

GROSS DOMESTIC PRODUCT OF KERALA- A STUDY ON THE IMPACT OF COVID-19 ON KERALA ECONOMY

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ABSTRACT

Novel Coronavirus (COVID-19), originated at Wuhan, China, has spread to more than 158 countries of the world infecting more than 47 crores of the population as per World Health Organisation data. Since most of the countries had their primary infection through people from pandemic areas, many countries have stopped flight operations and closed their borders. Moreover the pandemic brought trade and business of the affected countries into halt and they also restricted the movement of people in all respects. The flight cancellations caused huge loss to the airline industry. Likewise, many sectors of the society were affected with the prolonged country-wide lockdown, global economic downturn and associated disruption of demand and supply chains. Apart from being a global health concern, COVID-19 is having major consequences on the world economy, and experts have predicted that COVID-19 will lower global gross domestic product growth by one-half a percentage point for 2020. Furthermore, the economy is likely to face a protracted period of slowdown.

The Indian economy also witnessed an unprecedented shock due to the outbreak of the Covid-19 pandemic. The economic impact is determined by the length of the lockdown and how the situation unfolds after it is lifted. It is important to have a coherent interference of the global researchers to understand and limit the economic fallout. In this context, this study aims to discuss the potential impacts of the pandemic over economy of Kerala, by assessing the GDP data for the last 10 years from 2011 to 2020.

1. Introduction

The two waves of global pandemic, COVID-19 has caused a drastic loss of human life and has presented an unprecedented threat to public health, food systems, and the economy. The outbreak affect the economy through numerous channels, including sharp declines in domestic demand, decline in tourism and business, travel, trade and production linkages, supply disruptions and health effects. Almost all sectors face unprecedented challenges following the Covid-19 pandemic and subsequent lockdowns. The pandemic has had devastating economic and social effects. A staggering number of people live in a state of extreme poverty, and millions of businesses are at risk of ceasing to exist. Millions of livelihoods have been threatened by the pandemic.

Throughout the world, the food security and nutrition of millions of women and men are at risk, and those in low-income countries, including small-scale farmers and indigenous peoples, are particularly at risk. Since informal economy workers lack social protection and have lost access to productive assets, they are particularly vulnerable during lockdowns. They cannot feed their families without an income during these times. As the pandemic has affected the entire food system, it has exposed its fragility. Agricultural workers have been hampered from harvesting crops because of restrictions on trade, border closures, and confinement measures. Farmers have also been unable to access markets to buy inputs and sell their produce. Despite the economic slowdown, the lockdown has

become a boon for the environment to revive due to less pollution and reduced discharge of effluents to water from factories.

It is highly essential to conduct a study to assess the impact of the pandemic over all sectors of economy, particularly to analyze the relevance of Gross Domestic Product (GDP) as an indicator for economic performance and a tool for economic policy-making. The present study is to analyze how the impact of Pandemic is affecting Gross Domestic Product (GDP) of Kerala. The GDP of Kerala since 2011 has been adopted for this study.

2. Objectives of the study

- To analyse the factors that determine GDP
- To study the trend of GDP in Kerala.
- To assess the impact of Covid-19 on GDP of Kerala.
- To study the short term and long term impact on different sectors.
- To study the short term and long term recommendation for different sectors

3. Methodology

Secondary data is primarily used for the assessment of the impact. As the topic of the research is predominantly theoretical, a thorough literature review was a logical way to conduct a majority of the research. The sources for the literature review were mainly journal articles and different reports on the topic. These are collected from various sources such as internet, books, articles & public investigations. Gross Domestic Product often cited in newspapers, television news, government reports, central banks, and the business community is also used as a reference point. Different statistical tools and techniques have been applied for analysis and interpretation of the result.

GROSS DOMESTIC PRODUCT- AN OVERVIEW

Economic growth is very important for a country and a nation-state's dependence upon Gross Domestic Product (GDP) as an indicator for its status, development and power has become a global norm since the mid-twentieth century. National income is considered as the most comprehensive measure of the performance of an economy since it helps the government to know about economic condition in that country. Gross Domestic Product is a measure of production and an indicator of overall production activity. The level of production determines how much a country can afford to consume and it also helps to assess and understand the level of employment. GDP measures the monetary value of final goods and services i.e., those that are bought by the final user-produced in a country in a given period of time. It counts all of the output generated within the borders of a country. GDP is composed of goods and services produced for sale in the market and also include some non-market production, such as defence or education services provided by the government.

DEFINITION OF ECONOMIC GROWTH

All economic growth theories propose different factors that impact the economic growth of a country in different ways. Economic growth is the increase in the goods and services produced by an economy, typically a nation, over a long period of time. It is measured as percentage increase in real gross domestic product (GDP) which is gross domestic product (GDP) adjusted for inflation. GDP is the market value of all final goods and services produced in an economy or nation. There are three main types of economic growth theories, The Classical, Neo-Classical, and the Modern Day theories.

GDP is important because it gives information about the size of the economy and how an economy is performing. The growth rate of real GDP is often used as an indicator of the general health of the economy. In broad terms, an increase in real GDP is interpreted as a sign that the economy is doing well. When real GDP is growing strongly, employment is likely to be increasing as companies hire more workers for their factories and people have more money in their pockets. When GDP is shrinking, as it did in many countries during the recent

global economic crisis, employment often declines. In some cases, GDP may be growing, but not fast enough to create a sufficient number of jobs for those seeking them. But real GDP growth does move in cycles over time. Economies are sometimes in periods of boom, and sometimes in periods of slow growth or even recession. To determine “real” GDP, its nominal value must be adjusted to take into account price changes to allow us to see whether the value of output has gone up because more is being produced or simply because prices have increased. A statistical tool called the *price deflator* is used to adjust GDP from nominal to constant prices

System of National Accounts

GDP in a country is usually calculated by the National Statistical Agency, which compiles the information from a large number of sources. In making the calculations, however, most countries follow established international standards. The International Standard for measuring GDP is contained in the System of National Accounts, 1993, compiled by the International Monetary Fund, the European Commission, the Organization for Economic Cooperation and Development, the United Nations, and the World Bank.

The system of National Accounts Statistics (NAS) consists of a coherent, consistent and integrated set of macro-economic accounts - current and accumulation accounts, balance sheets and tables based on agreed concepts, definitions and accounting rules. It provides a comprehensive, conceptual and accounting framework for analyzing and evaluating the performance of an economy. From the stage of production of goods and services to the stage of their final disposal, innumerable transactions take place. National Accounts help us to understand in a nutshell how these various transactions are inter-related and give us an idea of the working of an economy. The NAS are compiled to meet the needs of Government, private analysts, policy makers and decision takers. The major use of the NAS is to assess how a country's economy is performing over time. These data are immensely useful for the purpose of building-up macro-economic models for projecting long and short-term expectations about future prospects. The Gross Domestic Product (GDP), which is the value in monetary terms of all goods and services produced in the economy in a given period of time, is the most important macro-economic aggregate of National Accounts. It is also used as a denominator for the estimation of rates of saving, capital formation, fiscal deficit, current account deficit, interest payments, expenditure on various social sectors, to name a few

Genesis of National Accounts in India

The statistics that are released by the CSO and the State DESs relate to various macro-economic aggregates of the Indian economy. The aggregates compiled and released (at current and constant prices) at annual periodicity by the CSO include gross and net domestic product by economic activity, consumption, saving, capital formation and capital stock, public sector transactions and dis-aggregated statements, as well as the four consolidated accounts of the nation namely, (a) Gross Domestic Product and expenditure, (b) National Disposable Income and its appropriation, (c) Capital Finance; and (d) External transactions. The CSO also releases the quarterly GDP estimates on the last working day of each quarter, the estimates pertaining to the previous quarter. In addition to these macro-aggregates, the CSO compiles and releases the Input Output Transaction Table (IOTT) at a periodicity of 5 years and the State-wise and crop-wise value of the output of agricultural crops at an ad hoc periodicity. The CSO also maintains the database on Gross and Net State Domestic Products, by industry, which is compiled by the State DESs

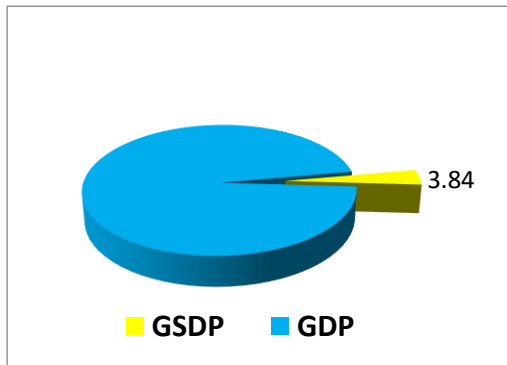
STATE LEVEL ESTIMATION IN KERALA

State level performance of an economy is analyzed by computing different macroeconomic indicators like Gross State Domestic Product, Net State Domestic Product, Per capita, Fiscal deficit etc. In Kerala, the Department of Economics & Statistics annually prepares the GSDP & NSDP (at Current & Constant Prices), Per capita income and District Domestic Product estimates. These estimates are prepared by using the concept & methodology adopted by CSO & SNA 2008. According to SNA 2008, the total economy is divided into Non-financial Corporations, Financial corporations, General NPISHs & Rest of the world. Based on the nature of economic activity, the institutional units are grouped into sectors & industries. Broadly, the methodology for compiling the estimates of GDP consists in dividing the whole economy into various sectors comprising primary, secondary and tertiary activities.

PERFORMANCE OF THE STATE ECONOMY

The GSDP estimates up to 2020-21(Q) with base year 2011-12 have been prepared in the Department of Economics & Statistics. The GSDP at current prices recorded a growth of -7.94% in 2020-21 (Q) as compared to the year 2019-20(P). The GSDP at constant prices recorded a growth of -11.51% in 2020-21(Q) as compared to the year 2019-20(P). The GSDP estimates at Current & Constant prices are depicted in the following tables.

GDP OF INDIA & KERALA



The GSDP estimates at current prices have risen from Rs.364047.88crores to Rs.758941.61crores during 2011-12 to 2020-21 for Kerala and Rs.8736328.72crores to Rs.19745670 crores for India. Table 3.1 shows the GVA / GSDP of Kerala & India at current price, growth rate, per capita income etc. and the percentage contribution of Kerala to India for the years from 2011-12 to 2020-21(Q). The State economy at current prices, contributes to about 3.84 per cent to the National GDP during the year 2020-21(Q).

Table 3.1
Gross State Value Added by Economic Activity -At Current Prices with base year 2011-12

		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20(P)	2020-21(Q)
	GSVA	33629310	38128287	42910029	47180920	50913738	57024819	63488389	69618249	73291499	67674320
	GSDP	36404788	41231300	46504121	51256405	56199361	63488640	70158826	78828558	82437420	75894161
	Per Capita at market price	108666	122471	137515	150824	164554	184979	203399	227397	236621	216749
	GVA Growth rate		13.38	12.54	9.95	7.91	12.00	11.33	9.66	5.28	-7.66
	GDP Growth rate	-	13.26	12.79	10.22	9.64	12.97	10.51	12.36	4.58	-7.94
	Per Capita Income Growth Rate	-	12.70	12.28	9.68	9.10	12.41	9.96	11.80	4.06	-8.40
	GVA	810694599	920269210	1036315261	1150427948	1257449865	1396520019	1550566521	1716121274	1846134326	1791516700
	GDP	873632871	994401310	1123352161	1246795929	1377187388	1539166901	1709004236	1888695691	2035101289	1974567000
	Per Capita at market price	71609	80518	89796	98405	107341	118489	130061	142328	151760	145680
	GVA Growth rate		13.52	12.61	11.01	9.30	11.06	11.03	10.68	7.58	-2.96
	GDP Growth rate	-	13.82	12.97	10.99	10.46	11.76	11.03	10.51	7.75	-3.0
	Per Capita Income Growth Rate	-	12.44	11.52	9.59	9.08	10.39	9.77	9.43	6.63	-4.01
% contribution of Kerala to All India GDP		4.17	4.15	4.14	4.11	4.08	4.12	4.11	4.17	4.05	3.84

P- Provisional Estimate Q - Quick Estimate, GSDP, GSVA, GDP, GVA (Rs in Lakhs), Per Capita (in Rs) Growth rate in %

Table 3.2
Gross State Value Added by Economic Activity -At Constant Prices with base year 2011-12

		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20(P)	2020-21(Q)
	GSVA	33629311	35635473	37165147	38586962	40648007	43537107	46075400	48022604	49076596	43491189
	GSDP	36404789	38769346	40278133	41995555	45121002	48530154	51618976	55422831	56652270	50130965
	Per Capita at market price	108666	115158	119105	123573	132116	141396	149650	159878	162610	143171
	GVA Growth rate		5.97	4.29	3.83	5.34	7.11	5.83	4.23	2.19	-11.38
	GDP Growth rate	-	6.50	3.89	4.26	7.44	7.56	6.36	7.37	2.22	-11.51
	Per Capita Income Growth Rate	-	5.97	3.43	3.75	6.91	7.02	5.84	6.84	1.71	-11.95
	GVA	810694599	854627535	906364867	971213279	1049187035	1132828462	1203417051	1274420252	1327147082	1245343000
	GDP	873632871	921301666	980136988	1052767363	1136949314	1230819322	1314458214	1400331625	1456926787	1351274000
	Per Capita at market price	71609	74599	78348	83091	88616	94751	100035	105526	108645	99694
	GVA Growth rate		5.42	6.05	7.15	8.03	7.97	6.23	5.90	4.14	-6.16
	GDP Growth rate	-	5.46	6.39	7.41	8.00	8.26	6.80	6.53	4.04	-7.25
	Per Capita Income Growth Rate	-	4.18	5.03	6.05	6.65	6.92	5.58	5.49	2.96	-8.24
% contribution of Kerala to All India GDP		4.17	4.21	4.11	3.99	3.97	3.94	3.93	3.96	3.89	3.71

P- Provisional Estimate Q - Quick Estimate, GSDP, GSVA, GDP, GVA (Rs in Lakhs), Per Capita (in Rs) Growth rate in %

The GSDP estimate at constant prices shows a positive growth over the years from 2011-12 to 2019-20 and shows negative growth in 2020-21. GSDP estimates 2011-12 for Kerala have risen from Rs.364047.89Cr to Rs.501309.65Cr during 2011-12 to 2020-21(Q) and for India it was from Rs.8736328.71Cr to Rs.13512740Cr. The steady increase in the GSDP reflects a healthy trend of the state economy and an upward development over the years, and from 2011-12 to 2019-20. But in 2020-21, the economy goes downward. The figures in Table 3.2 describes the GVA / GSDP of Kerala & India, growth rate, per capita income etc. and the percentage contribution of GSDP of Kerala to GDP of India at constant price for the years from 2011-12 to 2020-21.

Figure 3.2. Sectoral Decomposition of GVA of Kerala 2020-21(Q)

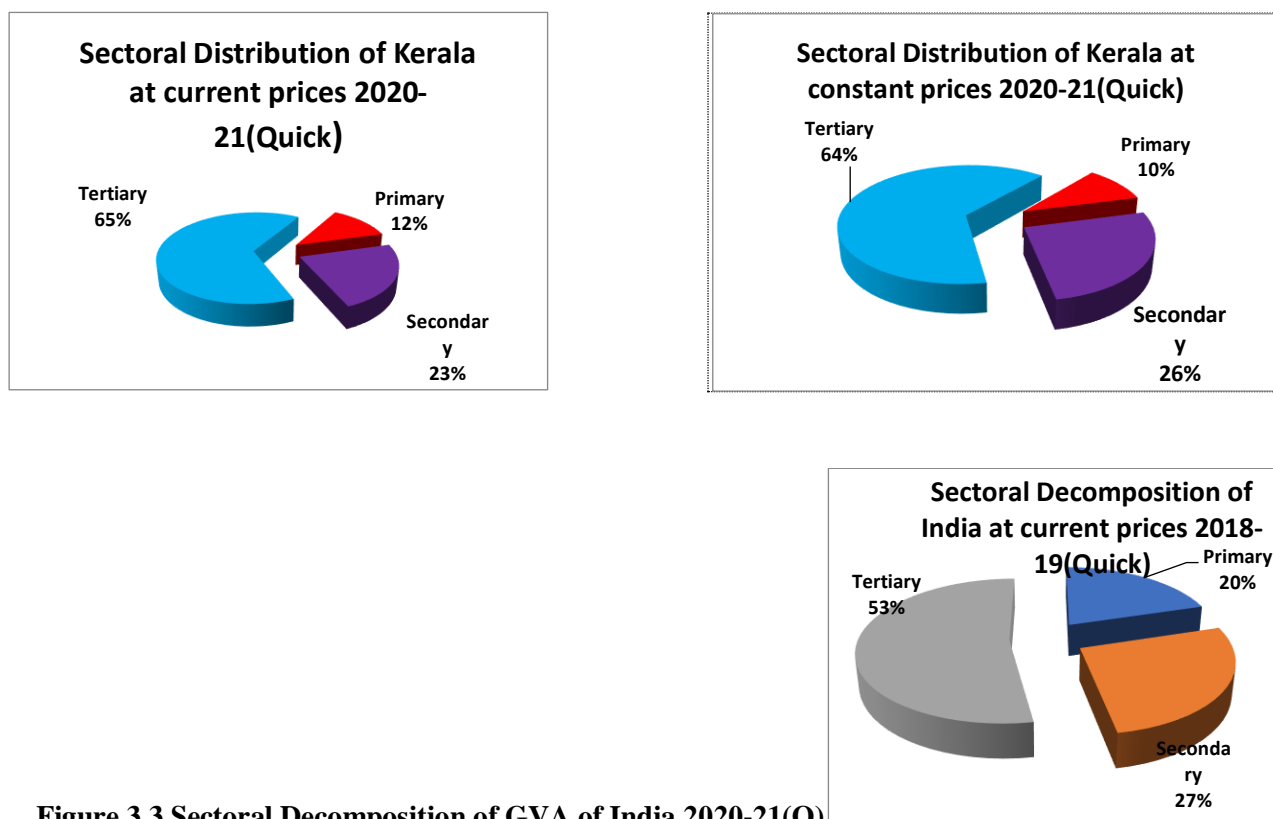
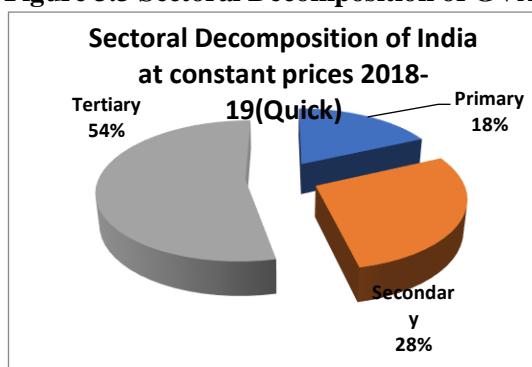


Figure 3.3 Sectoral Decomposition of GVA of India 2020-21(Q)



3.4 Comparison of Growth rate of GVA of Kerala and India

There is a constant decrease in growth rate of GVA in current prices of India and Kerala from 2012-13 to 2015-16, then it showed a fluctuating pattern, i.e., a slight increase in 2016-17 followed by a slight decrease in 2017-18 and again an increase in 2018-19 and afterwards a continuous decrease up to 2020-21.

In the case of GDP of India at constant prices, the growth rate increased from 2012-13 to 2016-17 and then it decrease from 2017-18 onwards and ultimately a negative growth in 2020-21. But in the case of Kerala, there was

a slight increase in the growth rate for the year 2018-19 as compared to 2017-18 and then a decrease in 2019-20 and a negative growth in 2020-21 at constant price.

Figure 3.4(a) Percentage Growth rate of GDP in Kerala & India (by economic activity) at current prices

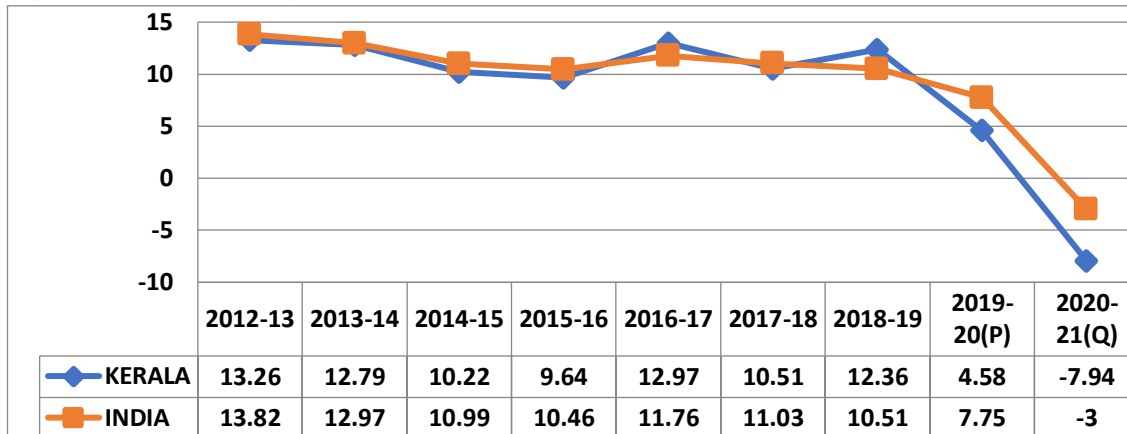
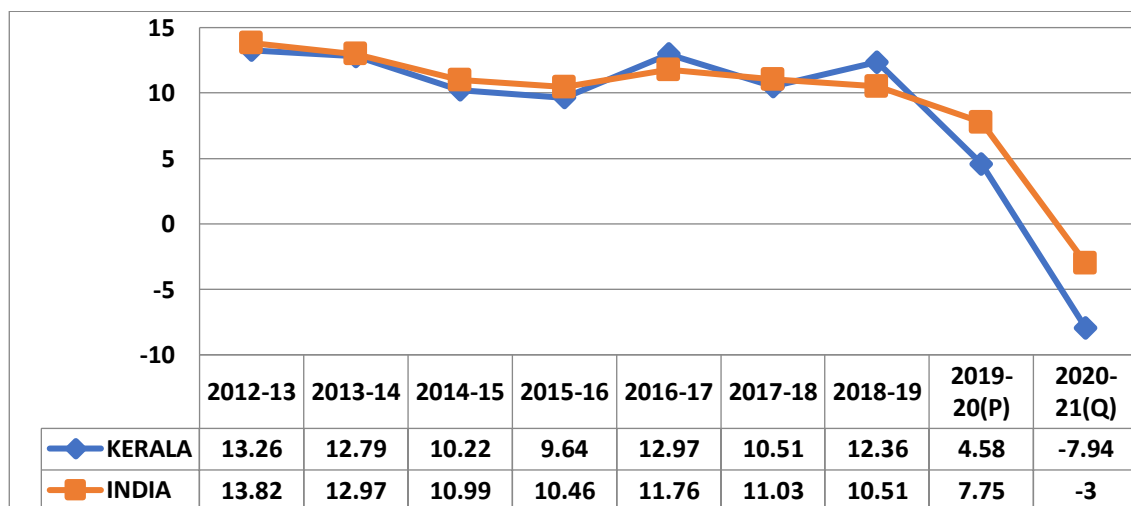


Figure 3.4(b) Percentage Growth rate of GDP in Kerala & India (by economic activity) at constant prices



3.5 Comparison of Per capita Income of Kerala and India from 2011-12 to 2020-21

The Per capita Income of Kerala has increased from Rs.108666 to Rs.216749 at current price from 2011-12 to 2020-21 and Rs.108666 to Rs.143171 at constant price, and that of India increased from Rs.71609 to Rs.145680 at current price and Rs.71609 to Rs.99694 at constant price.

COVERAGE, DATA SOURCE & ESTIMATION METHODS

According to the nature of economic activity, State Domestic Product estimates are prepared in sector wise & industry wise. The estimates are prepared in sector wise namely (1) Primary sector, (2) Secondary sector and (3) Tertiary sector.

4.1 PRIMARY SECTOR

Figure 4.1(a) Percentage Growth Rate of Primary Sector in Kerala & India (by Economic activity) at Current Price

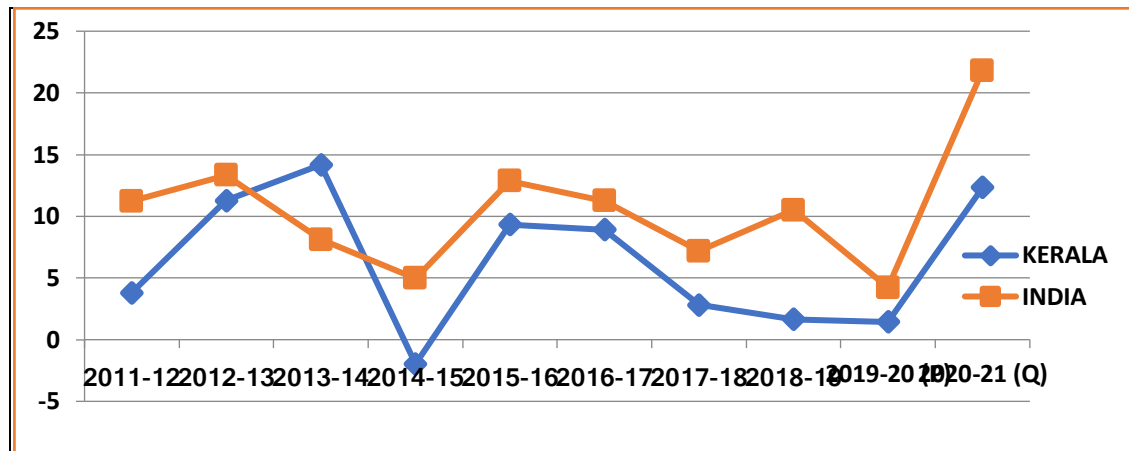


Figure 4.1(b) Percentage Growth rate of Primary Sector in Kerala & India (by economic activity) at constant price

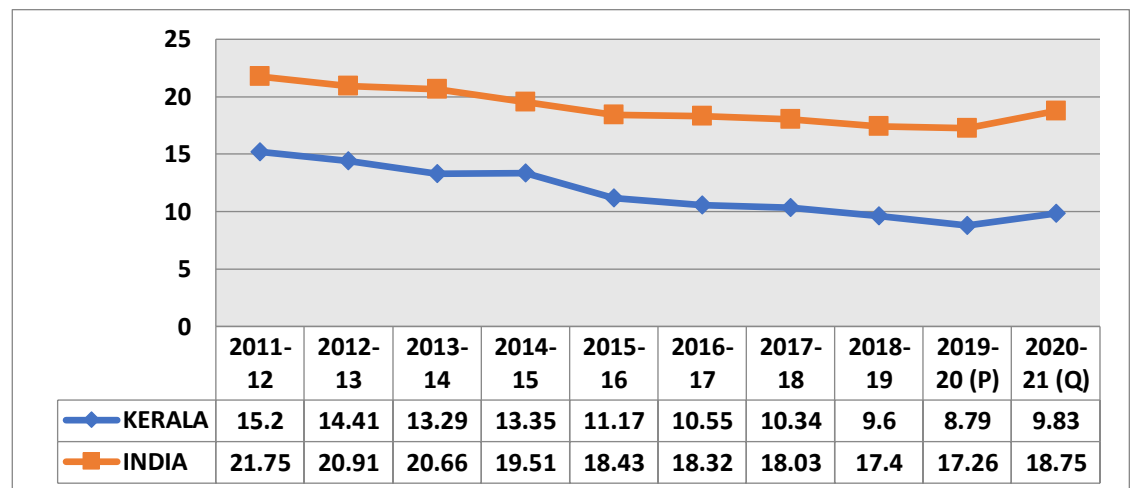


Figure 4.1 (c) Percentage contribution of Primary sector to GSDP of Kerala & GDP of India (by economic activity) at current price

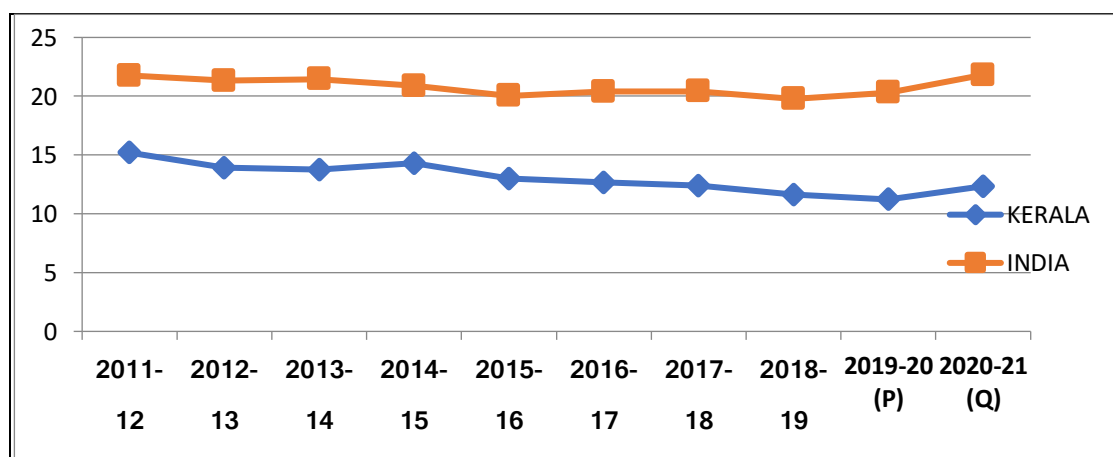


Figure 4.1 (d) Percentage contribution of Primary sector to GSDP of Kerala & GDP of India (by economic activity) at Constant price

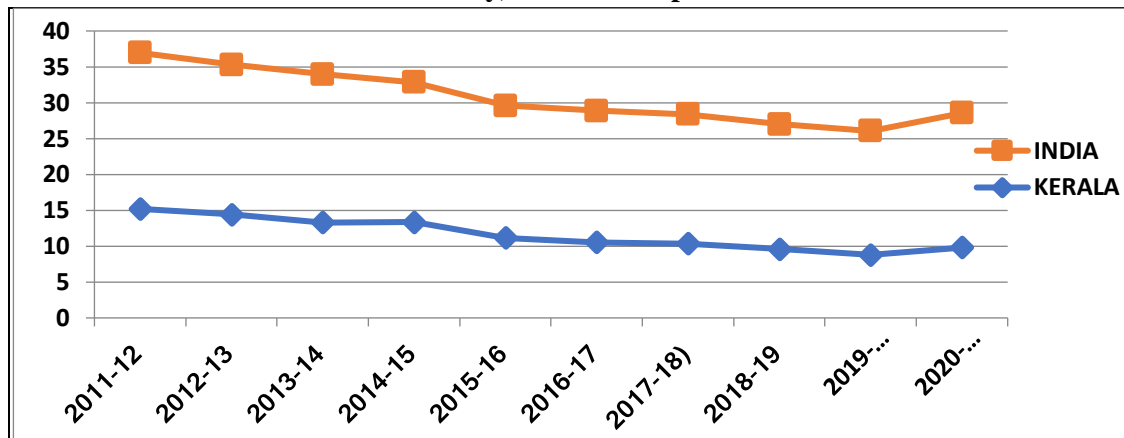


Figure 4.1 (e) Contribution of various sectors into the Primary Sector of Kerala & India at current prices

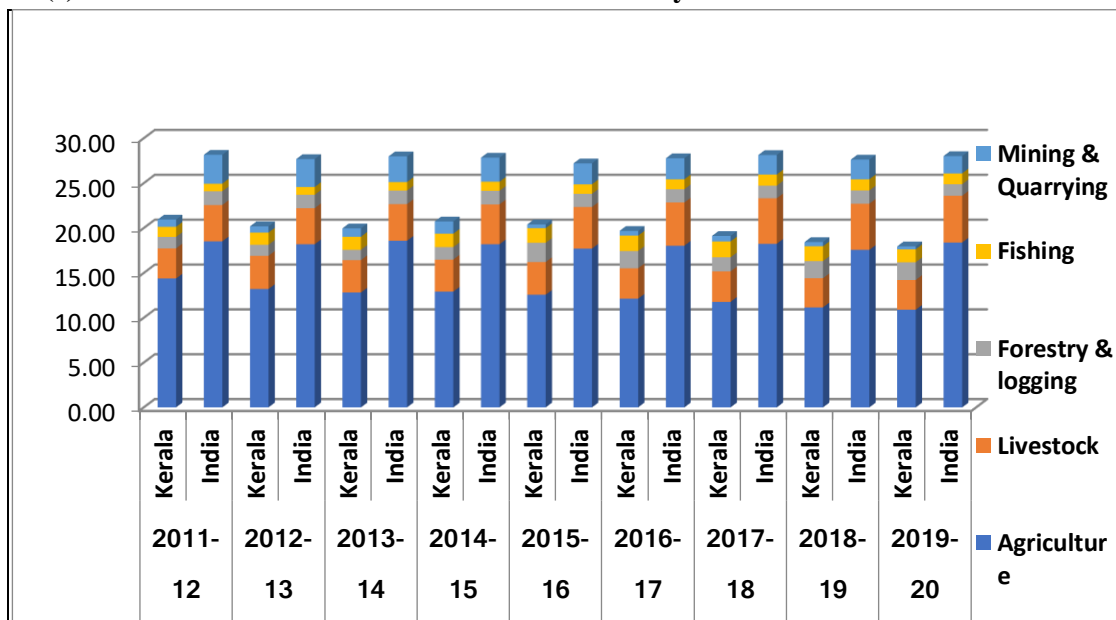
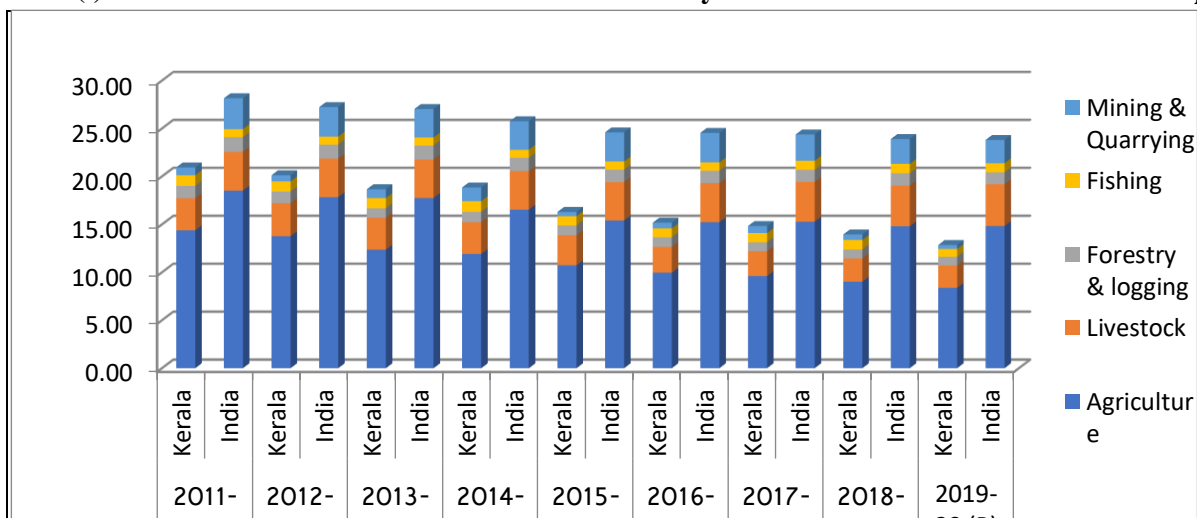


Figure 4.1 (f) Contribution of various sectors into the Primary sectors of Kerala & India at constant prices



PRIMARY SECTOR - SECTOR WISE DATA COVERAGE, DATA SOURCE AND ESTIMATION METHODS

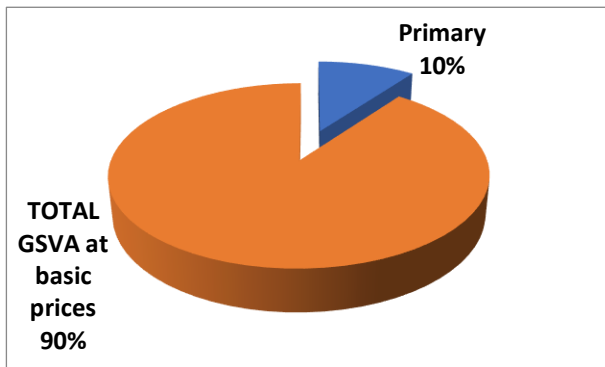


Figure 4.1 Percentage share of GSVa from primary sector in Kerala

4.1.1 Agriculture & Allied sector

Agriculture & Allied sector consist of Crops, Live Stock, Forestry & logging, Fishing & Aquaculture. *GVA estimates at current and constant prices are prepared by using the production approach.* The item wise details are described below.

4.1.1(a) Crops

The economic activities included in this sector are Growing of field crops, Fruits, Nuts, Seeds and Vegetables, Management of Tea, Coffee and Rubber plantations, Agricultural and Horticultural services on a fee or on contract basis such as harvesting, baling and thrashing, Preparation of tobacco for marketing, Pest control, Spraying, Pruning, Picking, Packing,

Ancillary activities of cultivators such as gur making, Transportation of own produce to primary markets, Activities yielding rental income from farm buildings and farm machinery and interest on agricultural loans. Operation of irrigation system comprises supply of water through various Government channels to the agriculturists is also included in this sector. Major data source are EARAS and Farm Price from State DES, Rubber Board, Coffee Board, Cost of Cultivation Studies, Government Budget etc.

4.1.1 (b) Livestock

The economic activities included in this sector are Breeding and Rearing of animals and poultry besides private veterinary services, Production of milk, slaughtering, Preparation and dressing of meat, Production of raw hides and skins, eggs, dung, raw wool, honey and silk worm cocoons etc Major data source are integrated sample survey results conducted by state Animal Husbandry department Central Silk Board, KVIC, ILC etc.

4.1.1 (c) Forestry & logging

The economic activities covered under this sector include (i) forestry (e.g., planting and conservation of forests, gathering of forest products, charcoal burning carried out in the forests), (ii) logging (e.g., felling and rough cutting of trees, hewing or rough shaping of poles, blocks etc.) and transportation of forest products to the sale depots/assembly centers and, (iii) farmyard wood (industrial wood and fuel wood collected by the primary producers from trees outside regular forests). The forest products are classified into two broad groups viz., (a) major products comprising industrial wood (timber, Round wood, match and pulpwood) and fuel wood (firewood and charcoal wood) and (b) Non Timber forest products (NTFP) formerly known minor products comprising a large number of wild growing forest material such as bamboo, fodder, sandalwood, honey, resin, gum, tender leaves, cork, balsams, vegetable hair, eelgrass, acorns, horse chestnuts, mosses, lichens etc. Major data sources are Production & price data from State Forest Department, NSS 68th Round, and Budget Documents etc.

4.1.1(d) Fishing & Aquaculture

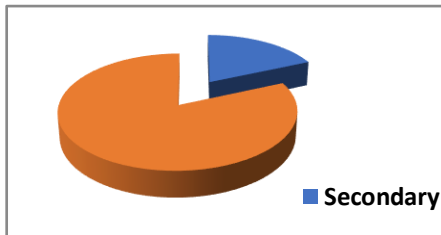
The economic activities covered under this sector include (i) commercial fishing in (a) ocean, coastal and offshore waters and (b) inland waters, that include catching, tackling and gathering of fish from rivers, irrigation and other canals, lakes, tanks, fields inundated tracts etc., (ii) subsistence fishing in inland waters and artificial ponds, (iii) gathering of sea weeds, sea shells, pearls, sponges and other ocean and coastal water products and (iv) fish curing viz., salting and sun-drying of fish. In order to cover the production of goods for own consumption, subsistence fishing has been included in the coverage. Activities of salting and sun-drying of fish are also included in this sector, since these are undertaken predominantly by the same households, which are engaged in commercial/subsistence fishing. Major data source is the production & price obtained from State Fisheries department.

4.1.2 Mining & Quarrying

The economic activities covered in this sector comprise extraction of minerals which occur in nature as solids, liquids or gases; underground and surface mines, quarries and oil wells, with all supplementary operations for

dressings and beneficiating ores and other crude minerals such as crushing, screening, washing, cleaning, grading, milling, floatation, melting, palletizing, topping and other preparations needed to render the material marketable. All these activities are covered to the extent they are carried on at the mine site. The expenditure on preparing mining sites, prospecting and boring activities are not included as they are included under the 'Construction' sector. Salt production by solar evaporation of sea water is also included under mining sector. Major data sources are state Mining & Geology department, Annual report of Public & Private Sector Companies, WPI etc. GVA estimates at current price are prepared by using the production approach. Constant Price estimates are prepared by deflating the Current price estimates.

4.2 SECONDARY SECTOR



Secondary sector includes Manufacturing, Electricity, Gas & Water Supply, and Construction.

Figure 4.2 Percentage share of GSVA from Secondary Sector in Kerala

Figure 4.2 (a) Percentage Growth rate of Secondary Sector in Kerala & India

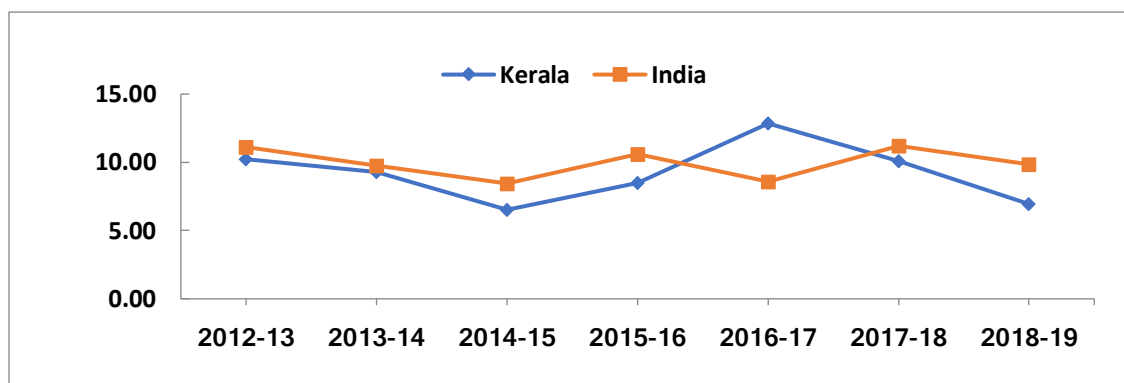


Figure 4.2(b) Percentage Growth rate secondary sector in Kerala & India

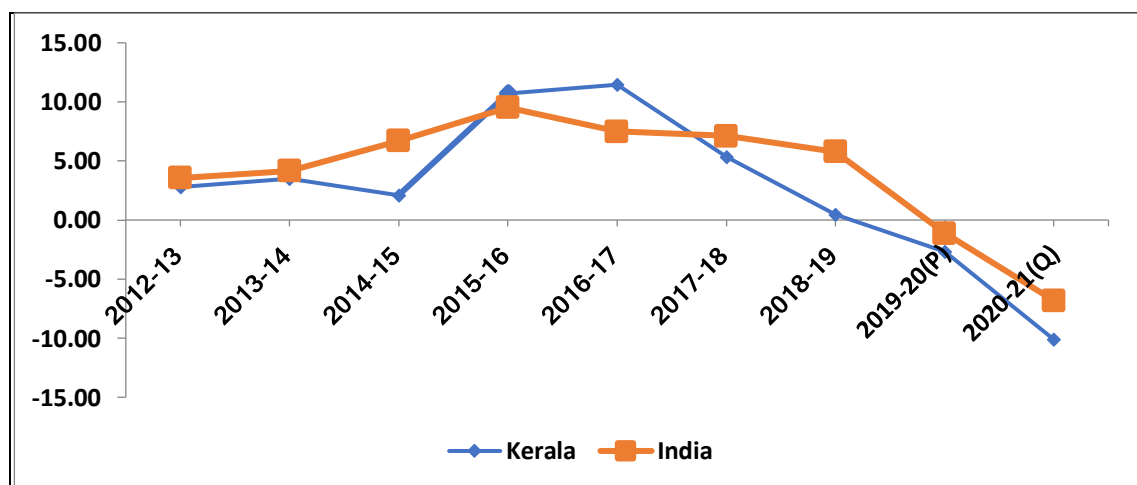


Figure 4.2 (c) Percentage contribution of Secondary sector to GVA of Kerala & GVA of India

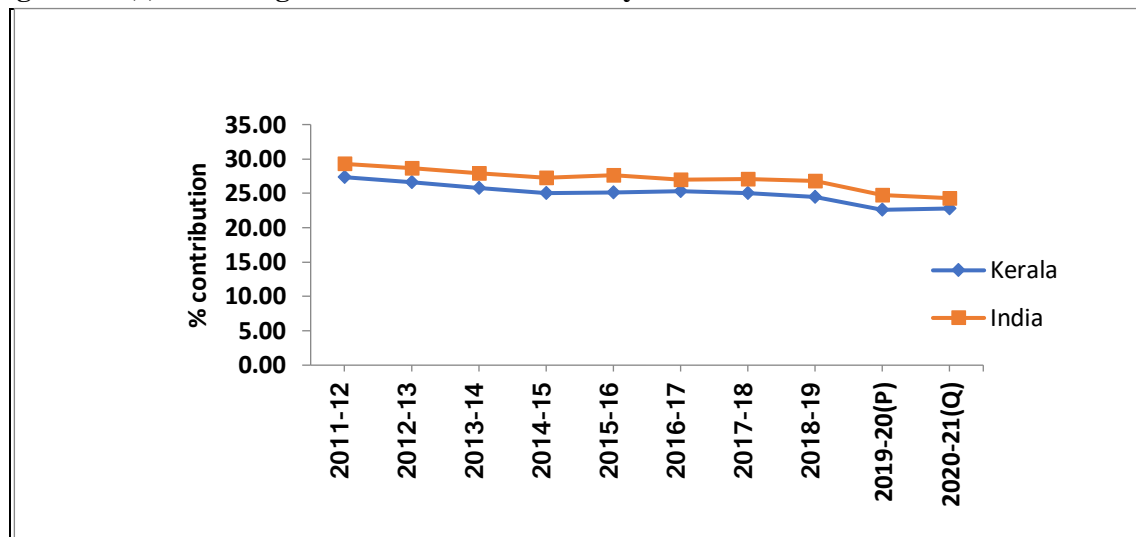


Figure 4.2 (d) Percentage contribution of Secondary sector to GVA of Kerala & GVA of India (by economic activity) at constant price

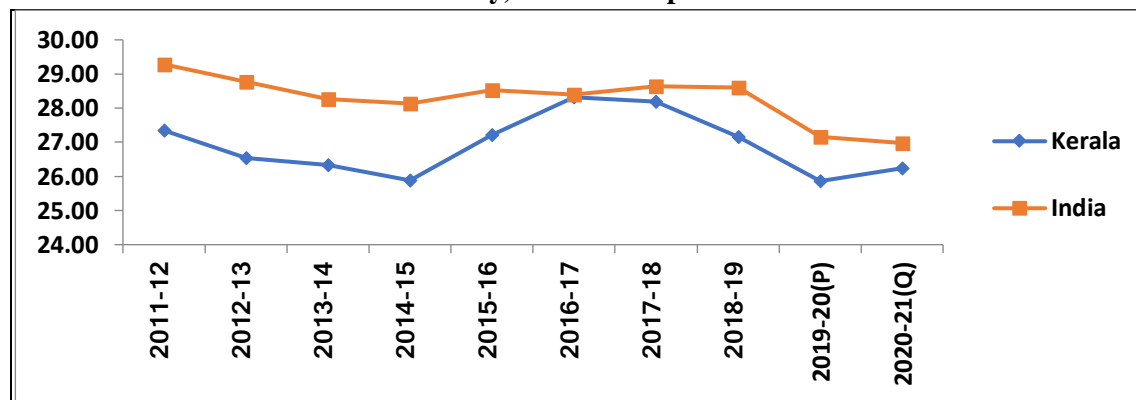


Figure 4.2 (e) Contribution of various sectors into the secondary sector of Kerala and India at current prices

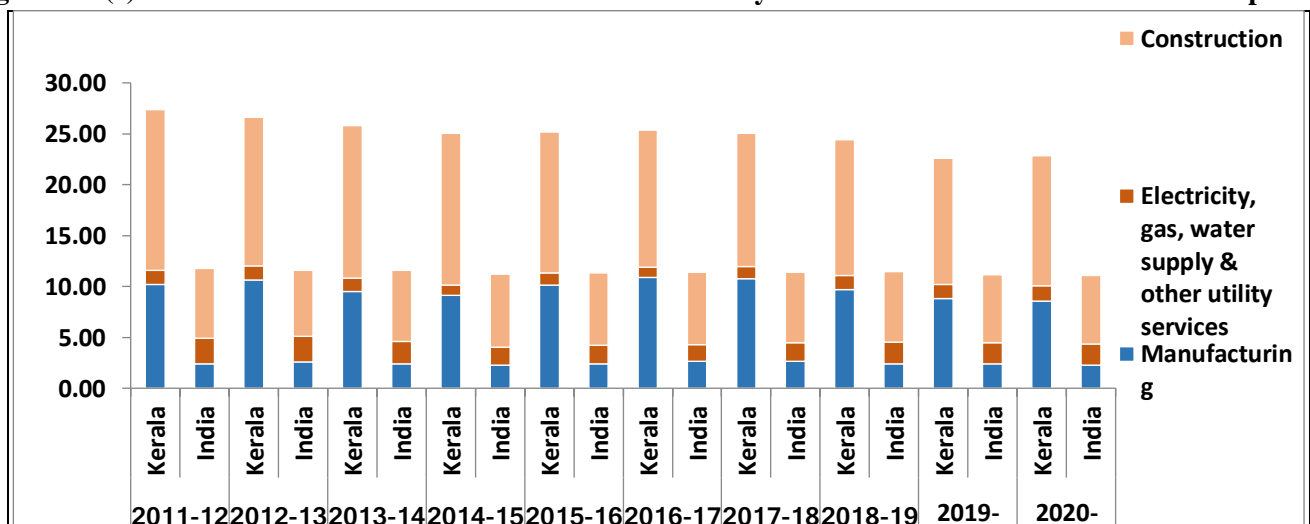
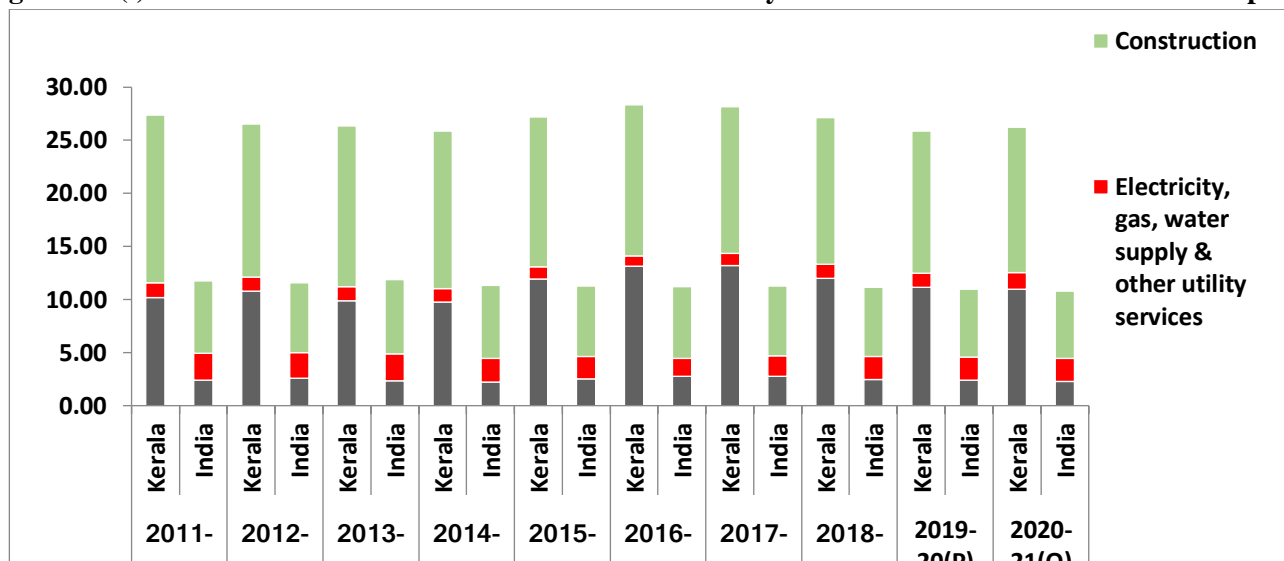


Figure 4.2 (f) Contribution of various sectors into the secondary sector of Kerala & India at constant prices



4.2.1 Manufacturing

The manufacturing sector covers all manufacturing, processing and repair & maintenance services units irrespective of their employment size, investment and location. The National Industrial Classification (NIC 2008) from 10 to 33 is generally included as economic activities of this sector. For the preparation of estimates, it is further classified into two namely organised and unorganised manufacturing. The organised manufacturing consists of Departmental Enterprises, Non Departmental Enterprises, Railway workshops, Private Corporate Enterprises including quasi corporations. Unorganised manufacturing comprises small scale enterprises located in the state. Major data sources are Annual report of Public & Private Sector Companies, Budget documents for DES, Railways, NSS 67th & 68th Round and WPI etc.

4.2.2 Electricity, Gas & Water Supply

The economic activities covered under this sector include generation, transmission and distribution of electric energy, the manufacture of gas in gas works including gobar gas and distribution through mains to household, industrial, commercial and other users and the activities associated with collection, purification and distribution of water excluding the operation of irrigation system. Major data sources are Annual reports of KSEB Limited, Kerala Water Authority, Annual report of Private Sector Companies, Budget documents DEs, NSS 67th & 68th Round and WPI etc.

GVA estimates at current price are prepared by using production & income approach. Constant Price estimates are prepared by deflating the Current price estimates.

4.2.3 Construction

The activity under this sector include contract construction by general builders, civil engineering contractors and special trade contractors, own account construction carried out by independent units of enterprises or other organisations which are not part of the construction industry proper. But, owing to the problems of availability of data separately from units carrying out construction work, construction industry, in India, for the purpose of estimating domestic product, has been taken to include the whole of construction activity (contractual as well as own account). Construction work covers all activity connected with site preparation, alteration, addition, repair and maintenance, construction and maintenance of roads, rail beds, bridges, tunnels, pipelines, rope-ways, ports, harbours, runways, construction/erection and maintenance of power, telecommunication, transmission lines, waterways & water reservoirs, power plants, hydro-electric projects, industrial plants and building installations,

planting and cultivating of new forests, plantations and orchards. Under NIC 2008, Division 41, 42, 43 covers construction activity. Major data sources are Annual report of Public & Private Sector Companies, Budget documents for DEs, Railways, AIDIS survey results, Prices of building material & labour cost from state DES.

Commodity flow approach is used to obtain the GVA estimates. This approach envisages estimation of production of commodities used in construction after adjusting them for inputs in other industries, changes in stocks, imports and exports so as to obtain the net availability of commodities for construction purposes. The commodities available for construction are valued at prices paid by the builders at the site of construction. Information on retail prices, transport costs, dealers' margins and indirect taxes collected from various sources is used to estimate the prices of inputs at site. Major data sources are Annual report of Public & Private Sector Companies, Budget documents for DEs, Railways, Prices of building material & labour cost from DES, AIDIS report, NSS 67th & 68th Round, WPI etc. GVA estimates at current price are prepared by using commodity flow method & income approach. Constant Price estimates are prepared by deflating the Current price estimates with proper indices.

4.3 TERTIARY SECTOR

It includes Trade & repair services, Hotels & restaurants, Railways, Road transport, Water transport, Air transport Services incidental to transport, Storage, Communication & services related to broadcasting, Financial services, Real estate, ownership of dwellings & professional services, Public administration and defense, Other Services.

Figure 4.3 Percentage share of GSVA from Tertiary Sector

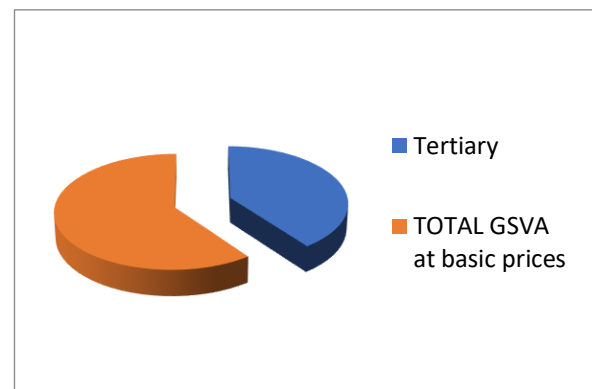


Figure 4.3 (a) Percentage Growth rate of Tertiary sector in Kerala & India by economic activity) at Current price

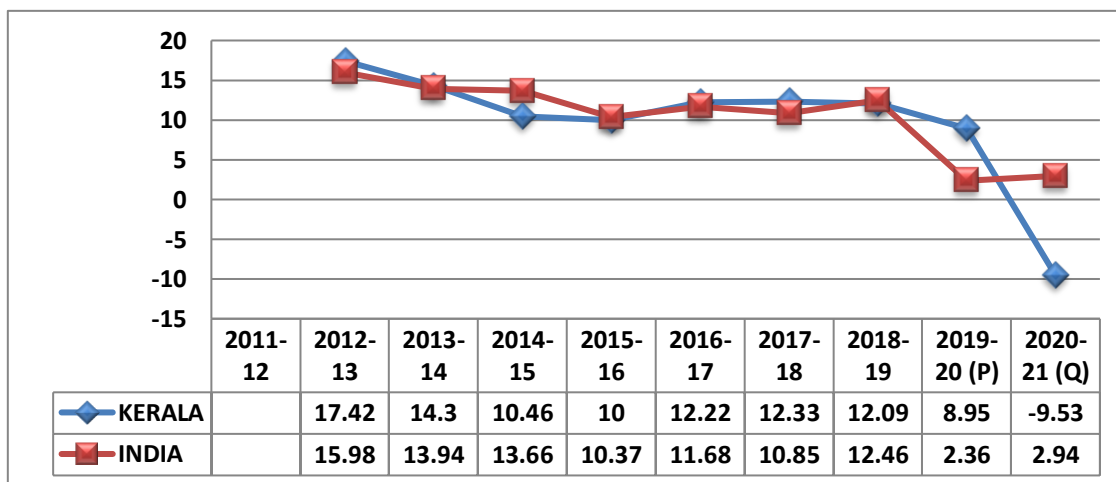


Figure 4.3 (b) Percentage Growth rate of Tertiary sector in Kerala & India by economic activity) at Constant price

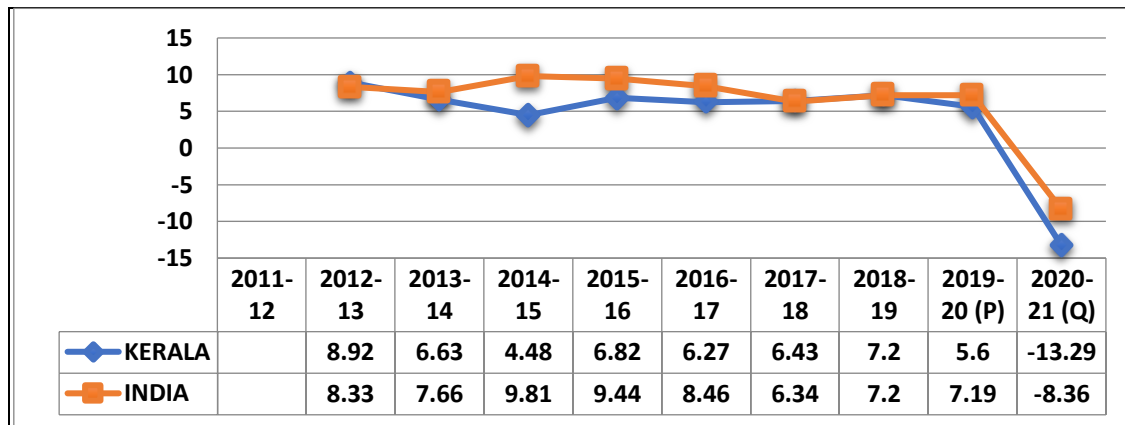


Figure 4.3 (c) Percentage contribution of Tertiary Sector to GSDP of Kerala & GDP of India (by economic activity) at current price

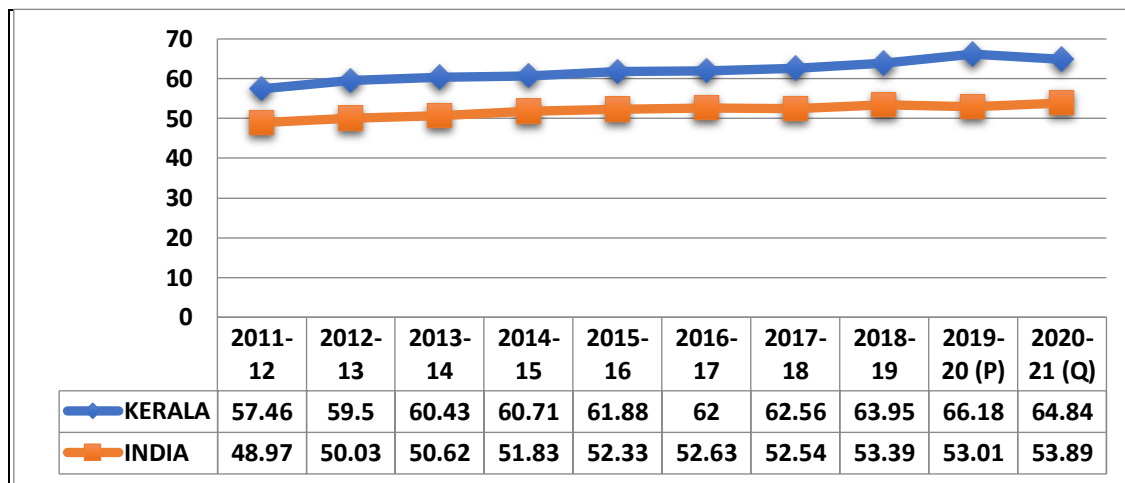


Figure 4.3 (d) Percentage contribution of Tertiary Sector to GSDP of Kerala & GDP of India (by economic activity) at constant price

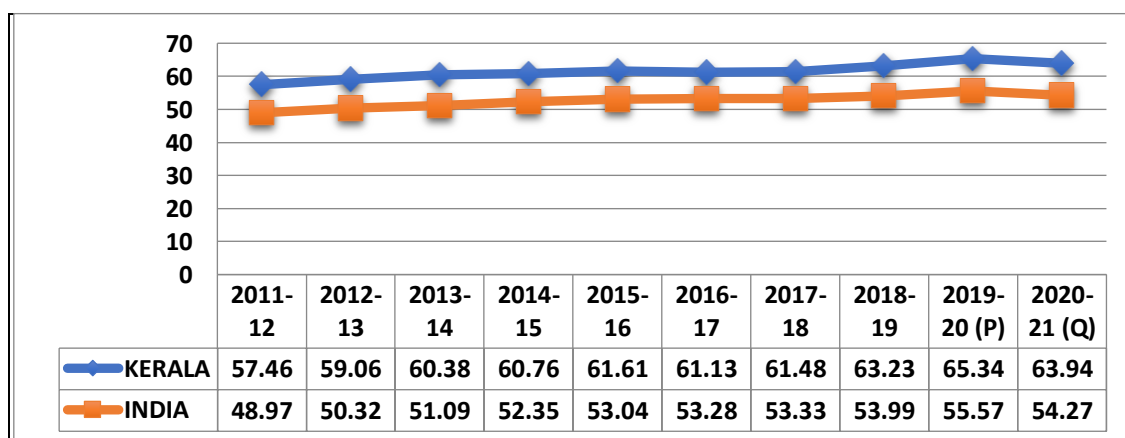


Figure 4.3(e) Contribution of various sectors into the Tertiary sector of Kerala & India at current price

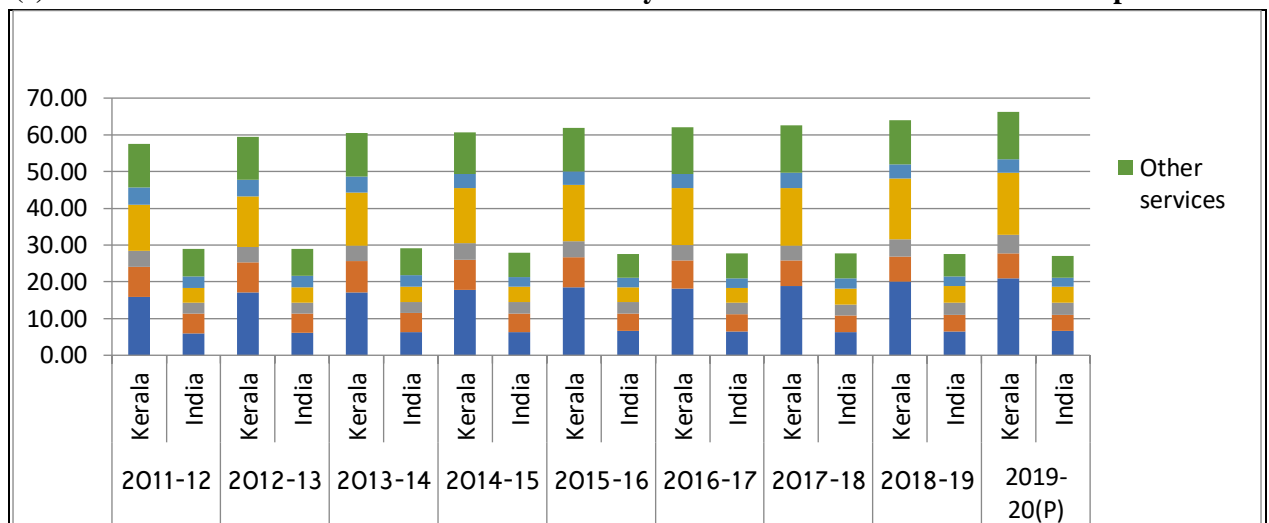
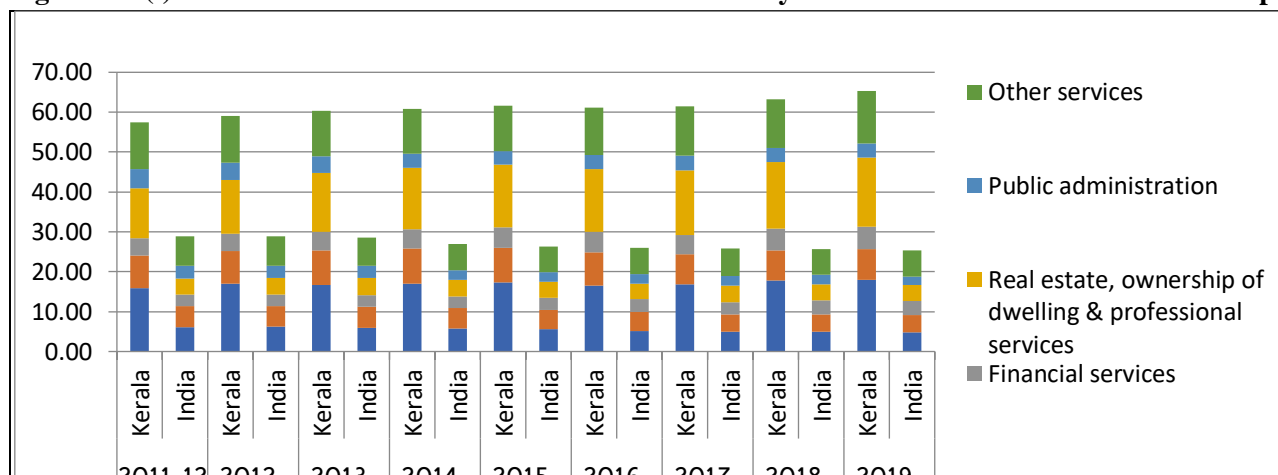


Figure 4.3 (f) Contribution of various sectors in to the Tertiary sector of Kerala & India at constant price



4.3.1 Trade & repair services

Trade & repair service includes wholesale and retail trade in all commodities whether produced domestically, imported or exported. It covers activities of purchase and selling agents, brokers and auctioneers. Wholesale trade covers units, which resell without transformation, new and used goods generally to the retailer and industries, commercial establishments, institutional and professional users or to other wholesalers. Retail trade covers units, which mainly resell without transformation new and used goods for personal or household consumption. This sector also comprises of maintenance and repair of motor vehicles and repair of personal household goods. The economic activities covered under this sector are Maintenance and repair of motor vehicles, Sale of motor vehicles, Whole sale trade except of motor vehicles Auctioning activities, Repair of personal household goods and Retail trade (except motor vehicles) Major data sources are Annual report of Public & Private Sector Companies, Budget documents for DEs, NDEs, NSS 67th & 68th Round, CPI from MOSPI etc.

GVA estimates at current price are prepared by production approach in the case of NDEs & income approach in the case of DEs. Current Price estimates are deflated using CPI (General) to obtain the Constant Price estimates.

4.3.2 Hotels & Restaurants

This sector covers services rendered by hotels and other lodging places, restaurants, cafes and other eating and drinking places. The economic activities covered are Hotels, Camping sites etc, Restaurants, bars and canteens. Major data sources are Annual report of Public & Private Sector Companies, Budget documents for DEs, NDEs, NSS 67th & 68th Round, CPI from MOSPI etc.

GVA estimates at current price are prepared by production approach in the case of NDEs & income approach in the case of DEs. Constant Price estimates are prepared by deflating the Current price estimates using CPI (General).

4.3.3 Transport, Storage & Communication

The economic activities included in this sector are Transport via railways, other land transport, Sea and Coastal water transport, Inland water transport, Scheduled air transport, Non-scheduled air transport. Supporting and auxiliary transport activities are activities of travel agencies, including Storage and warehousing, Post and courier activities and Telecommunications. The major data sources are the Annual report of Public & Private Sector Companies, Budget documents for DEs & Railways, NDEs, Motor Transport Statistics from state Transport Department, Cargo handled and passenger data, NSS 67th & 68th Round, CPI from MOSPI etc.

GVA estimates at current price are prepared by production approach in the case of NDEs & income approach in the case of DEs. Constant Price estimates are prepared by deflating the Current price estimates with CPI (transport & communication). The estimates are prepared industry wise namely Railways, Road transport, Water transport, Air transport Services incidental to transport, Storage, Communication & services related to broadcasting and consolidated to obtain the estimates of transport, Storage & Communication.

4.3.4 Financial services

The two main activities covered under this sector are banking and insurance which consisting of commercial banks, banking department of Reserve Bank of India, Public non-banking financial corporations, organised non-banking financial companies engaged in trading in shares, Investment holdings, mutual funds, loan finance and the like activities, unorganised non-banking financial institutions/undertakings such as professional money lenders and pawn brokers, Post office savings banks including operations concerning cumulative time deposits and national saving certificates, Co-operative credit societies, Life and non-life insurance activities etc. Major data sources are Annual accounts from all the Nationalized Banks, RBI publications & reports, Budget Documents Annual reports of Non departmental Non-banking financial companies and corporations.

GVA estimates at current price are prepared by production approach in the case of pension, income approach is used. Constant Price estimates are prepared by deflating the Current price estimates.

4.3.5 Real estate, ownership of dwellings & professional services

The economic activities covered in this sector are ownership of dwellings (occupied residential houses), real estate services (activities of all types of dealers such as operators, developers and agents connected with real estate), renting of machinery and equipment without operator and of personal and household goods, Computer and Related Activities, Accounting, Book-keeping and Related Activities, Research and development, market research and public opinion polling, business & management consultancy, architectural, engineering & other technical activities, advertising and business activities not elsewhere classified and legal services. Ownership of dwellings also includes the imputed value of owner occupied dwellings. Services rendered by non-residential buildings are considered to be a subsidiary activity of the industries, which occupy the buildings and therefore, are not included in this sector. Major data sources are Annual report of Public & Private Sector Companies, Budget documents for DEs, Census data, Capital Stock of rural & urban residential buildings, NSS 63rd 67th & 68th Round, CPI from MOSPI etc. GVA estimates at current price are prepared by production approach in the case of NDEs & income approach in the case of DEs. Constant Price estimates are prepared by deflating the Current price estimates using CPI (miscellaneous).

4.3.6 Public Administration & Defense

This sector covers services rendered by the administrative departments of the general government i.e., Central and State governments, Union Territories, Municipal Corporations, Municipalities, Housing Boards, Cantonment Boards, Improvement Trusts, District and Local Boards and Panchayat Raj Institutions. Public services in the autonomous institutions (quasi-government bodies) are also included under these economic activities. Major

data sources are State & Central Budget documents, AFS of Local bodies & Autonomous Institutions, CPI from MOSPI etc.

GVA estimates at current price are prepared by using the production cost occurred for providing the goods & services. Current Price estimates are deflated using CPI (General) to obtain the Constant Price estimates.

4.3.7 Other Services

The economic activities covered under this sector are Coaching and Tuition, Education excluding Coaching and Tuition, Human health activities including veterinary activities, Sewage and refuse disposal, sanitation activities, Activities of membership organisations social work, Recreational cultural and sporting activities washing and cleaning of textiles and fur products, hair dressing and other beauty treatment, funeral and related activities, private households with employed person, custom tailoring, extra territorial organisations and bodies. Major data sources are budget documents of DEs & autonomous Institutions, annual reports of the NDEs, annual reports of private sector companies, NSS 63rd round ES, NSS 61st and 68th & 67th round ES, CPI from MOSPI.

GVA estimates at current price are prepared by using the production cost occurred for providing the goods & services. Current Price estimates are deflated using CPI (miscellaneous) to obtain the Constant Price estimates.

Conclusion

The present study is designed in such a way that, for analysis purpose the final estimates of GSDP and GSVA 2011-12 to 2018-19, the provisional and quick estimates for 2019-20 and 2020-21 available with the department are taken for the purpose of analysis. Since all India data for 2020-21 (Q) was not available for certain areas in Tertiary sector, analysis was done for the period up to 2019-20.

The economic growth of Kerala, consequent to Covid-19 and containment measures, went into negative territory as in many parts of the country and the world. The growth in Gross State Value Added (at constant prices) as per quick estimates dipped to a low of (-) 11.51% in 2020-21 as against 2.22% growth in 2019-20.

At current prices, the GSVA declined to

(-) 7.66 % in 2020-21 against 5.28 % growth in 2019-20. The decline in Gross State Domestic Product growth was even further with a dip of (-) 11.51 % at constant prices and (-) 7.94 % at current prices. The corresponding growth in 2019-20 was 2.22 % and 4.58 % respectively. In Kerala, as per quick estimates (at current prices) the primary sector recorded a growth of 1.45 % while the growth in secondary and tertiary sectors was (-) 4.65 % and (-) 9.53 % respectively in 2020-21. Sectors that were badly affected include manufacturing, trade and repair services, hotels and restaurants, construction, road transport, financial services, and public administration. It was mainly the growth propelling sectors of the economy that were badly affected by the pandemic and consequent lockdowns over the last two years. The Covid-19 pandemic was an added set-back to the State economy which had already been affected by unprecedented floods in 2018 and 2019. In terms of sector-wise growth, the performance of the agriculture sector in the State showed improvement in 2020-21 compared to 2019-20. According to the data from the Directorate of Economics and Statistics (DES), there was an increase in the share of agriculture and allied sectors in total GSVA (at constant 2011-12 prices) of the State from 8.38% in 2019-20 to 9.38%. The contribution by the crop sector also increased from 4.32 to 4.84% during the period. The annual growth rate of GSVA (at constant 2011-12 prices) of agriculture and allied activities (including crops, livestock, forestry and logging and fishing and aquaculture) has been fluctuating over the years. The sector recorded a positive growth of 2.11% in 2017-18. In 2020-21, growth rate of agriculture and allied activities at constant price was (-) 0.78% compared to (-)5.09% in 2019-20. The growth in the crop sector was (-) 0.77% compared to (-) 5.53% in 2019-20. In 2020-21, livestock and crop sector recorded a positive growth rate at constant prices.

To conclude, the State Government should continue its policy of promoting growth and development in the economy and ensure social protection and welfare despite the constraints imposed by the Covid-19 pandemic. Kerala build on its strength to move ahead by developing high quality physical and social infrastructure for achieving higher economic growth and a better quality of life for its people.

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