CHAPTER I

INTRODUCTION

Process of economic development in any economy is multi dimensional involving structural transformation. There is a consensus among economists and scholars that with the growth of an economy there will also be a structural transformation in the composition of its national income. In the beginning of the 21st century the global economy, had undergone significant structural changes. A growing economy undergoes structural changes in the process of its economic development. The conventional wisdom about the various stages of the developmental process suggests that an economy changes from being an agriculture – dominated one to that of an industry-dominated economy and then to a services-dominated society. The credibility of the above –dictum had been established empirically by the experiences of the advanced countries of today. Any deviation from this established path does not enable a county to reach the destination of economic growth smoothly. Even, if it achieves economic development, the development would be volatile and unstable. These trends had been challenged now days at the national and at the international levels. It could be observed that along with economic development, there would be a rapid transition from agriculture to that of the service sector, while industry or the secondary sector lagged behind. This trend could be observed in the sectoral share of the GDP and its contribution to employment.
The occupational structure of a country refers to the distribution or the division of its employed population among to the different sectors. There is a close relationship between the economic development of an economy on the one hand and its occupational structure on the other.

The historical roots of economic development could be modestly traced back to the eighteenth century seminal work of Adam Smith¹, and sectoral imbalance was indeed the central idea in the then development thinking in the “The Wealth of Nations”. He had explained the relevance of the sectoral imbalance and the resulting constraints in the process of economic development. In a closed economy, the output growth of manufactures depended on the size of the agricultural surplus, while in an open economy it was largely influenced by the size of the potential foreign exchange earnings. The crux of the development debate was the question as to whatever agriculture or the manufacturing industry was the more important sector. The Physiocrats were in favour of agriculture as manufacturing could not add to the existing physical resource base; whereas Mercantilists preferred manufacturing, as its output could be easily traded for profit. Obviously, the early economists were much concerned with the issue of sectoral imbalance.

Further, Colin Clark had argued that “A high average level of real income per head is always associated with a high proportion of the working population engaged in tertiary industries… low real income per head is always associated with a low proportion of the working population engaged in tertiary production and a high percentage in primary production.”

According to economists like Fisher, “In every progressive economy, there has been a steady shift of employment and investment from the essential ‘primary’ activities… to ‘secondary’ activities of all kinds and to a still greater extent into ‘tertiary’ production”.

According to Thomas Tomich, Peter Kilby and Bruce Johnston, “Structural transformation accompanying rising per capita income can be considered along two dimensions, changing output shares and reallocation of the labour force. In both dimensions, structural transformation is characterized by ‘relative’ decline in the agricultural sector. But absolute levels of agricultural output and employment will rise throughout much of the prolonged process of structural transformation.”

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2 Colin Clark, *The Conditions of Economic Progress*, Oxford University Press, Britain, 1940
Structural changes took place in the various economies as the process of economic development preceded further and gathered momentum. The most common pattern of the structural changes followed a sequence pattern of a shift from Agriculture to that of Industry and then to the Service sector, these structural changes were observed both in their relative shares of national product and in the labour force.

Empirical Frame Work of Structural Transformation

The empirical frame work of structural transformation is presented below

Clark – Fisher’s Structural Transformation Approaches

Clark (1940)\textsuperscript{11} and Fisher (1935, 1939)\textsuperscript{12} were the pioneers of in studying about the structural transformation in economic development by looking at the sectoral shifts in the composition of the labour force. For the first time, they used the sectoral frame work of the primary- the secondary - and the tertiary sectors to understand the economic conditions of New Zealand, in particular, and of the other low-income countries, in general. By analyzing empirically, the inter-sectoral productivity growth and Ernest Engel’s effects of higher income elasticity of demand for the services, Clark and Fisher had predicted about, the emergence of the ‘service economy’ of highly developed countries. This had become the

\textsuperscript{11}Quoted in, Edward Nissan, “An Assessment of Economic Development: The Non-Agricultural Sector versus the Agricultural Sector”, \textit{The Indian Economic Journal}, Vol 41 No 4, April-June 1994, pp- 125-134

\textsuperscript{12}Quoted in, Alok and Yadav K, \textit{Structural Changes in Indian Economy – A Comparative Analysis}, Northern Book Centre, New Delhi, 1999, pp- 48-56
Clark-Fisher Hypothesis. They were of the view that a structural change accompanied the process of economic development.

**Rostow- Lewis’s Structural Transformation Approaches**

Lewis (1954) and Rostow (1960) had studied about the structural transformation in terms of accumulation of capital and sectoral composition. Accumulation relates to the physical capital formation at the aggregate level while sectoral composition captured the economy’s wide structural changes. Capital accumulation was necessary for the acceleration and the sustenance of economic growth whereas sectoral balance was important to prevent market disequilibrium. Rostow had laid a stress on two concepts such as the rate of investment and the leading sector. In his theory, Rostow had attributed the take-off stage in economic growth to a sharp increase in the rate of investment. Besides, the structural transformation was the productive structure of the economy. Similarly, Lewis had argued that an increase in physical capital accumulation was almost indispensible for a higher rate of growth economic growth. In a dualistic economic system the shift of resources from the traditional sector to the modern sector altered the distribution of the income in favour of the saving class. Lewis and Rostow had thus, emphasized on both capital accumulation and proper sectoral composition as

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the essential requirements for a sustained process of long-term structural transformation.

**Kuznets – Chenery’s Structural Transformation Approaches**

Kuznets Chenery’s variant of structural transformation, (1966)\(^{15}\) had characterized modern economic growth on the basis of an analysis of the quantitative aspects of economic growth in the developed countries. In his historical long time series analysis, he had observed that the share of agriculture in both the total workforce and in the total income had shown a decline in agriculture was the unique feature of modern economic growth through which could be analysed structural transformation. Kuznets reinterpreted the classicist pessimism of declining agricultural growth in the dualistic framework as the emerging process of modern economic growth. Kuznets called this process of transition which was from a dualistic structure to a one – sector modern economic growth as ‘structural changes’ in terms of value added and work force in agriculture as agriculture declined in relation to the non-agricultural activities consisting of manufacturing and service sector oriented activities.

Deutsch and Syrquin (1986) had validated the Kuznets –Chenery approaches on structural transformation as per their following observations: (i) the use of intermediate inputs in relation to the total gross output had been increasing (ii) the use of the primary products in relation to the total intermediate inputs had been declining while the use of the intermediates products from ‘industry’ and ‘services’ had been rising; (iii) the use of the intermediate services in industrial sectors on account of a more complex system with a higher degree of fabrication had been increasing with an increase in the level of the income; and (iv) the use of purchased modern industrial intermediate inputs in the agricultural sector had been increasing during the process of development.

While validating the Kuznets’s observation on the structural changes in both the developed as well as the less developed countries during the post-war period, Chenery and Syrquin(1986) had arrived at the inference that during the course of the period of the structural transformation, there had been a clear shift from the primary activities to the manufacturing activities; but at the higher income levels the share of the services in the total output and that of factor use had increased with the process of a decline in industrialization.

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Engel’s Approach of Structural Transformation

Engel’s law provides another example for a universal developmental process. It specifies that the income elasticity of demand for food items is less than unity, implying that the share of food in the total consumption level would fall as the level of income increased. When combined with the other indicators of the development process, such as the accumulation of capital and the formation of the skills with the rising income the share of food items fell considerably. Engel’s law had also thus helped us to explain the observed pattern of industrialization.

The foregoing discussion on structural transformation had brought out that structural change was an integral part of the process of modern economic growth. The prime mover to modern economic growth was science and technology in the form of modern intermediate inputs which narrowed down the asymmetry of production and organization in the different sectors of the economy and ultimately eliminated economic dualism. However, with an increase in the income levels, there is a tendency for the decline in the industrialization through a decline in the use of modern intermediate inputs through the introduction of intermediate services. In a nutshell, economic development envisaged a process of structural transformation from agriculture to that of manufacturing and then to that of service.

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Elements of Structural Transformation

The mechanism of economic progress in farming is the same as that of its operation in every other sector of the economy. The mechanism is simply the art of specialization. Not only is specialization related to in respect of specific crops by the farmers, but a host which were of the other functions formerly carried out by the farm households had been transferred to the specialist producers. The adoption of division of labour in all the various economic activities had brought along with it the opportunity to use machinery whose power, speed, and precision multiplied the yield of the human efforts. Specialization had not only made the introduction of the capital equipment possible, but had also facilitated changes more productive to make land labour and capital. As these processes got strengthened the farm households shifted along the continuum from self-sufficiency to that of their dependence upon markets for the disposal of their products, for the purchase of their raw material requirements, for opportunities to hire labour and work in return for wages, for investments and loans, and for other goods and services.

Structural transformation at the sectoral levels had resulted in a movement towards specialization and in market participation at the producers’ level. Specialization had led to the emergence of new manufacturing and service activities. The smaller sectors such as education, health, financial services and the like got greatly enlarged. The most dominant change however was the decline in
the proportion of the agricultural sector, a rise in the proportion of the manufacturing sector. This was in part due to a greater demand for the non agricultural goods with the rising of incomes, but the more fundamental cause was the transfer of functions from generalist producers in the countryside to the specialised firms in the towns and cities.

Thus, in under developed countries, countries at the lower end of the income scale, members of the rural households devoted 35 to 50 percent of their time and below in the non-farm activities. Gradually tasks such as the making of garments, utensils, furniture, weapons, jewellery, the processing of crops into food, the construction of buildings and boats had been handed over to the specialist producers. High – productivity agriculture had been enabled to enter into industrialization directly; it had also fostered it indirectly many other activities since the specialized services, differentiated market network and the financial institutions that serve farming activities had simultaneously led to increased efficiency in the various manufacturing and service activities. Moreover, the roads and other rural infrastructural facilities provided initially had facilitated increased agricultural production and had also fostered the growth of many rural non-farm activities.

The sectoral performance and the structural changes in an economy could be analysed in various ways. But, the most important significant variables were
changes in national income (GDP), the emerging trends in the employment potential and the behaviour of export related activities.

**National Income as an Indicator of Structural Transformation**

National income could be used to measure the economic growth of a nation. According to the National Income Committee (1951)\(^\text{22}\) a national income estimate measured the volume of the commodities and services turned out in country during a given period, counted, without any duplication. Thus, the total national income of an economy measured the flow of goods and services in that economy. The national income is thus, the sum total of the money value of all the financial goods and services produced in an economy during a year.

**National Income Estimation**

The National Income estimates provide us with much information related to the production activities which take place in the different sectors of an economy. These estimates also disclose the structural changes that take place in the economy over a period of years. In India, the national income is estimated both on the basis of the current prices and also at constant prices. The national income estimates based on the current level of prices provide us with information on the state of economic affairs of a country during that year. On the other hand, the national income estimates based on constant prices were obtained on the basis

\(^{22}\)Government of India, *First Report of the National Income Committee*, April 1951, P-6
of the prices that prevailed in a particular year, commonly known as the Base Year. To estimate the real changes in the total production over a period of years, national income was calculated at a constant level of prices.

**Pre – Independence Estimates**

In the pre-Independence era Dadabhai Naoroji, (1868) Shah and Khambatta, (1921-22) Shirras, (1911) and Wadia and Joshi (1913-14) had estimated the value of the output of the agricultural sector and then added a certain percentage of it as the income from the non-agricultural sector. The assumptions of most of these estimators were arbitrary and hence were devoid of any scientific basis Dr. V.K.R.V. Rao (1931-32) had made use of a combination of the census of output and the census of income methods. He had divided the economy of India into two categories. In the first category were included agriculture, pastures, mines, forest, fishing and hunting. The census of output method was used to measure this category. In the second category industry, trade, transport, public service and administration, profession, liberal arts and domestic services were included. For these occupations, the census of incomes method was used.

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Post – Independence Period Estimates

In the Post-Independence period the national income had been calculated on the basis of a list of industrial composition. The pioneer industrial composition lists were given by the United Nations, which listed thousands of industries which conformed to the International Standard, Industrial Classification (ISIC) of all economic activities of 1958. For the sake of convenience for International comparisons, the U.N. Statistical Commission had reduced the long list to nine main activities. Even today all the nations are following these nine main activities in different ways. The nine main activities include

1. Agriculture and Allied Activities;
2. Mining and quarrying;
3. Manufacturing Industries;
4. Construction;
5. Electricity and Oil;
6. Commerce;
7. Transport;
8. Communication; and
9. Administrative services.

However, owing to the difficulty of comparing the industrial structures of the different countries with respect to the stated nine types of industrial

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classification, Clark\textsuperscript{25} had further categorized the above nine activities into three broad groups or sectors, namely,

a) Primary Activities (sector): Agriculture, forestry, hunting and fishing, mining and quarrying;

b) Secondary Activities (sector): Manufacturing, construction, and electricity, oil and gas and water and power;

c) Tertiary Activities (sector): Commerce, transportation, storage and communication and services of all types.

Although the above classificatory scheme is quite convenient, it might result in the overlapping of the activities of the different sectors. For example, mining and quarrying is sometimes included in the primary sector and sometimes included in the secondary sector. Later, this classificatory scheme was referred to as a sectoral classification.

**National Income Estimates of the CSO**

The CSO has released three types of national income series like, ‘The Conventional series’, ‘The Revised Series’ and ‘The New series’; the earlier New Series had 1993-94, as the base year. At present, the year 1999-2000 is considered as the base year for the national income estimates in India. In the new series with the base year of 1999-2000, the method of estimation adopted is a combination of

the product and the income method approaches. The estimate of national income for a particular year was obtained by aggregating the contribution to the NDP by a number of industrial sectors and then adjusting it to the total net factor income flows from abroad.

For the purpose of estimating the National Income the CSO had classified the Indian Economy into the following industrial sectors and sub-sectors.

A. Primary sector

1. Agriculture and Allied Activities:
   1.1 Agriculture;
   1.2 Forestry and Logging;

2. Mining and Quarrying:

B. Secondary Sector

3. Manufacturing:
   3.1 Registered;
   3.2 Unregistered;

4. Electricity, Oil, Gas and Water Supply:

5. Construction:

C. Tertiary Sector

6. Trade, Hotels and Restaurants:
   6.1 Trade;
   6.2 Hotels and Restaurants;
7. Transport, Storage and Communications:
   7.1 Railways;
   7.2 Transport by Other Means;
   7.3 Storage;
   7.4 Communications;

8. Financing, Insurance, Real Estate and Business services:
   8.1 Banking and Insurance;
   8.2 Real Estate, Ownership of Dwellings Business Services;

9. Community and Personal services:
   9.1 Public Administration and Defense;
   9.2 Other Services
## TABLE 1.1
INDUSTRIAL COMPOSITION OF VARIOUS ORGANISATIONS

<table>
<thead>
<tr>
<th>NO</th>
<th>MAJOR ACTIVITIES</th>
<th>NO</th>
<th>CSO DEFINITION</th>
<th>NO</th>
<th>WORLD BANK DEFINITION</th>
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<th>UNITED NATIONS DEFINITION</th>
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<tbody>
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<td>A</td>
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<td>Secondary Sector</td>
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<td>Tertiary Sector</td>
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<td>Community, Social, and Personal Service</td>
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Linkage between Structural Transformation and Labour Force

Labour, is a primary factor of production and the size of the labour force is of great importance for studying about the level of economic activity in a country. ‘Labour – Force’, or in other words the ‘economically active’\textsuperscript{26} population, refers to that proportion of the population which supplies the required labour for purposes of production and hence includes both the employed as well as the ‘unemployed’ persons and the labour – force participation rate (LFPR) had been defined as the number of persons in the work – force participation rates (WFPR) or the worker-population ratio (WPR). For measuring LFPR and WFPR three approaches, namely, the usual status, the current weekly status and the current daily status had been adopted for collection of data in the National Sample Surveys.

Since employment is closely related with sectoral transformation a brief note on employment status in Indian economy is necessary. Of the three estimates obtained on the basis of the three approaches already mentioned, the first one gives the magnitude of the ‘usually employed or the usual status work-force’\textsuperscript{27} In the NSS survey, estimates had been presented for two categories namely, (a) ‘usually employed or ‘working’ in the principal status. (ps workers) and (b)


‘usually employed’ or ‘working’ in the principal and in the subsidiary status both taken together (Ps+ss workers). The second category included all the total usually employed persons or all the workers. The first category referred to those workers having a more or less stable employment.

The whole population of a country could be broadly divided into the economically active and the economically inactive population. The economically active population is regarded as the ‘labour force’ or the ‘working population’. In the determination of the size of the labour force, it is customary to the exclude children below the age of 15 years and the old people who were above the age of 60 years. The economically active population consisted of all persons who were in are from the age of 15-60 in India. In India the work force participation rate had been around 33 percent during every year. The labour force was the sum of the working population together with the number of the unemployed population in a country.

\[
\text{Labour Force} = \text{Work Force} + \text{Number of Unemployed Persons}
\]

\[
\text{Population} = \text{Economically active persons} + \text{Economically inactive persons} = \frac{\text{Labour force}}{\text{Rest of the Labour force}}
\]

In India according to the CSO the industrial composition comprised of nine main activities of the primary sector, the secondary sector and that of the tertiary sectors of the economy and according to the NSSO of India the work force was

the number of persons in the Labour force minus the number of the unemployed persons in country. In the present study the researcher had followed the Industrial composition according to the CSO and base year as the year of 1999-2000 as adopted by the CSO and the work force as defined by the NSSO for the present research work.

**Linkage between Sectoral Performance and Exports**

A country’s economic dealings with all the other countries might become an important factor in determining the size of its National Income. According to Kindleberger, a country with a large proportion of its national income generated through its exports would depend upon its rate of growth and the state of economic fluctuations in the world market. The country’s progress depended much on the income elasticity, the technological progress and the short-run instability of the commodities exported.\(^{29}\) The usual arguments, tariffs to protect the domestic industries against imports and in favour of government’s assistance to encourage exports had also to be taken into consideration. If a country’s exports were high, its national income also would be high, provided its own residents did not reduce their spending when foreign markets were expanding. Even the Mercantilists had suggested that international trade should be indulged in to increase the national wealth and the national income of a country. Thomas Mun

had said that “the ordinary means to increase our wealth and treasure is by international trade, where we must ever observe the rule to sell more to strangers yearly than what we consume of theirs in value.”

The national income is equal to the sum of the consumers’ purchases, business investments, governments’ expenditures on goods and services and exports minus imports. Of course, if purchases in any one of these sectors rose, and there was not an offsetting decline in the purchases in the other sectors, there would be an increase in the national income of the country. A country’s economic dealings with the other countries might become an important factor in the determination of the size of the national income of that country.

Ragner Nurkse had classified the related factors in the growth process of industrialization in the domestic country into three distinct patterns namely.

(i) Growth through the exports of Primary products,

(ii) Growth through the exports of Manufactured consumer goods, and

(iii) Growth through the expansion of the output for the domestic market.

India’s industrialization had been characterized by a combination of the different growth patterns pointed out by Nurkse. It is needless to point out that the

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30 Mun Thomas, England’s Treasure by Foreign Trade, William Hedge and Company, 1965, p-25
process of industrialization in India could not be initiated without having resorted to the imports of certain essential commodities. We could not carry on with our basic and key industries without certain essential items of imports from other countries. Even for the rapid growth of the agricultural sector, we had to depend much on our imports for the supply of adequate fertilizers to our farmers. We had to import much of the technical know-how also. We could not take advantage of the Western technology without dealing in adequate quantities of foreign trade, which the late Rajiv Gandhi had pleaded for. Foreign trade was essential for the defence of our country also. Most of our neighboring countries had equipped themselves with advanced sophisticated weapons for their defence requirements. Under such circumstances we could not remain quite. India, as a developing nation had ample opportunities for the production of a number of engineering goods, capital equipments and several other non-traditional items, which required a vast market. The Indian economy had to dependent on its foreign trade to a very great extent for realizing its objectives of growth with stability along with social justice.

India’s export policies and performances during the past forty years or so had been subjected to a number of critical evaluations. A sense of helplessness had developed over a period of years which had culminated in a very rapid pace of reform process from the year 1991 onwards.
Need for the Study

One of the laws of economic development was the fact that as an economy developed and grew there would be a shift in its workforce, and its share in the GDP from agriculture to that of industry and further on then to the services. The association between a structural change in the GDP and the process of economic development was one of the extensively explored themes and had been well documented in the literature on Economic Development\(^{31}\). One of the most significant developments in the world economy since the year 1980 had been structural adjustments and macro–economic reforms introduced by a number of developing countries.

India, too, was not an exception to this general trend. The Government had no option but to resort to macro economic reforms and structural adjustments in order to bring the economy back on the track. Since the second half of the year 1991, India had been implementing various economic reform processes. There is no doubt that these economic reforms had been able to facilitate a relatively higher growth rate in India after the set back during of the initial years.

The Indian economy grew at the rate of 9.6 percent during the year 2006–2007, was the second highest growth rate recorded in India after the 10.5 percent

growth rate registered in the year 1888–1989\textsuperscript{32}. The annual average growth rate during the pre-reform period (1980-81 to 1990-91), which was of the order of 5.6 percent, the post-reform period (1991-92 to 2006-07), the average annual growth rate was of the order of 6.3 percent of real GDP. The average annual growth rates of the sectoral shares during the pre – reform period, was of the order of 4.6 percent in the Primary sector, 5.6 percent in the secondary sector and 6.6 percent in the Tertiary Sector respectively. During the post-reform period (1991-92 to 2006-2007) the average annual rates of growth were 3.1 percent in the Primary sector, 6.7 percent in the Secondary sector, and 7.8 percent in the Tertiary sector respectively\textsuperscript{33}. Unfortunately the growth in agriculture did not suggest the type of resilience disclosed by the other sectors of the economy. In fact, the rate of growth of the Agricultural GDP has been decelerating. The process of deceleration in the growth of agriculture had started during the nineties when the annual agricultural growth rate went down to the level of less than 3.1 percent from 4.6 percent in the previous decades. The process of growth of non-agricultural sector had started in the nineties when the non-agricultural growth rate came up to more than 6.7 percent from the level of 5.8 percent in the secondary sector and rose to the level of 7.8 percent from the level of 6.6 percent in the tertiary sector during the post-

\textsuperscript{32}Business Line, “ 2006-2007 GDP Growth Revised Upwards to 9.6%”, Vol 15 No 31, 1\textsuperscript{st} February 2008, p-12

reform period. The difference was not very high in the non-agricultural sector
during the two periods.

In India 29.6 crores people were employed in 1980-81 and it went up
improved to the level of 42.3 crores of people in the year 2006-2007. The annual
rate of growth of employment was of the order of 2.04 percent during pre-reform
period, which was just equal to the rate of growth of the labour force during that
period. However, it was thought that if this annual rate of growth of employment
was sustained during the next decade, the country would be able to reduce the
back- lock\textsuperscript{34} of unemployment significantly. During the period of post-reform
period the rate of growth of employment was of the order of 0.98 percent per
annum. Only this was less than half of the growth rate of employment witnessed
during the earlier years.

In respect of foreign trade, India’s share in world’s total exports which was
nearly 0.5 percent during the pre-reform period which went up to nearly 1 percent
during the post reform period\textsuperscript{35}. The policy of liberalization in respect of foreign
trade was initiated the year 1985-86 but its impact was felt only after the year
1991 when the new economic reforms facilitated a more rapid globalization of the
Indian economy by reducing by abolishing the quantitative restrictions and also

\textsuperscript{34}Ruddar Datt, \textit{Economic Reforms Labour and Employment}, Deep & Deep
Publication Ltd, Delhi, 2003, pp-4-9

\textsuperscript{35}Ammannaya K. K, “GDP Growth in Indian Economy: Need Further Economic
Reforms”, \textit{Southern Economist}, March 1, 2007, p-8
the reducing the tariff barriers which hindered international trade. The main aim
of the reform measures was to boost up our exports. The Report on Currency and
Finance\textsuperscript{36} was published by the RBI had stated that on an average annual basis the
export growth rate during the period 1992-93 to 1998-99 was at level of 9.8
percent which was higher than that of the 8.2 percent growth registered during the
period 1980-81 to 1990-91. Further it could be noticed that the exports of the
primary sector had been declining during the post-reform period.

In this context, it could be stated that India had its influence with the rest of
the world as its economic performance had been able to match the leading
position it had assumed in the affairs of the world. Until recently, India had been
striving for its self-reliance within the frame work of a highly controlled and
centrally planned closed economy. India’s trade with the rest of world had been
very insignificant, and even the primary sector with a high level of high
population in its workforce could contribute only much less than the tertiary
sector to the GDP of the country. If we considered the per capita GDP of India as
a rough proxy for the average living standard of India’s population, there had been
a welcome change by way of much improvement in the past two decades in India.

An understanding of the economic activities as well as that of economic development would become possible by way of an analysis of the trends and patterns of the development process. Such a study is essential as it would take into account the performance of the primary, the secondary and the tertiary sectors under the two-sub periods namely, the pre-reform period and the post-reform period which would help us in analyzing the performance of the sectoral shares in the economy which is being considered in this research work.

Statement of the Problem

India had declared economic growth as its main policy objective, with the firm belief that dualism and its associated evils of income and social inequalities could be eliminated through economic growth and modernization. A rise in per capita income and a reduction and the ultimate elimination of poverty became the objective as well as yardstick for measuring India’s economic development during the fifties. The then prevailing major theoretical contributions, such as the ‘Big push’ (Rosenti- Rodan), ‘Balanced growth’ (Nurkse), and ‘Take off into sustained growth’ (Rostow) had a profound influence on the formulation of India’s development strategy which had emphasised the role of investment in modern activities in one chosen sector, within an aggregate frame work. In the light of these dictums, Mahalonobis had envisaged ‘industrialization’ as the

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'engine of growth’ which it would facilitate a transfer of unutilised resources (agriculture surplus and surplus labour) from low productivity areas like agriculture to the high productivity areas such as the industrial sector. In the earlier eighties, the dualistic framework of agriculture and that of non-agriculture had prevailed in India. The stagnation in the industrial growth since the mid-sixties was attributed to the favourable terms of trade. However, Ahuwalia (1985)\textsuperscript{38} had argued that industrial stagnation was due to supply constraints and not due to wage goods constraints.

The eighties had witnessed a shift in the development strategy in India from that of the planning regime to that of liberalization regime. During the three decades (from 1950-51 to 1980-81) economic growth on an average was around 3.5 percent per year which had been referred to as the ‘Iron or the Hindu rate of growth’\textsuperscript{39}. There was acceleration in the rate of economic growth during the 1980s to the level of 5.6 percent a year, due to a clear acceleration in the growth performance in all the three constituent sectors, namely, Agriculture, Industry and Services. The complementary elements of the strategy of the eighties had also included an outward orientation, a greater reliance on the market forces and the minimization of the role of the government. The First Export and Import Policy of

\textsuperscript{38}Ahuwalia I. J, \textit{Industrial Growth in India: Stagnation Since Mid-Sixties}, Oxford University Press, New Delhi, 1985

1978-79, the deregulation of the industries, the opening up of the secondary share market and the export orientation of the eighties were termed as the first phase of initiating the Indian economy through liberalization. The ‘eighties’ was also seen as the period of rapid structural changes in the Indian economy moving towards a service oriented economy when the work force was very nearly equal to that of the labour force of the economy. Unfortunately, the growth acceleration of the eighties was accompanied by the emergence of the unsustainable fiscal deficits, costly anti-export bias in the trade policy and the current account deficit in India’s balance of Payments.

In July 1991, many economic emergency measures were undertaken in India to restore the external and the domestic confidence in the economy and its management. It is referred to as the New Economic Policy (NEP). This Structural Adjustment Policy (SAP) had envisaged rapid industrialization together with modernization for achieving to as faster rate of growth of GDP. The economy responded exceptionally well to these initiatives. In the nineties a prominent feature of the growing economic development of the Indian economy was the emergence of the services sector which involved a very heterogeneous spectrum of economic activities.

On the empirical side, the earlier attempts to explain the inter-sectoral balanced growth had brought out two important issues, namely, (i) structural
transformation in the Indian economy and (ii) inter-sectoral linkages. Much of the earlier studies had confined to themselves assessment of the growth performance rather than paying much attention to structural transformation towards modern economic growth. Similarly, the inter-sectoral linkages had been studied to identify the demand versus the supply constraints to growth.

The performance of the contribution of the service sector’s share of GDP had been marked by a simultaneous fall in the primary sector’s contributions and only by a very smaller rise in a contribution from the secondary sector. Even in India, the primary sector had been holding a higher percentage of a workforce, the secondary sector had dominated in the exports of India during pre and the post reform periods. The growth of the services sector had been independent of the growth of the commodity sector which was considered to be bad. Besides, the share of the services’ sector in the national income was found to be much higher than its corresponding share in the level of employment. In recent years, jobless growth had become a characterize feature of the Indian economy. Against this backdrop, the present study makes a modest attempt to study the performance of the Sectoral shares of the economy in GDP, the employment and the exports that accompany the process of economic growth under two different policy regimes namely, the pre-reform period (1980-81 to 1990-91) in relation to the post-reform period (1991-92 to 2006-07).
Objectives:

The study is set to meet the following objectives

1. To study the performance and the structural changes of the primary sector with respect to GDP, Workforce and Exports.

2. To examine the performance and structural changes of the secondary sector with respect to GDP, Workforce and Exports.

3. To analyse the performance and structural changes of the tertiary sector in GDP, Workforce and Exports.

4. To assess the emerging sectoral pattern in the Indian economy.

Limitations of the Study

1. The present research study is macro in its nature, portraying the picture for the whole of India, which becomes the unit of the study, and hence comparisons at the micro level might not be feasible.

2. As the study had been completely based on the available secondary data, the limitations pertaining to the secondary data such as inadequacy and the lack of reliability would equally apply to this study also. The twenty seven year data and the results obtained there from might become applicable to those particular years only.

3. No attempt had been made to make any comparative analysis of India’s experience with those of the other countries. The study covers only certain important aspects such as the structural changes observed in the economy,
especially in the sectoral performances before and after the period of the economic reforms in the areas of their contribution to GDP, workforce and exports.

**Layout of the study**

The first chapter introduces the concepts, empirical framework of structural transformation, the main variables used in the study, the need for the study, the statement of the research problem, objectives, and limitations of the study and the layout of the study.

The second chapter deals with a review of the related literature and the research gap, the methodology, and the list of the tool used for the analysis in this study.

The third chapter analyses the performance and the structural changes of the primary sector with respect to GDP, Workforce and Exports.

The fourth chapter studies about the performance and the structural changes of the secondary sector in relation to GDP, Workforce and Exports.

The fifth chapter examines the performance and the structural changes of the tertiary sector in GDP, Workforce and Exports.
The sixth chapter studies the performance of the overall GDP, workforce and exports and the emerging sectoral pattern in the Indian economy.

The seventh chapter presents a summary of the findings, suggestions and conclusions.