

Indian Agriculture: Before and After Economic Reforms

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Abstract

Agriculture once known as the backbone of Indian Economy is at present at its worst, thanks to the anti farmer, pro-Industry policy of the various Indian Governments since 1991. India is once considered as the “Ann Data” of the entire world is struggling even to manage the own demand-supply problem of various agricultural commodities. The farmers are committing suicides, are celebrating “Crop Holidays” and are fighting with Govt. for illegal acquisition of land for developing Real estate or other commercially viable projects at the cost of Agriculture. The aim of this paper is to bring out the present scenario in the field of agriculture that leads to the minimum contribution of Agriculture in the Indian GDP, once the main contributor. This paper will discuss the various issues like less technical support to farmers, poor quality seeds, inappropriate storage, Minimum Support Price, irrigation, the problem of credit availability and above all the impact of Liberalization, Globalization and Privatization on the Indian Agriculture Sector. The issues related to the WTO and their impact on Indian Agriculture and the consequences of various treaties of WTO on Indian Agriculture sector will be discussed.

Key Words: Indian Agriculture, Economic Reforms, WTO, Gross Capital Formation

1.0 Introduction

Agriculturists in general and the small and marginal farmers in particular have been the worst sufferers from the onslaught of globalization. With more than 40 percent of agricultural lending even today coming from the non-institutional sources charging anywhere between 30-40 percent interest per annum, the farmers are in an immiserizing situation. They are committing one of the worst human tragedies – suicides. Rural India without them definitely is not shining. And with the woeful lack of infrastructure there is a gloom not a bloom in the countryside. A decline in the share of agriculture in the national income from over 50 per cent during the 50s to less than 20 per cent today may be a sign of structural transformation but the question today is whether Indian agriculture will be able to meet the new demands placed upon it by Liberalization, Privatization and Globalization (LPG).

1.1 Reforms in Agriculture

A common criticism of India’s economic reforms is that they have been excessively focused on industrial and trade policy, neglecting agriculture which provides the livelihood of 60 percent of the population. Critics point to the deceleration in agricultural growth in the second half of the 1990s (**shown in Table 1**) as proof of this neglect. However, the notion that trade policy changes have not helped agriculture is clearly a misconception. The reduction of protection to industry, and the accompanying depreciation in the exchange rate, has tilted relative prices in favor of agriculture and helped agricultural exports. The share of India’s agricultural exports in world exports of the same commodities increased from 1.1 percent in 1990 to 1.9 percent in 1999, whereas it had declined in the ten years before the reforms.

But while agriculture has benefited from trade policy changes, it has suffered in other respects, most notably from the decline in public investment in areas critical for agricultural growth, such as irrigation and

drainage, soil conservation and water management systems, and rural roads. As pointed out by Gulati and Bathla (2001), this decline began much before the reforms, and was actually sharper in the 1980s than in the 1990s. They also point out that while public investment declined, this was more than offset by a rise in private investment in agriculture which accelerated after the reforms. However, there is no doubt that investment in agriculture-related infrastructure is critical for achieving higher productivity and this investment is only likely to come from the public sector. Indeed, the rising trend in private investment could easily be dampened if public investment in these critical areas is not increased.

The main reason why public investment in rural infrastructure has declined is the deterioration in the fiscal position of the state governments and the tendency for politically popular but inefficient and even iniquitous subsidies to crowd out more productive investment. For example, the direct benefit of subsidizing fertilizer and under pricing water and power goes mainly to fertilizer producers and high income farmers while having negative effects on the environment and production, and even on income of small farmers. A phased increase in fertilizer prices and imposition of economically rational user charges for irrigation and electricity could raise resources to finance investment in rural infrastructure, benefiting both growth and equity. Competitive populism makes it politically difficult to restructure subsidies in this way, but there is also no alternative solution in sight.

Some of the policies which were crucial in promoting food grain production in earlier years, when this was the prime objective, are now hindering agricultural diversification. Government price support levels for food grains such as wheat are supposed to be set on the basis of the recommendations of the Commission on Agricultural Costs and Prices, a technical body which is expected to calibrate price support to reasonable levels. In recent years, support prices have been fixed at much higher levels, encouraging overproduction. Indeed, public food grain stocks reached 58 million tons on January 1, 2002, against a norm of around 17 million tons! The support price system clearly needs to be better aligned to market demand if farmers are to be encouraged to shift from food grain production towards other products.

Agricultural diversification also calls for radical changes in some outdated laws. The Essential Commodities Act, which empowers state governments to impose restrictions on movement of agricultural products across state and sometimes even district boundaries and to limit the maximum stocks wholesalers and retailers can carry for certain commodities, was designed to prevent exploitive traders from diverting local supplies to other areas of scarcity or from hoarding supplies to raise prices. Its consequence is that farmers and consumers are denied the benefit of an integrated national market. It also prevents the development of modern trading companies, which have a key role to play in the next stage of agricultural diversification. The government has recognized the need for change and recently removed certain products -- including wheat, rice, coarse grains, edible oil, oilseeds and sugar -- from the purview of the act. However, this step may not suffice, since state governments may be able to take similar action. What is needed is a repeal of the existing act and central legislation that would make it illegal for government authorities at any level to restrict movement or stocking of agricultural products (Planning Commission, 2001).

The report of the Task Force on Employment has made comprehensive proposals for review of several other outdated agricultural laws (Planning Commission, 2001). For example, laws designed to protect land tenants, undoubtedly an important objective, end up discouraging marginal farmers from leasing out nonviable holdings to larger farmers for fear of being unable to reclaim the land from the tenant. The Agricultural Produce Marketing Acts in various states compel traders to buy agricultural produce only in regulated markets, making it difficult for commercial traders to enter into contractual relationships with farmers. Development of a modern food processing sector, which is essential to the next stage of agricultural development, is also hampered by outdated and often contradictory laws and regulations. These and other outdated laws need to be changed if the logic of liberalization is to be extended to agriculture.

1.2 Some of the indicators of the crisis:

1.2.1 Based on the Structural Adjustment Programme the government has been reducing its investment in agriculture.

1.2.2 The fundamental difference between agriculture and industry is being ignored, viz. whereas capital is elastic in supply, land is inelastic. There is no level playing field. While the manufacturing and service sectors are virtually pampered, the real/ rural sector that feeds the masses is practically disregarded. Even thousands of farmers' suicides could not fetch such a soothing concern to the agriculture sector in our agrarian economy!

1.2.3 Farmer's suicides – an all-India phenomenon emanating largely from severe indebtedness – has pushed Indian agriculture to a critical condition. The National Sample Survey Organization (NSSO) Report released in 2005 states that 1 in 2 farm households are in debt and only 10 per cent of the debt was incurred for non production purposes. Also, 32.7 per cent of farmers still depend on money lenders. The National Crime Records Bureau reports that between 1997-2005 1,56,562 farmers committed suicide. Nearly 60 of them took place in the 4 progressive states, viz., Maharashtra, Andhra Pradesh, Karnataka and Madhya Pradesh. More than 20 per cent of suicides have taken place in Karnataka (Pushap, 2007, Kumaraswamy, 2008).

2.0 Gross Capital Formation in Agriculture and Allied Sector

The share of agriculture & allied sector in total GCF after showing a marginal increase during 1999-2000 to 2001-02 has been continuously declining (**Table 2**). It stood at 10.2 per cent in 1999-2000, increased to 11.7 per cent in 2001-02. The value of acquisitions of new or existing fixed assets by the Agriculture & allied sectors, which is known as Gross Capital Formation, as a proportion to the GDP in the Agriculture & allied sectors stagnated around 14 per cent during 2004-05 to 2006-07. Now, there is a marked improvement in this figure during the current Five Year Plan 2007-12. The proportion has increased to 16.03 per cent in 2007-08 and further to 19.67 per cent in 2008-09 (provisional) and to 20.30 per cent in 2009-10 (quick estimates [QE]). (**Table 2**) Though, the GCF in agriculture and allied sectors relative to overall GDP has remained stagnant at around 2.5 to 3.0 per cent. The decline was mainly attributed to decline in the private sector despite increase in the share of public sector.

3.0 Trends in Indian Agriculture

3.1 Production of Food Grains: In the earlier years of economic planning, food availability was the serious problem in India. The total food grain production was hardly 51 million tones in 1950-51, which increased to 198 million tones in 2004-05. The food grain production though increased but at a very lower rate from 2004 to 2009-10 as compared to the rate of growth before Liberalization. (**Table 3**)

3.2 Trends in Cropping Pattern: A change in cropping pattern indicates a shift in area under the cultivation of major crops. Since a long time the area under food grain crop cultivation has been declining, also indicating that the cultivation of non-food grain crops has been increasing. This shift in cropping pattern was taking place due remunerative prices being offered to commercial crops and better market access given to growers. The trend in cropping pattern is depicted in Table 2; and it is evident that there is a considerable change in the cropping pattern after 2004-05 to 2010-11 in favour of commercial crops. (**Table 4**).

4.0 Indian Agriculture since WTO

The establishment of World Trade organization (WTO) in 1995 – to make the world trade rule-based, transparent and free – had major implications for India and its agriculture. The Agreement on Agriculture (AOA) with its three broad areas viz., market access, export subsidies and domestic support was expected to improve India's agricultural trade under the new regime of multilateral, transparent and non-discriminatory trade. Although reduction in subsidies is a major feature under WTO, India had nothing to fear as agricultural subsidy was less than 10 per cent, i.e. the ceiling. India could also earn more profit by exporting agricultural produce vis-à-vis the developed countries (having 30-40 per cent subsidies) as their cost of agricultural production would go up when they reduce subsidies. Also the subsidy reduction was not applicable to consumer subsidies, thus keeping the Public Distribution System (PDS) and the weaker sections of society unaffected. Further, the reduction in terminal charges on agricultural produce would be

advantageous for India because with the removal of tariffs, her exports would have favorable competitive environment. With increased competition the poor people benefit from lower real costs of household consumption and production, what trade economists call the “procompetitive effects” of trade.

Initially the reforms did result in improvement in terms of trade for agriculture thanks to decontrol of fertilizers and a substantial hike in minimum support prices given by the government. Indian agriculture witnessed a small acceleration in the growth rate. The country had successfully overcome the food crisis. The growth rate in agriculture and allied sectors (at 1993-94 prices) that had risen from 3.3 per cent in 1951-61 to 3.9 per cent in 1981-91 (after a low of 1.7 per cent in 1971-81), reached 5.8 per cent in 1992-93. But the euphoria was short-lived. In 1993-94 it fell to 4.1 per cent, rose to 5.0 per cent in 1994-95 before falling to -0.9 per cent in 1995-96 and -2.4 per cent in 1997-98. In 2006-07 it was 2.7 per cent and for the entire period 2001-07 it was only 2.2 per cent (RBI handbook, 2006).

Experts began to opine that the international mantras being enforced by the developed countries to free the clutches of poverty and struggle of world farmers including India, was moving in the opposite direction (Pushap, 2007). For India it was not just a problem of slowing growth rate but a multifaceted problem with falling outputs, employment, investment, exports etc. The annual compound growth rate in rice for instance showed a fall in crop area from 0.63 per cent in 1981-91 to -1.49 per cent in 2001-05 and its yield rate from 2.68 per cent to 1.60 per cent during the same period. In case of sugarcane the growth in crop area fell from 3.20 per cent to -4.34 per cent and yield rate from 1.15 per cent to -1.86 per cent. Although there was some area expansion under non-food crops as a whole, it was at the cost of shrinkage of area under cereals (RBI Handbook, 2006). Investment in agriculture as percentage of GDP was 1.92 per cent in 1990-91. It fell to 1.37 per cent in 1999. Although it rose to 2.2 per cent in 2001-02 it began to fall and it reached 1.7 per cent in 2004-05.

5. Policy Measures need to be done

The crisis in agriculture is a crisis of the country as a whole and so needs urgent attention. Some of the suggestions are listed here.

- A revamping of the agricultural credit system – a pro-farmer approach is needed.
- Cooperative farming with coordination, particularly by small and marginal farmers needs to be revitalized.
- There is a need for periodic revision of the procurement prices for farm produce, making those remunerative.
- The issues regarding Special Economic Zones should be resolved at the earliest taking into account the genuine interests of the farmers.
- Our farmers must adopt modern practices of farming with a pinch of salt, not sailing on credentials of green revolution but implementing sustainable agriculture. One cannot simply sail on the credentials of green revolution. Sustainable agriculture should be the objective. Eco-friendly techniques must be adopted.
- Empowerment of farmers with social, cultural and spiritual rejuvenation is required to avoid suicidal cases. The balance between biological, human and physical capital growth must be maintained.

Conclusion

Indian agricultural has been hit hard during post WTO period (1995 – 2003). The share of agro goods in India’s global export has declined during this period. During post WTO period, agricultural subsidies of developed countries have been rather increased. Therefore it is very difficult for India to face global agricultural competitiveness. In this scenario, the global agricultural trade would likely to become oligopolistic. The returns of various crops have declined due to increase in cost of production, slow growth of agricultural productivity, weak marketing mechanism, increase in input intensity and fall of water table. As a result farmers have become highly indebted and are resorting to suicides. In the near future also the total quantum of exports particularly agriculture and light manufacturing goods can not be raised significantly in the global market in the near future because of limited and uncertain domestic export surplus and particularly their inelastic demand at world market.

References

Government of India (2004) “*Agricultural Statistics at a Glance 2007*”, Ministry of Agriculture, New Delhi

Gulati, Ashok, and Seema Bathla, “*Capital Formation in Indian Agriculture: Revisiting the Debate*,” Economic and Political Weekly, May 19-25, 36:20, pp.1697-1708.

Hans, V. Basil (2008). “*Inclusive Strategies under Globalization – Challenges and Opportunities for India*”, National Seminar on ‘Social Exclusion, Poverty and Livelihood of Marginalized Groups in India – Need for Effective Strategies’, September 24-25, Centre for Study of Social Exclusion and Inclusive Policy (CSEIP), Mangalore University, Mangalagangothri.

Kumaraswamy, D. M. (2008). “*Agriculture in Karnataka*” (Keynote Address), State level Seminar on Agriculture in Karnataka: Issues and Challenges, Sri Dhavala College, Moodbidri.

Ministry of Finance “*Economic Survey 2001-02*”, New Delhi 2002.

Pushap, P. (2007). “*Agriculture – India’s backbone Industry and its Plight in the wake of Globalization*”, The Journal of World Intellectual Property Rights, 3(1-2): 159-183

Reserve Bank of India (2006), “*Hand Book on Indian Statistics*”, Dept of Economic Policy and Research, Mumbai.

Sahu, G. B., and Rajshekar, D. (2005), “*Banking Sector Reform and Credit Flow to Indian Agricultur*”, Economic and Political Weekly, vol. XL 53, Pp 5550-555

Sahu, Gagan, Bihari (2008). “*Supply Analysis of Institutional Credit to Agriculture for Major States in India*”, Asian Economic Review, 50(2): 325-340.

Table 1

India’s Growth Performance

(Percent per year)

India’s Growth Performance

Year	Total GDP	Sectoral Growth of GDP		
	<u>Growth</u>	Agriculture	Industry	Services

1970-72 to 1980-81 (average)	3.2	2	4	7.2
1981-82 to 1990-91 (average)	5.7	3.8	7	6.7
1991-92	1.3	-1.1	-1	4.8
1992-93	5.1	5.4	4.3	5.4
1993-94	5.9	3.9	5.6	7.7
1994-95	7.3	5.3	10.3	7.1
1995-96	7.3	-0.3	12.3	10.5
1996-97	7.8	8.8	7.7	7.2
1997-98	4.8	-1.5	3.8	9.8
1998-99	6.5	5.9	3.8	8.3
1999-2000	6.1	1.4	5.2	9.5
2000-01	4	0.1	6.6	4.8
2001-02*	5.4	5.7	3.3	6.5
1992-93 to 1996-97 (average)	6.7	4.6	8	7.6
1997-98 to 2001-02 (average)	5.4	2.3	4.5	7.8

Source: Economic Survey 2001-02, Ministry of Finance, Government of India, 2002. Growth rates for 2001-02 are projections of the Ministry of Finance based on partial information.

Table 2

GCF in Agriculture & Allied Activities (Rs. Crore at 2004-05 prices)

Year	GDP	Agriculture & Allied Activities		GCF/GDP in agriculture and allied activities	GCF in agriculture as % of GDP
		GCF	GDP		
2004-05	29,714,64	76,096	5,65,426	13.46	2.56
2005-06	32,542,16	86,611	5,94,487	14.57	2.66
2006-07	35,660,11	90,710	6,19,190	14.65	2.54
2007-08	38,989,58	1,05,034	6,55,080	16.03	2.69
2008-09 P	41,625,09	1,28,659	6,54,118	19.67	3.09
2009-10 QE	44,937,43	1,33,377	6,56,975	20.3	2.97

Source: Central Statistics Office P: Provisional, QE-Quick Estimates.

Table 3

TABLE 3 : AGRICULTURAL PRODUCTION – FOODGRAINS						
(Million tonnes)						
Year	Cereals				Pulses	Total Foodgrains (5+6)
	Rice	Wheat	Coarse Cereals	Total (2 to 4)		
1	2	3	4	5	6	7
1951-52	21.30	6.18	16.09	43.57	8.42	51.99
1961-62	35.66	12.07	23.22	70.95	11.76	82.71
1971-72	43.07	26.41	24.60	94.08	11.09	105.17
1981-82	53.25	37.45	31.09	121.79	11.51	133.30
1991-92	74.68	55.69	25.99	156.36	12.02	168.38
2000-01	84.98	69.68	31.08	185.74	11.07	196.81
2004-05	83.13	68.64	33.46	185.23	13.13	198.36
2005-06	91.79	69.35	34.06	195.20	13.39	208.59
2006-07	93.35	75.81	33.92	203.08	14.20	217.28
2007-08	96.69	78.57	40.76	216.02	14.76	230.78
2008-09	99.18	80.68	40.03	219.90	14.57	234.47
2009-10	89.13	80.71	33.77	203.61	14.59	218.20
Note : Data for 2009-10 are based on Advance Estimates.						
Source : Ministry of Agriculture, Government of India.						

Table 4

Change in Cropping Pattern from 2004-05 to 2009-10 (Table 4)

Type of Yield	Value of output at (2004-05 prices) in Cr.		
	2004-05	2009-10	% change
Cereals	1,39,766	1,51,369	21.4 to 20.4
Milk Group	1,23,907	1,48,687	19.4 to 20.0
Fruits and Vegetables	1,13,341	1,44,779	17.8 to 19.5

Source : Economic Times, 12 Sept., 2011

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