opposed to national wealth, which measures the stock of goods possessed by a nation's citizens at a particular moment in time. During the British era, a number of national income estimates were created. Dadabhai Naoroji, William Digby, Findlay Shirras, Shah and Khambatta, V.K.R.V. Rao, and R.C. were notable estimators. Desai. The National Income Committee was established by the Indian government in August, not long after independence. 1949 in order to get reliable national income figures. Professor P.C. Mahalanobis was a member of the Committee. Professors V.K.R.V. Rao and D.R. Gadgil. In 1954, the National Income Committee's final report was published. Describe the trends and the composition of the national income. Analyze the growth and composition of the national income.

**KEYWORDS:**

Agriculture, Economy, Growth, Product, Trends.

## INTRODUCTION

Every sector in an economy makes use of natural, human, and material resources and adds to the overall flow of products and services during a certain time period. A year may be used to characterise each unique time period. National income is the term used to describe the revenue that a nation's citizens, including labour and capital investment, earn annually. Gross Domestic Product, Gross National Product, and Net National Income are only a few examples of the national income and production measurements that are used in economics to quantify overall economic activity in a nation or area. The total quantity of products and services generated inside some "boundary" is of particular significance to everyone. The border may limit the products and services that are counted and is often determined by location or citizenship. For instance, some metrics solely take into account items that are traded for cash and ignore bartered commodities, while others could make an effort to incorporate bartered items by assigning monetary values to them.

### Trends and National Income Structure

The National Income Committee states that "a national income estimate measures the volume of commodities and services turned out during a given period, counted without duplication." Thus,

the flow of commodities and services in an economy is measured by the total national revenue. National Income is not a stock but a flow. National income assesses an economy's capacity to produce products and services during a certain time period in order to satisfy consumer demand, as opposed to national wealth, which measures the stock of goods possessed by a nation's citizens at a particular moment in time [1].

**Prior to Independence Estimates**

During the British era, a number of national income estimates were created. The estimators who stood out were: Dadabhai Naoroji, Shah and Khambatta, Findlay Shirras, Wadia, and Joshi calculated the value of the agricultural sector's production before to independence, and they subsequently included a certain proportion as the non-agricultural sector's revenue. Most of these estimators used arbitrary assumptions that had no support in science. Dr. V.K.R.V. Rao combined approaches from the census of production and census of income. He separated the Indian economy into two groups. Agriculture, pastures, mining, forestry, fishing, and hunting all fell under the first group. The product created from these sectors was to be evaluated using the output technique. Industry, commerce, transportation, public administration and services, professions, liberal arts, and domestic service were all included in the second group. The census of income approach was used to these jobs. The revenue from real estate and other things not included in the aforementioned categories was added to these two subtotals. The values of the commodities and services used in the manufacturing process were not included in the gross aggregate revenue thus derived. An estimate of the national income was calculated by adding the net income earned overseas. Since the majority of these estimates were the product of individual efforts, they were severely constrained. The dependability of the estimations was compromised by the authors' arbitrary assumptions. Additionally, these projections were based on very suspect agriculture sector figures.

**Estimates for the Post-Independence Period**

The National Income Committee was established by the Indian government in August 1949, shortly after independence, to provide reliable estimates of national income. Professor P.C. Mahalanobis was a member of the Committee. Professors V.K.R.V. Rao and D.R. Gadgil. In 1954, the National Income Committee's final report was published. The study marked a turning point in this nation's history since it offered detailed information on national income for the whole of India for the first time. The following were the main elements of the National Income Committee report:

1. In 1950–1951, about half of the nation's revenue came from agriculture, which also comprised animal husbandry, forestry, and fisheries.
2. About one-sixth of the total revenue was supplied by the manual trades, manufacturing, and mining.
3. A little more than one-sixth of the entire national revenue was made up of the sectors of commerce, transportation, and communications.
4. About 15% of the country's revenue was made up of other services such professions and liberal arts, administrative services, domestic services, and real estate.
5. About two-thirds of the nation's GDP went towards the production of commodities. The phrase "commodity production" refers to the production of raw materials from industries including agriculture, mining, manufacturing, and manual labour.

6. About one-third of total national revenue was made up of services. Commerce, transportation and communications, administrative services, liberal arts, domestic services, etc. are all included in the services sector.
7. In 1950–51, the government sector's share of the national income was 7.6%. Along with it, the government's portion of total national spending was 8.2%.
8. The estimated margin of error for the national income figures came to roughly 10% [2], [3].

**Estimates from the National Income Committee and the CSO**

We have five national income estimate series for the time after independence.

**Conventional Series:** For the years 1948-1949 through 1964-1965, this series offered national income statistics at both current prices and prices from 1948-1949. The economy was split into 13 categories according to the traditional series. The output method is used to calculate income from six sectors, including agriculture, animal husbandry, forestry, fishery, mining, and factory establishments. The census of income method is used to calculate income from the remaining seven sectors, including small businesses, organised banking and insurance, commerce and transport, professions, liberal arts and domestic service, public authorities, residential property, and the rest of the world.

**Net production Method:** In agriculture, the yield per hectare is multiplied by the area seeded to assess the production of each crop. Crop cutting tests were carried out to determine the average yield. To determine the net value of the agricultural product, the cost of seed, manures, and fertilisers, market fees, repairs, and depreciation are subtracted from the gross value of production produced in this manner. Estimates of production are multiplied by market prices for enterprises engaged in animal husbandry, forestry, fisheries, mining, and manufacturing to determine the gross value of the output. To determine the net value added for each sector, the gross value of output is subtracted from the costs of the raw materials used in manufacturing and other expenses [4], [5].

## DISCUSSION

**Net Income Method:** An estimate of the total number of employees engaged in the various professions categorised as small firms is created in order to determine the contribution of small businesses. The average wages per head are calculated using sample surveys. Estimating the contribution of small businesses involves multiplying the overall number of people employed by the average annual income per person. A 20% adjustment to the money profits is applied to account for factor payments other than wages and salaries. The necessary information for banking and insurance is provided by the firm's balance sheets. To calculate the sector's net contribution, wages, salaries, directors' fees, and dividends are all put together. The process is the same for small businesses as it is for trade and transportation as well as for professions, liberal arts, and domestic services. Wages, salaries, pensions, other benefits, profits, surplus, etc. are totalled together for the public sector to determine its contribution. The overall contribution from the public sector is obtained by adding this to the contribution from government construction.

**National Income Series, priced for 1960–1961:** For the years 1960–61 through 1975–76, this series included national income statistics at both current prices and prices from 1960–61. A new series was launched using 1970–71 as the foundation year rather than 1960–61. Even when

deflated at constant prices at 1948–1949, 1960–1961, or 1970–1971 prices, estimates based on various base years show disparities in magnitudes. This is brought on by the variations in weights applied to the series. In place of the series with 1970–1971 as the basis year, the Central Statistical Organisation published another dataset on national income with 1980–1981 as the base year.

**CSO Revised National Income Series with Base Year 1999–2000**

The current series of national accounts, which uses 1993–1994 as the basis year, has been updated by the Central Statistical Organisation with a new series using 1999–2000 as the base year. In addition to changing the base year, the New Series includes coverage enhancements and, to the degree practical, adopts the recommendations of the United Nations System of National Accounts, 1993.

**The following are the coverage-related improvements:** Included are the processes for making betel leaf, toddy, goat, buffalo, and camel milk, duck eggs, and meat from unreported slaughtering in addition to the manufacturing of salt by sea water evaporation.The estimates of the output of the construction industry include expenditures spent on a few tree crops during the gestation period and the installation of wind energy installations.In accordance with the suggestions of the 1993 UNSNA, a new category of "valuables" has been added to the gross capital creation.The list includes economic operations relating to various forms of communication, the rental of machinery and other equipment without an operator, computer-related activities in the unorganised sector, coaching centres, social work with housing, and leisure and cultural activities [6], [7].

**Trends in the Growth and Structure of National Income**

A study of national income patterns is required to comprehend the effects of planning in India. Therefore, it would be preferable to study the trend in national income and changes in the composition of the national product during the last 57 years of planning. Income per capita and the net national product's trends. National and per-capita income statistics are gathered using today's exchange rates. The increase in national income at current prices reflects the combined influence of two factors, namely the increase in the production of really goods and services and the rise in prices, but figures of national income at current prices do not accurately depict the growth of the economy.

If the first element is the origin of the rise in national income, this suggests that more people now have access to goods and services, which is a sign of genuine growth. If the second element is to blame, it indicates an erroneous inflation of the national income in terms of money. Therefore, to remove the impact of any change in price level throughout the time, national income numbers are deflated at constant prices. Therefore, national income numbers adjusted for inflation become similar, but they do not account for the population impact. Per capita national product or per capita income is computed to take population growth into account. The growth of per capita income at constant prices is a measure of the change in people's standard of living, whereas the growth of net national product at constant prices is a measure of the community's overall productive effort and shows the rate of growth of goods and services in the economy. From 1950–1951 until 2007–2008, CSO has given a set of national income statistics at 1999–00. Despite the fact that this shows somewhat varied growth rates for various time periods, this was unavoidable due to coverage and a change in technique [6], [8].

**Rates of Annual Growth for the Plans**

The yearly average growth rate of NNP was 4.4% during the First Plan, but it fell to 3.8% during the Second Plan. However, under the Third Plan, the yearly average rise in national income fell to 2.6%, which was barely enough to counteract the population expansion. This is shown by the fact that throughout the Third Plan, there was a 0.4 rate of increase in per capita income. This was partly due to a severe drought in 1965–1966, which caused the growth rate to slow down. A second year of drought and a business slowdown followed this. Following 1967–1968, the economy began to rebound and the growth rate began to show indications of recovery. Real per capita income increased by only 0.8% annually throughout the Fourth Plan period, while the average annual rate of national income growth fell to 3.1%. The primary reasons for a reduced growth rate under the Fourth Plan were the high price increases in 1972–1973 and 1973–1974 and the production deficits due to decreased capacity utilisation.

The average annual rise in national income throughout the Fifth Plan was about 4.9%, whereas the average yearly increase in per capita income was just 2.6%. Overall, the Fifth Plan's economic performance may be regarded as extremely acceptable. India's NNP increased on average by 5.5% year throughout the Seventh Plan, while per capita NNP increased by 3.3% annually. It is clear that the Seventh Plan met both of its growth goal percentages of 3% for per capita NNP and 5% for NNP overall. This was a positive turn of events.

**Trends in the National Income Distribution by Industrial Origin**

The broad trends in the shifting makeup of domestic output are as follows:

From 55.4 percent of GDP in 1950–51 to 38 percent in 1980–81, and then further to 14.3 percent in 2010–11, the primary sector's contribution has decreased. The primary sector comprises agriculture, forestry, and fisheries. A sharp reduction in the proportion of agriculture alone is the primary reason for the downturn. The percentage of forestry has likewise decreased from over 6% in 1950–1951 to almost 0.7% in 2010–2011. Throughout the time period, the proportion of the fishery remained more or less steady at roughly 1%. The percentage of industry, which includes mining, manufacturing, power, gas, and water supply, as well as building, has increased steadily from 15% in 1950–1951 to 24% in 1980–1981 and 27.9% in 2010–2011. Manufacturing and building are two of industry's key facets. Manufacturing's percentage climbed from 8.9% in 1950–51 to 15.8% in 2010–11. Similar improvements were made in the proportion of building, which increased from 4.4% in 1950–1951 to 7.9% in 2010–2011. Trade, Transport, Storage, and Communication, Finance, Insurance, Real Estate, and Business Services, and Community, Social, and Personal Services make up the service sector's portion. The percentage of the service industry showed a significant increase, rising from 29.6% in 1950–1951 to around 57.8% in 2010–2011. From just 11.3 percent in 1950–51 to 27.0 percent in 2010–11, commerce, transport, and communications' share increased significantly. The main cause of this growth has been the development of communications and road transport during the last ten years of the mobile revolution.

**Gross Domestic Product as A Percentage of Industry of Origin**

The structural shift in the composition of the national product is also supported by the theory of economic growth. According to the distribution of the gross domestic product of industrialised nations, industry and services account for a much bigger percentage than agriculture. The

difference in the structure of their economies is primarily reflected in the difference in per capita earnings between developed and developing nations.

The proportion of industry and services increases as industrialization expands. The shift of the Indian economy from an agrarian to an industrialised one is now underway. A structural shift in the distribution of national income is a necessary part of this process. Even yet, the structural transformation is only progressing slowly. The poor rate of expansion of industrial production is the primary cause of the slow pace of structural change in domestic output.

India saw an increase in the proportion of the tertiary sector throughout the development phase, as was to be anticipated. The Indian economy has abruptly advanced to the stage of a post-industrial "service" economy without fully finishing the industrialization era. This only serves to highlight the need of bolstering the manufacturing sector by speeding up the industrialization process. By accelerating the industrialization project, it is necessary to further enhance the nation's shifting income structure. This does not suggest that agriculture is being neglected, but industrialization of the economy with a focus on agro-based sectors and companies that offer inputs to agriculture is a must in order to speed up the development process in that sector. The transformation of the Indian economy from a developing to a developed economy won't be complete until then [7], [9].

**Trends in the Public Sector's Share**

The public sector's contribution to the GDP was 14.9% in 1970–1971; it increased to 25.9% in 1993–1994; and then fell to 20.8% in 2008–2009. The progressive growth in the public sector's share is a direct outcome of the State's economic operations over the first four decades of development, which included both an expansion of administrative services and an increase in the productive activities of public businesses. Following that, economic reforms launched in 1991 emphasised the need of limiting the operating area of state firms. It placed emphasis on getting rid of businesses that were losing money and getting out of industries like hotels, consumer products, and other ones that had little societal benefit. The establishment of new industries, the growth of already existing businesses, the nationalisation of businesses like banks, insurance companies, and coal mining companies, as well as the merger of private electricity companies into electricity boards, are all factors that have increased the share of non-departmental enterprises.

**Organised and Unorganised Sector Share in NOP**

The CSO defines organised enterprises as any businesses that are registered, are under the jurisdiction of one or more Acts, and/or have yearly accounts and balance sheets. All unincorporated businesses and domestic industries other than organised ones that are governed by any Act and do not keep yearly accounts and balance sheets are classified as unorganised enterprises.

It is clear from that the organised sector's share increased from 30% in 1980–1981 to 42.9% in 2007–2008. As a result, over the same time period, the unorganised sector's share decreased from 70% to 57.1%. Additionally, it should be emphasised that the organised sector's contribution increased from 56.8% to 70.2% in the mining, manufacturing, and other sectors, and from roughly 40% in 1980–81 to 46% in 2007–08. On the other hand, the unorganised sector's share to agriculture, forestry, and fisheries somewhat decreased from 95.2% in 1980–81 to 91.2% in

2007–08. The development process has led to the NDP's composition changing from the unorganised to the organised sector.

**Indian National Income Estimation Limitations**

In order to determine national income, millions of economic variables must be added up since "national income is nothing more than a simple linear aggregation of income accruing to the factors of production supplied by the normal residents of the country in question." For this reason, it is important to keep in mind certain fundamental social assessments and standards based on a society's mores and customs. Aside from that, services were split into material and non-material services in the literature on the System of Material Production utilised by the former centrally planned economies. Transport, communication, and trade, including wholesale and retail enterprises like restaurants, were considered material or productive services. In contrast to the System of Material Production (SMP) used in former socialist nations like Hungary and Soviet Russia, which excluded virtually all other personal and most public services, the System of National Accounts (SNA) does not make this distinction and all services are considered to be rendering production activities. Regarding the inclusion of administrative services provided by the government, there is comparable debate. Which portion of the government's general administration is service to business firms, contributes to the value of its product, and should therefore not be counted, and which portion is service to the people as individuals and consumers, and should therefore be counted? is a challenging question for an estimator to answer. ..In the same way, while determining what constitutes net product and what constitutes consumption throughout the production process, the estimator essentially adopts the social consensus, which defines net product as "what is available either for individual, personal, or collective consumption, or for additions to capital stock [10], [11]."

In addition to these conceptual issues, there are a few national income calculation restrictions that are particularly pertinent to India. The assumption that is often made when estimating national output is that the majority of the goods and services produced are traded for money. In India, where agriculture is practised mostly for subsistence, a significant percentage of the product is either eaten by the farmers directly or is exchanged with other producers for other commodities and services. Ignoring this component of the agricultural production would significantly lower the country's output. There is currently no mechanism that can be used to objectively determine the entire yield of food crops and the quantity eaten domestically. Finding the imputed value of the non-monetised sector's output and adding it to the value of the monetised sector in India is thus a challenge.

Lack of information on the earnings of small producers or home businesses is another drawback in India. A very big proportion of producers operate domestic companies on a very modest scale. The majority of these small producers and business owners are so uneducated that they either have no concept how to keep accounting or do not see the need to do so. In response, the National Income Committee said that "an element of guess-work, there-fore, invariably enters into the assessment of output, especially in the large sectors of the economy which are dominated by the small producer or the household enterprise."

**Lack of information on income distribution:** The National Accounts Statistics do not provide any information on how much money families or individuals make. The National Sample Survey Organisation used data on consumer spending that was gathered through a pilot survey on the distribution of income, consumption, and savings during 1983–84 in 5 selected states and 4

metropolitan cities for this purpose rather than asking questions about household income or related variables. Despite criticism of these surveys' limited sample sizes, it was discovered that family incomes based on direct inquiries were 30–40% lower than those determined indirectly by adding consumption and saving. The NSSO has recommended full-scale pilot surveys on family income, saving, and consumption after admitting that the experience was unsatisfactory. In order to fully examine the spread impacts of the economic process on low income families, data on income distribution must be compiled.

**Unreported Unlawful Income:**Research on India's black economy has shown that a significant portion of the country's economy functions as a hidden or underground economy, and the revenue produced there is unreported income. In 2000–01, the underground economy produced nearly 40% of all revenue, according to a research by Dr. Arun Kumar. It is obvious that estimates of national income to that degree are understatements. It is also true that the black economy has grown in scale over time, and as a result, the amount of inaccuracy resulting from this component alone has been expanding.

The old series of national accounts with 1993–1994 as the basis year has been replaced by a new series with 1999–2000 as the base year by the Central Statistical Organisation. In addition to changing the base year, the New Series includes coverage enhancements and, to the degree practical, adopts the recommendations of the United Nations System of National Accounts, 1993. Trends in national income must be examined in order to comprehend the influence of planning in India. Therefore, it would be appropriate to study the trend in national income and changes in the composition of the national product during the last 57 years of planning. National and per capita income data are gathered using current exchange rates. The increase in national income at current prices reflects the combined influence of two factors, namely the increase in the production of real goods and services and the rise in prices, but figures of national income at current prices do not accurately depict the growth of the economy.

During the 1980s, there was a noticeable improvement in the growth rate. The per capita NNP increased on average by 3.0 percent each year between 1980–1981 and 1990–1991 while the net national product grew at a pace of 5.2% per year. The process of economic growth entails a fast expansion of government, particularly a swift expansion of economic and social services including family assistance, health care, and education. Community and personal services as a whole saw an increase in their proportion from 10.6% in 1950–51 to 13.4% in 2010–11. The structural shift in the composition of the national product is also supported by the theory of economic growth. According to the distribution of the gross domestic product of industrialised nations, industry and services account for a much bigger percentage than agriculture. The difference in the structure of their economies is primarily reflected in the difference in per capita earnings between developed and developing nations. The net domestic product is broken down separately for the rural and urban sectors in National Accounts Statistics. According to the statistics, although in 1970–1971 the rural sector supplied 62.4% of the total NDP, by 1993–1994 its proportion had fallen to 54.3%.

## CONCLUSION

In order to determine national income, millions of economic variables must be added up since "national income is nothing more than a simple linear aggregation of income accruing to the factors of production supplied by the normal residents of the country in question." Due to the lack of some essential datasets at the state level, the National Statistical Commission, a former

governor of the Reserve Bank of India, has highlighted significant gaps in the Indian Statistical System. Indicators of Industrial Production, Wholesale Price Index, Consumer Price Index, and Cost of Cultivation Studies for the majority of Crops are a few of these. The Commission took notice of the fact that Rajasthan and Karnataka recently established expert groups to develop state domestic product and enhance the gathering of these estimates. Similar efforts should be made in other states as well.

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# CHAPTER 9

# A STUDY ON INDUSTRIAL SECTOR IN POST-REFORM PERIOD

Dr. Mounica Vallabhaneni, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: mounicav@presidencyuniversity.in

**ABSTRACT:**

After economic liberalisation was started in 1991, India's industrial sector saw substantial changes in the post-reform period. This abstract offers a summary and analysis of the industrial sector's performance throughout this time period, stressing its expansion, difficulties it encountered, and potential for the future. Technological breakthroughs, greater competition, and integration with international markets were all outcomes of economic liberalisation and trade reforms. The industry saw a diversification of industries, with a noticeable increase in businesses including information technology, pharmaceuticals, automotive, textiles, and services. The establishment of an internationally competitive manufacturing base was made possible by this diversification, which also increased industrial production and enhanced productivity. Although the post-reform era has seen a lot of progress, some obstacles have prevented the industry from reaching its full potential. Industrial expansion has been hampered by limited infrastructure, poor access to financing, difficult regulatory processes, and a lack of skilled labour. The industry has also had to deal with issues related to resource depletion and pollution that are related to environmental sustainability. To maintain industrial development and ensure long-term sustainability, it is essential to address these issues. Additionally, the report examines the industrial sector's potential in the future. To achieve the potential of the industry, further reforms must be implemented, including programmes to make doing business easier, build infrastructure, and improve workers' skills. Increased productivity and increased global competitiveness may be achieved through embracing technology, innovation, and R&D. Boosting local manufacturing via programmes like "Make in India" may create jobs, increase industrial development, and lessen reliance on imports.

**KEYWORDS:**

Economic, Growth, Industry, Policy, Public.

## INTRODUCTION

Some of the significant policy alterations made by the 1991 Industrial Policy reforms were the liberalisation of industrial licencing, opening up industry to foreign investment, amending the Monopolies and Restrictive Trade Practises Act, and limiting the role of the public sector. In August 1991, a new set of policy initiatives were unveiled for the development and bolstering of small-scale industries. Empirical research have shown that the early 1990s investment boom resulted in a sharp rise in profits and demand; this impact was likely aided by advancements in technology and efficiency. In terms of manufacturing sector productivity, empirical data shows a decline in labour productivity and capital intensity in the years after the reform. The performance of the SSI sector in India demonstrates that the industry is up against a significant struggle to maintain and expand during the era of globalisation. It is clear that the SSI's development and contribution have not been particularly noteworthy in the years following the reform. However,

the Indian SSI industry now has access to new markets and prospects because to changes in national and international legislation. In light of the modifications to the industrial policy established in 1991, the performance of the industrial sector in the post-reform era may be analysed. An examination of structural changes in industrial production and the effects of liberalisation on the profitability and productivity of the manufacturing sector are also included in the study. Given its significant role in the Indian economy and high potential, the small-scale industry will get particular attention [1], [2].

**Post-Reform Industrial Sector**

By the late 1970s and early 1980s, it was evident that the government's extensive regulation and supervision of private economic activity had stifled economic efficiency and development. As a result, systematic deregulation began in the middle of the 1980s. The success of the industrial sector was significantly impacted by tax reform, particularly the transformation of multi-point excise charges into a modified value added tax by 1990. It accomplished this by lessening input taxes and the resulting distortion. In addition, the 1991 New Industrial Policy statement brought changes to laws controlling monopolies, foreign investment, small-scale businesses, and the function of public sector organisations. The reform of industrial licencing and openness of industry to foreign investment was a significant component of the NIP declaration of 1991. In addition to this, the Monopolies and Restrictive Trade Practises Act was modified throughout the 1990s reform process. As a result, huge enterprises no longer needed previous government clearance for new investment, capacity growth, or mergers.

At the same time, only infrastructure services fell within the purview of Public Sector Units. The introduction of full privatisation in the late 1990s resulted in a sluggish progression and the first significant successful privatisation in 2001. In August 1991, a unique set of policy measures for the development and enhancement of small-scale industries were adopted as a consequence of the aforementioned reforms. We believe that the government's commitment to the value of this sector in achieving its goals for economic development was amply reaffirmed by this new policy declaration. In this strategy, the government sought to provide the industry greater vigour and growth impulse so that it could fully contribute to the economy in terms of growth in production, employment, and exports. The approach resulted in a significant delicensing of the industry and raised investment caps for equipment and plant. In general, the government's supervision over private investment created impediments for businesses functioning in the Indian market prior to the reform period. Through licencing laws, reserving output for the public sector, and protracted, confusing processes for sanctioning foreign direct investment, it was accomplished. Additionally, there was a 40% equity share cap on these investments.

**India's Small-Scale Industries**

There is no one functional economic criteria that can be used to define small-scale industries. The SSIs in many nations have been determined by particular conditions. The SSI is a relative notion that must be understood in the context of the nation in question's political and social surroundings, as well as the degree of economic growth achieved. SSIs in India did not get the same level of prominence during British administration as they do now. It seems that the majority of nations identify small-scale industries or businesses according to their employment rates. SSIs are often considered to be those organisations that employ more than 5 but less than 50 or 100 people. Investment caps are also utilised in India to categorise SSIs. In 1950, this cap was established at Rs. 0.5 million for fixed assets that employed less than 50/100 people, either

with or without electricity. Later, starting in 1960, there are no constraints pertaining to work; nonetheless, the investment limit has been increased in order to keep up with inflation and maintain the actual worth of investment limits. The investment cap was set at Rs. 10 million in 1999.

## DISCUSSION

Small-scale industry has been a key component of India's economic growth strategy ever since the country attained independence. Small-scale industry reservations, tax breaks through reduced excise taxes, preferential bank credit allocation and subsidisation, the extension of business services by the government, and preferential government procurement have been the main components of India's policy to support small-scale industries. As a result, efforts have been made to safeguard small-scale industries from the rivalry of major corporations by both reservations and financial concessions. According to SSIs, the justification for SSI protection is that capital market distortions are much more significant than labour market distortions. Additionally, small businesses may have more difficult regulatory obstacles in the land market to get proper access to land. Similar to how the SSIs efficiently utilise capital and take advantage of the plentiful labour supply that characterises an underdeveloped economy. Recently, the question of whether SSI protection is still necessary has come up. The number of tiny units has increased significantly over time. As a result, the government's technical support system for SSIs has become both outdated and insufficient. Additionally, the reservation strategy has lost its value as the economy has opened up. Additionally, the tax breaks may potentially be working to prevent the development of huge units. Thus, India has to develop a new strategy for assisting small-scale enterprises [3], [4].

Globalisation and the Performance of Small Industry Units in India: SSI is essential for India due to its large contribution to production, exports, and employment. At the end of March 2002, there were 3.4 million small industrial units, which contributed to more than 40% of the manufacturing sector's gross value of production, nearly 35% of all exports, and over 19.2 million jobs. The only other industry with more employment than this is agriculture. The economic environment has seen a significant transition as a result of the combined effects of globalisation, liberalisation, and recent events. Today's SSIs operate in a market where they have little choice but to compete or die. There are two techniques to assess how well a small industry is growing:

1. To compare the 1990s and 1980s in terms of the relative contribution of small industries to GDP, exports, and organised sector employment.
2. Comparison of the 1990s and 1980s small industry growth rates for units, employment, production, and exports.

We note that the expansion of small industry throughout the 1990s transitional era has slowed down in terms of units, employment, and production as well. Growing rivalry during the globalisation era may have had a negative impact on Indian SSI development. It should be emphasised that, with the exception of exports, the situation during the two times seldom changes. While it is true that employment and unit growth rates have continuously declined, export growth rates, which are more crucial, have varied.

It can be observed that during the 1980s protection period, small industry's revenue share rose, but during the 1990s transition period, it significantly decreased. In conclusion, the performance of the SSI sector in India does suggest that the industry is up against a significant struggle to

maintain and expand throughout the era of globalisation. However, the SSI sector in India now has access to new markets and prospects because to developments in national and international policies. To capitalise on the potential, the government and small business must make an effort to embrace technological dynamism.

**Structural Change in Industrial Growth Under Planning Review**

A notable aspect of India's economic growth during the last 50 years, starting in 1951, has been the country's journey towards industrialization. The Industrial Policy Resolution of 1956, which officially began the industrialization process, and its active implementation via the five-year plans required significant financial expenditures in increasing capacity across a variety of sectors. India is now the tenth most industrialised nation in the world as a consequence of the approximately 50-year increase in industrial output of about five times. The industrial structure has a wide spectrum of consumer, intermediate, and capital items represented in it. India's progress in industrialization is evident in the commodity composition of its foreign trade, where the share of manufactured goods imports has steadily decreased and industrial products, particularly engineering goods, have grown to make up an increasing portion of India's exports. Last but not least, the fast industrialization has been accompanied by an equal increase in management and technical capabilities for the effective operation of the most complex businesses as well as for planning, developing, and building such companies.

**Since Independence, the Industrial Revolution**

The diversification of India's capabilities has been a significant accomplishment in the industrial sector. This shows that the industrial production of certain commodities is increasing. The numbers clearly demonstrate the country's output of several significant items has increased dramatically. In practically all areas of consumer products, India has achieved self-sufficiency. Production of capital goods has grown at a very rapid rate. The mining and metals industries, chemical and petrochemical industries, production, capital goods industries, including advanced equipment for steel mills, fertiliser plants, chemicals, etc., light, medium and heavy engineering industries, transportation industry and construction industries, have all achieved an impressive industrial capacity. Furthermore, with just a little amount of imports, India can now support its future economic development sectors. Finally, the infrastructure, comprising its R&D capabilities, consulting and engineering services, and project management services, has shown a remarkable track record of advancement [5], [6].

**Industrial Growth Rate**

However, there hasn't been any industrial development since 1951. Following a 14-year period of early growth of roughly 8 percent, there has been a shifting tendency since then near stagnancy in 1968, 9.5% in 1976–1977, and a high level of percent in 1979–1980. The growth rate of industrial production was estimated to be 5.5% in the 1960s and to be roughly 4% per year on average in the 1970s. Even in 1980–1981 there was a 5.5 percent annual rise in industrial output. The fundamental truth was that the pace of industrial development had been slowing. Growth rate had increased to an average of over 8 per year during the 7th Plan, and had decreased to 0 per year during the 8th Plan. Industry growth declined to 4.6% per year under the Ninth Plan, but it significantly increased to 8.2% per year during the 10th Plan. This progression is positive.

**Increasing Infrastructure**

The remarkable, albeit still insufficient, expansion of the nation's infrastructural facilities has been accompanied by a more than threefold increase in coal use, India's primary fuel source, and notable success in the exploration of oil and gas both on and offshore. These developments have been marked by the rapid pace of industrial growth and the development of productive capacity. The Sixth Plan did a great job of summarising infrastructure accomplishments. India has entered the petrochemical era thanks to the development of an effective complex of refineries, pipelines, storage, and distribution. To support this sub-continental economy, a sizable infrastructure has been constructed, including a network of irrigation, storage works, and canals; hydro and thermal power generation; regional power grids; a largely electrified and dieselized railway system; national and state highways; and a telecommunications system that covers most urban centres and connects India with the rest of the world. Agriculture and contemporary industrial development have fueled the rise of banking, insurance, and trade, necessitating corresponding growth and modernization of ports, shipping, and internal and external air services. However, as has been mentioned throughout, the richer segments of the population, both in urban and rural regions, have been the main beneficiaries of all these services.

**Research and Development**

Science and technology have seen significant advancements. India now holds the third-place spot in terms of technical talent and labour force. The creation of nuclear power, the agricultural business, and space technology for communications and development are just a few of the fields where scientists and technicians are working at the cutting edge of knowledge today. We just need a chosen import of technology for future industrial and scientific progress together with expanding proficiency in adaptive research development. More than a lakh and a half degree and diploma holders have graduated from technical institutions, demonstrating that the nation has been successful in training a cadre of technology manpower that can handle cement factories, chemicals fertiliser units, oil refineries, power houses, steel locomotive factories, engineering industries, etc. Similar to this, teaching bright young people in top talents and deploying them to plants has helped to produce skilled many and lessen reliance on foreign technical specialists. Rural, small-scale, and cottage businesses haven't, however, had the assistance for research and development they needed.

**Inadequacies of the Industrialization Programme**

It should be noted that most of the industry development is merely visible and not actual, without undervaluing the successes process of industrial expansion began during the plan period. Our justifications are as follows:

First, in 1948–1949, the national industrial revenue share was 17%. In terms of its contribution to national product, it was approximately in 1996–1997, and the manufacturing industry sector has continued to contribute at a low level an rise of just 4% in 50 years. This proportion ranges between 30% in the industrialised countries.

Second, the industrialization process has been able to reduce the unemployment issue. Professor Gunnar Mydral researched the spread impact of industrialization on employment as well as its reverse repercussions in terms of unemployment on the traditional, despite the fact that the high capital intensity of the public sector only produced a relatively tiny amount of employment,

because employment absorbed only 2% of the workforce. After carefully analysing the circumstances, My made the following conclusion: "Until the area is considerably more industrial, the employment benefits of industrialise cannot be projected to be particularly big for many decades ahead. The net employment consequences may even be adverse for a while. In the worldview that views industrialization as the panacea for "unemployment" and "under-employment," this aspect of the issue is neglected as the larger ramifications for labour utilisation beyond the modern sector [7], [8].

**Industry Ownership Structure**

Data regarding the ownership structure of industries have been divided into three categories by the Annual Survey of Industries. Industrial facilities that are held by sole proprietorships, joint families, and partnerships are included in the non-corporate sector. Second, the corporate sector is further separated into two sectors: public and private limited firms are included in the private corporate sector, while public corporations and government departmental enterprises are included in the public corporate sector. The third group, "others," includes the khadi and rural industries. Co-operative societies that operate handloom and industrial facilities, such as sugar mills in Maharashtra, are two examples.

The non-corporate sector, which is largely comprised of small businesses and is referred to as the unorganised sector, accounts for 63% of all units by number, but only uses 7.3% of productive capital and generates 8.2% of value added, while employing approximately 31% of all industrial workers. The corporate sector employed around 66% of the industrial workforce and accounted for 91.3% of the productive capital and 90.4% of value added. The private sector employed around 62% of the industrial workforce and accounted for 83.2% of the productive capital and 78.4% of the value created within the corporate sector. Along with this, the public sector contributed 8% of the productive capital with 12% of the value generated and employed just 3.3% of the 8.45 million industrial workers in total.

Others were a small group, contributing little in the way of labour, value created, or productive capital. The growth of the public sector in the he and basic industries, the machine goods sector, engineers industries, etc., which provided the industrial base of the economy and thus created the basic infrastructure of the economy to enable the private sector to flourish later, is noteworthy of the changing industrial pattern in the planning era. In this sense, the role of the public sector as the economic engine is clear. It's interesting to note that the earnings per worker got between 2004 and 2005 were lowest in the non-corporate sector, at $27603. Because the State set the salaries, regardless of what was earned, they were greater in "others" such as Village Industries, Handlooms, etc. as "50, 385." The greatest average annual pay per worker were found in the corporate or organised sector, at 62,809. The pull sector's earnings in the Corporate sector were the highest at '70,720, while the private sector's were the next highest at '58,966. The public sector sets the pace for raising salaries, thus it offers to set the example for the private sector to follow.

## CONCLUSION

It is essential to strike a balance between environmental concerns and economic development if we want to reduce negative environmental effects. The fair distribution of the advantages of industrialization will be facilitated by ensuring inclusive growth via the reduction of income gaps, support for labour rights, and encouragement of the expansion of small and medium-sized

businesses. To sum up, the industrial sector has grown significantly, become more diverse, and become more competitive in the years following the reform. But in order to achieve continuous development, issues including legislative difficulties, infrastructural deficits, and environmental sustainability must be resolved. India can further enhance its industrial sector, support economic growth, and establish a sustainable and internationally competitive industrial base by enacting reforms, investing in infrastructure, encouraging innovation, and assuring inclusion.

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# CHAPTER 10

# A BRIEF DISCUSSION ONPROBLEMS IN THE PUBLIC SECTOR

Mr. Yelahanka Lokesh, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: lokesh.yr@presidencyuniversity.in

**ABSTRACT:**

Government, service delivery, and social advancement all heavily rely on the public sector. Its efficacy and efficiency are, however, constrained by a number of issues. In this abstract, the major issues facing the public sector are outlined, examined, and their sources and effects on public policy and administration are explored. This identifies numerous issues that are prevalent in the public sector. The delivery of services is often slowed down and decision-making is hampered by bureaucratic red tape, numerous restrictions, and complicated processes. Public monies may not be used to their full potential due to ineffective resource allocation, fiscal restrictions, and poor financial management. Government institutions lose the public's faith and confidence when there is a lack of openness, accountability, and integrity. The operation of the public sector is also severely hampered by political meddling, favouritism, and corruption. These issues are a result of several factors. Organisational performance may be hampered by stiff organisational structures that are decades old, poor methods for managing human resources, and insufficient capacity-building initiatives. Politics may interfere with the execution and continuation of policy. Examples include party interests and short-term political cycles. Additionally, structural problems including a lack of checks and balances, shaky regulatory frameworks, and cultural norms may allow inefficiencies and malpractices in the public sector to persist.

**KEYWORDS:**

Development, Economy, Growth, Indian Economy,Public.

## INTRODUCTION

Almost no "Public sector" existed in the Indian economy until 1947. The only examples worth mentioning were the government-run salt and quinine plants, as well as the railways, posts, telecommunications, port trusts, and ordnance and aircraft manufacturers. Even though the concept of planning was often debated by Congress administrations in the Indian provinces, the notion that economic progress should be encouraged by the State actively controlling industrial concerns did not take hold in India prior to 1947. However, in the years after independence, the 1956 Industrial Policy had a key component that included expanding the public sector.

The Indian economy was given a key position by the public sector thanks to the Industrial Policy Resolution of 1956. For starters, India's economy required a major boost since it was undeveloped and backward at the time of independence. It was mostly an agricultural economy with no industrial foundation, high unemployment, low levels of savings and investment, and almost no infrastructure amenities. The Indian private sector was unable to provide this push because it was underfunded, lacked management talent, and was unable to assume the risks associated with significant investments with a lengthy gestation period. At the time, it was believed that only massively planned government involvement could boost industrial and

agricultural output, provide job possibilities, eradicate poverty, etc. In order to build a strong agricultural and industrial basis, diversify the economy, and overcome economic and social backwardness, the public sector was seen as the main driver of economic development that was self-sufficient.

The government gradually added more justifications to this fundamental justification for the expansion of the public sector, such as: to speed up the growth of the economy's core sectors; to meet the equipment needs of strategically significant sectors like railways, telecommunications, nuclear power, and defence; to exert countervailing power on the operation of private monopolies and multinationals in certain areas; to ensure easier access to commodities of mass production. In fact, throughout time, the government ventured into a number of industries for a variety of good and negative reasons, as well as often for no apparent reason at all [1], [2].

**Centralised Government Businesses**

Except for banks, financial institutions, and departmental enterprises like the Railways, there were 217 Central Government undertakings as of March 31, 2010. port, etc. The rise in investment in Central Government undertakings. The figure shows that since 1951, the Central Government's industrial and commercial activities have grown from 5 in 1950–1951 to 239 units in 2005–2006, while capital investments have grown from 29 to 5,79,920 crores as of the end of March 2010. Long-term loans and equity capital are used as the investment vehicles.

**Investments overall in the public sector**

4,21,089 crores were invested in total by Central Government Public Sector Enterprises in 2006–07. As of 31.3.2005, the State level Public Enterprises accounted for $2,59,180 crores. In addition to these, investments of close to'50,000 crores were made by departments like Railways, Posts and Telegraphs, and other departments. If all of them are taken into account, the total public sector investment in all types of businesses throughout the whole nation at the municipal, state, and federal levels would come to almost '7,30,269 crores.

**Goals of the Public Sector**

We sum up the goals of creating public businesses in India in this section's conclusion:To generate financial resources for development, to promote income and wealth redistribution, to create employment opportunities, to promote balanced regional growth, to encourage the development of small scale and ancillary industries, to promote exports on the one side and import substitution on the other; to promote rapid economic development through the construction and expansion of infrastructure.

**The Problems in the Public Sector**

This book deals with some of the financial and accounting concerns that have generated public discussion, such as external reporting and monitoring, which are prevalent in many areas of the public sector. These problems range from philosophical to practical in nature. Others have to do with internal financial control, while others have to do with external reporting and monitoring. However, two general questions come up. The first focuses on how particular accounting and control issues should be handled in the context of the public sector. These issues develop as a result of the unique constitutional, financial, and economic characteristics of public sector organisations. These will undoubtedly have an impact on how they account for and manage their

business. The accounting treatment of capital equipment and the need to provide non-financial indicators to augment financial data due to the non-profit nature of the majority of the public sector are two areas of particular importance. The second issue that inevitably arises from the first is: In what ways, if any, should public sector practise deviate from private sector practise? This concern has been raised in relation to the majority of financial reporting-related topics, such as the format of financial statements and how specific accounting items like capital asset value and depreciation are handled. Additionally, internal financial and economic concerns are raised, such as the usage of investment monitoring and assessment tools [3], [4].

## DISCUSSION

It is true of almost all the major points in this book's plot that such topics cannot be considered in isolation. For instance, concerns regarding the format of external financial statements cannot be divorced from inquiries about the nature and goals of specific public sector activities, nor can they be separated from the fact that there are several consumers of financial statements in the public sector, each with a unique set of requirements. Similar to this, it is impossible to assess the link between auditing practises in the public and private sectors without considering the various ways in which accountability is exercised for institutions in the public sector as opposed to the goals and modes of accountability of private organisations.

For instance, the degree of consistency and degree of flexibility amongst institutions of a similar kind should be discussed in the context of financial reporting. The question of how accounting standards should be formed is another recurring concern, while the nature and rights of various user groups when using external financial information are not always obvious. Regarding internal financial control, the need for better systems for monitoring, not just internally but also for external disclosure and performance assessment, has generally been sparked by the strain on resources. Finally, on a more personal level, many public sector accountants continue to be concerned about the function and standing of accountants within their organisations and in connection to the accounting profession as a whole.

Despite privatisations, the public sector is quite vast and tremendously varied. The entire spending of the public sector on hiring people, products, and services to carry out both business and public service activities is substantial around 40% of the gross domestic product even after taking the significant amounts spent on transfer payments into account. It provides a general notion of the magnitude of the net public sector expenditures after four analyses. It is clear that local government spending makes up more than 25% of total public spending, and that spending on health accounts for more than 10%. Contrarily, despite their high expenditure levels, the nationalised industries place a relatively low total demand on the public coffers.

### Public Sector Issues

Several accusations are made against India's public sector. Some are unbalanced, while others are, to some extent, sincere.

### Objective and Function

The assigned role of public enterprises in the nation has changed significantly over the course of the last six decades of planning, from "attaining the commanding heights" in the national economy and "easing out private sector" to "opening up," "liberalisation," and "globalisation." Setting the public sector's position in the Indian economy has been and will continue to be a

concern for policy makers. Second, the goals specified for the public sector are not always particularly systematically defined objectives. Even the macro-level goals have been muddled by a multitude of, sometimes incompatible, assertions.

**Size and Areas Covered**

A major question of enormous importance is whether the public sector should include a broad range of economic activity or should be limited to a chosen few. Another major political choice is whether the country's economy should be open to the private sector, restricted solely to the public sector monopoly, or granted a competitive share in the free market. In the Indian political system, the issue has persistently persisted, especially in recent years.

**Management and Organisation**

Since the nation's independence, the structure and administration of the public sector firms have been based on "trial and error." Due to the companies' initial ease of administration and operation, they were set up as departmental undertakings. After then, the government company form became the most popular. Corporate structure was also adopted in India as a result of global events, notably in England. And a plethora of companies, including development corporations as well as sectoral and multipurpose corporations, were formed. Last but not least, joint ventures returned to the picture, this time drawing inspiration from global developments. The management has been a challenge to solve for a long time. First off, both in the early years and more recently, there has consistently been a lack of management abilities in the nation. The other significant issue that requires the greatest attention is the structure of management boards. Here, the government overburdens the governing board with employees, compromising the firms' right to be autonomous. The management board drastically tips the scales in favour of the government when making policy decisions, thereby turning the company into a department [5], [6].

**Personnel Management**

The public sector's personnel management is plagued by a wide range of issues, which are mostly to blame for its performance, which is ineffective, wasteful, and below par. Following the broad principles of the government in regards to issues of reservations, etc., individual businesses or a central personnel agency for a group of businesses in a certain sector conduct recruiting for public companies. The inclination to promote government workers into high management is so pervasive in the nation that it undermines the idea of inbreeding and leaves insiders disappointed and uninterested, to say nothing of their disillusionment. Another issue that requires rapid consideration is employee salary or remuneration. While top managers often get substantial salaries along with many perks and other incentives in most businesses, medium and lower level managers typically receive pay that is gradually decreasing. Most public organisations only conduct yearly character rolls as part of their performance evaluation process. These have the effect of lowering performance standards, which causes a steady decline in business efficiency.

**Financial Administration**

Due to a lack of financial discipline, awareness, and professionalism, solid and scientific financial management is a primary necessity for the majority of businesses. In managing the finances of public sector organisations, the financial adviser must play a vitally significant role. The most important aspect of financial management, budgeting, is often improperly implemented

in public organisations. A number of organisations, including the Board of Management, Administrative Ministry, Ministry of Finance, Bureau of Public Enterprises, Planning Commission, Director General of Technical Development, and Public Investment Board, are involved in the planning and control of the financial management of public enterprises in the nation.

**Employee Involvement in Management**

The goal of launching worker participation in management was to ensure increased productivity for the greater good of the company, the employees, and the community, to give workers a better understanding of their role in the production process, to satisfy their need for self-expression, and to improve workplace relations. Four primary phases make up the WPM process: information sharing, collaborative consultations, shared decision-making, and self-management. At each level, decisions are made with the best interests of the company in mind with the participation of the workforce. There are a variety of issues with selecting employees to represent workers at the Board of Management, among other levels of participation, including the board level [7], [8].

**Accountability and Independence**

The concept of "autonomy" indicates "freedom to act" and is connected to "freedom in internal management". In the context of public companies, autonomy does not entail 'complete freedom' to operate whatever the particular firm management chooses. As a result of being held responsible to Parliament via the relevant minister, Public Enterprises are unable to operate independently. The public enterprises should be given enough latitude to operate along commercial lines at the same time. It promotes initiative and helps speedy decision-making. Accountability of the public businesses entails providing the public, who is ultimately the owner of these firms, with financial information. S.S. Kher claims that "accountability entails measuring top management. It is important to keep in mind that the accountability we are discussing is accountability with a clear, demonstrably beneficial goal. Accountability and control must be distinguished from one another. While responsibility is a passive role, control is an active function. Control refers to guiding, constraining, or encouraging a group or person to do a certain activity. In reality, responsibility is made easier by control. To be held responsible, a person or organisation has to have the ability to manage their environment.

**India's Public Sector's Role**

The reach of the public sector has gradually increased since independence was attained and planning was introduced. The acceptance of the socialist social structure as our country's aim and the ratification of the Industrial Policy Resolution of 1956 both contributed to a purposeful expansion of the public sector's role.

We need a thorough understanding of the whole public sector in order to comprehend the function it plays. Along with independent companies, we should also incorporate departmental enterprises. When doing so, it's important to remember to include businesses managed by state governments, municipal governments, and other organisations in addition to those owned and operated by the federal government. To assess the contribution of the public sector in the Indian economy, it would not be acceptable to use a single indicator; rather, it would be preferable to utilise a few indicators, such as employment, investment, output value, national income produced, savings, capital creation, and capital stock.

**Employment Ratio of the Public Sector**

Public sector proper, or businesses owned by the federal, state, and local governments, includes government administration, the military, and other government services like health, education, and research. These two categories of employment are also significant. In 1971, there were 111 lakhs of people engaged in the public sector as a whole. By March 2006, that number had increased to almost 182 lakhs, and it then dropped to 180 lakhs in 2007. Since employment in the public sector is limited to the organised sector, the public sector in India's economy employs 65.9% of all employees in that sector.

**Public Sector's Share of GDP**

The public sector's percentage of the economy has steadily increased during the last five decades. At current prices, the public sector contributed 23.6% of GDP in 1993–1994 compared to 7.5% in 1950–1951 (measured in current values). In contrast, it fell to 20,8% in 2008–09. So, around one-fourth of the country's production comes from the public sector. This is mostly a result of the public sector's businesses expanding quickly.

Between 1950–51 and 2007–08, there is a significant rise in the percentage of public administration and defence, going from 4.5% to 8.7%. Nevertheless, the proportion of public sector businesses increased from 3% in 1950–1951 to 11.2 % in 2008–2009. In spite of this, the private sector still controls a large portion of the economy. There are other industries, including agriculture and small business, where the state's role is almost nil. The government owns 100% of the insurance industry, the military industry, domestic crude oil production, etc. Industries of strategic and global significance are increasingly being taken up by the state.

**Reasons for the Growth of Public Enterprises**

Some sectors had to be placed under public ownership and control in a rising country like India since it was believed that otherwise, the economy couldn't expand quickly. The pace of economic development was anticipated to be accelerated by nationalising certain industrial, financial, and insurance entities and establishing new ones. Consequently, public businesses became a crucial component of India's economic growth strategy. In this part, we'll examine the rationality of public companies in the context of India's economic planning. Economic Development Rate and Public Sector Enterprises: India's reasoning for public businesses was that the government could plan for economic growth at a pace that was considerably quicker than what the private sector could do on its own. In other words, in order to achieve the government's intentionally high rate of development aim, the public sector was crucial [9], [10].

The government had to use mandatory saving via taxes to achieve this lofty plan goal. According to Professor Ramanadham, "After gathering the resources, the government and other significant policy-making bodies like the Planning Commission are under the normal human temptation to use the funds under the government's own aegis, and it appears to be an avoidable hassle for the administration to offer the money to private enterprises in the first instance and then go about instituting the necessary checks and balances for the sake of ensuring the safety of the public." The establishment of industrial businesses in the public sector is advocated as preferable to Parliament and the administrative authorities. Pattern of Resource Allocation and Public Enterprises, in the words of Professor Ramanadham, "The main reason for the expansion of the public sector lies in the pattern of resources allocation decided upon under the plans." The

Second Plan switched the focus to mining and industries, primarily capital and basic goods sectors to be developed under the auspices of the public sector. As a result, additional funding for industrialization was directed via the public sector. As a result, "it is inevitable that the public sector must grow not only absolutely but also relatively to the private sector. "Regional Inequalities Can Be Eliminated Through Public Enterprises: The need for balanced growth throughout the nation's regions and to ensure that there were no significant regional inequalities was another crucial factor in the expansion of the public sector. In areas that lacked development and sufficient local resources, the Central Government established public companies. The construction of the three steel facilities at Bhilai, Rourkela, and Durgapur as well as the Neyveli Project in Chennai, all of which were intended to aid in the industrialization of the areas around the projects, are good examples. In several instances, state governments struggled to generate enough money for regional development. The Central Government's establishment of projects or the beginning of firms that were sponsored by the Centre were the only other options.

Resources for Economic Development Funding: At first, the state was a significant source of funding for development. The excess of government-owned businesses might be reinvested in those sectors or utilised to launch and grow new businesses. It should be mentioned that private sector businesses have the option to reinvest all or a substantial portion of their income in order to fund growth. Profits in private businesses, however, are distributed as dividends to shareholders. Only inequality among people would result from this. However, the public sector's businesses' revenues may be utilised to create new capital. Socialistic Social Organisation: The socialistic social structure of society necessitates two forms of public sector expansion. One need is that production be centrally planned in terms of the kind of items to be produced, the quantity of output, and the schedule of their creation. In comparison to the private sector, it can be simpler to do this via government.

**Here is a quotation from the Second Five-Year Plan:** "The acceptance of the socialistic model of society as the national purpose, as well as the need of planned and fast growth, demand that all industries of fundamental and strategic significance, or in the character of public utility services, should be in the public sector. Other sectors that are crucial and need investment on a scale that, under the current conditions, only the state could deliver, must also be in the public sector.

**Disadvantages and Limitations of the Private Sector:** The way the private sector acted and thought contributed significantly to the growth of the public sector in the nation. When the Americans urged that the Bokaro Project be established in the private sector, Mr. J.R.D. Tata publicly acknowledged that the commercial sector was unable to raise the necessary 700 crores of funding. As a result, the private sector either did not want to enter particular industries or, if it did, lacked the necessary resources. Although this was reasonable, the private sector was unable to accept even the typical commercial risks. When the necessity for fertiliser production was critical for the nation to advance an agricultural breakthrough during the Second Plan era and subsequently, many of the permits granted to the private sector for building up fertiliser facilities were renounced. Another example: Despite having promised the government that it would grow, the private cement industry was scared off from doing so during the commercial slump of 1966–1967. The government was forced to create the Cement Corporation of India to increase cement output in order to protect the long-term economic prospects. The involvement of the government into the medication and pharmaceuticals business was caused by the private sector drug industry's inability to produce antibiotics and, concurrently, by its egregious exploitation of the customers, to the point of holding them to ransom [11], [12].

## CONCLUSION

Comprehensive changes to public administration and governance are needed to solve these issues. Technology adoption, process simplification, and bureaucratic streamlining may all improve productivity and service delivery. To rebuild public confidence, it is essential to strengthen accountability systems, encourage openness, and put anti-corruption measures into place. Organisational performance may be enhanced via training initiatives, hiring based on merit, and capacity development for institutions. Additionally, in order to solve systemic problems and ensure effective governance, political will, policy consistency, and long-term vision are crucial. The provision of services, governance, and social advancement are all significantly hampered by issues in the public sector. Governments may strive towards increasing organisational effectiveness, strengthening the delivery of public services, and reestablishing public confidence by identifying and resolving the root causes of these issues. To build a responsive, effective, and trustworthy public sector that successfully meets people' demands, effective public sector management, open and accountable practises, and thorough reforms are required.

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# CHAPTER 11

# A STUDY ON EFFICIENCY OF PUBLIC SECTOR ORGANIZATIONS

Dr. Mounica Vallabhaneni, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: mounicav@presidencyuniversity.in

**ABSTRACT:**

Effective service delivery, efficient resource utilisation, and overall organisational effectiveness all depend on the efficiency of public sector organisations. In this abstract, the effectiveness of public sector organisations is surveyed and analysed. Performance is assessed, significant variables affecting effectiveness are noted, and the consequences for public administration and governance are discussed. The performance of public sector organisations is first evaluated in terms of service delivery, cost-effectiveness, and resource management. Even though public sector organisations have a wide range of mandates and responsibilities, efficiency is mostly influenced by organisational structure, management practises, accountability, transparency, and accountability. To measure and evaluate organisational efficiency levels, evaluation frameworks, performance indicators, and benchmarking methodologies are used. Efficiency in public sector organisations has many different ramifications. Effectively using public resources and meeting citizen expectations are all advantages of efficient organisations. Enhancing efficiency may also save costs, improve financial management, and enable resource reallocation to more important areas. A favourable connection between the people and the government may also be fostered through efficiency by boosting public trust in, and confidence in, governmental institutions.

**KEYWORDS:**

Development, Economy, Growth, Indian Economy,Public.

## INTRODUCTION

While the government has been pursuing an increasing number of public sector activities, there has been significant criticism over the country's government ventures' subpar performance and, in some instances, complete collapse. Some economists have argued that profit should not be used as a criterion for evaluating the performance of public enterprises. In their view, public enterprises are guided by a number of factors when setting prices, so using profit as a criterion of their efficiency would not be appropriate. This is especially true for social utility services like railroads, postal and telegraphs, water and electricity supplies, etc. Even though expenses may have increased, the State shouldn't raise the pricing for these services. Similar to private businesses, public businesses spend heavily in heavy and fundamental industries. Such businesses have a protracted gestation period, and some of the investment may still be in the building. Therefore, it would be fair to determine the rate of return on effective capital utilized rather than include the capital used for ongoing building, expansion, or capital projects.

Furthermore, when referring to state firms, which are prohibited from manipulating depreciation or other payments to indicate a greater rate of return, the word "profitability" should not necessarily be used in a corporate or strictly commercial sense. In addition, PSUs provide far greater labour compensation than small and medium-sized businesses in the private sector, including higher wages, salaries, and other benefits. Therefore, a greater social rate of return

should be adjusted for while evaluating their performance. In the context of private sector businesses, as opposed to PSUs, the notion of total surplus created in the form of declared earnings, retained profits, and depreciation becomes more important. This is meant to emphasise that the issue has to be seen in the appropriate context, not to imply that profitability shouldn't be taken into account as a measure of efficiency [1], [2].

Even while profit maximisation may not be the only factor used to evaluate their success, it is certain that doing so would be foolish. Profit maximisation may not be seen as a favourable trait, but it may serve as a "good whip" to discipline public firms when they misbehave, as has been appropriately noted. Thus, the maximisation of profit has the drawback of forcing businesses to cut down on resource waste and the resulting inefficiencies. From this vantage point, the case for using the excess produced by public firms for economic growth is quite strong. It would be absurd to claim that everything is well with the state enterprises. There is a lot of room to increase the effectiveness and operation of public sector businesses. The following are the important considerations:

Growing Losses: A study of how public sector businesses have operated finds that either their earnings have been pitifully low or that they have been losing money. The State Governments, however, have long-term losers such Irrigation Works, State Electricity Boards, and State Road Transport when contrasted to the performance of the Central Government. SEBs suffer the most losses. The losses suffered by SEBs are thought to have increased from These losses, which ranged from 4,117 crores in 1991–1992 to 30,606 crores in 2005–2006, were brought on by the fact that electricity was delivered for only 240 pese per unit, as opposed to the cost of production and distribution, which was 350 pese per unit.

**Political variables affect location choices:** It has been recognised that political issues often affect project site decisions. Independent of the findings of the feasibility assessment regarding expenses, powerful ministers in the governing party make commitments about the future placement of projects in a state. This strategy wastes a significant amount of capital resources. The Central Government's decision to split the MIG aircraft project into two components, to be situated in two different states, is a perfect illustration of this political yet stupid strategy. Nasik and Koraput are more than 900 kilometres away from one another. To appease two influential political bosses from two different states, this was done [3], [4].

## DISCUSSION

Delays in completion and rising construction costs: Numerous assessments on the operation of public sector projects have noted that many of the projects took longer than expected to finish. Not only that, but the projects' costs were also increased. In contrast to the initial estimate of three years, the Trombay Fertiliser Project took 6-7 years to complete. Poor and insufficient project planning is mostly to blame for the rise in expenses and delay in the construction time schedule. Comprehensive building plans must be created in order to prevent needless delays and expense increases from adding to the strain on already-scarce resources.

Over-capitalization is a criticism against initiatives in the public sector. In other words, many initiatives had an undesirable input-output ratio. The Study Team discovered various businesses to be over-capitalized, including Heavy Engineering Corporation, Hindustan Aeronautics, Fertilisers Corporation, etc. The Study Team stated in this regard that "the causes leading to over-capitalization can be traced to inadequate planning, delays and avoidable expenditure

during construction, surplus machine capacity, tied aid resulting in the compulsion to purchase imported equipment on an exclusive basis, expensive turn-key contracts, bad location of projects, and the provision of housing and other amenities on a liberal scale."

**Price Policy:** The price strategies used by public sector organisations are regulated and overseen by the government rather than being purely driven by the profit maximisation concept. The majority of public businesses create goods that are used as inputs by other economic sectors. If the price of steel, oil, fertilisers, or coal were set at a very high level, it would be suicide for the economy's total development. The social effects of the public sector's pricing policy must be considered. In this regard, it's important to keep in mind that prices are often held low due to public pressure, even while expenses and prices have been growing. Naturally, this has an impact on business profitability [5], [6].

**Use of personnel resources in excess of real needs:** It has been noted that the majority of public companies use more people than is actually necessary. The insufficient facilities for employee training and education are a blatant indication of poor workforce planning. Personnel have moved from the public sector to the private sector as a consequence of the subpar pay and wage rates and the lack of employee incentives. The emoluments of executives have been significantly increased by the Sixth Pay Commission, preventing their transition to the private sector. It has been proposed that workers should have access to senior positions inside public sector organisations. Additionally, a company should educate and promote its expert and technical personnel into management.

In PSE, the government has been letting go of redundant personnel. This approach led to a 3.78 lakh decrease in the overall workforce of Central PSEs, from 19.92 lakhs in 2001–02 to 16.14 lakhs in 2006–07. As a result, CPSEs now pay less in wages. Utilisation of capacity: In 2005–2006, out of 203 units, 103 units, or 51% of all manufacturing/producing units, had capacity utilisation figures of above 75%. On the other hand, 67 public sector businesses operated at less than 50% of rated capacity, while 33 operated in the capacity utilisation range of 50% to 75%. Clearly, this is not the best scenario. Finding the reasons for poor capacity utilisation is crucial in order to take the required action to improve the situation.

**Ineffective Management:**Improving the overall performance of public companies requires a focus on managerial effectiveness and efficiency. Quick operational choices are essential for commercial and industrial firm efficiency. This calls for the government enterprises to operate with a great deal of autonomy and flexibility. Again, a great deal of flexibility in working and power delegation are required. Another crucial need for operational efficiency inside the company is the transfer of power from top management to lower levels. Each officer should be aware of his duties and the outcomes that are expected of him. In India's public sector businesses, responsibilities and obligations have sadly gone largely undefined. Finally, the availability of skilled candidates to fill key jobs is essential to the efficient running of public organisations. 'Colonies for bureaucrats' is a disparaging term used to describe public companies. The government personnel who initially supplied funding for the projects also interfered with the right of administration. They injected "bureaucratic blood" into the system in this manner. The usage of bureaucrats as chairman, managing directors, and managers of public firms has a regrettable history. Many of them lack the necessary qualifications to manage industrial businesses. In these businesses, the government has gradually shifted to professionalised management. This progression is positive.

The Indian economy's public sector was given a strategic role by the Industrial Policy Resolution of 1956. For starters, India's economy required a major boost since it was undeveloped and backward at the time of independence. It was mostly an agricultural economy with no industrial foundation, high unemployment, low levels of savings and investment, and almost no infrastructure amenities. It is impossible to assess the link between auditing practises in the public and private sectors without comparing the goals and modes of accountability used by public sector organisations to those used by private businesses. For instance, the degree of consistency and degree of flexibility amongst institutions of a similar kind should be discussed in the context of financial reporting. In terms of internal financial control, the strain on resources has often led to a request for better mechanisms for monitoring, both internally and externally, as well as for performance evaluation and disclosure.

Despite privatisations, the public sector continues to be very vast and quite diversified. The entire spending of the public sector on hiring people, products, and services to carry out both business and public service activities is substantial around 40% of the gross domestic product — even after taking the significant amounts spent on transfer payments into account. Since gaining independence and the introduction of planning, the public sector's reach has gradually increased. A purposeful expansion of the public sector's participation was further prompted by the acceptance of the socialist social structure as our country's aim and the ratification of the Industrial Policy Resolution of 1956. There are two key categories of public sector employment: the public sector proper, which includes businesses owned by the federal, state, and local governments, and other government services like health, education, and research. Government administration and defence are also included in this category [7], [8].

Despite widespread criticism of public sector businesses, there is no doubting that the public sector played a major role in the country's fast industrialization over the first three decades after independence. The majority of public sector businesses were founded with consideration for the production and distribution needs of the Indian economy. Retained earnings and depreciation make up internal resources. The public sector was able to deploy more internal resources with each five-year plan. Internal resources in the range of 29,750 crores were produced during the Seventh Plan.

The public sector has become more significant and has taken centre stage in the Indian economy from every viewpoint. The majority of the businesses in the Central sector are covered by what we have just said. In order for the economy to expand quickly in a growing country like India, certain industries have to be given to the public for ownership and management. The socialistic social structure of society asks for two strategies to expand the public sector. The sort of items to be produced, the amount of output, and the schedule of their creation will all need to be centrally coordinated.

The growth of the public sector in the nation was largely a result of the actions and attitudes of the private sector. Mr. J.R.D. Tata freely admitted that the business sector was unable to raise resources totaling 700 crores when the Americans requested that the Bokaro Project be established in the private sector. The government was compelled to take over a number of private sector businesses, either in the interest of employees or to stop the exploitation of customers. While the government has been pursuing an increasing number of public sector activities, there has been significant criticism over the country's government undertakings' subpar performance and, in some instances, complete collapse. As a result, it would be acceptable to determine the

rate of return on effective capital employed rather than include capital used for ongoing building, expansion, or capital projects [9], [10].

Although profit maximisation may not be the only factor used to evaluate their success, it is certain that doing so would be foolish. When assessing the effectiveness of the public sector, it is important to include the benefits to the workers, such as a consistent increase in their pay, housing options, access to healthcare, and educational opportunities. It would be absurd to claim that everything is well with public enterprises. There is a lot of room to increase the effectiveness and operation of public sector businesses. Several assessments on the operation of public sector projects have noted that many of the projects took longer than expected to finish. Most public sector businesses don't have logical pricing practises. They don't have a publicly stated pricing policy, with the possible exception of a few departmental instructions and ad hoc fragmentary orders. It might be argued that the Federation of Indian Chambers of Commerce and Industry, Forum of Free Enterprises, and other groups create an overly negative image of the public sector. In July 1991, the Indian government unveiled a new industrial policy in an effort to boost public sector performance.

## CONCLUSION

The public sector, however, has several difficulties and barriers to efficiency. Political involvement, inflexible organisational structures, bureaucratic red tape, and a lack of autonomy may all impede effective decision-making and operation. The adoption of novel practises and the improvement of performance might be hampered by inadequate capacity, skills shortages, and reluctance to change. Reforming public administration is necessary to address these issues, as is simplifying processes, increasing transparency, and encouraging a culture of responsibility and performance. In conclusion, successful governance, service provision, and resource management depend on the effectiveness of public sector organisations. Organisations in the public sector may increase efficiency and boost performance by putting an emphasis on elements like excellent governance, leadership, resource allocation, and staff engagement. To achieve long-term efficiency improvements, it is possible to embrace technology, encourage innovation, and use continual review and improvement methods. In the end, efficient public sector organisations are crucial for advancing the general welfare, citizen happiness, and efficient public administration.

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# CHAPTER 12

# ROLE OF INFRASTRUCTURE IN ECONOMIC DEVELOPMENT

Mr. Yelahanka Lokesh, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: lokesh.yr@presidencyuniversity.in

**ABSTRACT:**

Infrastructure is essential for promoting sustainable growth and accelerating economic development. This abstract offers a summary and analysis of the function of infrastructure in economic growth, underlining its ramifications and outlining crucial policy points for maximising its influence. Economic activity is supported by infrastructure, which includes telecommunications networks, electricity systems, water and sewage facilities, and social infrastructure. It boosts industrial output, links markets and regions, and eases the flow of people, commodities, and services. Reduced transaction costs, increased productivity, and increased corporate competitiveness are all benefits of reliable and efficient infrastructure. Additionally, infrastructure expenditures support the growth of the economy, the eradication of poverty, and the enhancement of societal standards. Additionally, the investigation investigates how infrastructure affects economic growth. Business expansion, investment attraction, and innovation are all made possible by adequate infrastructure. As connection is improved, markets can be integrated and more people can take part in international commerce. The development of industries, the support of value chains, and improved market efficiency are all made possible by easy access to dependable energy, transportation, and communication infrastructure. Additionally, a strong social infrastructure, including facilities for education and healthcare, is essential for the growth of human capital and raising productivity.

**KEYWORDS:**

Development, Economic, Energy, Electricity, Society.

## INTRODUCTION

Infrastructure refers to the essential facilities and services required for the functioning of a society or business, as well as the fundamental physical and organisational frameworks. The phrase often refers to the technological infrastructures that underpin a civilization, such as telecommunications, water supply, sewerage, and roadways. When seen from a functional perspective, infrastructure makes it easier to produce commodities and services, distribute completed items to markets, and provide essential social services like schools and hospitals. For instance, highways make it possible to convey raw materials to factories. A definition of infrastructure that encompasses all things and all people is not very helpful since it obscures how investors, governments, and citizens can comprehend, promote, and steer investments towards enduring, networked assets with broad social advantages. The construction, maintenance, and replacement of primary infrastructure components are often monopolistic in nature and expensive. Infrastructures support economic productivity and raise living standards. The physical elements of interconnected systems that provide goods and services necessary to allow, maintain, or improve society living circumstances may thus be more precisely characterised as infrastructure [1], [2].

**Infrastructure's Contribution to Economic Development**

The growth of agriculture and industry has a direct impact on a nation's economy. But in order to produce food, you need things like irrigation, electricity, financing, and transportation infrastructure. In addition to machinery and equipment, industrial production needs skilled labour, management, energy, banking and insurance infrastructure, marketing infrastructure, transportation services, including roads, rails, and ships, as well as communication infrastructure. The infrastructure of an economy is made up of all these resources and services that support industrial and agricultural activities. An crucial prerequisite for raising agricultural and industrial productivity in a nation is the creation and extension of these infrastructure. A revolution in transportation and communications, extensive use of cargo and later oil as a source of energy, tremendous expansion in banking, insurance, and other financial institutions to finance production and trade, an explosion in scientific and technological knowledge, and other factors have all contributed to the industrial and agricultural revolutions that have occurred in England and other countries over the past 200 years or more.

The following are examples of infrastructure facilities, often known as economic and social overheads:

1. Irrigation, together with flood control and the construction of community areas.
2. Coal, electricity, oil, and unconventional sources of energy.
3. Transportation includes roads, railroads, ships, and civil aircraft.
4. Posts and telegraphs, telephony, telecommunications, etc. Are all forms of communication.
5. Finance, banking, and insurance.
6. Technology and science.
7. Social costs: healthcare, sanitation, and education

**Infrastructure Development Since Independence**

Indian planners put significant attention to the quick construction of these facilities from the First Plan forward since they were well aware of the connection between infrastructural facilities and general economic development. Over 50% of the overall plan budget has typically been set up for infrastructure development. Infrastructural facilities have increased dramatically as a consequence.

For instance, between 1951 and 2010, the output of coal, including lignites, increased from 32 million tonnes to 566 million tonnes. The output of petroleum crude increased from a meagre 0.4 million tonnes to over 34 million tonnes over the same time period, while electricity generation from public utilities excluding power generation from captive and unconventional power plants rose from 5 billion kwh to 768 billion kwh. Similar to this, there has been a significant increase of other infrastructure facilities [3], [4].

## DISCUSSION

The availability of energy is the most significant single element that may serve as a restraint on a nation's potential to thrive economically. India is a significant energy user and producer. India is now the fifth biggest energy user and the seventh greatest energy producer in the world. The rate of economic expansion, the magnitude of per capita income, and the amount of energy used per person are all directly correlated.

**Materials for Energy**

Energy comes from two general categories: commercial energy and non-commercial energy. Coal, petroleum, and electricity are the three main sources of commercial energy, or more accurately, commercial sources of energy. These resources are commercial in the sense that their users must pay a fee to access them. Over 50% of the energy used in India is for commercial purposes. Firewood, vegetable waste, and dried dung are examples of non-commercial energy sources, sometimes referred to as traditional energy sources. Because they are intended to be free and without charge, they are referred to as non-commercial sources. In fact, non-commercial sources like dried dung and firewood have begun to attract a premium in both urban and, to some degree, rural settings. Non-commercial sources of energy are renewable, in contrast to commercial sources of energy, which are often finite hydroelectric power being the exception. Indian homes rely on conventional energy sources for more than 60% of their cooking and heating requirements.

**Primary Energy Availability in India**

Primary commercial energy comes from three main sources: coal and lignite, oil and gas, and electricity. Coal and lignite: India's total coal resources are now projected to be at 148,790 million tonnes, but the mineable reserves might be as high as 60,000 million tonnes. The overall lignite reserves, which are mostly located in Neyveli in Tamil Nadu's South Arcot district, are estimated to be 3,300 million tonnes, of which 1,900 million tonnes are proven reserves. Around 566 million tonnes of coal, including lignite, were produced annually. The projected demand for coal in the present and the future indicates that India's coal reserves will only be enough for 130 years. The net recoverable reserves of oil are estimated to be approximately 550 million tonnes, while the net recoverable reserves of gas are estimated to be around 500 billion cubic metres, based on the most recent data. About 34 million tonnes of crude oil are produced annually. Oil may only last 20 to 25 years at the present pace of usage.

There are two types of electricity: hydro-electric power and thermal power. Nuclear energy as well as the utilisation of oil and gas are used to create thermal electricity. Around 90,000 MW is the official estimate of the yearly energy potential from hydroelectric sources; only around 18,000 MW of this capacity has been realised. Despite the inherent benefits and superiority of hydro power plants over thermal and nuclear plants, this suggests that only 20% of the hydro potential has been exploited and that the other 80% is still untapped [5], [6].

**India's Non-commercial Energy Resources**

Fuelwood: In our villages and cities, fuelwood is widely utilised and necessary for cooking. The Tenth Plan estimates that fuel wood accounts for 65% of all rural energy usage. 223 million tonnes of fuel wood were used in 2001–2002, of which 180 million tonnes were used for domestic purposes and the remaining 43 million tonnes for cottage industry, hotels, etc. There would be a true fuelwood famine if the demand and supply trends persist. In fact, scientists believe that the availability of fuelwood may become a bigger problem in the near future than the supply of food grains. Agricultural wastes are now utilised as feed and fodder, roofing material, organic matter for composting, and as fuel for cooking. Straw is one example of an agricultural waste. Agricultural waste usage for fuel purposes was estimated to be over 41 million tonnes in 1975–1976 and may be around 65 million tonnes now, although there are no genuinely trustworthy data available.

**Animal Waste:**In our rural regions, dried animal waste is often utilised as fuel. About 73 million tonnes of the estimated 324 million tonnes of animal manure produced annually are thought to be burned for energy. This amounts to more fertiliser than is used in India's whole agricultural output. This precious organic manure, which is animal faeces, might be utilised as fertiliser to significantly improve food output.

**India's Non-Conventional Energy Sources**

Three more energy sources are referred to as non-conventional sources of energy even though the aforementioned commercial and noncommercial sources of energy are regarded as conventional sources of energy. They are tidal power, wind power, and solar power. India, a tropical nation, has almost infinite solar energy potential. Similar to how there is an abundance of wind energy, particularly in coastal and hilly places, neither solar energy nor wind energy is currently being used due to a lack of cost-effective technology. However, given the severe lack of traditional energy sources, several nations are looking into the viability of employing these alternative energy sources. They would thus become increasingly important in the years to come [7], [8].

**Trends in Commercial Energy Consumption**

It's important to note that over time, the proportion of coal in overall commercial energy use has continuously decreased, but the proportion of oil and electricity has constantly climbed.

**Crisis in Rural Energy and Decentralised Energy**

The traditional energy systems, which rely on fossil fuels like coal and power as well as oil crude, have utterly failed to address India's rural energy issue. This might at any point lead to "fuelwood riots" that resemble the food riots of the late 1950s and early 1960s. The issue of rural energy supplies necessitates a completely novel strategy known as the "decentralised energy" strategy, which aims to provide energy from locally accessible renewable sources like cowdung and agro-wastes. Or, to put it another way, efforts must be undertaken to provide commercial energy based on the conventional non-commercial energy sources.

Obviously, wood is the most significant cooking fuel and will continue to be for a very long time. People in urban areas have started to rely more and more on firewood as a result of the increase in the cost of fossil fuels and their scarcity. There is a severe lack of firewood, which has led to an increase in the cost of fuelwood. Contrary to popular assumption, India has enough area to produce even two to three times as much fuelwood as is needed. According to the Planning Commission Fuelwood Study Committee, about 240 million tonnes of fuelwood may be generated annually by:

**Fuelwood on Farmland:**Planting trees on farmland as windbreaks, fruit trees, shade trees, fodder trees, and shelter belts will all provide fuelwood;

**Fuelwood On Wastelands:**Growing fuel-wood on nearly 80 million hectares of arid and waste lands, including land along the nation's roads, railway lines, canals, etc., would yield an estimated 95 to 100 million tonnes per year, even if 15% of this vast tract of land is planted with fuelwood species; and

**Fuelwood Deteriorated Forests:**Proper degraded forest preservation and fuelwood tree planting may produce roughly 50 million tonnes of fuelwood annually.

Actually speaking, the issue of a lack of firewood can be resolved if the government is willing to raise enough money (roughly '800 to '1,000 crores annually) and is willing to change the current forest policy from the production of timber to that of fuel and fodder. Such an endeavour is worthwhile since it would not only assist address the pressing issue of fuelwood in both rural and urban regions, but it would also significantly boost job opportunities in sectors such as tree planting, maintenance, tree-felling, wood-processing, etc. Additionally, it will improve the ecological situation by increasing tree cover, reducing floods and soil erosion, and fostering soil fertility.

Since 1976, the government has encouraged agricultural forestry and social forestry activities in an effort to support the fuelwood planting scheme. However, the Government has made wood into a valuable commercial commodity and doomed the weaker parts in rural regions to continue experiencing severe fuelwood shortages by subsidising and pushing wealthier and more wealthy farmers to opt for enormous tree planting. The better course of action would be to actively include the rural poor, particularly the rural women, in community forestry activities, assist them in producing more fuel and feed, and ensure equitable distribution of these resources. Although the bureaucrats find it challenging to put this option into practise, government policy makers will eventually have to give it a go.

The most potential alternative energy technology in the residential sector is biogas plants, according to the Planning Commission Working Group on Energy Policy. For the development of biogas plants in rural regions, the government provided a number of incentives and favourable bank loans. Nearly 3.2 million biogas plants have been installed nationwide as part of the National Project for Biogas Development; the yearly aim is now 2 lakh biogas plants. The biogas plant has the dual benefit of generating fuel and manure. The gas generated may be utilised for basic agricultural tasks, illumination, and cooking. Four to five heads of cattle are the bare minimum required to feed a family-sized plant, and it is estimated that there are 15 million families with the necessary number of animals. As a result, the plan has a lot of potential to expand local energy sources, and the government has launched a big, ambitious campaign to establish biogas facilities.

The government's hopes for the biogas program's success were not realised. The fact that no effort was made to adequately analyse the cost-benefit of these plants to the consumers is one fundamental cause for their subpar performance. The rising understanding that the biogas programme will exacerbate the disparity between the rural regions' energy haves and have-nots is more significant than this factor. For instance, it has been calculated that just 10% of rural families in India had 4 to 5 heads of cattle, therefore the biogas plants would only be beneficial to the farmers who are wealthier. Once again, these wealthier farmers would utilise animal excrement just for their own purposes, depriving the underprivileged of a fuel that now has no cost and has always been freely accessible. The government and several non-profit organisations have begun pushing community plants, which are very inexpensive to put up and run, in an effort to solve the issues caused by household biogas plants. However, there are issues with manure collection and gas distribution, and the price of distribution to individual households is rather expensive. The community biogas plan does not seem to have a bright future in light of the caste, religion, and other social elements in our areas [9], [10].

Agricultural Wastes: The rise in food grain output to between 200 and 210 million tonnes would result in around 335 million tonnes of grain crop waste alone. The potential use of materials like

cotton stalks, rice husks, and other biomass as fuels for cooking may be expanded with the use of more advanced and effective methods. After researching the potential of agricultural wastes in a wealthy village in the Ludhiana District, Dr. Pathak of the Punjab Agricultural University discovered that after the village's fodder needs were fully satisfied, the energy potential of the remaining crop wastes and animal wastes was sufficient to meet all of the village's energy needs and still leave a surplus. The increase in energy supplies in the form of agricultural wastes will benefit society as a whole and the rural poor in particular in a situation where supplies of conventional energy, and sources like firewood, are dwindling and since alternatives like paraffin are not within the reach of the rural poor.

The government's current national energy strategy is very unbalanced since it attempts to address both the oil and coal shortages at the same time. The primary factors taken into account have been the energy requirements of transportation, industry, and the higher income groups in metropolitan areas. The impoverished population in both urban and rural regions requires access to energy for cooking, but the national energy strategy has largely overlooked this requirement. The ineffective and irregular efforts to promote solar cookers, biogas facilities, and most recently fuelwood plantings have not significantly alleviated the cooking energy shortage. A national cooking energy policy is therefore urged by the Centre for Science and Environment, an informed non-profit group: "An integrated national cooking energy policy is an imperative if the Government wants to help meet the basic needs of our population without causing wholesale environmental destruction. The consequences will be terrible for the populace and the environment if the government is unable or unwilling to develop an actionable policy.

**Power**

One kind of energy, electric power, is necessary for both commercial and non-commercial applications and is a crucial component of economic growth. Electricity is used in transportation, manufacturing, and agriculture for commercial purposes. Electricity is needed for residential purposes such as lighting, cooking, and running appliances like refrigerators and air conditioners. It seems sense that the demand for energy for residential usage would develop quickly given India's population expansion and the rise in the use of contemporary technology in everyday life.

The growing usage of electricity in agriculture is a notable trend. The demand for electricity for lift irrigation and the energization of pumpsets has gone from 4% to 22% in recent years as a result of rural electrification schemes. India's power consumption has increased significantly as a result of the formation of new industries such as those producing iron and steel, machine tools, engineering, fertilisers, etc. as well as the capacity expansion of those producing consumer products.

However, it should be noted that the percentage of industry in the overall amount of electricity used has decreased from 68.3% in 1970–1971 to 37.1% in 2009–2010. This is not to say that industrialization has slowed significantly or that industrial facilities are switching to other fuels. Instead of relying on the insufficient and sometimes unreliable public utilities, several major industrial units have invested heavily in the construction of their own captive power facilities. An estimated 109.7 billion kwh of electricity produced by non-utilities and used by enterprises. One can see that the amount of energy used by home users has grown quickly, while the amount of electricity used by railroads and for public lighting as a percentage of overall consumption has decreased.

**Energy sources for electricity**

There are three basic ways to generate electricity: nuclear power, thermal power, and hydropower. However, it has been argued that hydro projects need a longer gestation time than thermal ones. The Power Economy Committee looked into this issue and came to the conclusion that if a hydro project is well considered and developed before execution, the actual construction duration would be quite similar to that of a thermal project. This explains why the Energy Survey of India Committee and the Power Commission in 1962 suggested relying more heavily on hydro-projects. There was a decrease in focus on hydro projects after the enormous excitement for hydro-electric projects during the First and Second Plans. This was a bad move, and the direction of the trend needed to be changed. The Power Economy Committee emphasised this as a future direction change of policy, stating: "Under the current conditions in the country, the hydro schemes constitute the most economical source of electric production To control and reduce the cost at energy generation and supply in the country, to enable full utilisation of generating facilities already built up and to ensure that the limited capital allocations to the power supply industry go the furthest in meeting the needs of the country's population. The Government has been relying more on thermal power to alleviate the power shortfall in India despite the obvious benefits touted for hydro-power and the reality that just one-fifth of hydro power has been harvested in the nation so far. With the goal of more quickly using the enormous hydropower potential the nation has, the Indian government adopted a strategy on hydro-power development during the 1998–1999 academic year. As a result, plans were made to add around 8800 MW of hydropower capacity to the Central Sector by 2004–2005.

**Thermal Strength**

The primary source of electricity in India has traditionally been thermal power, which is produced from coal and oil. The installed thermal power capacity expanded from 1,150 MW in 1950–1951 to 1,18,000 MW in 2009–2010, and throughout this time, the percentage of thermal power climbed from 67% to 74% in relative terms. Only a minor portion of the thermal power is produced by oil, with the majority coming from coal. Oil and coal are both non-renewable and finite resources. Electricity is produced from low-grade coal and middlings found in collieries and washeries. Thermal power stations are thus situated close to coal mines and washeries. The cost of producing electricity using oil has skyrocketed due to the growth in the price of oil on the global market and, as a result, the rise in local oil prices. The Fuel Policy Committee thus suggested using coal-based technology in its stead. Although the use of oil for power generation is being discouraged, coal's ability to successfully replace it hinges on how much coal output can be increased in the nation.

**Nuclear Energy**

Only 3% of the existing electrical capacity comes from nuclear power, which is a relatively new source of energy. Although there are attempts to build nuclear power plants in Tamil Nadu, Rajasthan, etc., the Planning Commission has stated unequivocally that these contributions "will remain relatively modest in the coming two decades, in relation to the total capacity of the power systems in India and their rates of growth." Nuclear energy is unlikely to make a significant contribution to the country's electricity output given the relative failure of nuclear power reactors in Russia and other nations, including India.

It is believed that poor nations will henceforth be the primary users of nuclear energy, despite growing opposition from the industrialised world. Currently, the nation has 19 nuclear power facilities with a combined installed capacity of 4000 megawatts. After the Indo-US nuclear agreement, its capacity is anticipated to increase to 60000 megawatts. There are plans for five new nuclear power plants, one of which will be at Jaita Pur, Maharashtra. There are plans for further nuclear parks in West Bengal, Gujarat, Andhra Pradesh, and Tamil Nadu. The installed capacity of each of these parks will be 10,000 megawatts.

In the whole globe, there were 436 nuclear reactors. US, Japan, and France produced 56.5% of the world's nuclear energy, which was enough to provide 6.5% of the world's energy needs. It should be mentioned that while the US now gets 19% of its energy from nuclear power, it has been a while since it built a new nuclear power plant. Even Japan is using less nuclear sources to produce electricity. The Kashiwazaki Kariwa nuclear plant's closure after the 2007 earthquake is a major factor in the same. There have been many decommissioned nuclear reactors, but no new ones have been built to replace them. Nuclear energy output decreased by 1.8% on a worldwide scale last year. Therefore, it seems that the Indian administration is particularly excited about the country's use of nuclear energy. Strong opposition to the Jaitapur nuclear project serves as a warning to future opposition that nuclear initiatives would encounter in light of worldwide experiences.

In order to maximise the contribution of infrastructure to economic growth, the research also identifies important policy factors. Governments are crucial in creating an environment that fosters the development of infrastructure. In order to mobilise resources, this entails developing sensible infrastructure policies, maintaining clear and effective regulatory frameworks, and encouraging public-private partnerships (PPPs). Prioritizing investments and maximising effect need strategic infrastructure planning, which is based on comprehensive requirements studies and cost-benefit analyses. Furthermore, for long-term economic and social sustainability, it is essential to construct sustainable infrastructure that takes into account environmental factors and climate change resistance.

## CONCLUSION

Infrastructure networks need to be continuously upgraded and expanded as a result of rapid urbanisation, population increase, and technology improvements. To bridge funding shortfalls, governments must to investigate cutting-edge finance options like green bonds and infrastructure funds. Adopting cutting-edge technology, such as smart infrastructure and renewable energy, may also open up new possibilities for the efficient and sustainable development of infrastructure. This conclude by saying that infrastructure is crucial to economic progress since it helps to promote productivity, competitiveness, and inclusive growth. Governments may stimulate economic change, draw in investment, and enhance the general standard of living for their people by making investments in and maintaining strong infrastructure networks. For infrastructure to have the greatest influence on economic growth and to ensure a successful and secure future, strategic policy considerations, sustainable development practises, and innovative funding structures are essential.

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# CHAPTER 13

# ECONOMIC DEVELOPMENT OF INDIA'S TRANSPORTATION SYSTEM

Dr. Mounica Vallabhaneni, Assistant Professor
Department of Commerce and Economics, Presidency University, Bangalore, India
Email Id: mounicav@presidencyuniversity.in

**ABSTRACT:**

India's transport network is crucial in promoting economic growth since it makes it easier for people, products, and services to move across the nation. The accomplishments, difficulties, and prospects for the future of India's transport system are highlighted in this abstract, which offers a summary and analysis of the subject. Construction and improvement efforts have been undertaken in ports, airport links, trains, and road networks. Increased connection, lower transportation costs, and greater logistical efficiency are all results of expanding and upgrading the transportation infrastructure. As a result, the economy has grown, regions have become more integrated, and trade and commerce have risen all throughout the nation. The transportation network plays a crucial role in enabling businesses, agriculture, and tourism. The transfer of raw materials and completed commodities is made easier by effective transportation networks, facilitating industrial production and supply chains. Increased connection in agriculture makes it easier for farmers to reach markets and transport their goods. A well-connected and accessible transit network also promotes tourism, creating job opportunities and fostering economic development in the hotel and service industries. Additionally, spending in high-speed rail systems, logistics facilities, and multimodal transportation hubs may boost connectivity, boost productivity, and promote economic development.

**KEYWORDS:**

Development, Economic, Economy, Market, Transport.

## INTRODUCTION

Transport and communications are the nerves of the Indian economy, helping the movement of people and goods, if agriculture and industry are thought of as the body and the bones. The transportation infrastructure aids in enlarging the market for commodities, which enables large-scale manufacturing via the division of labour. It is necessary for the transportation of fuel, equipment, raw materials, and other items to the locations of production. The requirement for transport infrastructure will increase as output in any sector of the economy becomes more widespread and constant. The improvement of transport facilitates the production of resources and opens up isolated locations. Despite having plenty of agricultural, forestry, and mineral resources, regions cannot be developed as long as they remain inaccessible and distant. Transport development aids in the better and more efficient use of resources by connecting the less developed areas with those that are comparatively more developed. Finally, the increase of transportation infrastructure directly aids industrialization. As a result of the need for items like ships, motor vehicles, and locomotives, specialised industries have emerged. Thus, the development of transit is crucial for a rising nation like India.

**The Five Year Plans and Transportation**

The development of transport was given top priority by Indian planners because, in their opinion, "an efficient and well developed system of transport and communications is vital to the success of a plan of economic development which lays stress on rapid industrialisation." As a result, the allocation for the transport sector was quite high during the first three plans, i.e., between 25 and 28 percent. The transport sector's allocations in the following plans fell steadily. For instance, just 13% of the whole budget was spent on the Eighth Plan. The transport industry has not, however, reached full development, as seen by the decreased allocation in the previous three plans. On the one hand, there is a shortage of resources, while on the other, the energy and industrial sectors are being given more attention [1], [2].

**Transportation System Development Since 1951**

Considering the size of the nation and its geographical characteristics, rail and road transport systems predominate, although other types of transport are equally significant within their specific fields. Demonstrates that since the implementation of economic planning in 1950–1951, the transport industry has seen significant expansion. Despite a modest increase in route length, railroads have seen a 3% annual gain in freight originating tonnage. The number of roads has grown at a 5% yearly pace, while the fleet of trucks used for road transportation of commodities has grown at a 7% annual rate. Over 40% of Indian villages are serviced by all-weather roads, while approximately 70% of Indian villages are linked by a network of rural roads. While coastal shipping could only record a paltry gain of 1.4%, shipping tonnage climbed by an amazing 11%. Passenger traffic on aeroplanes has swiftly increased by 9% annually. Between 1951 and 2010, the volume of traffic handled by major ports rose at an average yearly rate of almost 5%, from 19 million tonnes to 562.7 million tonnes. The spectacular growth of the transport industry as a whole is a result of the significant funding devoted to the expansion of the transport network throughout the planning period.

**India's Transportation Development Issues**

Although transportation systems have made significant strides during 1950–1951, there are still several obstacles, limitations, and challenges. Inadequacies and imbalances in India's transport systems pose a danger to both urban and rural areas' economic development and standard of living. Transportation bottlenecks: The demand for transportation continues to exceed the capacity of the whole transportation system, including the road network. For instance, due to railway capacity issues, bulk goods like coal have had to be transported across great distances by road at a significant economic expense. The country's almost all sectors have been impacted by the severe waggon scarcity. Lack of railway infrastructure was often to blame for the country's widespread coal shortage, despite their being plenty of coal at the mines, the manufacturers' stockpiles of cement, the lack of fertilisers and food grains, and other shortages. Manufacturers have been forced to hire road carriers to convey their goods due to the inefficiencies, delays, and widespread corruption among the railway workers. The railway constraints have now been mostly eliminated. 30% of the communities in our nation still don't have access to roads today. Due to inadequate infrastructure and capacity, the road transport system is under a lot of stress. As a result, there have been significant transit delays, fuel waste, and increased operational expenses. Additionally, there are issues with shipment that must be dealt with.

Poor transport system planning: When developing transport plans, the geographical and economic factors that affect the country's need for transport were not given enough consideration. For instance, big cities and towns tend to have concentrations of people and economic activity. There is a great deal of strain on the rail and road transport systems in the cities and certain regions due to the massive concentration of traffic in those areas of the nation. There should be the creation of other routes or balanced regional growth. In the years to come, there will inevitably be a significant increase in the need for transit. The growth of transport services cannot always meet this rise in demand. Greater industrial dispersion, balanced regional growth, the production of thermal power, the development of alternative energy sources, etc. are all important components of careful transportation planning [3], [4].

Another problem with poor transportation planning is that it has led to an explosion of individualised transportation, primarily consisting of scooters and cars, in urban areas where there is insufficient mass transit, no demand management, and policy distortions in the areas of fuel pricing and bank finance. High levels of pollution and worrisome accident rates are results of this. On the other hand, many communities are cut off from adjacent markets and cities by unreliable all-weather transportation. Another issue with India's inadequate transit design is that the North East and Jammu and Kashmir have not been sufficiently connected to the rest of the nation, leaving them isolated both physically and psychologically. Finally, several environmentally beneficial and economically advantageous forms of transportation, such as coastal shipping, inland water transportation, and non-mechanized transport, have mainly lagged behind.

Coordination between rail and road transport: Road and rail travel now dominates the nation and will likely do so in the future as well. However, the mix of modes of transportation has been consistently moving away from railroads. For example, in 1950–1951, road transport accounted for 11% of freight traffic and 26% of passenger travel, but by today, those percentages had climbed to 60% and 80%, respectively. From an economic and environmental perspective, this trend towards more vehicle traffic is not desirable. One of the obvious effects is a steadily rising import cost for energy. According to the Seventh Plan, "Ideally, the Railways should have adequate capacity to clear all train and waggon load traffic for long and medium loads, especially for bulk commodities, while the road transport would cater primarily for small lot, short haul traffic for which it is the more efficient mode."

Overgrown and outdated assets: India's transport system is plagued with overgrown and outdated assets. For all forms of transportation, this is true. For instance, in the case of the Indian Railways, a significant amount of the rolling stock as well as around 25% of the entire route length and 80% of the workshop equipment must be replaced or updated. A third of the planes of our airline businesses, over half of the shipping cargo, and almost eighty percent of the buses run by the SRTUs would need to be replaced. It is now widely acknowledged that this replacement issue has taken on huge dimensions and cannot be solved within a single strategy.

## DISCUSSION

Transport technology has a significant impact on the productivity and safety of the transportation industry. The employment of developing technology and the modernization of the transport system are crucial components of transport planning, but they should be based on local requirements rather than a copy of industrialised nations' practises. Though technology advancement has been a focus of every five-year plan, actual progress has been agonisingly

slow: multi-axle vehicles, road construction, cargo handling equipment at ports, navigation and communication facilities at airports, modernization of rolling stock, and signalling systems in the railways are all still in their infancy. Without paying attention to these factors, the productivity of operations and the calibre of service, apart from improving the security and dependability of the transportation system, would suffer. The overall Indian transport system has grown significantly over the years, but it still has numerous flaws, necessitating a significant effort in capacity growth, modernization, and technology advancement. To address the aforementioned variety of issues confronting the transport industry, the Tenth Plan has suggested a comprehensive transport strategy. The transport plan programmes of the Tenth Plan are doomed to be little more than paper plans due to the size of the difficulties in the transportation sector and the enormous financial resources necessary (estimated at $2,000,000,000).

**Increasing Indian Railways**

The first train travelled 22 miles between Bombay and Thana in 1853, marking the humble beginning of the Indian Railways. After a slow start in 1853, the railway expanded quickly, and by 1900, it had approximately 25,000 kilometres of track. In the next 50 years, just 10,000 miles of new railway lines were built, leaving a total of little more than 34,000 miles of railway in 1950. Initially, private businesses controlled by Englishmen ran the railways. The government provided several perks, like free land grants and a guarantee of a specific rate of return on investment, among other things. Private ownership and administration have drawn criticism and concerns. In 1925, the first railway company was taken over by the Indian government. The government of India eventually took control of the other firms as well, and by 1950 the railroads throughout the old princely States had also been taken over. The Indian Railways are currently a single State-owned company. One of the largest railway systems in the world, it is the largest nationalised enterprise in the nation and has a capital base of about '58,000 crores, 63,000 route kilometres, 8,000 diesel and electric locomotives, 42,000 passenger coaches, 2,22,000 waggons, and employs almost 1.6 million people. Railways have a special place in the Indian economy for long-distance freight transit in the bulk, long-distance passenger travel and mass quick transportation in suburban regions [5], [6].

**Plans for Railway Development**

The primary goal of planning in Indian Railways in the past was to increase rail traffic in a way that avoided production bottlenecks and ensured an effective rail transport system because Indian Railways is the largest transport organisation that is closely linked to the growth of the national economy. In all, 24,000 crores were spent on railroads in the first seven schemes. Each Plan had a specific purpose in addition to the overarching goal of an effective rail transportation system, Indian Railways were in poor state throughout the first three years of the Tenth Plan. But in the latter two years of the Tenth Plan, productivity skyrocketed, leading to a massive growth in capacity development, a rise in railway earnings, the control of railway spending, and enormous surpluses.

**India's roads and system of roads**

**Road Transport Is Important for the Indian Economy**

The road transportation method has distinct benefits over the railroads:All around the globe, road development and motorised transportation have greatly increased gross domestic product, but

India has lagged far behind in these areas. Additionally, there is huge potential for job creation in the road building and maintenance industries. India also needs more road miles, particularly to open up the huge territories that can only be accessible by highways.Road transport is more rapid, practical, and adaptable. It is especially useful for moving products and short-distance trips. Motor vehicles can simply pick up people and products from wherever and transport them to the desired destination. Road transport allows for pickup and delivery from door to door. However, unlike roads, railroads have set lines and lack the flexibility of those roads. Both passengers and cargo must be transported to the train station.Railways need the addition of roads. India is a nation of villages, and the only method to link them is through road; cities may be connected by rail. A system of feeder roads will need to adequately service the railway stations. The trains can only receive their products and passengers via these roadways. Road transit is important for such movement over small distances, but trains are necessary for long-distance transportation of goods and people. As a result, roads and trains are complimentary rather than competing.The farmers benefit particularly from road haulage [7], [8].

Good roads make it easier for farmers to transport their goods swiftly to markets and cities, especially perishable goods like vegetables. The farmer can only be guaranteed of a consistent market for his goods by improving the road infrastructure. When seen in the perspective of the green revolution, this gains significant significance. Additionally, decent roads ease the burden on draught animals. If there aren't adequate roads, it could be hard for the peasants to leave their villages during the rainy season. In this regard, it is crucial to understand that the road network is what connects the peasants to the cities and the fresh concepts and systems that come from the city.Roads play a critical role in the nation's defence. As we previously discussed, it is essential for the soldiers to be transferred rapidly from one location to another during emergencies in a large nation like India. Here, the railroads are helpful. The road transportation, however, is more significant than the railroads. The army must transfer its personnel, armoured vehicles, field artillery, and other equipment these days. Roads are vital for the transportation of these. An illustration of the significant role roads play in the defence of the nation is the priority placed on building border roads to enable army mobility for the security of the northern borders against Chinese incursion.

The Seventh Plan highlights the significance of roads in the following ways: Roads are a crucial component of the transportation infrastructure since the nation's economy is still predominantly agricultural in nature and the settlement pattern is rural-oriented. With population increase and the expansion of the labour force, there are significant job possibilities created by road building and maintenance. Additionally, improved roads increase fuel efficiency and boost the sector's total productivity for road transportation. Thus, the Seventh Plan will continue to place a high priority on road construction.

**Road and Rail Coordination**

Roads and railroads complement one other far more than other types of transportation do, and they both benefit from this. The local market and the closest train station are connected to the growers via the road network. On the other hand, the railways operate as a connecting connection between the region of production and distant customers as well as between manufacturers in the city and farmers in the countryside. Without excellent and sufficient roads, the Railways cannot gather and convey enough products. However, even the greatest roads are unable to connect the producers of bulky goods like coal, iron and steel, cement, and agricultural

products with the end customers. Roads and railroads work well together. They are now, however, rivals everywhere. Such a rivalry has also been going on in India. There have been efforts to reduce rivalry and promote coordination between the two transit systems for at least the past three decades.

**The Natural Advantage of Road Transportation**

In luring both people and cargo traffic, bus and trucking businesses may outcompete railroads. Certain services that can only be provided by motor transportation include door-to-door pickup and delivery, a highly flexible schedule, quick travel, etc. Due to these benefits, road shipping has become quite popular among merchants, "particularly for less than waggon load consignments." David Hughes claims that "road delivery has often cut our cost in half and decreased delivery time. The lack of theft is a further significant benefit of road distribution versus rail transport. There is no damage, no animosity, no very costly packaging involved. According to Hughes, "road transport companies are taking up as much as 80 to 90 percent of the small parcel traffic in South India." Transportation of goods by road is quicker, suffers less from pilferage, and has the advantage of direct delivery from door to door while rail transportation is full of complaints such as denial of waggon facilities, lengthy delays in booking, the unintentionally long time taken in transportation, and so on [9], [10].

**Railways Are Safeguarded from Road Competition**

Many committees examined the rivalry between railroads and roads for transportation in the 1930s. One significant recommendation was that the railway should enhance its offerings and successfully compete with roads. For instance, the Railways should operate show trains, modify the schedule, provide inexpensive round-trip tickets and season tickets, etc. The Railways should implement rapid goods trains, quicker processing of commodities, streamlined administrative procedures, door-to-door pickup and delivery services, etc., in the area of goods transit. The Indian Railways have mostly adopted these proposals.

The Motor Vehicles Act of 1939 made it mandatory for all motor vehicles to get licences and required them to abide by certain rules about vehicle maintenance, avoiding congestion, speeding, etc. The free movement of commodities was limited by the Act of 1939. Permits were only valid in certain locations, and additional authorization was required to operate outside of the initial region. The Motor Vehicles Act was created to safeguard the railroads from the harmful competition that motorised transportation poses.

The State Governments of India received "A Code of Principles and Practises" from the Indian Government in 1945 for the control of road transport. According to this code, any goods aside from those that are perishable or delicate may be transported without charge up to a distance of 75 miles, and only if the railroads cannot manage the additional traffic. Thus, it is evident that the government has continuously attempted to regulate road traffic in order to save the railroads. The Masani Committee put it succinctly this way: "In respect to railways and roads, the principle of rail-road co-ordination was accepted long ago, but in the Committee's opinion it has not been fairly applied and has been working in a one-sided way so as to restrict road transport."

The interests of railroads have traditionally been safeguarded by the government against competition from the automobile. This mindset is important for the following reasons:

1. In terms of central finance, railroads play a crucial role as the main form of land transportation.
2. Without efficient coordination, there would be unnecessary duplication that would hurt the budget of the central government.
3. Road transportation should likewise be under public management and control because that is now the case with railroads.
4. There are two requirements for railroads that do not apply to roads: the need to transport all goods supplied and the ban on unjustified favouritism and discrimination.
5. The railway tariffs are set according to the maximisation of profit rather than what the traffic can endure.

Railways transport two different kinds of goods: high-rate traffic and low-rate traffic. Low-cost raw materials used in industrial and agricultural operations, such as coal, cement, mineral ores, fertilisers, etc., are transported in low-rate traffic. The railroads offset their loss on this kind of business with revenue from large volume traffic. The natural outcome will be a rise in freight rates for lower-priced items if road traffic is permitted to syphon off the cream of the commerce. This will have a negative impact on the nation's industrial growth and will also seriously harm regional development and exports. Above all, even at a loss, the railroads must provide a number of critical demands for the country. When they need to open up key lanes and provide special travel accommodations for social and national goals, this is the case.

## CONCLUSION

Urban regions now face traffic congestion, air pollution, and road safety issues as a consequence of rapid urbanisation, population increase, and rising automobile ownership. Modernizing the railway network and increasing the capacity of the ports and airports are both necessary to accommodate the rising demand. The effectiveness of the transportation system is further hampered by problems with interoperability, multimodal integration, and last-mile connection. In conclusion, India's transport system has significantly contributed to sectoral development, regional integration, and economic progress. India can further unleash the potential of its transport system to spur economic growth by tackling issues like traffic, pollution, and infrastructural deficiencies. A well-connected, effective, and sustainable transport system that supports economic development and raises the standard of living for its population will depend heavily on leveraging technology, adopting sustainable practices, and pursuing strategic investments.

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