

AGRICULTURE IN JHARKHAND: ACHIEVEMENT AND CHALLENGES

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ABSTRACT

An important part of India's economy is agriculture. Because of post-reform economic policies, India's economy is no longer heavily reliant on agriculture and has diversified into other sectors, particularly manufacturing and services. Notwithstanding agriculture's declining contribution to GDP, the share of the workforce based in the sector has not decreased. Despite the fact that the agricultural sector no longer employs more than 52 percent of the overall workforce, more than half of India's population still depends on it for survival. Several studies and political statements have expressed serious concern about the present slowdown in agricultural development. Several reports have looked at agricultural expansion and criticized the neoliberal policy regime for supposedly not caring about agriculture. The business shifted heavily toward cash crop cultivations, and yield and productivity variations were enormous. Due to their inability to pay their agricultural debts, some farm families committed suicide. Focusing on farmers from indigenous groups, this analysis looks at the ups and downs of Indian agriculture. The research concludes that a lack of political will and bad policy execution are important causes to the agricultural sector's recent downturn, along with problems with infrastructure, technology, and the environment.

Keywords: Agriculture, India, Indian Economy, Challenges, Performance.

Introduction

In India, the agricultural sector employs the vast majority of the population. Growth in India's agriculture sector is essential to the country's economic development. It contributes close to 16% to India's GDP and 13% of its exports. The livelihoods of more than 620 million people may rest on its shoulders, since it accounts for 52 percent of employment in the nation. Agriculture helps the economy expand in several ways, including via food production, increased exports, labor migration to non-agricultural sectors, the generation of capital, and the preservation of consumer markets in preparation for industrialisation. India's agriculture industry remains its economic backbone and a source of pride for its residents despite the country's rapid development over the previous 60 years.

Half of India's workforce is in industry, although agriculture only accounts for 16% of GDP. When the reform period started, investments in agriculture have gradually declined. Farmers now depend primarily on private support as the State pulls back. The suicide rate among farmers has also risen over time, with the most vulnerable being those who farm on the margins. Farmers have resorted to this extreme measure because of the rising costs of cultivation, leading to more indebtedness, crop failures, and an inability to face price hikes brought on by further deregulation of the agricultural industry. More employment in the countryside, if the government is serious about this, would prevent people from leaving so quickly and spur development that would benefit everyone.

Agricultural Reforms

Critics of India's economic reforms say they prioritize business and industry over agriculture, despite the fact that the latter is responsible for providing 60% of the country's GDP. Skeptics point to the fall in agricultural production in the second half of the 1990s (Table 1) as evidence of this negligence. There is no denying that changes in trade policy have contributed to a rise in agricultural production.

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Once industrial protections were removed and the currency was devalued, relative prices shifted in favor of agriculture and agricultural exports. India's percentage of global agricultural exports increased from 1.1% in 1990 to 1.9% in 1999, thanks to a decade of reforms.

Agriculture has been affected by various issues notwithstanding the beneficial benefits of changes in trade policy. Less funding from the government has led to a lack of infrastructure for agricultural growth such irrigation and drainage systems, soil conservation and water management systems, and rural roadways. This decline, as noted by Gulati and Bathla (2001), predated the reforms and was much more pronounced in the 1980s than in the 1990s. Moreover, they note that the reforms increased private investment while decreasing governmental investment, but that the latter was more than offset by the former. The government is the most probable source of funds for the necessary investment in agricultural infrastructure to increase output. If government spending did not increase in these vital areas, it would be easy to slow the trend of increasing private investment.

Digital Agriculture Market of Jharkhand

On Thursday, Prime Minister Narendra Modi established a digital trading network called National Agricultural Market for farmers in eight States, one of which being Jharkhand. In the future, farmers all across the nation may utilize this website to promote their wares to prospective wholesale purchasers, increasing the likelihood of making more sales and more money. The first farm market (e-platform) in the nation was established by the Prime Minister during a ceremony in Mhow, Madhya Pradesh, and it is affiliated with the Krishi Bazar Samiti in Pandra (Ranchi).

Jharkhand's mahua and tamarind have joined the wheat, maize, pulses, oilseeds, potatoes, onions, and spices from the other eight states in the e-mandi.

By bypassing the middlemen and merchants who, by agreement, kept commodity prices artificially low, farmers will gain from the e-platform (e-mandi) by selling their commodities at the going market rate.

Objectives of the Study

Every research has a motive and for this study the objectives are as follows:

- To study the performance of agriculture in Jharkhand
- To study the role of agriculture in development of Jharkhand
- To study the impact of reforms in agricultural development of Jharkhand.

Research Methodology

All of the information presented here is secondary, meaning that it was gathered from previously existing studies and reports. The Ministry of Agriculture and Farmers' Welfare's Directorate of Economics and Statistics (DES) provided the data on area, production, and yield. Statistics and percentages were used to make sense of the information gathered on important crops.

Analysis and Interpretation

Table 1: Gross State Value Added of Agriculture and Allied Sector at Current and Constant (2011-12) Prices (in Lakh Rupees)

Year	GSVA (at Current Prices)	GSVA (at Constant 2011-12 Prices)	Growth Rate
2011-12	2233546	2233546	
2012-13	2550211	2364954	5.88
2013-14	2844224	2321295	-1.85
2014-15	4016315	3033187	30.67
2015-16	3146379	2171688	-28.40
2016-17	4033246	2680275	23.42
2017-18	4592177	2739386	2.21
2018-19*	4572199	2581264	-5.77
2019-20**	5090224	2644841	2.46

Source: Directorate of Economics and Statistics, Government of Jharkhand

*Provisional Estimates ** Projected Values

Around 43% of the labour force is employed in agriculture and the allied industry, which accounts for about 13% of the state's Gross Value Added (GSVA). Not only is production low relative to the number of people employed in this industry, but it has also changed widely from year to year. As a

result, there is a need for this industry to find ways to increase the profitability and reliability of its operations. In certain years (2014-15 and 2016-17), the GSVA of Agriculture and the Allied Sector grew by double digits, whereas in others (2013-14, 2015-16, and 2017-18), it shrank. This wide variation in growth rates can be traced back to 2011-12.

Area, Production and Productivity during the Kharif Season

Table 2: Area, Production and Yield of Kharif Crops

Area-000' hectares, Production in 000' tonnes, Yield in Kg/Hectare

Financial Year	Total Area	Total Production	Yield
2015-2016	1889.48	2955.70	1564
2016-2017	2020.04	5420.62	2683
2017-2018	2042.93	5729.15	2804
2018-2019	1798.45	3350.86	1863
2019-2020	1623.52	4121.79	2539
2020-2021 (1st Advance estimate)	1938.16	4581.95	2364

Source: The Directorate of Agriculture, Government of Jharkhand

With the exception of 2018-2019, the state's kharif crop yields have increased steadily over the previous five years (ending in 2019-2020), and the initial advance forecasts for 2020-21 are rather optimistic. The total area-coverage of 198,000 ha during food-grains during the kharif season 2020-21 is an increase of almost 315,500 ha from the 162,350 ha covered under it during the same season in 2019-20. Unsurprisingly, analysts anticipate output patterns to continue rising.

Area

Table 3: Trends in Area, Production and Yield of the Principal Kharif Crops

Area-000' hectares, Production in 000' tonnes, Yield in Kg/Hectare

Crop	2016-2017			2017-2018			2018-2019			2020-2021		
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield
Paddy	1678.96	4988.06	2971	1735.4	5131.9	2957	1527	2894	1895	1641.21	3975.99	2423
Maize	286.23	578.07	2020	294.7	596.7	2025	261.1	455.3	1744	280.8	592.7	2111

Source: SAMETI, Jharkhand

In terms of overall production and area under cultivation, paddy is the most significant kharif crop farmed in the state. According to the first preliminary projections for the year 2020-21, the total area under kharif crops is estimated to be 1938 thousand hectares, with paddy accounting for close to 84.7 percent of this area. Next in line is maize, which takes up around 14% of the overall kharif crop cultivation area.

Area, Production and Yield of Rabi Crops

Table 4: Area, Production and Yield of Rabi Crops Area-000' hectares, Production in 000' tonnes, Yield in Kg/Hectare

Financial Year	Total Area	Total Production	Yield
2015-2016	161.72	296.50	1833
2016-2017	221.44	443.15	2001
2017-2018	231.09	489.33	2117
2018-2019	169.79	313.87	1849
2019-2020	222.42	455.44	2048

Source: The Directorate of Agriculture, Government of Jharkhand

Kharif crop acreage, productivity, and yield are all weather-dependent variables. More farmland, higher yields, and a bountiful harvest are all results of a successful monsoon. Despite a poor monsoon in 2015-16, at which time the state saw significant drops in the area, output, and yield of its Kharif crop, the state saw two years in a row of favourable monsoon conditions in 2016 and 2017. That's why kharif crop acreage, productivity, and yield all went up dramatically. In the 2017-18 harvest year, the state's kharif crop yielded a whopping 5,729,090 metric tonnes. Area, output, and yield for these crops plummeted in 2018-19 as a direct result of a poor monsoon the year before. But since then, they've begun to get better.

Rabi crop area, production, and yield have all been trending in the same direction as Kharif crop area, production, and yield. When the monsoon and winter rains are plentiful, all three flourish, whereas dry conditions have the opposite effect. Rabi crop productivity and yield dropped in 2015–16 due to poor monsoon conditions, which also affected the Kharif harvest. The ensuing two years, 2016–17 and 2017–18, had a significant rise in Rabi crop area, output, and yield as a result of the favourable monsoon conditions. In the year 2017-18, the state had a record-breaking harvest of 489 thousand tonnes of Rabi crops. The area planted, the amount harvested, and the total yield of these crops all dropped dramatically as a result of the poor monsoon in 2018–19. But, things have improved for them in 2019-2020. This year saw increases of around 31% in both land area and output, and nearly 45% in both output and yield. Around 16% of the state's net planted area is devoted to Rabi crops in a typical year. Two of the most common Rabi crops in the state are wheat and gramme. Rabi crops are grown on more than 90% of the total land area. Rabi crop coverage must be enhanced to make the state food secure. Water shortage, poor soil fertility, and open grazing during the Rabi season are the key limitations on the land used for growing Rabi crops.

Conclusion

The agriculture industry in Jharkhand is essential to the state's economy. Many initiatives have been taken on by the State Department of Agriculture to enhance the agricultural sector of the state. In order to boost farmers' quality of life, the State's business environment between rural and urban market has to be bolstered via upgrades to infrastructure facilities. To increase output, the government should encourage high-quality seed, improve irrigation systems, and inform farmers of the advantages of adopting new technologies.

References

1. Chand, R., Kumar, P., & Kumar, S. (2012). Total Factor Productivity and Returns to Public Investment on Agricultural Research in India. *Agricultural Economics Research Review*, 25(2), pp 181-94.
2. Golait, R., & Lokare, S. M. (2008). Capital Adequacy in Indian Agriculture: A Reposte. Reserve Bank of India.
3. Hazell, P. B. (1984). Sources of increased instability in Indian and US cereal production. *American Journal of Agricultural Economics*, 66(3), pp-302-11.
4. Himanshu, H., Jha, P., & Rodgers, G. (2016). *The changing village in India: Insights from longitudinal research*. Oxford University Press.
5. Evenson, R. E., Pray, C., & Rosegrant, M. W. (1998). *Agricultural research and productivity growth in India* (Vol. 109). International Food Policy Research Institute.
6. Saxena, R., Singh, N. P., Balaji, S. J., Ahuja, U., Kumar, R., & Joshi, D. (2017). Doubling Farmers' Income in India by 2022–23: Sources of Growth and Approaches. *Agricultural Economics Research Review*, 30(2), pp-265-77.
7. Chand, R and Kumar P(2004) – “Determinants of Capital Formation and Agriculture Growth Some New Explorations” *Economic and Political Weekly*, December 25, pp 5611-16
8. Rao C H (2003) – “WTO and Viability of Indian Agriculture” *Economic and Political Weekly*, Vol. 36, No. 36, pp 3453-57
9. Government of Jharkhand (2016-17) – Economic Survey, Ministry of Finance, Government of Jharkhand.
10. Government of Jharkhand (2017-18) – Economic Survey, Ministry of Finance, Government of Jharkhand.
11. Government of Jharkhand (2018-19) – Economic Survey, Ministry of Finance, Government of Jharkhand.
12. Government of Jharkhand (2019-20) – Economic Survey, Ministry of Finance, Government of Jharkhand.
13. Government of Jharkhand (2020-21) – Economic Survey, Ministry of Finance, Government of Jharkhand.
14. Government of Jharkhand (2021-22) – Economic Survey, Ministry of Finance, Government of Jharkhand.
15. www.timesofindia.com.

