

Good Governance: A Necessary Precondition for Sustainable Agriculture

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Abstract—Agriculture in our Country, the principal source of livelihood for more than 58 percent of the population, has been facing alarming challenges due to absence of good governance apart from over-dependence on rain, natural calamity, scarcity of natural resources, lower productivity, unpredictable profitability, inadequate technological advancements, stiff competition of globalisation, etc.. With over 60 percent of the cultivated land in the country being rain-fed, agriculture has been more risky. Further, unprecedented floods, cyclones, droughts in different part of our country destroy crops even just before the harvesting, which lead to irreparable loss to farmers, unbearable debt burden, frustration, etc. Therefore, to safeguard the interest of innocent farmers, mandatory crop insurance facility like recently launched Atal Pension Yojana at subsidised premium needs to be provided jointly by the State Government and Central Government against crop failure. The Government need to fulfil their promises and implement previous plan proposals to provide adequate and timely infrastructural facilities like irrigation, high quality seeds, fertilisers, timely credit, procurement and storage of agricultural output, reduction of post harvest losses, marketing support, etc. It is high time for the Government to encourage more need based agricultural research and education, develop state-of-art technology to enhance agricultural productivity, execute minimum support price, safeguard soil health, promote mechanisation of farming, focus on 'Lab-to-Land' linkages with community radio and ICT enabled support services for sustainable agriculture.

Keywords: Good governance, Sustainable agriculture, Crop insurance, Agricultural infrastructure.

1. INTRODUCTION

Agriculture is the principal source of livelihood for more than 58 percent of the population of India. Agriculture provides the bulk of wage goods required by non-agriculture sectors and most of the raw materials for the industrial sector. According to CSO's Press Releases on 9 February 2015, the share of agriculture and allied activities, industry, services to gross value addition (GVA) at factor cost at current price are 17.6, 29.7 and 52.7 respectively for the year 2014-15. Agriculture in India is vital as well as sensitive as far as critical issues like food shortages, growing population, unemployment; food inflation, etc are concerned. At the same time, with over 60 percent of the cultivated land in the country being rain-fed, agriculture has been more dependent on timely and adequate

monsoon leading to higher risk. Further, unprecedented floods, cyclones, droughts in different part of our country destroy crops even just before the harvesting leading to irreparable loss to farmers, unbearable debt burden, frustration, etc. *World Bank: "India Country Overview 2011"* reports, "With a population of just over 1.2 billion, India is the world's largest democracy. Nevertheless, disparities in income and human development are on the rise. Preliminary estimates suggest that in 2009-10 the combined all India poverty rate was 32% compared to 37% in 2004-05. Thus, it will be essential for India to build a productive, competitive, and diversified agricultural sector and facilitate rural, non-farm entrepreneurship and employment. Encouraging policies that promote competition in agricultural marketing will ensure that farmers receive better prices." Thus, it is high time to transform the challenges faced by the agricultural sector into opportunities to achieve sustainable agriculture in the line of the reports by the World Bank and the United Nations.

2. OBJECTIVES

The objectives of this paper are

- i) To diagnose the challenges faced by the agricultural sector in India.
- ii) To study the impact of good governance on sustainable agriculture in different countries.
- iii) To suggest possible measures for good governance to transform the challenges into opportunities to achieving sustainable agriculture.

3. LITERATURE SURVEY

The World Bank Group in 1992 defined governance as "the manner in which power is exercised in the management of a country's economic and social resources for development". The World Bank identified three distinct aspects of governance: (a) the form of the political regime; (b) the process by which authority is exercised in the management of a country's economic and social resources for development;

and (c) the capacity of governments to design, formulate and implement policies and discharge functions.

The United Nations Development Programme (UNDP) defined good governance in a 1997 UNDP policy document entitled "Governance for Sustainable Human Development". The document states that governance can be seen as the exercise of economic, political and administrative authority to manage a country's affairs at all levels. Good governance comprises the existence of effective mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences. Its essential characteristics are: (i) *Participation*: All men and women should have a constructive voice in decision-making, either directly or through legitimate intermediate institutions that represent their interests with freedom of association and speech; (ii) *Rule of law*: Legal frameworks should be fair and enforced impartially, particularly the laws on human rights; (iii) *Transparency*: There should be free flow of information and direct accessibility to all; (iv) *Responsiveness*: Institutions and processes should serve all stakeholders; (v) *Consensus orientation*: Good governance should mediate differing interests in order to reach broad consensus on policies and procedures; (vi) *Equity*: All men and women should have equal opportunity to maintain or improve their well-being; (vii) *Effectiveness and efficiency*: Processes and institutions should produce results that meet needs while making the best use of resources; (viii) *Accountability*: Decision-makers in government, the private sector and civil-society organizations should be accountable to the public as well as to institutional stakeholders; and (ix) *Strategic vision*: Leaders and the public should have a broad and long-term perspective on good governance and human development for poverty reduction, job creation, environmental protection and the advancement of women.

The International Fund for Agricultural Development (IFAD) has a highly focused mandate on governance, which is to mobilize funds for agricultural development in its developing Member States and, in particular, for projects designed to increase food production, reduce rural poverty and improve nutritional levels.

Sustainable Agriculture:

Sustainable agriculture is a system of crop and animal production, which operates under the law of nature and takes into account social values, namely bearing in mind the existence of rural communities. The United Nations' Food and Agriculture Organization (FAO) formulated the three-pillar integrated approach of sustainable agriculture which is defined as "the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner so as to ensure the attainment and continued satisfaction of human needs for present and future generations. Such development (in agriculture, forestry and fishing) conserves land, water, plant and animal genetic

resources that are environmentally non-degrading, technically appropriate, economically viable and socially acceptable." Sustainable agriculture can be described and measured by cost-benefit analysis, risk analysis, charts of ecosystems, and indicator systems. Sustainable agriculture is a dynamic rather than static concept.

Roy and Tisdell (1995) in examining the impact of technological change on the rural sector in India argued that serious deficiencies existed in implementing policies and administering development programmes. An evaluation of the "food for work" scheme revealed that women accounted for only 20 percent of the beneficiaries (Duvvury, 1989). A study of the impact of the Integrated Rural Development Projects (IRDP) by Rath (1985) found that the beneficiaries were misclassified and that only 3 percent of the rural poor were able to cross the poverty line. Although decentralisation of planning was envisaged by Gandhi to be suitable for India (Roy and Tisdell, 1992, 1995), it could not be implemented on a national scale in India because of its inherent limitations. Hence, it is felt that the participation of beneficiaries in the formulation, implementation and maintenance of programmes is necessary. (Yugandhar and Raju, 1992). According to Roy and Tisdell (1998), good economic policies will not achieve sustainable development if they are not implemented properly. But effective implementation of policies depends on good governance. Thus, it can be argued that good governance is more important than good economic policies.

4. CHALLENGES TO AGRICULTURE IN INDIA:

The World Bank: "India Country Overview 2008" reports "Slow agricultural growth is a concern for policymakers as some two-thirds of India's people depend on rural employment for a living. Current agricultural practices are neither economically nor environmentally sustainable and India's yields for many agricultural commodities are low. Poorly maintained irrigation systems and almost universal lack of good extension services are among the factors responsible. Farmers' access to markets is hampered by poor roads, rudimentary market infrastructure, and excessive regulation."

a. *Infrastructure*: Poor rural roads, inadequate irrigation systems leading to crop failures in some parts of the country, regional floods, poor seed quality and inefficient farming practices, lack of cold storage and harvest spoilage cause over 30% of agricultural produce going to waste, lack of organised retail and competing buyers thereby limiting Indian farmer's ability to sell the surplus and commercial crops. The Indian farmer receives about 10% to 23% of the price the Indian consumer pays for exactly the same produce and the rest goes to loss to farmers which is due to inefficiencies, poor infrastructure and higher profit margin to middlemen. Farmers in developed economies of Europe and the United States receive 64% to 81% of the price the Indian consumer pays. (Source: www.quora.com/How-can-the-situation-of-Indian-farmers-be-impro...)

b. Productivity: The productivity of its farms is below that of Brazil, the United States, France and other nations. Rice productivity in India was less than half that of China. Indian total factor productivity growth remains below 2% per annum; in contrast, China's total factor productivity growth is about 6% per annum, even though China also has smallholding farmers. Several studies suggest India could eradicate its hunger and malnutrition and be a major source of food for the world by achieving productivity comparable with other countries. (Source: www.fao.org)

Causes of Low Productivity in India:

Mainly the following factors are the causes of low productivity. 1) Poor Governance, 2) Inadequate government support, 3) Idleness and lack of national spirit, 4) Illiteracy and lack of awareness, 5) Poor research and education, 6) Inadequate credit facility, 7) Poor irrigation facility, 8) Slow adoption of modern technology, 9) General socio-economic backwardness, 10) Slow progress in implementing land reforms, 11) Inadequate or inefficient finance and marketing services for farm produce, 12) Inconsistent government policy, 13) Inadequate and deteriorating irrigation facilities as revealed by the fact that only 52.6% of the land was irrigated in 2003–04, 14) Poor storage facility, 15) Overdependence on monsoon, 16) Higher agricultural subsidies, 17) Insufficient marketing support, 18) Huge wastage due to inefficient supply chains, 19) Inadequate crop insurance scheme, 20) Poor implementation of Government plans, etc..

5. POOR GOVERNANCE IN IMPLEMENTATION OF INITIATIVES/ PLAN PROPOSALS:

1) Infrastructure: The government has not been able to implement schemes to raise investment in marketing infrastructure. Among these schemes are 'Construction of Rural Go-downs', 'Market Research and Information Network', and 'Development / Strengthening of Agricultural Marketing Infrastructure, Grading and Standardisation'.

2) Research and Education: The NSSO 70th round survey indicates that about 59 per cent of farmers do not get much technical assistance and know-how from government-funded farm research institutes or extension services. So they have to rely on progressive farmers, media, and private commercial agent

3) Extension Programmes: To ensure last-mile connectivity, extension services need to be geared up to address emerging technological and information needs. Effectiveness of the lab-to-land programme can be improved by leveraging information technology and e- and mobile (m-) applications, participation of professional NGOs, etc. The Budget 2014-15 allocation of Rs100 crores to Kisan TV for disseminating real time information to farmers regarding new farming techniques, water conservation, organic farming, etc. will partly make up for the existing adverse ratio of one extension

worker for every 800 to 1000 farmers and provide farmers a direct interface with agricultural experts.

4) Irrigation: The central government initiated the Accelerated Irrigation Benefit Programme (AIBP) in 1996-97 for the completion of incomplete irrigation schemes and Rs 67,195.47 crore of grants has been released up to 31 December 2014. The wide gap between gross cropped area and gross irrigated area which has not improved much since the First Five Year Plan period needs to be bridged for increasing productivity, production, and resilience (Source: Department of Agriculture & Cooperation, Govt. of India).

5) Seed: Seed is the vital input for enhancing agricultural production and productivity. It is estimated that the quality of seed accounts for 20-25 per cent of agricultural productivity. Efficacy of all other agricultural inputs such as fertilizers, pesticides, and irrigation as well as impact of agro-climatic conditions is largely determined by the quality of the seed used.

6) Fertilizers: Major initiatives taken in the fertilizer policy of the government in 2014-15: (i) Notification of the Modified New Pricing Scheme (NPS-III) for existing urea units on 2 April 2014 and the New Investment Policy 2012 on 2 January 2013 to facilitate fresh investment in the urea sector to make India self-sufficient have not been implemented fully.

7) Financial support/ Credit: Agricultural credit flow target for 2014-15 has been fixed at Rs 8, 00,000 crore against which achievement has been Rs 3, 70,828.60 crore (Provisional) up to 30 September, 2014. But, studies conducted by the RBI and National Bank for Agriculture and Rural Development (NABARD) indicate that the crop loans are not reaching intended beneficiaries and there are no systems and procedures in place at several bank branches to monitor the end-use of funds. Also, although overall credit flow to the agriculture sector has increased over the years, the share of long-term credit in agriculture or investment credit declined from 55 per cent in 2006-07 to 39 per cent in 2011-12. According to NSSO 70th round data, as much as 40 per cent of the finances of farmers still comes from informal sources, despite an increase in the flow of institutional credit to agriculture in recent years. Usurious moneylenders account for a 26 per cent share of total agricultural credit

8) Mechanization: Agricultural mechanization increases productivity of land and labour. Although India is one of the top countries in agricultural production, the current level of farm mechanization, which varies across states, averages around 40 per cent as against more than 90 per cent in developed countries. Farm mechanization in India has been growing at a rate of less than 5 per cent in the last two decades. Credit flow for farm mechanization is less than 3 per cent of the total credit flow to the agriculture sector. A dedicated Sub-Mission on Agricultural Mechanization has been initiated in the Twelfth Plan, with focus on spreading

farm mechanization to small and marginal farmers and regions that have low farm power availability.

6. MAJOR SCHEMES OF THE GOVERNMENT

Rashtriya Krishi Vikas Yojana (RKVY): The government has approved continuation of the RKVY scheme during the Twelfth Plan whereby RKVY funding will be routed into three components, viz. production growth, infrastructure and assets, and sub-schemes and flexi-fund. The proposed allocation for implementation of this scheme during 2015-16 is Rs 18,000 crore. In view of the need to increase capital formation and get higher returns on investments, states are at liberty to spend up to 100 per cent of total outlay in the infrastructure and asset creation component.

Sustainability and Adaptability: Concerns have been raised for quite some time about non-sustainability of the present cropping pattern and use of water resources. The following initiatives announced in Budget 2014-15 have brought the issue of sustainability and climate adaptation to the forefront:

Pradhan Mantri Krishi Sinchayee Yojana with allocation of Rs 1000 crore.

Neeranchal: A new programme with an initial outlay of Rs2142 crore in 2014 to give additional impetus to watershed development in the country,

The National Adaptation Fund for Climate Change: A scheme to provide, in mission mode, a soil health card to every farmer, with an allocation of Rs100 crore. An additional amount of Rs 56 crore has been allocated to set up 100 mobile soil-testing laboratories across the country.

7. FAILURE/ CLOSURE OF INSURANCE SCHEMES LAUNCHED BY GOVERNMENT:

1) **Comprehensive Insurance Scheme (CIS):** The scheme covered 15 states and 2 union territories. The scheme was scrapped in 1997.

2) **Experimental Crop Insurance scheme (ECIS):** Introduced in 1997-98, covering non-loanee small and marginal farmers growing specified crops in selected districts. The premium was subsidized. The premium collected was about Rs. 3 crores and the claims amounted to Rs. 40 crores. The Government discontinued the scheme during 1997-98 themselves.

3) **Farm Income Insurance Scheme (FIIS):** Launched during 2003-04 and was withdrawn in 2004.

4) **National Agriculture Insurance Scheme (NAIS):** The Government then introduced in 1999-2000, a new scheme titled "National Agricultural Insurance Scheme" (NAIS) or "Rashtriya Krishi Bima Yojana" (RKBY). NAIS envisages coverage of all food crops for all farmers, both loanees and non-loanees, under the scheme. The premium rates vary from 1.5 percent to 3.5 percent of sum assured for food crops. In the

case of horticultural and commercial crops, actuarial rates are charged. Small and marginal farmers are entitled to a subsidy of 50 percent of the premium charged- the subsidy is shared equally between the Government of India and the States. NAIS operates on the basis of Area approach- defined areas for each notified crop for widespread calamities. Under the scheme, each state is required to reach the level Gram Panchayat as the unit of insurance in a maximum period of 3 years. Agriculture Insurance Corporation of India is implementing the scheme.

8. INDIA'S GLORIOUS HISTORY

2500 years ago, Indian farmers had discovered and begun farming many spices and sugarcane. It was in India, between the sixth and fourth centuries BC, that the Persians, followed by the Greeks, discovered the famous "reeds that produce honey without bees" being grown. People in India had invented, by about 500 BC, the process to produce sugar crystals called *khanda* which is the source of the word *candy*. Before the 18th century, cultivation of sugarcane was largely confined to India and traded in Europe until the 18th century.

Before the mid-1960s, due to lower productivity of agriculture, India was dependent on imports and food aid to meet domestic requirements. However, two years of severe drought in 1965 and 1966 convinced India to reform its agricultural policy as foreign aid and imports for food security are not sustainable. India adopted significant policy reforms focused on the goal of food-grain self-sufficiency which is known as India's Green Revolution. It began with the decision to adopt superior yielding, disease resistant wheat varieties in combination with better farming knowledge to improve productivity. The state of Punjab led India's green revolution and earned the distinction of being the country's bread basket. The initial increase in production was centred on the irrigated areas of the states of Punjab, Haryana and western Uttar Pradesh. With the farmers and the government officials focusing on farm productivity and knowledge transfer, India's total food-grain production soared. A hectare of Indian wheat farm that produced an average of 0.8 tonnes in 1948, produced 4.7 tonnes of wheat in 1975 from the same land. Such rapid growth in farm productivity enabled India to become self-sufficient by the 1970s. (Source: Human Development Report 2004, Punjab, Green Revolution).

9. SUGGESTIONS

India's of glorious history is the evidence of our strength to manage crisis and to progress to self-sufficiency and then towards leadership in agriculture. The 'Green Revolution' of 1960s created landmark achievement. The State of Punjab took the lead for the success of 'Green Revolution' with the help of good governance. . Therefore, the Punjab model of "Green revolution and good governance and maintenance of sustainable agriculture" may be adopted by all the states Government and central Government to transform the

challenges mentioned to opportunities to create the history of sustainable agriculture and self sufficiency. According to the World Bank's report 2008, India's population is growing faster than its ability to produce rice and wheat. India can easily feed its growing population, plus produce wheat and rice for global exports, if it can reduce food staple spoilage, improve its infrastructure and raise its farm productivity to those achieved by other developing countries such as Brazil and China. (Source: www.worldbank.org, www.fao.org). Thus, it is clearly evident that due to good governance; India could convert a crisis to self sufficiency by adopting 'Green Revolution' and become one of the world leaders in sustainable agriculture.

10. CONCLUSION

Therefore, to safeguard the interest of innocent farmers, mandatory crop insurance facility like recently launched Atal Pension Yojana at subsidised premium to all needs to be provided jointly by the State Government and Central Government against crop failure. The Government need to fulfil their promises and implement previous plan proposals to provide adequate and timely infrastructural facilities like irrigation, high quality seeds, fertilisers, timely credit, procurement and storage of agricultural output, reduction of post harvest losses, marketing support, etc. It is high time for the Government to encourage more need based agricultural research and education, develop state-of-art technology to enhance agricultural productivity, execute minimum support price, safeguard soil health, promote mechanisation of farming, focus on 'Lab-to-Land' linkages with community radio and ICT enabled support services for sustainable agriculture.

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