



## Challenges of Indian Agriculture Sector

Ramesh Krishna Vipparthi, Lecturer, Department of Commerce, SCIM Government Degree College, Tanuku, West Godavari Dist., A.P

### Abstract

*Much boasted Structural Reforms initiated by former Prime Minister P.V. Narasimharao Government in early 1990s' aiming to make Indian economy more market-oriented by expanding the role of private and foreign investment, have brought out sweeping changes across the nation creating many opportunities on one side and threats on the other, leaving a long list of winners and losers behind. This paradigm shift – popularly called by critics as U-turn, from State to market has witnessed dismantling physical controls along a broad front of the Indian economy, only to passionately embrace Liberalization and Globalization, integrating Indian economy into the world economy. It is now, after two and a half decades, found to be an apparent failure in addressing the problems of poverty, unemployment, inequalities in access to health and education. The fascination for Foreign Direct Investments (FDIs) to make productivity-enhancing investments in Information Technology (IT), IT enabled services, business process outsourcing, Research and Development (R&D) and knowledge management activities, by side-lining the primary sector, has created utter chaos and confusion in Indian economy. GDP growth is high in Industry and Services, where employment could not be generated up to the mark, while the growth is low in agricultural sector where majority of people are employed. The agriculture policy has undergone fundamental changes raising serious concerns on the performance of agriculture sector in the country. Present paper aims to discuss the problems and reasons for deceleration in agriculture and enunciate the policies needed for revival of Indian agriculture.*

**Keywords:** Primary Sector – Agriculture, Globalization – Negative impact, Indian Economy – Structural Changes, Growth in Agriculture, - National Policy

### 1. Introduction

Since the past two and half decades during the post-reform period, Indian economy witnessed significant economic growth to be considered as one of the fastest growing economies in the world. Standing only after China, India even surpassed United States of America to occupy the place of second major growing economies of the world. However, during the past 15 years, it is found that improvements in economic growth, foreign exchange, IT revolution, export growth, etc., the income distribution has

been unequal and only very small sections of the population have benefited more from higher growth and prosperity. The problems such as poverty, unemployment, inequalities in access to health and education and poor performance of agriculture sector have not been seriously addressed by the government programmes and strategies.

### 2. Structural Reforms in Indian Economy: Voluntary or Forced?

Since independence, Indian ruling elites and intelligentsia, with a belief generated



by a mixture of socialism and the nightmare experience of British colonial exploitation have attempted to close the economy to outside world by emphasising more on protectionism through development of internal markets with the policy of import substitution. Launching the Licence Raj, the barricades of inconvertibility of Rupee, high tariffs and import licencing were erected to prevent entry of foreign goods into Indian markets. In order to have complete control over firms, their investments and development, a system of central planning for the economy was moved to operate making the State and its planning and not the markets, more powerful to determine how much investment was needed in which sectors. Nationalisation of key and basic industries, launching Five-Year Plans, and elaborate licence regulations were part of this policy. However, the much cherished Licence Raj created only an irresponsible, self-perpetuating bureaucracy accompanied with flourishing corruption.

In order to curb the adverse effects of Licence Raj, inspired by Socialism an attempt was made to liberalise the economy in 1966. However, emerging serious economic crisis triggered by Balance of Payments (BoP) problems in mid-1980s, made India stand on the verge of bankruptcy by the end of 1990. Still having the fixed exchange rate system – where the rupee was pegged to the value of a basket of currencies of major trading partners – Reserve Bank was forced to pledge 20 tonnes of gold to Union Bank of Switzerland and 47 tonnes to Bank of England as part of a bailout deal with the International Monetary Fund (IMF). Since then, most of the economic reforms were forced upon India as a part of the IMF bailout<sup>1</sup>. It is in this connection that

the then Prime Minister P.V. Narsimharao's Government had launched First Round of Economic Reforms during 1991–96, bringing structural changes to Indian economic policy to embrace Liberalization and Globalization, thus in turn, integrating Indian economy into the world economy. The following Government led by Atal Bihari Vajpayee's administration speeded up economic progress by resolving outstanding problems with the West and then opening gates for FDI investment into Information Technology (IT) and allied activities, thus making India second most attractive destination for FDI after China.

The structural reforms attracted productivity-enhancing investments in IT and IT enabled services, Business Process Outsourcing (BPO), Research and Development (R&D) and knowledge management activities. Some of the consequences and impacts of globalization are: exposure of domestic agriculture to international competition, growth of non-agricultural sector and its impact on demand for agricultural products, urban middle class life-style changes including diets, rising food imports in developing countries, competitiveness and diversification of domestic production systems, vertical integration of the food supply chain, etc.

### **3. Oscillating Performance of Indian Agriculture**

Ever since the implementation of Structural reforms, Indian agricultural sector has shown an oscillating performance at various levels. It has been impoverished by Globalization wave, leading to many suicidal deaths of farmers and rising serious concerns on



the performance of the sector. It is evident that the commodity sector including agriculture and industry could not record any sizable growth during the post-reform period as compared to that of 1980s, while the agriculture sector witnessed a growth much lower than 2 per cent per annum during the previous decade.

### **3.1. Employment Generation & Workforce Vs. GDP Growth**

Wide disparity between employment generation and GDP growth is surfaced as the growing industry and services could not generate sizable employment opportunities while the agriculture where majority of people are employed could not contribute to the GDP growth. Bina Agarwal, Professor of Development Economics and Environment at the University of Manchester, UK, observes that there has been a lop-sided approach to development in India during the past few decades. Despite the higher growth during the previous two decades, the inclusive growth in terms of focus on agriculture has been missing<sup>2</sup>. Noting that agriculture contributes to overall growth of the economy by ensuring employment and food security to majority population which in turn reduces poverty in a developing country, she opines that if pro-poor growth and real development is needed, high agricultural growth and rising incomes for farmers are essential<sup>3</sup>.

### **3.2. Increasing small and marginal farm holdings**

Demographic pressures on the other hand, have increased small and marginal farm holdings. Cultivation spreading to marginal lands and diversification of agriculture has raised serious concerns for India in maintaining its food security. In addition, the increased use of food

crops as bio-fuels also has pushed up their demand. For instance, the Under US law, 40% of the corn harvest must be used to make biofuel<sup>4</sup>. Moreover, rise in crude oil prices led to an increase in global food prices. Thus, myriad of conditions joined together to create tough times for Indian agricultural sector.

### **3.3. Workforce & low productivity**

One of the paradoxes of the Indian economy is that the decline in the share of agricultural workers in total nationwide work force. It has been slower as compared to the decline in the contributing share of agriculture in GDP. It is observed that there was a 34 percentage point decline in the share of agriculture in GDP between 1961 and 2004-05, while the decline in share of agriculture in employment generation was mere 19 percentage point only<sup>5</sup>. As a result, the labour productivity in agriculture has shown a marginal increase, while that of non-agricultural workers has increased rapidly. There were only about 259 million agricultural workers in the year 2004-05 out of which female workers formed around 42 per cent of the total agricultural workforce in India<sup>6</sup>.

### **3.4. Increasing Wages of Hired Labour**

Farm business incomes decelerated with the increasing wage costs of hired labour leading for cost increases in non-cereal crops. It was also mentioned that reduction in subsidies could be compensated by higher output prices, but to compensate for the decline in yields and farm income, much higher output prices are needed. Mid-term Appraisal of the Tenth Plan also attributes part of the decline in agriculture growth to lower input-use which in turn, was due to



lower profitability during the post-reform period<sup>7</sup>.

### **3.5. Terms of Trade (ToT) in Agriculture**

With Liberalisation and reduction in protection to industry, terms of trade became very unfavourable to agriculture since 1990-91. In the years 1999-00 and 2000-01, despite an increase in private investment in agriculture, there was a decline in the index based on implicit prices of GDP encompassing a four point decline in the agricultural TOT during 1998 to 2004.

### **3.6. Total Factor Productivity in Agriculture**

The growth of Total Factor Productivity (TFP) has been almost identical staying at 1.13 per cent per annum in both the agriculture and non-agriculture sectors during the 50-year period from 1950 to 2000<sup>8</sup>. However, it declined during the post reform period as the non-agriculture sector's TFP growth was higher than that of agriculture.

### **3.7. Darker side of Indian agriculture: Farmers' Suicides**

In recent years, farmers' suicides have increased in some states. There were around 167,000 farmers' suicides in the previous decade. Indebtedness of farmers and increasing risk in agriculture are the main factors responsible for the suicides<sup>5</sup>. Sharper decline in absolute productivity, price uncertainty due to trade liberalization and rise in costs due to domestic liberalization, decline in credit and non-farm work intensified the crisis. Most of the studies have identified household indebtedness as the main reason for the suicides. However, indebtedness is due to increase in input intensity of agriculture. Long-term factors like decline in farm size, groundwater

depletion, deterioration in soil quality, etc. have also been responsible for the agrarian crisis and farmers' suicides.

### **3.8. Sublime Causes for Deceleration in Agriculture**

Despite the signs of improvement in recent years, agriculture sector has recorded a growth rate less than 2 per cent since the mid-1990s. Yield growth has also declined. Farmers' suicides have continued/increased in some states. Farming is becoming a non-viable activity. In addition, there is a little scope for increase in net sown area. Land degradation in the form of depletion of soil fertility, erosion and water logging has increased. There has been a decline in the surface irrigation expansion rate and reduction in ground water table. Risk and vulnerability have increased. Disparities in productivity across regions and crops have persisted. Long-term factors like steeper decline in per capita land availability and shrinking of farm size are also responsible for the agrarian crisis.

The Steering Committee report on agriculture for 11th Plan has identified the possible reasons for deceleration in agriculture since mid-1990s<sup>9</sup>. According to the report, the major sources of agricultural growth are: public and private investments in agriculture and rural infrastructure including irrigation, technological change, diversification of agriculture and fertilizers. It looks like that the progress on all these sources slowed down in the 1990s particularly since mid-1990s. According to the report, the causes of slow down are: increase in subsidies crowding out investment in infrastructure, degradation of natural resources, failure in conservation and improvement of rain-fed land, knowledge gap with existing technology, low market



infrastructure and too much regulation, institutions not geared to help women farmers, imperfections in land market and plight of small farmers<sup>10</sup>.

#### **4. Rejuvenation of Indian Agriculture: Need of the Hour**

In order to revive and rejuvenate the agricultural growth, appropriate policies are needed at least to reach 4 per cent growth rate in agriculture and to increase in incomes of farmers. However, slow growth of the agricultural sector, where half of Indians earn most of their income, highly restrictive and complex labour laws, high inflation, high poverty, corruption and graft as well as lack of political consensus and will, are some of the crucial issues that are to be addressed, before identifying policy issues and the needed reforms in agriculture. The policies needed for revival of Indian agriculture are discussed below:

##### **4.1. Price Policy**

Major underlying objective of the Indian Government's price policy is to ensure food security by protecting both producers and consumers, which are achieved through three instruments, namely procurement prices/Minimum Support Prices (MSPs), buffer stocks and Public Distribution System (PDS). Government of India (GOI) follows a Minimum Support Price (MSP) Policy for 24 major crops including paddy, wheat, jowar, bajra, maize, ragi, pulses, oilseeds, copra, cotton, jute, sugarcane and tobacco<sup>11</sup>. Cost of production is the important factor in determining MSP.

There is a need to provide remunerative prices to farmers in order to maintain food security and increase incomes of farmers. For this, both price and non-price factors are important in raising

agricultural production. Studies have shown that aggregate supply response is higher for non-price factors as compared to price factors. Therefore, in the context of Globalization, tariff policy becomes important for agricultural commodities and it is important to monitor exports, imports, global supply and demand and fix tariffs accordingly. There is a need to strike a balance between producer prices and consumer prices by careful calibration of minimum support prices and tariff policy with respect to import duties.

##### **4.2. Macro Policies and Agriculture**

The experience in several countries during the reform period shows that public expenditure as percentage of GDP is low and declining. As a result, public investment in rural development has declined sharply in most of the Asian countries<sup>12</sup>. Consequently, agricultural growth slowed down in most countries in the 1990s leading to sluggish average annual rate of growth of gross capital formation in many countries. On the other hand, financial sector has historically had an urban bias and the macro policies have not been pro-employment and pro-poor in the post-reform period in many developing countries, including India. There is a need to have pro-agriculture, pro-employment and pro-poor macro policies.

##### **4.3. Land Issues**

It is important to record and register actual cultivators including tenants and women cultivators, and issue passbooks to them, to ensure that they gain access to institutional credit and other inputs. As part of the reforms, lease market should be freed and some sort of security for tenants has to be guaranteed. This will ensure availability of land for cultivation on marginal and small farmers.



The land rights of people living in the agency areas must be protected. There is considerable scope for further land redistribution, particularly when waste and cultivable lands are taken into account. Commenting on land market, the Steering Committee in its report recommended, "Small farmers should be assisted to buy land through the provision of institutional credit, on a long-term basis, at a low rate of interest and by reducing stamp duty. At the same time, they should be enabled to enlarge their operational holdings by liberalizing the land lease market. The two major elements of such a reform are: security of tenure for tenants during the period of contract; and the right of the land owner to resume land after the period of contract is over"<sup>13</sup>. Thus, it is crucial to ensure land leasing, create conditions including credit, whereby the poor can access land from those who wish to leave agriculture.

#### 4.4. Agricultural Credit

The nationalization of banks in 1969 and subsequent developments led to expansion of the geographical and functional reach by commercial banks, regional rural banks (RRBs) and cooperative credit institutions. Public policy is aimed at 'social' and 'development banking' in the form of meeting rural credit needs and reducing the role of informal sector credit. A large number of small and marginal farmers and other vulnerable groups remain excluded from the opportunities and services provided by the financial sector. It is important to curb this exclusion and include small and marginal farmers as beneficiaries<sup>14</sup>.

#### 4.5. Globalization and Agriculture

There has been adverse impact of trade liberalization on the agricultural

economy of the regions, growing crops such as plantation, cotton and oilseeds in which foreign trade is important. In the recent years, domestic prices of several agricultural commodities have turned higher than international prices. India is not able to check import of a large number of commodities even at high tariffs. This is true not only in the case of import from developed countries where agriculture is highly subsidized but also in the case of products from developing countries. India is facing severe import competition in the case of items like palm oil from Malaysia and Indonesia, spices from Vietnam, China and Indonesia, tea from Sri Lanka and rice from Thailand and Vietnam<sup>15</sup>. Cost reduction is, therefore, important for increasing producers' profit margins. The policies have to induce larger investments in yield-augmenting technological improvements and contain the adverse environmental impact of misuse of water and agro-chemicals for sustainability of growth.

To compete in the global market, the country needs to reduce various post-harvest costs and undertake suitable reforms to improve efficiency of domestic markets and delivery systems. To be able to successfully compete in a liberalized trade regime, therefore, there is need for a paradigm shift from merely maximizing growth to achieving efficient growth. The effect of volatility in international prices on domestic agriculture should be checked by aligning tariffs with the changing price situation.

Implementation of the WTO Agreement on Agriculture (AOA)<sup>16</sup> since 1995 has brought out the inadequacies inherent in the agreement. The on-going negotiations in the WTO on the AOA provide an opportunity for India to rectify these inadequacies and inequalities. India



should stress on the implementation of Uruguay round agreements to reduce subsidies and other distortions caused by policies pursued by developed countries.

## 5. Conclusion

As the Globalization and Liberalization policies have created many juxtaposing conditions, it is important for the Government to frame policies to convert the inherent weaknesses into strengths and threats into opportunities to attain higher agricultural growth. To achieve this, both price and non-price factors are important. Hence, the Indian ruling elite and intelligentsia should focus on dealing with the challenges created by globalization, volatility in prices, shrinking farm size, dry land farming challenges and environmental stress. Any upcoming Government policy or economic policy reforms should address the issues created by highly restrictive and complex labour laws, high inflation, high poverty, corruption and graft as well as lack of political consensus and will. It should also attempt to remove or at least minimize the deficits underlying in Indian agriculture spreading across the areas such as investment, credit and infrastructure, research and technology extension, market, diversification, institutions and education/skill orientation. Last, but not least, India, on the international diaspora, should stress on the implementation of Uruguay round agreements to reduce subsidies and other distortions caused by policies pursued by developed countries.

## References

1. Weinraub, Bernard (1991), *Economic Crisis Forcing Once Self-Reliant India to Seek Aid*, New York

Times; available at: <http://www.nytimes.com/1991/06/29/world/economic-crisis-forcing-once-self-reliant-india-to-seek-aid.html>

2. Agarwal, Bina (1994), *A Field of One's Own: Gender and Land Rights in South Asia*, Cambridge University Press.

3. *ibid.*

4. Mardell, Mark (2012), *US biofuel production should be suspended, UN says*, BBC News Business; available at: <http://www.bbc.com/news/business-19206199>

5. Singh, V. Surjit and Reddy, Ratna (eds.) (2009), *Changing Contours of Asian Agriculture: Policies, Performance, and Challenges: Essays in Honour of Professor V.S. Vyas*, New Delhi: Academic Foundation.

6. *ibid.*

7. GOI (2005), *Mid-Term Appraisal of 10th Five Year Plan (2002-2007)*, New Delhi: Planning Commission; available at <http://planningcommission.gov.in/plans/mta/midterm/midtermapp.html>

8. Dev, S Mahendra (2008), *Challenges for Revival of Indian Agriculture*, New Delhi: National Centre for Agricultural Economics and Policy Research; available at: [http://www.ncap.res.in/upload\\_files/jml/jml1.pdf](http://www.ncap.res.in/upload_files/jml/jml1.pdf)

9. GOI (2007a), *Economic Survey 2006-07*, Ministry of Finance, Government of India.

10. *ibid.*

11. GOI (2011), *Annual Report*, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India. Available at: <http://www.agricoop.nic.in/Annual%20report2010-11/AR.pdf>

12. Dev, S Mahendra (2006), *Ensuring equitable development through reforms*, Chennai: The Hindu.



13. Kapila, Raj and Kapila, Uma (eds.) (2007), *Economic Developments In India : Volume - 114 Analysis, Reports, Policy Document*, New Delhi: Academic Foundation.
14. Dev, S Mahendra (2005), Reform and formal credit, [Review of the book, *Financial Liberalization and Rural Credit in India* by V. K. Ramachandran and MadhuraSwaminathan (Eds), Chennai: The Hindu.
15. GOI (2007), *Report of the Steering Committee on Agriculture and Allied Sectors for Formulation of the Eleventh Five Year Plan (2007-2012)*, New Delhi: Planning Commission; available at [http://planningcommission.nic.in/aboutus/committee/strgrp11/str11\\_agriall.pdf](http://planningcommission.nic.in/aboutus/committee/strgrp11/str11_agriall.pdf)
16. WTO (1995), *Uruguay Round Agreement: Agreement on Agriculture*, Information and Media Relations Division, WTO; available at [http://www.wto.org/english/docs\\_e/legal\\_e/14-ag\\_01\\_e.htm](http://www.wto.org/english/docs_e/legal_e/14-ag_01_e.htm)
- Bibliography**
17. Bhalla, G.S. (2006), 'Agricultural Growth and Regional Variations', in R. Radhakrishna, S.K. Rao, S. MahendraDev and K. Subbarao (eds.), *India in a Globalising World: Some Aspects of Macroeconomy, Agriculture and Poverty, Essays in honour of Prof. C.H. HanumanthaRao*, New Delhi: Academic Foundation.
18. Chand, R., S.S. Raju and L.M. Pande (2007), *Growth Crisis in Agriculture: Severity and Options at National and State Levels*, Economic and Political Weekly, Vol.42, No.26.
19. Dev, S. Mahendra and N. ChandrasekharaRao (2005), *Food Processing and Contract Farming in Andhra Pradesh: A Small Farmer Perspective*, Economic and Political Weekly, Vol. 40, No.26.
20. Dev, S.Mahendra (2008), *Inclusive Growth in India: Agriculture, Poverty and Human Development*, New Delhi: Oxford University Press.
21. GOI (2007), *Report of the Expert Group on Agricultural Indebtedness*, Ministry of Finance, Government of India.
22. Gulati, A. and SudhaNarain (2003), *Subsidy Syndrome in Indian Agriculture*, New Delhi: Oxford University Press.
23. Sivasubramonian (2004), *The Sources of Economic Growth in India: 1950-51 to 1999-2000*, New Delhi: Oxford University Press.
24. Swaminathan, M.S. (2007), *Agriculture Cannot Wait: New Horizons in Indian Agriculture*, Academic Foundation.
25. Thorat, Usha (2006), *Financial Inclusion and Millennium Development Goals*, RBI Bulletin, February.
26. Vaidynathan, A. (1996), *Agricultural Development: Imperatives of Institutional Reforms*, Economic and Political Weekly, Vol.31, No.35-37.
27. Vaidyanathan, A. (2006), *India's Water Resources: Contemporary Issues on Irrigation*, New Delhi: Oxford University Press.
28. Vyas, V. S. (2004): *Agrarian Distress: Strategies to Protect Vulnerable Sections*, Economic and Political Weekly, 25 December.
29. GOI (2008), *Economic Survey 2007-08*, Ministry of Finance, Government of India.