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IMPACT OF ECONOMIC REFORM AND AGRICULTURE GROWTH IN INDIA

Article Particulars

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Abstract

Agriculture in India has undergone rapid transformation in the past two decades. The policies of globalization and liberalization have opened up new avenues for agricultural modernization. Due to its importance in national output and employment, agriculture was given special attention by India's policy makers and development planners which helped this sector to play an important role in economic development of the country and in improving income and living standard of vast population dependent on agriculture. During last one and a half decade several challenges have surfaced are becoming more and more severe with the passage of time. The growth rate has turned lower than the growth in population dependent on agriculture implying the per capita income in agriculture is falling. Economic liberalisation entails a set of measures that are inimical to petty production in general, and agriculture in particular. In that sense, these policies have a distinct class bias against petty producers and the poor. These policy pursuits resulted in a reduction of public investment in rural infrastructure, including irrigation, agricultural research and extension services and a decline in the supply of rural credit to small and poor cultivators, and the pursuit of agricultural trade liberalisation.

Keywords: *Economic liberalisation, living standard, policy makers, employment, public investment, learning goal*

Review of Literature

Renuka Mahadevan (2003) assessed the productivity growth in Indian agriculture and to study the impact of globalisation. The study revealed that, there could easily be benefits that have not yet surfaced, or were yet to be identified and perhaps too difficult or intangible to measure. Whatever the case, it was highly likely that it is too soon to assess the full impact of globalization and economic reforms. Furthermore, the process of liberalization had been gradual and remained incomplete.

Ramesh Chand (2005) measured the performance of agriculture sector in the country in the recent years. The result turned out to be quite dissatisfactory because of sharp deceleration in growth rate of agricultural output. Agricultural production over time was affected by interacting influences of technological, infrastructural, and policy factors. During the decade of 1990s, declining trend in public sector investment that set in year 1979-80 continued for most part of the decade.

Ashok and Balasubramanian (2006) explore the role of infrastructure in productivity and diversification of agriculture and discussed issues related to the project and advantage in development of Tamil Nadu state economy. Tamil Nadu's performance with respect to the Human Development Index (HDI) was also impressive; it ranked third among 29 states.

Growth Rate of Agriculture

The growth rate has turned lower than the growth in population dependent on agriculture implying that per capita income in agriculture is falling. This is considered a major factor for large scale rural distress and large number of suicidal deaths by farmers in various parts of the country. Another biggest challenge is to ensure sustainable use of natural resources. While the need for accelerating agricultural growth are obvious, natural resource base in the country is shrinking. There are also signs of degradation of land and overexploitation of water in the country. Post WTO period has shown serious challenge to Indian agriculture as domestic prices of several commodities have turned higher than international prices. This has made imports attractive and adversely affected exports. The situation calls for improving competitiveness of Indian agriculture which requires improvement in efficiency in agricultural production, marketing, transport etc. High growth of the agricultural sector is crucial for overall development of economy. In India, its importance is heightened with a substantial section of the population dependent on agriculture for employment. As per the National Sample Survey Office (NSSO), about 59% of male workers and 75% of women workers were dependent on agriculture in 2011–12 (NSSO 2014: 14). High agricultural growth is important to reduce rural poverty. It was argued that doubling of the rate of agricultural growth from 2% to 4% along with 9% rate of growth of the economy will reduce income disparities between the agricultural and non-agricultural sectors (Planning Commission 2006).

Impact of Economic Reforms in Indian Agriculture

Agricultural sector is the mainstay of the rural Indian economy around which socio-economic privileges and deprivations revolve, and any change in its structure is likely to have a corresponding impact on the existing pattern of social equality. No strategy of economic reform can succeed without sustained and broad based agricultural development, which is critical for

- Raising living standards,
- Alleviating poverty,
- Assuring food security,
- Generating buoyant market for expansion of industry and services, and
- Making substantial contribution to the national economic growth.

According to [Bhalla 97], of the three sectors of economy in India, the tertiary sector has diversified the fastest, the secondary sector the second fastest, while the primary sector, taken as whole, has scarcely diversified at all. Since agriculture continues to be a tradable sector, this economic liberalization and reform policy has far reaching effects on (I) agricultural exports and imports, (ii) investment in new technologies and on rural infrastructure (iii) patterns of agricultural growth, (iv) agriculture income and employment, (v) agricultural prices and (vi) food security [Bhalla 93].

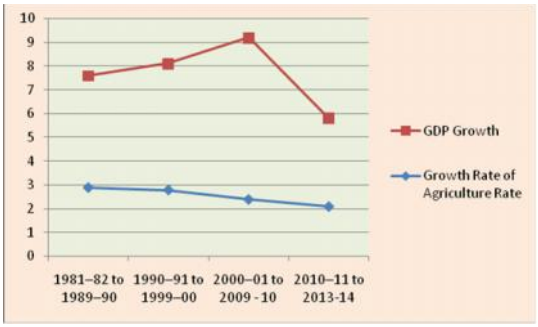
Table 1: Growth Rates of GDP of Agriculture Sector and GDP of the Economy, 1981–82 to 2013–14

		(%)
Periods	**Growth Rate of Agriculture Rate**	**GDP Growth**
1981–82 to 1989–90	2.9	4.7
1990–91 to 1999–00	2.8	5.3
2000–01 to 2009 - 10	2.4	6.8
2010–11 to 2013-14	2.1	3.7

Source: Handbook of Statistics, Reserve Bank of India, various years.

Table 1 Shows that the growth rate of gross domestic product (GDP) of agriculture has declined since the initiation of economic reforms in India. However, during this period, growth rates of GDP have been increasing except for the two years between 2010–11 and 2013–14. The table shows an increasing divergence between growth rates of GDP of agriculture and economy between 1990–91 and 2009–10, thereby indicating the declining importance of agriculture in the growth trajectory of India. Declining contribution of agriculture is also reflected in terms of a steady decline in the share of agriculture in overall GDP. This decline had started in the 1980s; however it was sharper in the 1990s and in the new millennium since 2000. The share of agricultural output in GDP had declined by 4.4 percentage points in the 1980s, the corresponding figures in the 1990s and post 2000 were 5.6 and 7.3 percentage points, respectively. This shows that the agricultural sector is losing its importance as an income generating activity at a faster pace with the onset of reforms in India. Expectations regarding performance of the agriculture sector as highlighted in the approach paper of Eleventh have not been realised.

Figure1: Growth Rates of GDP of Agriculture Sector and GDP of the Economy, 1981–82 to 2013–14



Capital formation in Agriculture

Capital formation is necessary for improving long-term growth potential in agriculture. Higher growth rates of agriculture witnessed in the 1980s were due to the lagged impact of increases in the share of agriculture and allied sector in gross capital formation during the late 1960s and 1970s. However, since the 1980s, the share has shown a declining trend. There was a mild recovery during the late 1990s till 2001-02, and then the share declined again. The declining trend since the 1990s implies that there has been lesser investment in agriculture as compared to the non-agriculture sector.

Table 2: Post - Reform Capital Formation in Agriculture, 1981-82 to 1989-1990

Year	Public Investment	Growth Rate (%)	Private Investment	Growth Rate (%)	Total
1981–82	12,723	52.4	11,549	47.6	24,272
1982–83	12,665	48.4	13,467	51.6	26,132
1983–84	12,962	46.7	14,816	53.3	27,778
1984–85	12,488	49.1	12,938	50.9	25,426
1985–86	11,248	46.5	12,960	53.5	24,208
1986–87	10,667	44.9	13,051	55.1	23,719
1987–88	10,981	38.1	17,816	61.9	28,797
1988–89	10,302	39.2	15,564	60.8	25,866
1989–90	8,909	34.2	17,132	65.8	26,041

Source: Economic Survey – various year

Table 2 shows the capital formations of both public & private sector. 1981-82 to 1989 to 1990 for the private investment is constantly i.e. proportionately increasing. It was 1981-82, 52.4% decreased to 1989-1990. This shows that Government gave less importance to Agricultural sector.

Figure 2: Post - Reform Capital Formation in Agriculture, 1981-82 to 1989-1990

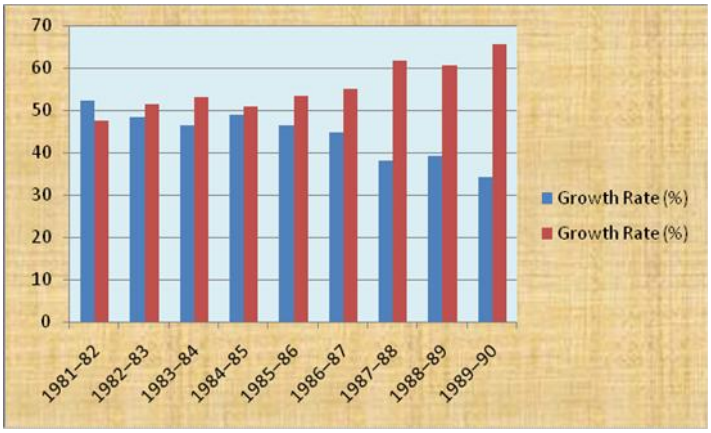


Table 3: Pre - Reform Capital Formation in Agriculture, 1981-82 to 1989-1990

Year	Public Investment	Growth Rate (%)	Private Investment	Growth Rate (%)	Total
1990–91	8,938	25.5	29,116	74.5	38,054
1991–92	7,901	32.2	16,634	67.8	24,535
1992–93	8,167	26.3	22,862	73.7	31,030
1993–94	8,907	31.7	19,230	68.3	28,137
1994–95	9,706	36.1	17,183	63.9	26,890
1995–96	9,560	34.9	17,777	65.1	27,336
1996–97	9,225	30.9	20,589	69.1	29,814
1997–98	7,812	24.3	24,692	75.7	32,504
1998–99	7,949	24.2	24,956	75.8	32,905
1999-2000	41,483	17.3	50,151	82.7	8,668
2000–01	8,085	17.8	37,395	82.2	45,480
2001–02	9,712	17.1	47,266	82.9	56,978
2002–03	8,734	15.7	46,934	84.3	55,668
2003–04	10,805	20.2	42,737	79.8	53,542
2004–05	16,187	29.7	38,309	70.3	54,496
2005–06	19,940	31.9	42,629	68.1	62,569
2006–07	22,987	52.1	44,167	47.9	67,154
2007–08	23,257	30.6	52,745	69.4	76,002
2008–09	20,572	23.2	68,137	76.8	88,709
2009–10	22,693	24.3	70,640	75.7	93,333
2010–11	19,854	21.6	72,181	78.4	92,035
2011–12	21,184	19.6	86,958	80.4	1,08,142
2012–13	23,886	21.3	88,371	78.7	1,12,257
2013–14	23,191	24.2	72,446	75.8	95,637

Source: Economic Survey – various year.

The Table 3 shows Capital formation of both the sectors after 1990-1991 are very divergent in nature. The public was very low when compared to private investment. Private investment is increasing at a faster rate but public investment is fluctuating in these years. If the public investment is increased the private investment increases multi-fold. The growth rate of public investment is in 1990-91 and reduced to 25.5% in 2013-14 24.2%. This is a poor factor showing that Government is ignoring the agricultural sector. But the private investment has increased in manifold in these four decades.

Figure 3: Pre - Reform Capital Formation in Agriculture, 1981-82 to 1989-1990

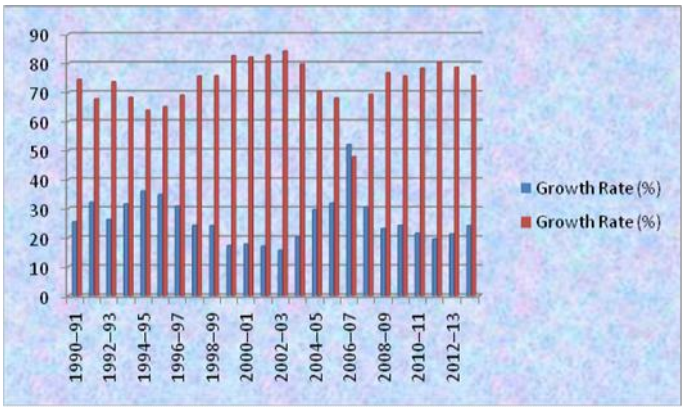


Table 4: Productivity of Irrigation for Food grains in Indian Agriculture

(Growth rates in %)				
Year	**1981-82 to 1989 – 1990**	**1990 – 91 to 1999-2000**	**2000-01 to 2009 to 2010**	**2010-11 to 2012-13**
Growth rate of gross irrigated area	2.07	2.28	1.11	1.36
Growth rate of output of food grains	2.8	1.75	1.03	0.66
Productivity of irrigation	0.73	0.53	0.08	0.7

Source: Economic survey - various years.

Table 4 shows that productivity of irrigation was highest in the 1980s. It was a period when green revolution was broad based, with the inclusion of rice growing regions in eastern India. Growth rate of irrigated area increased marginally in the 1990s as compared to the 1980s; growth rate of output of food grains declined during this period. Decline in productivity of irrigation in the 1990s was due to a loss of momentum in the development of yield-increasing technologies such as cultivation of drought-resistant crops. This loss of momentum is directly related to the decline in public expenditure on research. Also, the political economy of irrigation from groundwater sources had a significant role in reducing productivity of irrigation in the 1990s. As Rao noted that, "there was a sharp decline in agricultural growth in east UP on account of

severe cuts in the supply of power for pumping water, which was diverted to west UP to satisfy the powerful farm lobby". From 2000–01, growth rates of gross irrigated area and output declined sharply as compared to the preceding decades.

Figure 2: Productivity of Irrigation for Food grains in Indian Agriculture

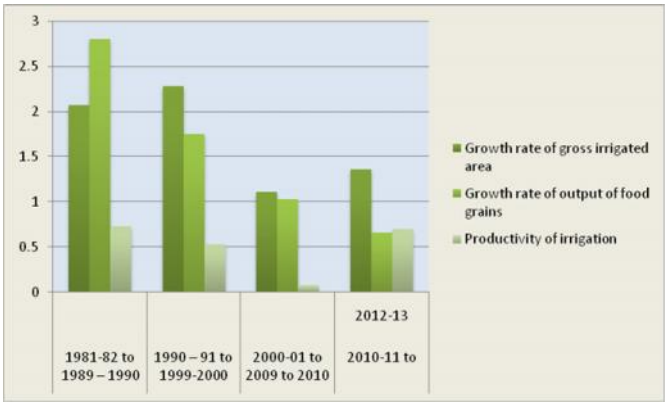


Table 5: Public Expenditure on Research and Extension in Agriculture and Allied Sector as Share of GDP of Agriculture and Allied Activities

Year	Research and Education	Extension
1960–62	0.21	0.09
1970–72	0.23	0.14
1980–82	0.39	0.11
1989–91	0.41	0.16
1992–94	0.40	0.15
1995–97	0.38	0.14
1998–2000	0.44	0.15
2001–03	0.52	0.13
2004–06	0.52	0.13
2009–10	0.30	0.06
2011–12	0.32	0.05

Source: Economic survey - various years.

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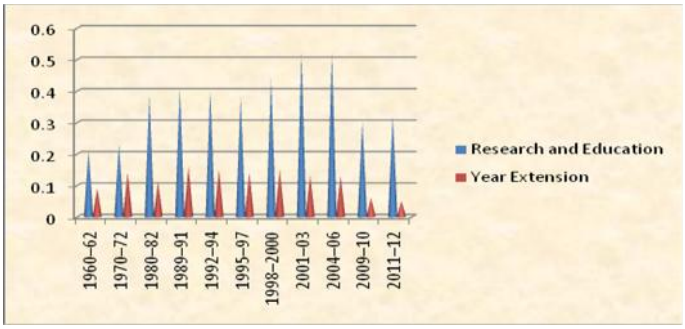

Table 5 shows public expenditure on research and extension in agriculture and allied sector as a share of GDP of agriculture and allied activities. It shows that the share of public spending on research and extension in GDP of agriculture and allied activities was low since the 1960s, as well as in the subsequent decades. In other words, public spending on agricultural research and extension services did not increase after reforms.

Decline in Employment

Growth rate in agricultural employment in rural areas was 1.38% during 1983 to 1993-94which was decline to 0.12% during the post reform period of 1993-94 to 2005-06 the growth rate of employment in agriculture in the urban areas also have shown a considerable decline with 1.54% in pre-reform period and -3.74% in post reform period.

The plan outlays in agriculture and its allied activities have been gradually declined during the plan period from 14.9% in the first plan to 5.2% by the 10th plan. This clarifies that the Govt. has withdrawn its support from the agriculture sector development. Thus the impact of globalization on our agrarian sector has worsened the plight of agricultural workers to an alarming degree. The share of agriculture in our Gross Domestic Product (GDP) has declined from 54.56 percent in 1951-52 to 27.87 per cent in 1999-2000 almost a 50 per cent reduction. But the shift of labor force from agriculture to other sectors, as projected by the followers of the World Bank-IMF model, has not taken place. For, as much as 65 per cent of our workforce is still engaged in agriculture. These limitations are severely affecting the capacity of Indian agriculture to compete in the global market. Characterized by low and stagnating yields, a very large proportion of marginal, small and semi medium holdings, a high proportion of landless labour households, and highly concentrated and food - oriented cropping system, Indian agriculture would therefore be facing serious challenges, both internally and externally.

During last one and a half decade several challenges have surfaced in Indian agriculture which is becoming more and more severe with the passage of time. These relate to growth of output, efficiency, equity and sustainability. The biggest challenge is to reverse the sharp decline in growth rate of agriculture sector experienced after mid 1990s.

The new agricultural technology has made the farmer market-oriented. The farmer are largely depended on the market for the supply of inputs and for the demand for their output. At the same time the demand for agricultural credit as also increased the cash requirements of the farmer. And other hand modern technology has definitely proved its superiority over the traditional technology only in those areas where appropriate conditions prevail. But has mentioned above these conditions prevail only in certain selected areas and the rest of the country is not yet suitable for advanced technology. What is, therefore wanted is the evolution of a low-cost technology which

can be adopted by all small farmers and which can use and exploit the local resources.

Conclusion

Though India has demonstrated that there exists broad political support to its economic reform programme, as has been proved by transition of several Governments in the last decade through the political space, agricultural trade policy reforms need to be accelerated much more than what has been done so far. The challenge is to make soften the inefficiency that exists in the Indian agriculture to close the gap between its potential and actual performance through a proper policy framework.

India being a net exporter in agricultural products, it has more to gain from the trade reforms. It has sufficiently high bound rates on most of the products and therefore, flexibility can be ensured against unfair competition. India does not have to worry about its subsidy, as it is already below the required line and it also does not have any domestic support to reckon with. All these place India in an advantageous position. Moreover, the ongoing negotiations are likely to yield enough flexibility in product choice and tariff selection. A multilateral trading system is in the interest of India, given the fact that it is placed in such a situation where no clear group fits well.

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