

Contemporary Agricultural Traits in India

Abstract

Agriculture is backbone of Indian economy and it is primary sector of country, but it reflects certain problems relating to the farmers and the land on which they make farming, means of agriculture and the governmental plans and schemes in order to ensure cent percent exploitation of the resources. Farmers require advance or experts knowledge to take decision during soil preparation, seed selection, fertilizer management, pesticide management, water scheduling, weed management etc, so that to get high yield. Besides it, the market system in India too requires improvement. Agriculture sector can become profitable only in the case when first, the land for farming is fertile enough for the farmers to grow the crop properly, and secondly, there is a developed market for the yields to be sold and exported. India being a land of variety of climate and geographical conditions. Though rural as a whole, the problems that have long been being faced by the farmers are relating to barren land, uncertainty of rain or of excessive rain, market system, paucity of grants being provided to the farmers, lack of plans and schemes, corruption that prevents the farmers from availing themselves of the governmental schemes meant for them. As a result of the constant efforts of the government, the agricultural scenario today is entirely different from what once it was. Several irrigational schemes, use of the modern tools replacing the traditional ones, improved market system etc. constitute the picture of the contemporary agricultural traits in India.

Though much has been done, and is being done to improve the agriculture sector, still it needs to be improved for the cent percent exploitation of the resources available in India. It may be possible only when a conducive agricultural environment is created in a way that every farmer gets an opportunity to prove his potential and contributes to it, and when it becomes possible and feasible for the farmers to avail themselves of the various schemes and plans meant for them for the sake of agricultural reforms.

The paper serves as a picture of the contemporary agricultural traits in India.

Keywords: Rural, Economy, Superstitions, Agrarian Society, Parochialization, Upliftment, Agricultural Reforms, Green Revolution.

Introduction

Agriculture plays a vital role in India's economy. Over 58 per cent of the rural households depend on agriculture as their principal means of livelihood. The share of primary sectors* (including agriculture, livestock, forestry and fishery) is estimated to be 20.4 per cent of the Gross Value Added (GVA) during 2016-17 at current prices. Agriculture is not only meeting the demand for food grains but also other needs of development. In recent years, agricultural sector has been diversified to produce commercial crops and horticultural crops viz., fruits, vegetables, spices, cashew, areca nut, coconut and floricultural products like flowers, orchids etc., dairy and other animal husbandry products. The demand for these products has also been increasing. Liberalisation of the economy has created ample scope for the development of agricultural sector both in terms of increased production and trade. India's share in the world trade in agricultural commodities is less than 1 per cent. For over four decades industry remained highly protective and agriculture served as a source of cheap raw materials for the domestic industry, a very large segment of which was inefficient and globally non-competitive.

There are two major reasons of the importance of the agricultural sector in India-First, the country achieved self-sufficiency in food production at the macro level, but still is a food deficit countryi facing massive challenges of high prevalence of malnourished children and high incidence of rural poverty. The pressure on agriculture to produce more and raise farmers' income is high. Second, the dependence of the rural workforce on

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agriculture for employment has not declined in proportion to the sectoral contribution to GDP.

Sustained agricultural growth, which is facilitated through constant policy and institutional support has the potential to augment growth in the rural economy and associated secondary activities like food processing and retail trading. However, agriculture-led rural industrialisation has not received due attention from policy makers in the country notwithstanding the fact that maintaining the growth of agriculture per se was lost sight of during the 1990s. However, at present there is a change in the situation, and the agriculture sector in India is constantly on its way to improvement. But it will not be fair to use the term 'developed' or 'improved' for it, as still much is left to be done. We can pay compliments to ourselves for having a developed agriculture sector only then there are no more reports of the suicides committed by the farmers from any part of India.

Current Picture of Agriculture in India

1. India's GDP is expected to grow at 7.4 per cent in 2018-19. India's food grain production reached 275.68 million tonnes in 2016-17 and is targeted at 274.55 million tonnes in 2017-18.
2. India has been the world's largest producer of milk for the last two decades and contributes 19 per cent of the world's total milk production.
3. India is emerging as the export hub of instant coffee which has led to exports of coffee increase 17 per cent in calendar year 2017 to reach US\$ 958.80 million.
4. India topped the list of shrimp exporters globally in 2016 with exports of US\$ 3.8 billion which are expected to double to US\$ 7 billion by 2022.
5. Total area in India, sown with rabi crops reached 61.79 million hectares in January 2018.
6. India is the second largest fruit producer in the world. India's horticulture output reached 300.64 million tonnes in 2016-17 and is expected to reach 305.43 million tonnes in 2017-18.
7. Agricultural export constitutes 10 per cent of the country's exports and is the fourth-largest exported principal commodity. Agricultural exports from India reached US\$ 24.66 billion during April-November 2017 with exports of basmati, buffalo meat reaching US\$ 2.61 billion and US\$ 2.76 billion, respectively.
8. India is the largest producer, consumer and exporter of spices and spice products. Spice exports from India grew by 6 per cent year-on-year between April-September 2017 to US\$ 1.37 billion.
9. Dairy sector in India is expected to grow at 15 per cent CAGR to reach Rs 9.4 trillion (US\$ 145.7) billion by 2020.
10. The online food delivery industry grew at 150 per cent year-on-year with an estimated Gross Merchandise Value (GMV) of US\$ 300 million in 2016. The sector grew 15 per cent every quarter during January-September 2017.
11. According to the Department of Industrial Policy and Promotion (DIPP), the Indian agricultural services and agricultural machinery sectors have cumulatively attracted Foreign Direct Investment (FDI) equity inflow of about US\$ 1.99 billion and US\$ 466.31 million, respectively, during April 2000 to September 2017. The food processing sector attracted FDI of US\$ 8 billion in the same period.
12. In January 2018, India Agri Business Fund II (IABF-II), co-sponsored by Rabobank, the UK's CDC Group and Asian Development Bank (ADB), made an investment worth US\$ 10 million for a minority stake in Global Gourmet Pvt Ltd, a frozen food products exporting company.
13. In December 2017, a mobile application which can forewarn farmers about diseases affecting the livestock has been launched by the Ministry of Agriculture and Farmers Welfare, Government of India.
14. A loan agreement of US\$ 318 million was signed between the Government of India, Government of Tamil Nadu and the World Bank in December 2017 for the 'Tamil Nadu Irrigated Agriculture Modernization Project' through which is expected to benefit around 500,000 farmers in the state.
15. Sugar production in India is expected to grow 23 per cent to reach 25 million MT in sugar year 20183.
16. Cotton output in India is expected to increase by 9 per cent in 2017-18 to 37.7 million bales.
17. In December 2017, India and Colombia signed a Memorandum of Understanding (MoU) for cooperation in the fields of agriculture and fisheries.

Initiatives Being Taken by the Government for the Improvement of Agriculture

1. The Government of India is going to provide Rs 2,000 crore (US\$ 306.29 million) for computerisation of Primary Agricultural Credit Society (PACS) to ensure cooperatives are benefitted through digital technology.
2. Around 100 million Soil Health Cards (SHCs) have been distributed in the country during 2015-17 and a soil health mobile app has been launched to help Indian farmers.
3. With an aim to boost innovation and entrepreneurship in agriculture, the Government of India is introducing a new AGRI-UDAAN programme to mentor start-ups and to enable them to connect with potential investors.
4. The Government of India has launched the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) with an investment of Rs 50,000 crore (US\$ 7.7 billion) aimed at development of irrigation sources for providing a permanent solution from drought.
5. The Government of India plans to triple the capacity of food processing sector in India from the current 10 per cent of agriculture produce and has also committed Rs 6,000 crore (US\$ 936.38 billion) as investments for mega food parks in the country, as a part of the Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters (SAMPADA).
6. The Government of India has allowed 100 per cent FDI in marketing of food products and in food product e-commerce under the automatic route.

7. A new platform for selling agricultural produce named e-RaKam has been launched by the Government of India and will operate as a joint initiative of Metal Scrap Trade Corporation Limited and Central Railside Warehouse Company Limited (CRWC).
8. According to the Agriculture Ministry, 50,000 hectares of area is available for coconut cultivation in Bihar, the Coconut Development Board plans to equip the farmers thus making India the world leader in production, productivity, processing for value addition and export of coconut.
(Source- IBEF, www.ibef.org)

Objectives of the Study

1. Getting a sufficient feedback about the Indian agricultue
2. Being familiar with the contemporary agricultural traits
3. Producing the picture of the contemporary agricultural traits in India
4. Presenting an economic analysis and interpretation of the agricultural reforms as a result of the green revolution

Review of Literature

Al Jazeera " Drought fears loom in India as monsoon stalls." , 5 August 2012. India announced major reforms in organised retail. These reforms would include logistics and retail of agricultural produce. The announcement led to major political controversy. The reforms were placed on hold by the government in December 2011. In the summer of 2012, the subsidised electricity for pumping, which has caused an alarming drop in aquifer levels, put additional strain on the country's electrical grid due to a 19% drop in monsoon rains and may have contributed to a blackout across much of the country. In response the state of Bihar offered farmers over \$100 million in subsidised diesel to operate their pumps.

The Indian Express "PM Modi: Target to double farmers' income by 2022" , 28 February 2016, Narendra Modi announced to double farmer's income by 2022.

Finance Ministry, Ministry of Agriculture (Latest update: January, 2018), Agriculture of India-

1. There are 2 major agricultural seasons in India: Kharif and Rabi
2. Kharif season lasts from April to September (summer); rice (paddy) is the season's main crop
3. Rabi season lasts from October to March (winter); wheat is the season's main crop
4. According to the Ministry of Agriculture, total food grain production in the country in May 2017, stood at around 273.38 million tonnes.
5. India imported 2.7 million tonnes of wheat in FY17 (till January 16, 2017) and an additional 1.2 million tonnes are to be imported by February 2017
6. In March 2017, of 64.5 million hectares of agriculture land, the government insured 19 million hectares during the rabi season, to benefit 16.4 million farmers, under the Pradhan Mantri Fasal Bima Yojana (PMFBY) programme. The

total amount for insurance for rabi crops is US\$ 10.16 billion.

A.L. Srivastava (2.2.1918).Contemporary India's increasing physical prosperity and cultural dynamism—despite continued domestic challenges and economic inequality—are seen in its well-developed infrastructure and a highly diversified industrial base, in its pool of scientific and engineering personnel (one of the largest in the world), in the pace of its agricultural expansion, and in its rich and vibrant cultural exports of music, literature, and cinema.

Hypothesis Formed for the Study

1. The Green Revolution is evident in India through the various agricultural reforms
2. Traditional means of farming have been replaced by the modern ones
3. The contemporary agricultural trends mirror a positive change and sustainable development
4. The agricultural traits are subject to the economic analysis and interpretation
5. Finance Ministry, Ministry of Agriculture is enthusiastic about the future of the Indian agriculture

Research Methodology

Based on the report of Finance Ministry, Ministry of Agriculture and designed with the specific purpose to ascertain, be known to and to produce an economic perspective of the effect of the green revolution on the Indian villages with agrarian societies in majority and with parochialization at the root, the paper is a semi-empirical study based on an unorganized and personal observation made casually by the investigator as well as on the secondary data supplied by the various journals through the research papers and internet sites. The paper still maintains the scientific spirit through the overview of literature, objectives, hypotheses, collection, classification, analysis and economic interpretation of the subject. At the root lies the casual non participant observation of the Indian rural agrarian society where there exist superstitions, and where through the various governmental schemes and plans meant for the agricultural reforms and upliftment of the villages and the people.

Economic Interpretation of the Study

The paper is relevant and significant in terms of Economic interpretation. The economy of India is based on agriculture as India is said to be a rural country where more than half of its population lives in villages. The Indian economy reflects the traces of fluctuation. The government has a serious concern for the agricultural and rural upliftment and sustainable development. For it, through the five year plans attempt has been there to bring about agricultural reforms. Providing special grants, loans and other facilities for the agricultural purposes are some of the things that reveal the picture of both the replacement of the traditional farming by the modern one and of the contemporary agricultural traits that seem to be transforming the rural India tremendously and incredibly. The picture produced by the investigator is enthusiastic and grounded in his faith that the contemporary agricultural traits are meant for the economic development.

Conclusion

India has been experiencing the increase in the production of food grains particularly after the introduction of new agricultural strategy (i.e., Green Revolution) in agricultural practices. Annual growth rate of 2.08 per cent was recorded during 1970s. Annual growth rate of 3.5 per cent in food grains in 1980s is the hallmark of the green revolution that enabled India to become self sufficient in food grains and even a marginal exporter. The decade of 1990s could not maintain this pace and annual growth rate has fallen to 1.7 per cent which is just about equal to annual population growth. Total production of food grains has increased from 176.39 million tonnes in 1990-91 to 233.9 million tonnes in 2008-09.

In the post-Green Revolution period, application of new agricultural strategy, research and technology was very much restricted in the production of food grains, i.e. only wheat and rice. But under the liberalisation wave, with the growing demand for agricultural exports, many new areas of agricultural operations have become favourable and lucrative. In the agriculturally backward areas, having no irrigation system, dry land farming has been initiated. The other activities like horticulture, floriculture, animal husbandry, fishery etc. have been encouraged. Application of modern improved techniques in these areas has resulted in the development of many backward areas which were previously subjected to wide spread poverty.

Green revolution and increasing mechanization of agriculture have resulted fall in employment opportunities, resulting in a serious problem in the rural areas. Although many special employment programmes have been introduced to serve as a security net but increasing potentiality of the agricultural sector as emerged from the liberalisation wave should be exploited properly. The growing trend in agricultural exports, increasing demand for horticultural and animal products in the export market has created ample opportunities and scope for employment of huge number of population. This allied sector being labour intensive can provide a lasting solution to the rural unemployment problem of the country. To conclude: Despite much efforts and planned reforms, India still has a low productivity, for which the following factors are responsible:

1. The average size of land holdings is very small and is subject to fragmentation due to land ceiling acts, and in some cases, family disputes. Such small holdings are often over-manned, resulting

in disguised unemployment and low productivity of labour.

2. Adoption of modern agricultural practices and use of technology is inadequate, hampered by ignorance of such practices, high costs and impracticality in the case of small land holdings.
3. Overregulation of agriculture has increased costs, price risks and uncertainty.
4. Government intervenes in labour, land, and credit markets. India has inadequate infrastructure and services.
5. Illiteracy, general socio-economic backwardness, slow progress in implementing land reforms and inadequate or inefficient finance and marketing services for farm produce.
6. Inconsistent government policy.
7. Irrigation facilities are inadequate

In a word, India is expected to achieve the ambitious goal of doubling farm income by 2022. The agriculture sector in India is expected to generate better momentum in the next few years due to increased investments in agricultural infrastructure such as irrigation facilities, warehousing and cold storage. Furthermore, the growing use of genetically modified crops will likely improve the yield for Indian farmers. India is expected to be self-sufficient in pulses in the coming few years due to concerted efforts of scientists to get early-maturing varieties of pulses and the increase in minimum support price.

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