



# A study of the Growth Characteristics of the State Economy

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## 1. Introduction

Economic growth is the most commonly accepted barometer that reflects the status of economy for countries/states. Economic growth being a quantitative term refers to an increase in the level of national product with an associated increase in income with the corresponding increase in the various indicators of economic performance, such as increased industrial and agricultural production, employment levels and decline in the number of poor below a stipulated poverty line. Meanwhile, Economic development is a broader term which encompasses positive changes in social life along with growth in economic life. It is a qualitative improvement in the standard of living of human beings and well-being of the masses by raising per capita income.

## 2. Statement of Problem

The sectoral composition of Gujarat's economy has undergone structural changes over the years. This change is best exemplified with changing shares of agricultural, industrial and services sector in the GSDP and NSDP. From a primarily agro-based economy during the 1960s, the Gujarat's economy has emerged predominant in the services sector during the 1990s. This shift in the composition has resulted in substantial changes in the production and demand linkages among various sectors and in turn, had substantial implications for growth and development process in the economy of Gujarat.

Experiences of the various developed economies in this regards show that the growth process, in general, is not balanced among sectors. Therefore, by concentrating investment on appropriate sectors, the process of economic development can be accelerated. The key sectors would stimulate greater economic activity in other sectors and would results in a larger multiplier effect on growth and development. In the context of Gujarat, currently this issue has serious short- and long-term implications. While proper understanding of the sectoral performances in view of the recent of the economy is an immediate priority, the issue assumes importance in designing appropriate long-run strategies to achieve an inclusive and sustainable growth.

Investigation of the performances among the sectors becomes important from the policy perspective. A clear perspective of the sectoral dynamics could be useful in devising a conducive and appropriate development strategy. A proper understanding of the characteristics and trend of sectoral performances also assumes importance in designing effective government policies.

The study of sectoral performances is all the more important for a developing state like Gujarat so that positive growth stimulus among sectors could be acknowledged and adopted to sustain the economic growth momentum making it more inclusive readdressing various socio-economic problems such as poverty, unemployment and inequality.

Structural Changes across various national economies around the world reflects a common pattern of decline in share of primary sector in state income to secondary sector and at later stages of development from secondary sector to tertiary sector this transformation is also noticed in occupational

structure. However Structural Changes experienced by India haven't followed the trend in occupational patterns as experienced by other economies of the world.

Very little research is undertaken to study the pattern of structural changes in the economy of Gujarat post economic reforms. These changes haven't been studied or analysed that would conclude on pattern and dimension of change which would in-turn help in deciding and planning for future policy reforms.

Against this backdrop, this research attempts to analyse growth performance of the primary, secondary and tertiary sectors of the economy under the framework entitled "Economic Growth of Gujarat: A Sectoral and Structural Analysis".

### 3. Reviews of related Literature

**Colin Clark's Conditions of Economic Progress (1940)** was his most important contribution to macro measurement. It was the first study to present comparable estimates of levels of real income across countries adjusted for differences in the purchasing power of currencies. These were linked to inter-temporal measures of GNP in real terms of the type he had previously produced.

**Neoclassical growth theory (e.g., Abramovitz, 1956; Solow 1956 and 1957)** regards growth largely as the outcome of exogenous technical progress, which effectively offsets the law of diminishing returns to which inputs are subject. From the policy perspective, this theory has little to offer since technical change is unexplained and therefore not amenable to policy.

**W.W.Rostow, in his book The Stages of Economic Growth (1960)**, found that it is possible to identify all societies, in their economic dimensions, as lying within one of five categories: the traditional society, the preconditions for take-off, the take-off, the drive to maturity, and the age of high mass-consumption. A traditional society is one whose structure is developed within limited production functions with a ceiling that exists on the level of attainable output per head. This ceiling resulted from the fact that the potentialities which flow from modern science and technology were either not available or not regularly and systematically applied. Generally speaking, these societies, because of the limitation on productivity, had to devote a very high proportion of their resources to agriculture. The second stage of growth embraces societies in the process of transition; that is, the period when the preconditions for take-off are developed; for it takes time to transform a traditional society in the ways necessary for it to exploit the fruits of modern science. During the take-off new industries expand rapidly, yielding profits a large proportion of which are reinvested in new plant; and these new industries, in turn, stimulate the services to support them and for other manufactured goods, a further expansion in urban areas occurs with the establishment of other modern industrial plants. The whole process of expansion in the modern sector yields an increase of income in the hands of those who not only save at high rates but place their savings at the disposal of those engaged in modern sector activities. The new class of entrepreneurs expands; and it directs the enlarging flows of investment in the private sector. New techniques spread in agriculture as well as industry, as agriculture is commercialized, and increasing numbers of farmers are prepared to accept the new methods and the deep changes they bring to the ways of life.

**Kuznets, S (1966)** found that high income countries experienced relative expansion in the industrial sector till the middle of the 20th century. He summarized the structural changes that accompany economic growth, emphasizing "the shift away from agriculture to non agricultural pursuits and, then, away from industry to services". Simon Kuznets mentioned three factors that bring structural changes in the economy.

#### **4. Research Questions**

1. To explain the sectoral composition of NSDP and Per Capita Income from 1991-92 to 2018-19 for the state of Gujarat.
2. To examine the sectoral real growth rates in NSDP and Per Capita Income at current and constant prices for the state of Gujarat.

#### **5. Relevance of the study**

This study is important because of growing importance for development of Gujarat's economy. No state can develop without passing through various phases of structural changes. Structural changes and economic development are strongly connected. Hence for structural changes to occur the economic development is a pre-requisite. From this point of view the relevance of the study can be noted down as:

#### **6. Academic relevance**

The study is useful from academic point of view considering its help in understanding changes in sectoral and occupational patterns in the state of Gujarat during post reforms period and what could be appropriate ways to analyze these changes and gain insights as to develop suitable theory on structural changes in the economy of Gujarat.

#### **7. Research relevance**

The study is relevant from research point of view because it will provide basic insights as to what are the various factors that induce structural changes in the economies, what structural changes are ideal and good for economies as to what works and what doesn't work for states and how reforms could have positive impacts on structural changes that helps to economies development and growth more inclusive, balanced and sustainable.

#### **8. Policy relevance**

The policy relevance of the study can be rightly understood if one takes into account challenges of economies that encompass structural changes during the process of development. This research can help the policy makers and other appropriate authorities to know what are the patterns and dimensions of structural changes that an economy undergoes during the process of development and various reforms. It can help in modification of development policies and designing development friendly reforms that play a significant role in correcting the un-even growth patterns with positive social and economic impact on state.

#### **9. Objectives of the study**

This research work to be undertaken is aimed at the following main objectives:

1. To study of the Growth Characteristics of the State Economy
2. To highlight the growth characteristics of the state economy - particularly during and after the reform period by analysing NSDP and PCI.

#### **10. Scope and Limitation**

##### ***10.1 Scope of the study***

1. Geographical scope of study is confined to state of Gujarat.
2. Only selected indicators are chosen as part of study.
3. Study is purely based on available authenticate secondary data.
4. Sectoral composition, population parameters, occupational structure, current status of infrastructure and human development index has been selected by the researcher.
5. Study pertains to structural changes. Hence, theoretical scope covers various theories on structural changes, economic growth and economic development of various economies of world, India and other states and policies adopted so far.

### **11. Limitations of the study**

1. Study is limited to the state of Gujarat only.
2. The study doesn't include any comparison with other state, nation, economy or policies adopted by them.
3. Data is collected from various authenticate secondary data available.
4. Period of study is from the year 1991-92 to 2018-2019.

### **12. Research Methodology**

The present study has been undertaken by the researcher after conducting literature survey in different sectors of the economy. The study has been scientifically conducted based on secondary data of agricultural and allied sector (Primary Sector), industrial and manufacturing sector (Secondary Sector) and service sector (Tertiary Sector) respectively. Being an economic study, the researcher has conducted literature survey based on the objectives of the present study. To have scientific inferences the researcher employed secondary data of 29 years. The data pertaining to population growth, area of production yield of food grains, gross irrigated area, contribution of primary sector to NSDP at current and constant prices, contribution of secondary sectors real to NSDP at current and constant prices and contribution of tertiary sector to NSDP at current and constant prices, status of infrastructure, Human development index have been analyzed with the help of empirical data.

### **13. Sources of Data**

The study is based on secondary data. For analyzing the objectives of this research study, the data can be collected from various sources. Use of existing literature has been made to support the factual data. The data collected from Central Statistical Organization, National Sample Survey Organization, Gujarat Economic and Statistic Department, RBI Bulletins, various issues of Economic Surveys of Gujarat, reports from Ministry of Planning Commission, reports from Ministry of Agriculture, Ministry of Industries, Ministry of Tourism, Economic Appraisal, Mid-Year Reviews, Census Reports, Statistical Hand Book, various reports, research surveys, periodical magazines, Department of Statistics and other government's organizational journals and articles, electronic sources.

### **14. Techniques of Analysis of Data**

The data collected is systematically presented, analyzed and classified to draw meaningful conclusions. The gathered data was keyed in excel and was analyzed using simple and logical statistical techniques like average, growth rates, percentages, ratios.

### **15. Economic Growth**

Although many of the time the terms "Growth" and "Development" are used in synonymously however both are different in conception and meaning. Economic Growth more or less refers to increase in the level of national product with an associated increase in income, along with an increase in the various indicators of economic performance, such as increased industrial and agricultural production, employment levels and decline in the number of poor below a stipulated poverty line. Thus economic growth refers to quantitative increase in numbers indicating increased economic performance. Meanwhile Economic development is a broader term which encompasses positive changes in material welfare, especially for persons with the lowest incomes, the eradication of mass poverty with improvement in social life along with growth in economic life. It is a qualitative improvement in the standard of living of human beings and well-being of the masses.

According to Kindleberger, "Economic growth means more output, while economic development implies both more output and changes in technical and institutional arrangement by which it is produced and distributed. Growth may well involve not only more output derived from greater amounts of inputs but also greater efficiency, i.e. an increase in output per unit of input. Development

goes beyond this to imply changes in the consumption of output and in the allocation of inputs by sectors”

## 16. Testing of Hypotheses

### Hypothesis 1

**The new economic policy, 1991 has accelerated the growth of NSDP of Gujarat.**

It is evident from table 4.2.1 & 4.2.2 the size of NSDP at current and constant prices, the CAGR of NSDP from 1990-91 to 2018-19 stood at 14.30% at current price and 6.91% at constant prices. It is evident from table-4.3, that economic policies initiated during start of 1990s had positive impact on per capita income figures, the CAGR of PCI from 1990-91 to 2018-19 stood at 12.33% at current price and 5.06% at constant prices. Post initiation of new economic policies during 1990s has acted as a catalyst for the economy of Gujarat, reflected through the size and growth rate of NSDP. Hence, this Hypothesis is positively proved.

### Hypothesis 2:

**The share of primary sector in Gujarat’s economy has declined rapidly.**

According to table-4.5.1 & 4.5.2 it is observed that contribution of primary sector to the NSDP at current and constant prices is falling gradually. The contribution of primary sector to the NSDP at current and constant prices declined by -11.2% and -38.03% respectively during the period of 1990-91 to 2018-19. On the onset of reforms at centre, the falling contribution of the Primary Sector could not be controlled, though the total contribution in rupees went on increasing, contribution to total NSDP of primary sector further fell in percentage terms. Hence this Hypothesis is positively proved.

## 17. Achievement of Objectives

**Objective No 1:** To study of the Growth Characteristics of the State Economy

The said objective was achieved through studying the trends in sectoral composition of NSDP for the state of Gujarat during post reforms period with availability of data from various reports.

**Objective No 2:** To highlight the **growth characteristics** of the state economy - particularly during and after the reform period by analysing NSDP and PCI.

The said objective was achieved through studying the trends in net state domestic product for the state of Gujarat during post reforms period.

## 18. Conclusions

The annual average growth for the entire period of NSDP at current price stood at 14.53% and 7.38% per annum at constant price shown optimistic change over the years. The average growth rate comes around 12.57% which means per capita doubled every 5.85 years in the state at current prices. While for constant prices the average growth rate from 1990-91 to 2018-19 comes around 5.54% which means per capita doubled every 12.94 years. However, the results measured at current prices, have component of inflation in it which inflate the price, in turn the state domestic product and per capita. The real growth could be measured in terms of constant prices, which would give actual rate of growth.

The Primary Sector achieved CAGR at 12.08% per annum for the entire period at current price shown positive in spite of fluctuating trend of growth rate over the years an impressive growth of more than 27 times while CAGR at constant price shown as 2.75% per annum with growth of more than double for the entire period. The Secondary Sector contributes an impressive growth of almost 54 times at current price with CAGR at 14.81% per annum shown positive in spite of fluctuating trend of growth rate over the years while CAGR at constant price shown as 8.52% per annum with growth of more

than 11 times for the entire period. The Tertiary Sector also contributes an impressive growth of more than 43 times at current price with CAGR at 13.91% per annum shown continuous positive trend of growth rate over the years while CAGR at constant price shown as 9.77% per annum with growth of more than 15 times for the entire period

On the onset of reforms at centre, the falling contribution of the Primary Sector at current and constant price could not be controlled, though the total contribution in rupees went on increasing. The contribution decreased from 31.82%, to 20.62% in three decade registering with fall of 11.2% while the average contribution of primary sector at current prices to NSDP stands at 24.47%. In same way at constant price, the contribution was decreased from 57.42%, to 19.42% in entire period with of fall of 38% while the average contribution of primary sector at constant price to NSDP stands at 34.97%. The contribution of Secondary Sector in the NSDP shows a slight fluctuating but overall contribution considering importance of the sector is progressive, the total contribution in rupees went on increasing in same way contribution to total NSDP also increased in percentage. The contribution of secondary sector at current price increased from 32.62% to 42.49% registering with rise of 9.87% in three decade and the average contribution stands at 37.01% for the entire period. In same way at constant price, the contribution was increased from 26.60% to 43.86% with total rise of 17.26% in the entire period and the average contribution of primary sector at current prices to NSDP stands at 33.72% for the entire period 1990-91 to 2018-19. The fluctuating contribution of the Tertiary Sector could not be controlled, though the total contribution in rupees went on increasing while percentage of contribution shown volatile. The contribution of tertiary sector at current price increased from 35.56% to 36.89% registering with rise of 1.33% in three decade and the average contribution stands at 38.52% for the entire period. In same way at constant price, the contribution was increased from 15.96% to 36.72% with total rise of 20.76% in the entire period and the average contribution of primary sector at current prices to NSDP stands at 31.31% for the entire period 1990-91 to 2018-19.

The economy of Gujarat observed a growth pattern in which the share of tertiary sector in NSDP has moved faster and far ahead as that of primary and secondary sector. The emerging structure of Gujarat's economy is characterized by tertiary sector led growth with continuously shrinking share of primary sector and nearly stagnant share of secondary sector. In response to new policy regime and series of reforms, different sectors of the economy depict a differential behaviour pattern. The impact of reforms on different sectors is not uniform on all the sectors. The tertiary sector has responded positively with largest share in NSDP and with a high growth rate. But the primary sector has responded adversely to the process of economic reforms of the nineties. The declining share in NSDP and damped growth rate of primary sector is a self-speaking fact. The secondary sector, with signs of indifference, is still in its transitional phase of making adjustments among different factors.

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