



A STUDY OF ECONOMIC PERFORMANCE OF RAJASTHAN SINCE 1991

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Abstract

At the time of independence, Rajasthan was largely dependent on agriculture. It was a slow growing state and the level of industrialization was minimal. The reforms which were introduced in 1991 were helpful for the state in terms of growth acceleration and poverty alleviation front. Economic performance of the state has been remarkable in increasing Gross State Domestic Product; however, it ignores the impact of a missing manufacturing growth in the process of structural change on the overall growth of an economy. This paper tries to bring out a concise but comprehensive overview of impact of reforms on the output of three economic sectors of Rajasthan i.e., Primary, Secondary & Tertiary. And how structural transformation happened in Rajasthan post reforms.

Key Words: Primary Sector, Secondary Sector & Tertiary Sector, Sectoral Output and Structural Transformation.

Introduction

The Indian economy was growing at a rate of 3.5 percent from 1950-1980s which was very low in comparison to other developing countries. India faced many restrictions, bureaucratic controls and protection policies led India to economic crisis in 1991 which reflected the macroeconomic mismanagement of the economy and an attempt was made to stabilize the economy by economic reforms.

The post reform economic performance of Rajasthan was impressive if one sees it from the point of view of increasing output of three sectors of economy, shift from low productive sector to high productive sectors, poverty reduction and accelerating growth despite the fact that the Rajasthan was a low-income state during reform period. With the shortage of water, Rajasthan showed considerable potential in the agriculture & its allied sector from the beginning by investing in the crops that are

compatible with soil conditions and climate. Likewise, state had pulled investment in industrial sector and, increasingly, services, due to enhancements in the business environment i.e., inflow of FDI. Apart from this, state has effectively used the new information technology with respect to increase service delivery. Economy of Rajasthan has been divided into three different sectors which ultimately contribute to GSDP (Gross State Domestic Product) i.e., Primary (Agriculture), Secondary (Manufacturing) & Tertiary sector (Service).

• Agriculture Sector

Agriculture Sector or primary sector of an economy is crucial for socio-economic development of a country/State. The sector provides employment, food security and livelihood to most people in the rural areas. However, because of the rapid development towards industries, the agriculture sector had been gradually ignored. In the last two decades despite challenges of lack of infrastructure, water scarcity, the state's varied climatic zones, uneven access to inputs in Rajasthan.



Rajasthan changed its approach in terms of agriculture by bringing diversity in crops. It promoted the crops which were suitable to the climatic and other conditions here. Crops such as pulses and guar had favourable conditions in Rajasthan which is why focus was given to them. This focus resulted in good results. Rajasthan came among the top State in terms of production of oilseeds, guar and pulses. The State supplied them in both national and international markets because of their nutraceutical and pharmaceutical attributes. Apart from core agriculture, Rajasthan has a well-developed animal husbandry sector. This sector is crucial especially for rural areas.

- **Manufacturing Sector**

Manufacturing is an engine of economic growth because of the increasing demand (higher-income elasticity) for industrial goods. In the earlier stage of development GDP growth in countries were driven by the manufacturing sector. In Rajasthan as well, manufacturing was a significant growth driver in the last two decades. Rajasthan successfully remained among top five States that had a rapidly growing manufacturing sector. The State has also increased its share in overall output of manufacturing sector in India. The sector performed exceptionally well in the last decade, especially in automobiles and electronics.

The geographical location and being situated near ports and trading hubs plays a beneficial role for Rajasthan. There are notable improvements in road and power infrastructure in the State. The power resources and base of the State has helped a lot in setting up businesses here.

Rajasthan has substantial opportunities in manufacturing sector. If they are exploited, possibly it will go a long way towards smoothing the state's structural transformation that is an important component for creating better jobs.

- **Service Sector**

After the post-reform period in India service sector can be seen to promote economic growth. The sector has become largest sector in terms of its share in employment and GDP in both India and Rajasthan. The sector is highly diverse, ranging from business services, financial services, social services and infrastructure services. In Rajasthan, service sector contributed around 42 percent of GSDP in 2018. In the last decade, Rajasthan has promoted use of technology in delivery of services, healthcare and education. This has given positive outcomes on different levels.

Historically, tourism in Rajasthan has been one of the most important economic sectors. Development of tourism in Rajasthan helped in creating huge employment opportunities. This also helped people in looking beyond agriculture for getting employment. This helped the State in generating a source of income for people living in rural areas near tourist place. Rajasthan's experience in tourism and strong asset base will have positive effects in terms of sustainable and long terms growth. This inclusive growth will foster a positive structural transformation in Rajasthan.

Research Methodology

Present study builds on existing research and methodologies.

Objectives

- To examine the post reforms trends of Gross State Domestic Product.
- To analyze the sector wise percentage contribution to GSDP of Rajasthan.
- To explores output of primary, secondary & tertiary sector after 1991.
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Data Source

Keeping in view the broad objectives of the paper, the study is purely based on secondary data of Rajasthan & Indian economy. The data will be collected from different national sources such as NITI Aayog, Rajasthan Government Statistics, Central Statistics Office (CSO), World Bank and RBI. The methodology used for data collection will be consistent with objectives of my paper.

- **Software:** Excel and SPSS
- **Statistical tools:** Average, percentage, ratio, correlation, tables (pivot table), graphs (Line chart, Scatter plot, Histogram)

Literature Review

Lavopa, A. M. (2015). the author has attempted to study economic development by the process of structural transformation. The author primarily argues that a developing or underdeveloped economy should complete two aspects of the process of structural transformation needs in order to come at par with the developing world. The first is the proper absorption of the surplus labour of the traditional sector in the modern sector and the second is the technological advancement and upgradation of the modern sector. The author points that a failure to achieve either of the two would lead to an economy fall in a trap which will keep it a low and middle-income economy and hamper its growth which will remain within a boundary.

Author concluded that the countries entangled in the development trap are the ones which have not been able to achieve a proper level of modernization. It means those countries that have either failed to take advantage of the global technological advancement or have not expanded their modern sectors. The composition within the modern sector is crucial in determining the outcome of that country's economic growth. The existence of a solid and vibrant manufacturing sector would balance out the slow growth in the overall modern sector when they achieve good level of modernization. Another factor which balances out the slow rate of growth tendency is the level of exports by an economy. These higher exports will help the economy in getting rid of a restrictive balance of payment situation and will help the economy in expansion of technology by regular exposure to the global economy. The conclusion drawn by the author was that when the economic activities shift from low productivity to a high productivity sector, then it has a good impact on that overall sector as well and accelerates the overall expansion of technology.

Ghose, A. K. (2021) the paper "Structural Change and Development in India" aims to analyze the employment conditions in India and the effects of structural transformation on conditions of employment prevailing in the country. It argues that structural change is a process of relocation of labour from low productivity agriculture sector to high productivity one. Structural transformation is not only a contributor to the growth of economy of a country but is also the primary way to improve employment conditions in developing countries. The structural change that India has experienced is quite different in the sense that the labour reallocation here has occurred from agriculture to the service sector and not to the manufacturing sector. This re-allocation has helped in achieving economic growth but it has not contributed in improving the employment conditions in the country and the pace of employment condition improvement has been very sluggish. It highlights that the direct shift from agriculture to the services has left manufacturing behind and that it is a big challenge to correct this situation. If India had experienced the usual occupational shift from agriculture to manufacturing then it would have also led to the improvement in employment conditions. The structural change in India was



focused on enhancing the growth and it was expected that together with that it will bring improvements in employment conditions but that has not happened. The study argues that India should endeavour to make transition from service late growth to manufacturing growth and that the same is still possible.

Adams Jr, R. H. (2004). The aim of their Paper was to examine the impact of economic growth on reduction of poverty and inequality. They discuss two divergent views relating to the role of economic growth in reducing poverty and inequality in developing countries. First view argues that economic growth is necessary to reduce poverty and inequality whereas the second one holds the view that economic growth increases income inequality and thereby helps the rich and not the poor.

They concluded by holding that economic growth is an important tool which helps in reducing poverty in low-income countries. The author however argues that there would be a stronger relation between economic growth and poverty reduction when consumption is used as a measure of economic growth and a fragile link between them when GDP per capita would be used as a measure. It was argued that growth has little impact on income distribution which remains stagnant. When growth happens at this stagnant income distribution, it helps in increasing the income of all the sections of the society including the poor and thereby helps in reducing poverty.

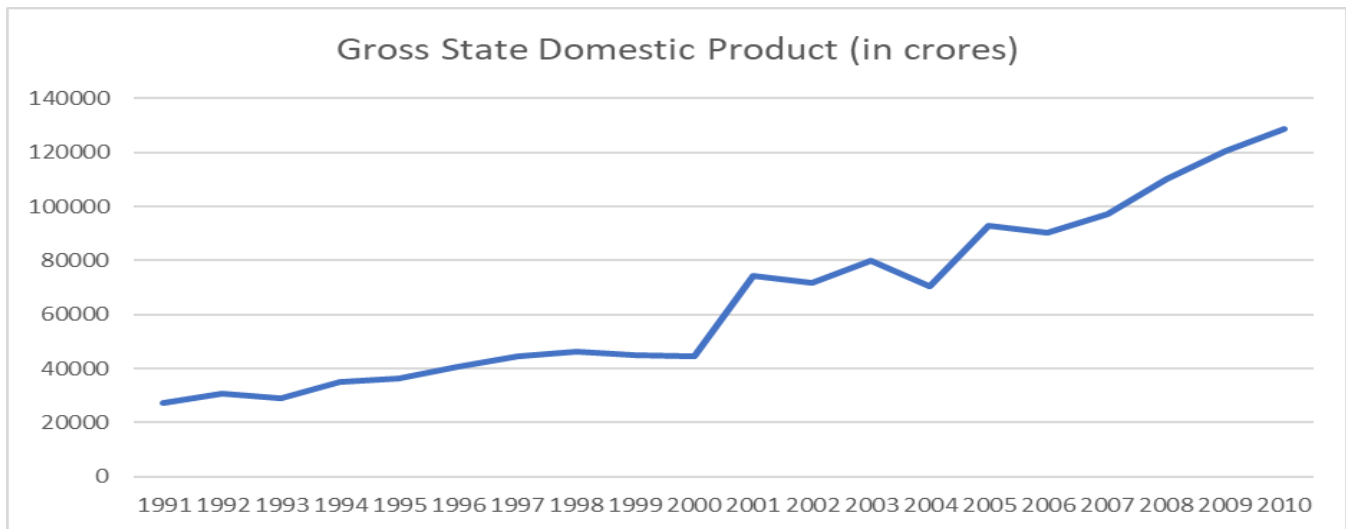
Bender, D. (2012). This paper was an attempt to analyze how structural change impacts employment, rate of wages and per capita income in countries with low income. The paper uses a Lewis Model type two sector model as well as the Solow Model and synthesis of these two models is done by the author. Structural change is the process of change and shift in overall employment shared by different sectors of the economy. The paper tries to portray that the changes and shifts in employment pattern is the underlying reason of increase in rate of growth of economy and rise in per capita income. The author has tried to measure the change that is brought by the employment and occupational transformation by dividing this into different stages with and without labour surplus and arguing that these different phases exhibit different dynamics of growth. The phase with labour surplus in a dual sector economy initially shows high but falling growth and after the absorption of surplus labour in the next phase, there is low but rising growth.

Analysis & Findings

The Gross domestic product of state during the post-reform period in comparison to current period has shown a substantial growth in absolute as well as relative terms. GSDP of the state was around 27000 crore Rupees in 1991-92, whereas it increased to around 6,00,000 crores in 2019-20. The growth rate of the GSDP of the state was very low and disrupted during the post-reform period, however it started rising i.e., slowly and steadily. In 1995-96, growth rate was 0.89 percent but it has increased to around 9 percent in 2019. Although, the growth rate was negative in between few years of three decades i.e., in 2000-01, 2004-05 and 2020-21. Below are the charts 1&2 of Gross Domestic Products of Rajasthan from 1991 to 2019 at respective constant prices. We can clearly see that GSDP from 1991 to 2010 was volatile, it increased exponentially after 2011-12 to 2019-20.

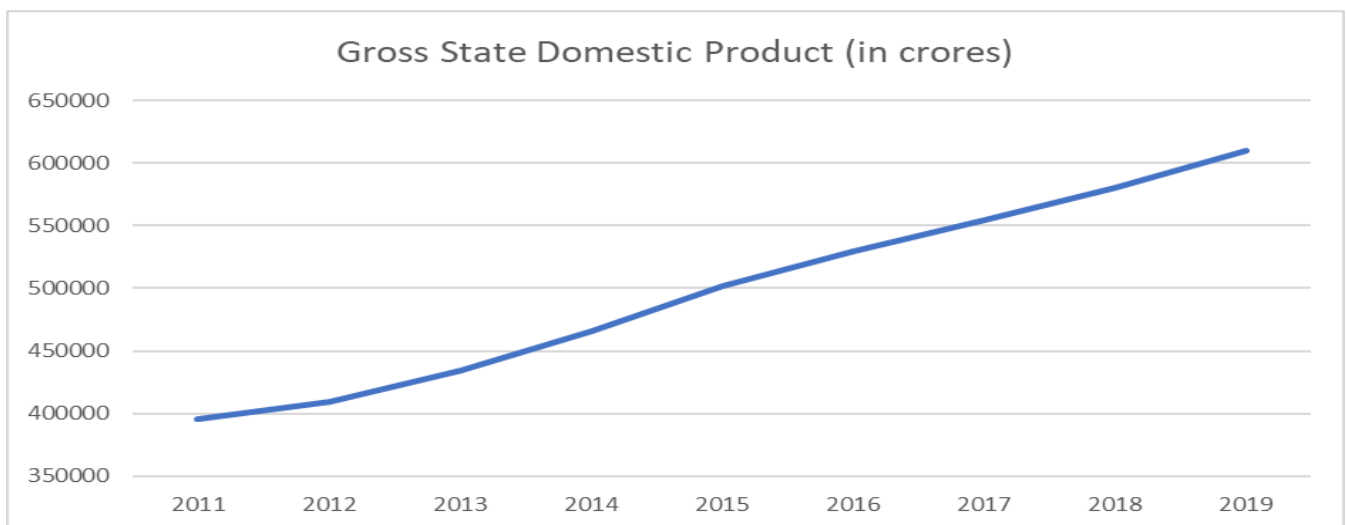


**Chart 1: Gross State Domestic Product (In Crores) From 1991 To 2010
(At Constant Prices 1999-00)**



Data Source: Rajasthan development report, economic review of Rajasthan, 1996-97, state domestic product Rajasthan 1993-94 to 1997-98, state domestic product Rajasthan_1999-2000 to 2009-10, constant 1999-2000, economic review (English) 2001-02

Chart 2: Gross State Domestic Product (In Crores) From 2011-12 To 2019-20 (At Constant Prices 2011-12)

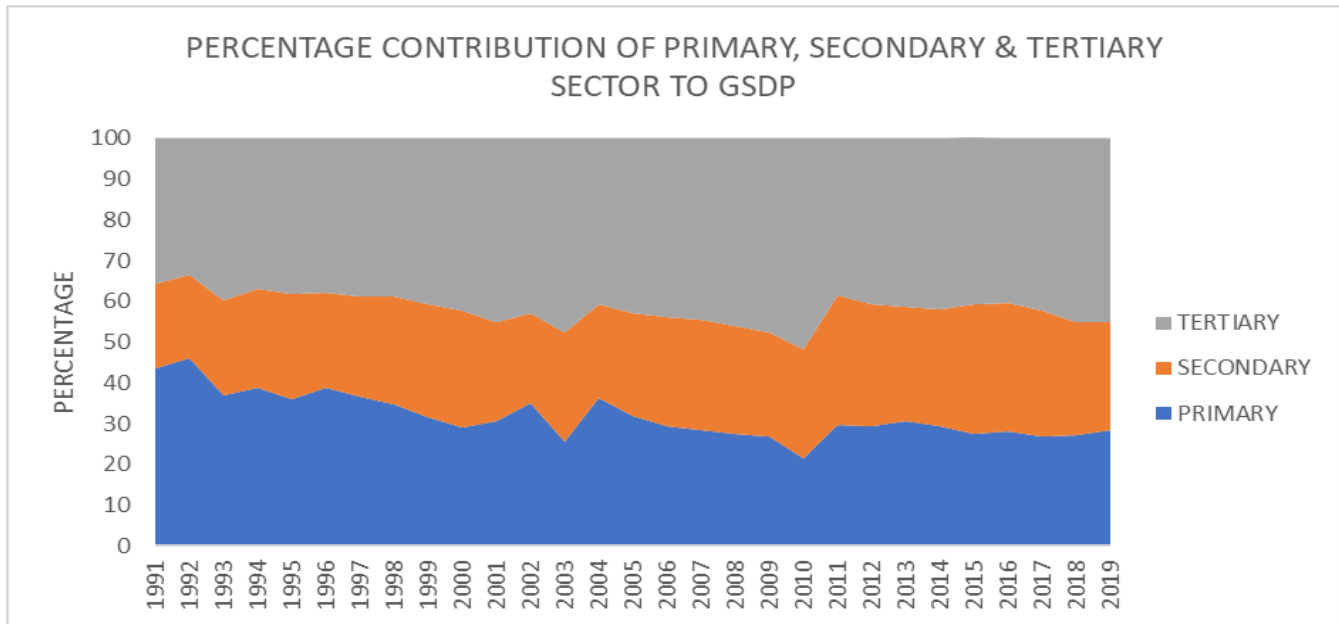


Data Source: State Domestic Product Rajasthan, Govt. Of Rajasthan, 2011-12 To 2020-21

Sector wise contribution to GSDP of Rajasthan had shown a drastic change. Primary sector showed a declining trend after 1990s reforms i.e., around 43 percent in 1991-92 to around 28 percent in 2019-20. Whereas, the tertiary sector's contribution increased from around 35 percent in 1991-92 to around 44 percent in 2019-20 at respective constant prices. However, the secondary sector was stagnant during the period, in 1991-92 it contributed around 20 percent and in 2019-20 it was around 26 percent.



Chart 3: Percentage Contribution of Primary, Secondary & Tertiary Sector To Gsdp From 1991 To 2019



Data Source: Rajasthan Development Report, Economic Review Of Rajasthan, 1996-97, State Domestic Product Rajasthan 1993-94 To 1997-98, State Domestic Product Rajasthan_1999-2000 To 2009-10, Constant 1999-2000, Economic Review (English) 2001-02, State Domestic Product, 2020-21

Chart 3 shows the percentage contribution of primary, secondary and tertiary sector in GSDP. An overall comparison and analysis of this figure reveals that the average contribution of the primary sector has consistently declined in all three decades from 1991-2019. The analysis of the average percentage contribution of the secondary sector to GSDP shows that the sector has experienced very sluggish growth in these three decades. And the average percentage contribution of secondary sector remained stagnant in the first two decades. However, it increased in the last decade.

The analysis of the average percentage contribution of the tertiary sector to GSDP reveals that between the average percentage contributions of tertiary sector output increased from 1991-2000 to 2001-2010. However, the average percentage contribution to GSDP of the state has experienced a decline in the last decade. Despite the decline it continued to remain as the biggest contributor to the overall GSDP of the state.

Table 1: Primary, Secondary and Tertiary Sector Output (In Crores) From 1991-92 To 2020-21

Year	Primary Output	Secondary Output	Tertiary Output
1991	11854	5641	9728
1992	14146	6314	10265
1993	10764	6757	11539
1994	13494	8531	12815
1995	13097	9368	13875
1996	15822	9445	15501
1997	16331	10878	17281



1998	16079	12112	17986
1999	14195	12530	18396
2000	12910	12679	18744
2001	21964	17362	32436
2002	27940	17691	34303
2003	18104	18834	33394
2004	33746	21106	37859
2005	28896	22775	38772
2006	28541	25933	42801
2007	31471	29484	49082
2008	33278	31795	55192
2009	34702	32679	61113
2010	28114	35385	67832
2011	112058	119685	145735
2012	115080	116385	158294
2013	125304	114733	169796
2014	128324	125363	183916
2015	127539	148664	191276
2016	138989	156852	200161
2017	138341	159997	218055
2018	145361	147529	241748
2019	159038	149809	252371
2020	164650	137802	224996

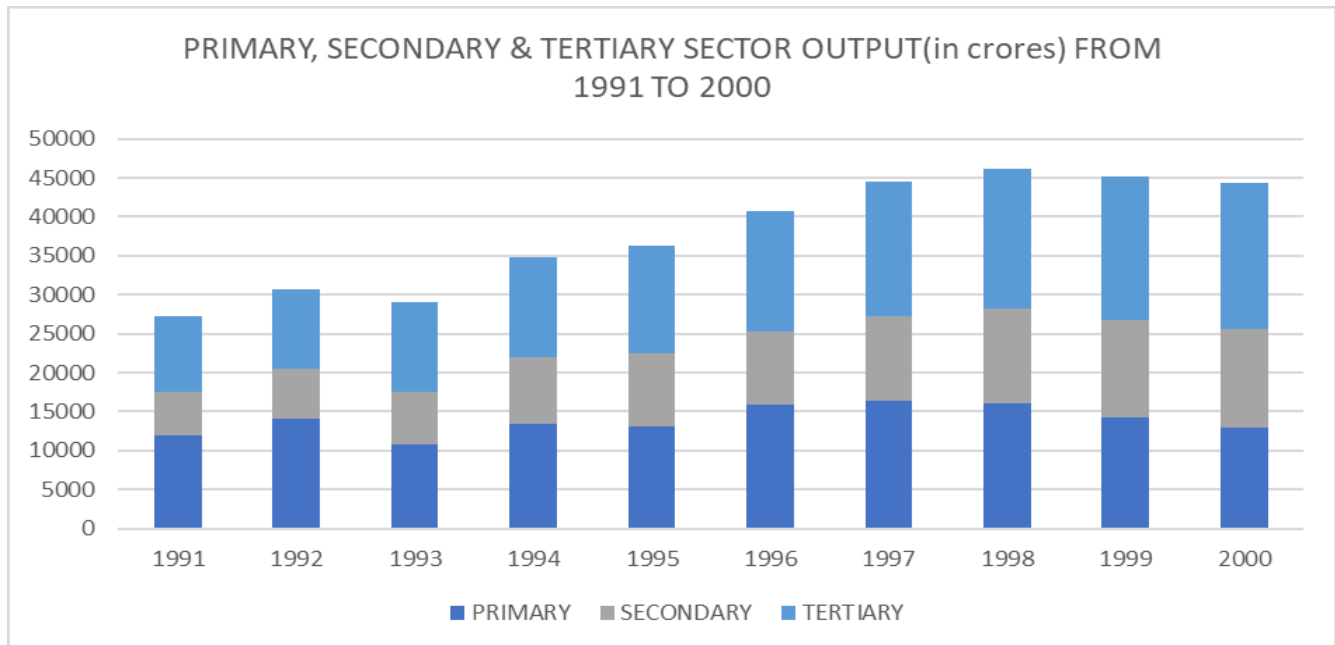
Data Source: Rajasthan Development Report, Economic Review Of Rajasthan, 1996-97, State Domestic Product Rajasthan 1993-94 To 1997-98, State Domestic Product Rajasthan_1999-2000 To 2009-10, Constant 1999-2000, Economic Review (English) 2001-02, State Domestic Product, 2020-21

The post reform periods from 1991-2019 experienced weak manufacturing growth in the economy of Rajasthan. During the period, the state experienced widespread agriculture as well as livestock growth. The state has also experienced sequential droughts which brought a reduction in the growth rate of the agriculture of Rajasthan. However, the continuous policy shifts and planning in the state have helped the agriculture in showing resilient growth even during these challenging times.

Post reform story of structural change in Rajasthan was like that of the country as whole. In the period between 1994 to 2005, the service sector of the state shown immense growth. However, in 2012 when the process of structural change in India became slow, Rajasthan experienced a stronger jolt and the process nearly came to a halt. The later changes which were experienced in the structural base in Rajasthan came not at the cost of agriculture but of industry. The movement of labour from agriculture to the other two sectors, led to increase in labor productivity in agriculture which became the principal driver of growth in the post reform period.

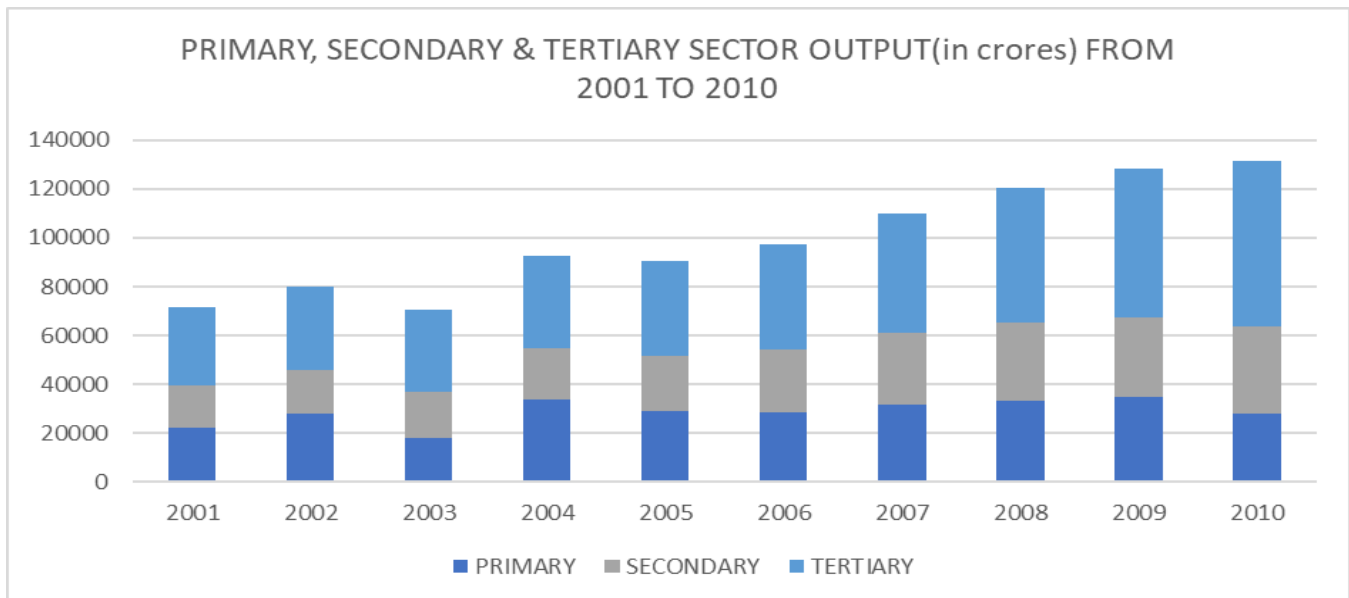


Chart 4: Output of Primary Secondary and Teritary Sector of Rajastha From 1991 To 2000



Data Source: Rajasthan Development Report, Economic Review Of Rajasthan, 1996-97, State Domestic Product Rajasthan 1993-94 To 1997-98

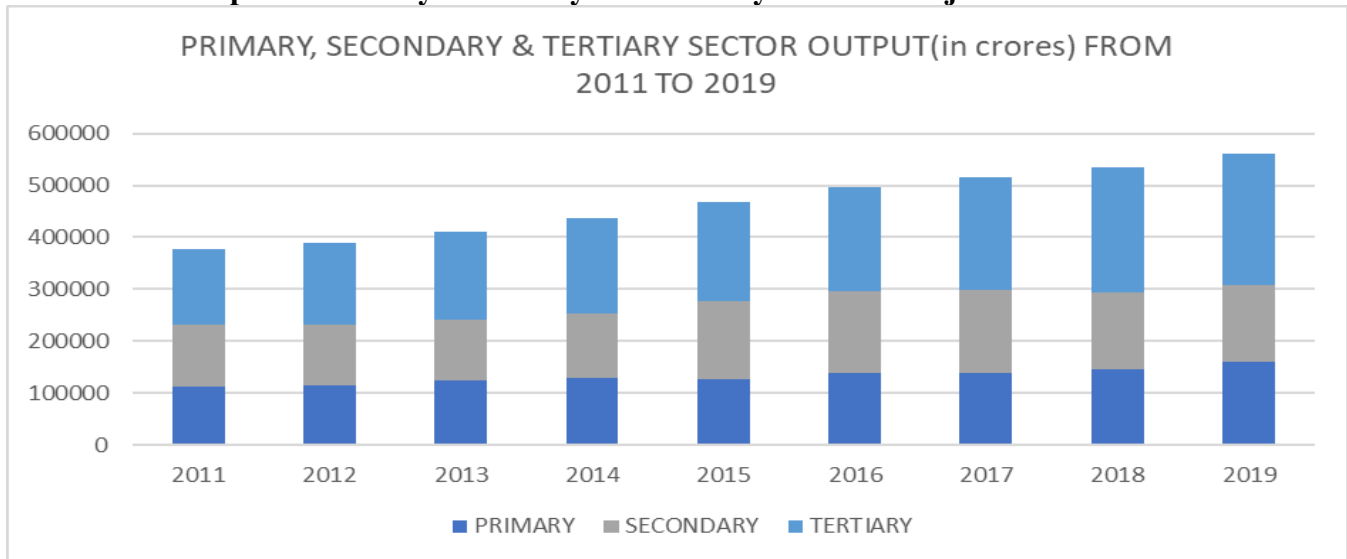
Chart 5: Output Of Primary Secondary and Teritary Sector Of Rajastha From 2001 To 2010



Data Source: State Domestic Product Rajasthan, Govt. Of Rajasthan, 1999-2000 to 2009-10



Chart 6: Output of Primary Secondary and Teritary Sector of Rajastha From 2011 To 2019



DATA SOURCE: STATE DOMESTIC PRODUCT RAJASTHAN, GOVT. OF RAJASTHAN, 2011-12 TO 2020-21.

The data charts 4, 5 & 6 given above contains output of primary, secondary and tertiary sectors in the Rajasthan economy for three different decades. In the first decade (chart 4), the primary sector was producing the maximum output of all the three sectors followed by the tertiary sector and the secondary sector.

A look at the data of chart 5 reveals that the tertiary sector had replaced the primary sector to become the biggest output producing sector in the Rajasthan economy and the primary sector had fallen to the second spot followed by the secondary sector at the last spot.

Chart 6 reveals that all three sectors had experienced monumental increase in their respective outputs as compared to chart 4 & 5. One more significant change that can be observed is that the secondary sector has beaten the primary sector to become the second biggest output producing sector of the state economy and the primary sector output has fallen to the last spot. Tertiary sector remained the largest output producing sector of the state economy.

Comparison of three charts (4, 5 & 6) reveals that the service sector output has increased exponentially from 1999-00 to 2019. During the reforms period primary, secondary and tertiary sector output was very close, however, after 1999-00, inequality among primary, secondary and tertiary sector's output started arising. Between 2001-02 to 2009-10, inequality among primary and secondary sector's output was negligible but can be seen from chart inequality among primary and tertiary sector's output & secondary and tertiary sector's output was very high. In 2010, the inequality among sectoral output reduced as a consequence of global crisis in 2008 i.e., overall GSDP declined. However, after 2011-12, service sector showed an immense growth, so as its output. Whereas the growth of primary and secondary sector output remained stagnant. As a consequence, the inequality between output of three sectors, mainly between secondary and tertiary increased rapidly.



Conclusion

Results have shown that Gross State Domestic Product of Rajasthan has increased in absolute as well as relative terms although it was very volatile during 2001-02 to 2011-12. The structure of Rajasthan economy has had changed drastically from 1991-00 to 2019-20. Share of primary sector in GSDP of the state have decreased from around 43 percent to 28 percent. On the other hand, the share of tertiary sector has increased from about 35 percent to 45 percent. It shows that the disparities in sector wise output had rapidly increased from 1999-00 to 2019-20, mainly, among the outputs of primary & tertiary sector and secondary & tertiary sector. The disparity in output of three sector had slowed down the growth of primary and secondary sector as a consequence the state had low per capita income..

The output of the primary sector increased from 1991 to 2019 in absolute as well as relative terms. However, in absolute terms primary sector's output is showing increasing trend but the contribution in GSDP declined. The reason for the same can be traced to the improvement in and advancement in the technology after liberalization of Indian economy. This technological advancement benefitted agriculture in Rajasthan. Moreover, the government has also brought many schemes to provide easy access to finance, change in crop pattern and more accessible irrigation sources among others.

The output of the secondary sector increased but the percentage contribution to GSDP was stagnant. The state experienced some growth in the industrial bases in the economy and industries started flourishing in the state. Some industrial hubs got created in the state but such hubs were concentrated in few parts of the state and their spread all around the state was missing. The output of secondary sector of Rajasthan increased at a diminishing rate and was rather sluggish. In the industries sector itself, the contribution of MSMEs has been more than that of the large industries and if the construction sector is removed from the secondary sector, then the performance of this sector will reflect even poorer scenario.

The output of the tertiary sector has exhibited huge jump and upward trend since the beginning of the new economic reforms. The sector today captures the maximum output contribution among all the three major sectors in the overall GSDP of Rajasthan. The growth rate of the output of tertiary sector has been phenomenal and it left the other two sectors far behind in terms of rate of growth of output since the advent of the new economic reforms. The reasons of this successful phenomenon could be the change and shift in the demands of people of the state from necessary goods to leisure goods and services with the rise in their incomes. The state tapped its strengths and played to them by bringing improvements in its tourism and hospitality industry and concentrated on information technology and modern communication mediums.

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