

PERFORMANCE OF AGRICULTURE SINCE POST LIBERALISATION IN INDIA

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1.0 Introduction

Agriculture, being the mainstay of Indian economy since long, is facing a crisis of a different sort. Education is keeping the educated youth out of agriculture and land is being increasingly used for estate development and building luxury and tourist resorts if not lying unused. Agriculture continues to grow below 2% p.a. and sectoral problems in honey, spices, pulses, bamboo, horticulture is yet to find a voice. Subsidy based agricultural development from the West is not becoming acceptable in world Forums like the WTO. India is one of the leading producers of foodgrains and many horticulture crops and is also a net exporter of many important food commodities. After Green Revolution, the production has increased many times and at the same time it has also ensured that India is not far away from its goal of Food Security.

In this paper, an attempt is made to study the performance of Agriculture Sector since post liberalization. After liberalization the share of GDP is almost low when compare with 1950-51. The study relies on secondary data compiled from various published sources i.e., the Directorate of Economics and Statistics (DES), Ministry of Agriculture, Department of Agriculture, Cooperation and Human Welfare. The paper is organised into two sections: first part is focussing on introductory part and rest of the part is about study of the performance of agriculture in the context of foodgrains and the labour participation in the Primary Sector.

In 1950-51 the contribution of agriculture in GDP was 50.10 per cent. Since its contribution to India's GDP has continuously declined and reached 15 per cent during 2014-15. The foodgrains and pulses rends from first five year plan to twelfth five year plan represents a continuous increase in area of food grains from 98.79 million ha. to 123.17 million ha.

Table 1.1.. Demographic profile of India

| Demographic Indicator | 2001 | 2011 |
|--------------------------------|---------|---------|
| Population (million) | 1028.10 | 1210.60 |
| Sex Ratio (Female/1000 males) | 933 | 943 |
| Population Density (per sq.km) | 325 | 382 |
| Urban (%) | 27.80 | 31.20 |
| Decadal population growth (%) | 21.50 | 17.60 |

Source: Census of India, 2001, 2011

The above table clearly shows that the demographic indicators of India. As per 2011 Census, the Population was 1210.60 million, Sex Ratio when compare with 2001 has little progress.

The importance of agriculture has not diminished for two major reasons. First, the country achieved self-sufficiency in food production at the macro level, but still is a food deficit country facing massive challenges of high prevalence of malnourished children and high incidence of rural poverty. The pressure on agriculture to produce more and raise farmers' income is high. Second, the dependence of the rural workforce on agriculture for employment has not declined in proportion to the sectoral contribution to GDP. This has resulted in widening the income disparity between the agricultural and non-agricultural sectors (Chand and Chauhan, 1999). The cropping pattern in India has undergone significant changes over time. As the cultivated area remains more or less constant, the increased demand for food because of increase in population and urbanisation puts agricultural land under stress resulting in crop intensification and substitution of food crops with commercial crops. (Elumalai Kannan, Sujata Sundaram, 2011). During late sixties, the high yielding varieties introduced in wheat and rice heralded India's green revolution. Along with technology, new institutional structures enabled the farmers to adopt improved methods of cultivation. The significant changes included provision of better irrigation facilities, government procurement system, guaranteed support price and input subsidies.

The next phase in Indian agriculture began in early 1980s. This period started witnessing process of diversification which resulted into fast growth in non-foodgrains output like milk, fishery, poultry, vegetables, fruits etc which accelerated growth in agricultural GDP during the 1980s (Chand, 2003). There has been a considerable increase in subsidies and support to agriculture sector during this period while public sector spending in agriculture for infrastructure development started showing decline in real term but investment by farmers kept on moving on a rising trend (Mishra and Chand, 1995; Chand, 2001).

The notable fact is that, the fourth phase of agricultural policy started after initiation of economic reform process in 1991. This period opening up of domestic market due to new international trade accord and WTO was another change that affected agriculture. This raised new challenges among policymakers.

Table 1.2. Sectoral Composition of GDP: 1950-51 to 2010-11

| Census Year | Primary Sector | Secondary Sector | Service Sector |
|-------------|----------------|------------------|----------------|
| 1950-51 | 54.81 | 10.51 | 34.68 |
| 1960-61 | 42.50 | 19.30 | 38.20 |
| 1970-71 | 41.94 | 20.48 | 37.58 |
| 1980-81 | 35.39 | 25.29 | 39.32 |
| 1990-91 | 29.02 | 26.49 | 44.49 |
| 2000-01 | 23.03 | 26.00 | 50.97 |
| 2010-11 | 18.21 | 27.76 | 54.03 |

Source: CSO, National Accounts Statistics

The above clearly indicates that the Primary Sector changes natural resources into products. The sector provides raw materials for the Industrial Sector. Agriculture, Fishing, Forestry are the major activity of the Primary Sector. Among three, Agriculture was dominant as a single sector with 54.81 per cent in GDP in 1950-51, came down to 20.02 after liberalization, followed 18.21 per cent in 2012-13, the allied activities in the Primary Sector also came down to 2.1 per cent during same period from 10.2 per cent in 1950-51.

Table 1.3. India's Foodgrains Production

| Year Triennium Ending | Food grain Production (million tonnes) |
|-----------------------|--|
| 1950-51-53 | 98.79 |
| 1959-60-62 | 116.21 |
| 1969-70-72 | 123.50 |
| 1981-82-84 | 128.46 |
| 1990-91-93 | 124.29 |
| 1990-00-02 | 122.31 |
| 2008-09-11 | 123.28 |
| 2014-15-16 | 123.17 |

Source: Agricultural Statistics at a Glance MOA, GOI & Directorate of Statistics & Evaluation.

The above table indicates that the food grain production is an stagnant and very slight increase and decrease in production.

The table 1.4 clearly indicates that there has been a change in the compositions of labour since 1950-51. The subdivision of land due to various socio-economic factors has led to increase the agricultural labour from 1950-51, 28.1 per cent to 54.9 in 2011. Another notable fact is that the composition of agriculture labour is declining per centage of cultivator to total agricultural worker from 70.19 per cent to 45.1 per cent in 2011.

Table 1.4 Labour in Agriculture Sector

| Census Year | All Occupation (Main Workers) | Agricultural Labourers | Cultivators | Total Agricultural Workers | % of agricultural workers with total workers | % of agricultural labourers to total agricultural worker | % of Cultivator to total agricultural worker | % of agricultural labourers to total agricultural workers |
|-------------|-------------------------------|------------------------|-------------|----------------------------|--|--|--|---|
| 1950-51 | 139.5 | 27.3 | 69.9 | 97.2 | 69.7 | 19.6 | 70.19 | 28.1 |
| 1960-61 | 188.7 | 31.5 | 99.6 | 131.1 | 69.5 | 16.7 | 76.0 | 24.0 |
| 1970-71 | 280.4 | 47.5 | 78.2 | 125.7 | 69.7 | 26.3 | 62.2 | 37.8 |
| 1980-81 | 244.6 | 55.5 | 92.5 | 148.0 | 60.5 | 22.7 | 62.5 | 37.5 |
| 1990-91 | 314.1 | 74.6 | 110.7 | 185.3 | 59.0 | 23.7 | 59.7 | 40.3 |
| 2000-01 | 402.2 | 106.8 | 127.3 | 234.1 | 58.2 | 26.5 | 54.4 | 45.6 |
| 2010-11 | 481.9 | 144.3 | 118.8 | 263.1 | 54.6 | 29.94 | 45.1 | 54.9 |

Source: Registrar General of India

Water is basic factor in agriculture next to land. Rainfall is the natural source of water in agriculture. But rainfall is the most uncertainty and is marked by wide variations in different parts and also variation from year to year in its quantity, incidence, and duration. Therefore, only artificial supply of water through irrigation is the way to overcome the problem of deficiency of water. Irrigation water comes from two sources: surface water and ground water. Surface water is provided by the flowing water of rivers or the still water of tanks, ponds, lakes, and artificial reservoirs. The surface water is carried to the field by canals, distributaries, and channels. Ground water is tapped by sinking wells where drought animals, diesel or electric power is utilized to take out water. Canals, tanks, wells including tubewells are the principal sources of irrigation in India. Since 1950-51, considerable importance had been attached to the provision of canal irrigation and well irrigation. Even though 40 percent of irrigation is supplied by canals, now well irrigation has caught up rapidly irrigation by tubewells has been expanded considerably.

Table 1.4 Sources of Irrigation

| Sources | 1950-51 Area (Million ha) | % | 1970-71 Area (Million ha) | % | 2000-01 Area (Million ha) | % |
|------------------------------|---------------------------------|------|------------------------------|------|---------------------------------|------|
| Canals | 8.29 | 44.0 | 12.80 | 40.5 | 17.1 | 31.3 |
| Wells including Tubewells | 5.98 | 31.7 | 12.10 | 38.3 | 30.9 | 56.6 |
| Tanks | 3.61 | 19.1 | 4.10 | 13.0 | 3.1 | 5.7 |
| Others | 0.97 | 5.2 | 2.60 | 8.2 | 3.5 | 6.4 |
| Total | 18.85 | 100 | 31.60 | 100 | 54.6 | 100 |

Source: Indian Agriculture in brief, 21st Edn, 1986 CMIE, Statistical Abstract, India, 2004

Table 1.5 Changes in Irrigated Area in India from 1950-51 to 2000-01

| Category | (In Thousand Hectares) | | | | | |
|----------------------|------------------------|---------|---------|---------|---------|---------|
| | 1950-51 | 1960-61 | 1970-71 | 1980-81 | 1990-91 | 2000-01 |
| Net irrigated area | 20853 | 24661 | 31103 | 38720 | 48023 | 54836 |
| Gross irrigated area | 22563 | 27980 | 38195 | 49775 | 63204 | 75821 |

Source: Agricultural Statistics at a Glance , 2008

The above table shows that there is scope to increase agricultural production by increasing both net and gross irrigated area.

2.0 Conclusion

Agriculture is the backbone of the Indian Economy. It ranks Second Worldwide in farm output. Agriculture, and allied activities like forestry and fisheries accounted for 13.7 per cent of the GDP in 2013, about 50 per cent of the workforce. The sector is demographically the broadest economic sector and plays a prominent role in the overall socio-economic fabric of India. The country exported \$8 billion worth of agricultural products in 2013, making it the seventh largest agricultural exporter worldwide and the sixth largest net exporter. Agriculture, being the mainstay of Indian economy since long, is facing a crisis of a different sort. Education is keeping the educated youth out of agriculture and land is being increasingly used for estate development and building luxury and tourist resorts if not lying unused. Agriculture continues to grow below 2% p.a. and sectoral problems in honey, spices, pulses, bamboo, horticulture is yet to find a voice. Subsidy based agricultural development from the West is not becoming acceptable in world Forums like the WTO.

Conspicuously, the primary sector was dominant with 55 percent, in the beginning of 1950-51 indicating the dominance of agriculture. After three decades, in 1980-81 its share declined to 5.29, a slash of 19.42 per cent in the GDP. In the following three decades, 1980-81 to 2010-11, it is declined 18.21 per cent, that is, about 17.18 per cent, a slightly less than the earlier 30 years. India's Economy underwent structural transformation since liberalization in terms of Gross Domestic Product.

REFERENCES CITED

1. Agricultural Statistics at Glance (2016), Accesdon www.agricoop.nic.in
2. Census of India 2001 and 2011
3. Chand, Ramesh and Sonia Chauhan (1999). Are Disparities in Indian Agriculture Growing?. Policy Brief No. 8. New Delhi: National Centre for Agricultural Economics and Policy Research.
4. Chand Ramesh (2001), "Emerging Trends and Issues in Public and Private Investments in Indian Agriculture: a State wise Analysis", *Indian Journal of Agricultural Economics*, 56 (2), 161-184.
5. Chand Ramesh (2003), "Government Intervention in Foodgrain Markets in the Changing Context", Policy Paper 19, National Centre for Agricultural Economics and Policy Research, New Delhi.
6. *Elumalai Kannan Sujata Sundaram (2011)*, Analysis of Trends in India's Agricultural Growth, Working Paper, 276, The Institute for Social and Economic Change, Bangalore
7. Government of India (2008), Agricultural Statistics at a Glance. Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.
8. Mishra, S. N. and Ramesh Chand (1995), "Private and Public Capital Formation in Indian Agriculture: Comments on Complementarily Hypothesis and Others", *Economic and Political Weekly*, 30 (24): A-64 –A-79.