

PROSPERITY OF AGRICULTURE FOR RURAL DEVELOPMENT

By

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[Abstract: Rural development is an important sector in the underdeveloped and developing economy. It is process of integrating the results of multi functions to improve the standard of living of rural poor. Improving standard of living of poor refers to making them access to income earning assets, and employment. Agriculture being the main activity in rural economy its prosperity would make rural development process more faster. Of course, in India several efforts were made for rural development through five year plans, still agriculture sector has immense scope to develop and to contribute for the rural development. With this backdrop this paper attempts to review the agricultural development and rural development in India.]

Key Words: Agriculture; Rural development; Transformation; Market economy

Introduction

Rural India is real India is still holds good as large part of its economy is composed of rural sector. Rural economy is generally backward due to low returns to their resources, and the market failure in supporting rural economy. Rural development has been the priority sector in the five year plan efforts from the beginning. Among other several issues, rural development is linked very much to agriculture development as it is the main occupation of the rural people. Agriculture plays a vital role in the Indian economy as well as India's rural development. Around 70.0 per cent of the rural households depend on agriculture as their principal means of livelihood. Agriculture along with fisheries, animal enterprises and forestry accounts for one-third of the nation's Gross Domestic Product (GDP) and is its single largest contributor. Agricultural exports constitute a fifth of the total exports of the country, moreover, it provides food security to Indian huge population, in addition to the raw materials it supplies to Indian industries.

Agriculture and rural development need to go together as they are naturally integrated in the rural economy. These sectors, for their survival depend much on governments; both

contribute significantly to the market economy, but market supports them less. Therefore, there is a need to collective support from government and market to integrate both these sectors and thus, they integrate with the national economy. With this background, this paper attempts to analyse the Indian experience on government intervention and market failure to integrate agriculture and rural development and other related issues and challenges.

Objectives:

The main purpose of this paper is to highlight the importance of agriculture and rural development in Indian economy. The specific objectives are;

1. To analyse the status of rural development in Indian economy
2. To examine the role of agriculture in rural development and national economy
3. To evaluate the role of government and market in promoting agriculture for rural development

Methodology:

The paper is descriptive and analytical in nature. Critical evaluation of the efforts made through five year plans and their experiences followed by analysis of both agriculture and rural development in India with the help of secondary data, the paper attempts to advocate the need to integrate this two sectors and the need of both government and market support for their better contribution to national economy.

Status of Rural Development

Rural development is an important sector of Indian economy and it implies that improving standard of living of rural people. Improvement of standard of living results from providing income earning employment and access to basic assets like land. Most unskilled labour force in rural area has to depend on traditional activities which are by character low income earning. Modernizing such activities is hindered by low income only. Of course that problem can be filled by providing credit facility which again has not given expected results in case of India's rural development owing to various social and economic factors.

Rural development is a strategy package seeking to achieve enhanced rural production and productivity, greater social-economic equity, and aspiration, balance in social and economic development. The primary task is to mitigate the hunger of about 60.0 percent of the rural population, providing adequate and nutritious food. Rural development is a comprehensive term which essentially focuses on action for the development of areas that are lagging behind in the overall development of the village economy and development of the productive resources in each locality.

Rural India is still real India, in the sense that Indian economy, social, cultural and political strength and even economic are really shaped by its rural area. Agriculture and allied activities are the economic backbone of rural as well as national economy. Slow transformations are noticed in the last seventy years because of efforts made in Five Year plans. Starting from Community development programmes with National Extension Service as agency, later Green Revolution, Target group programmes with different strategy, White revolution, and the recent microfinance activities, and such other experiments have given different experience. Intervention of Non-governmental organisations accelerated the rural transformation making people more dynamic and more participatory with technological orientation. Rural development has traditionally centred on the exploitation of land-intensive natural resources such as agriculture and forestry. However, even now agriculture remains as main economic activity in rural area.

Role of Agriculture in Rural development

Agriculture is an important part of India's economy and at present it is among the top two farm producers in the world. This sector provides approximately about 17.0 percent to the total GDP and provides employment to over 60.0 percent of the population. Indian agriculture has registered impressive growth over last few decades. Agriculture is the only means of living for almost two-thirds of the population in India. The food grain production has increased from 51 million tonnes (MT) in 1950-51 to more than 270- 280MT in recent years. Some salient features of Indian agricultural scenario are it is the largest provider of livelihood in rural India, it contributes large share to India's GDP, it is still dependent primarily on the monsoons and growth in agricultural production has been stagnant for the past several years, and natural calamities created shortages in supply of food grains.

Agriculture plays a vital role in Indian economy few to be noted are, its share in National Income, largest employment providing sector, contribution to Capital formation, providing raw material to industries, market for industrial products, earner of foreign exchange significance for trade and transport, and source of revenue for the government.

Contribution to National Income

Agriculture is contributing a major share to national income since from the beginning of the five year Plans. In 1950-51, agriculture and allied activities contributed about 59.0 per cent of the total national income. Although the share of agriculture has been declining gradually with the growth of other sectors, the share still remains very high as compared to that of the developed countries. The share of agriculture has declined to 54.0 per cent in 1960-61, 48.0 per cent in 1970-71, 40.0 per cent in 1980-81 and then to around 18.0 per cent in the recent

years, whereas in U.K. and U.S.A. agriculture contributes only 3.0 per cent to the national income.

Source of Livelihood

In India, over two-thirds of the working population, mostly in rural area are engaged directly on agriculture and allied activities, depend for their livelihood. According to an estimate, still around 66.0 per cent of our working population is engaged in agriculture at present in comparison to that of 2 to 3 per cent in U.K. and U.S.A., 6.0 per cent in France and 7.0 per cent in Australia. Thus, the employment pattern of India is very much common to other under-developed countries of the world. Developed agriculture when compared to soon after independence, still is the major source of Livelihood for rural population.

Source of Food Supply

Agriculture is the only major source of food supply as it is providing regular supply of food to such a huge size of population, largest in the world. It has been estimated that about 60.0 per cent of household consumption is met by agricultural products. India is self-sufficient in food after almost 1980's, thanks to green revolution.

Role of Agriculture for Industrial Development:

Agriculture in India has been the major source of supply of raw materials to various important industries of our country. Cotton and Jute textiles, Sugar, Vanaspati, Edible oil, plantation industries (viz. tea, coffee, rubber) and aggro-based cottage industries are also regularly collecting their raw materials directly from agriculture.

About 50.0 per cent of income generated in the manufacturing sector comes from all these aggro-based industries in India. Moreover, agriculture can provide a market for industrial products as increase in the level of agricultural income may lead to expansion of market for industrial products.

Commercial Importance

Indian Agriculture is playing a very important role both in the internal and external trade of the country. Agricultural products like tea, coffee, sugar, tobacco, spices, cashew-nuts etc. are the main items of our exports and constitute about 50.0 per cent of our total exports. Besides manufactured jute, cotton textiles and sugar also contribute another 20.0 per cent of the total exports of the country. Thus nearly 70.0 per cent of India's exports are originated from agricultural sector. Further, agriculture is helping the country in earning precious foreign exchange to meet the required import bill of the country.

Source of Government Revenue

Agriculture is one of the major sources of revenue to both the Central and State Governments of the country. The Government is getting a substantial income from rising land revenue. Some other sectors like railway, roadways are also deriving a good part of their income from the movement of agricultural goods.

Overview of India's Agricultural Economy

In the early 1950s, half of India's GDP came from the agricultural sector. By 1995, that contribution was halved again to about 25 per cent. As would be expected of virtually all countries in the process of development, India's agricultural sector's share has declined consistently over time as seen in the table-1.

Table-1: Percentage Share of GDP in India over the years

Year	1951	1965	1976	2011-12	2012-13	2013-14	2014-15	2016-17	2023-24
Percentage share of GDP (at constant price)	52.2	43.6	37.4	18.9	18.7	18.6	17.6	17.32	17.8

Sources: Economic Survey of India, Various Years

Government Interventions

In the last five decades, the Government's objectives in agricultural policy and the instruments used to realize the objectives have changed from time to time, depending on both internal and external factors. Agricultural policies can be divided into supply side and demand side policies. The former include those relating to land reform and land use, development and diffusion of new technologies, public investment in irrigation and rural infrastructure and agricultural price supports. The demand side policies on the other hand, include state interventions in agricultural markets as well as operation of public distribution systems. Such policies also have macro effects in terms of their impact on government budgets.

Macro level policies include policies to strengthen agricultural and non-agricultural sector linkages and industrial policies that affect input supplies to agriculture and the supply of agricultural materials. During the pre-green revolution period, from independence to 1964-1965, the agricultural sector grew at annual average of 2.7 per cent. This period saw a major policy thrust towards land reform and the development of irrigation. With the green revolution period from the mid-1960s to 1991, the agricultural sector grew at 3.2 per cent during 1965-1966 to 1975-1976, and at 3.1 per cent during 1976-1977 to 1991-1992.

The policy package for this period was substantial and consisted of:

- a) Introduction of high-yielding varieties of wheat and rice by strengthening agricultural research and extension services,
- b) Measures to increase the supply of agricultural inputs such as chemical fertilizers and pesticides,
- c) Expansion of major and minor irrigation facilities,
- d) Announcement of minimum support prices for major crops, government procurement of cereals for building buffer stocks and to meet public distribution needs, and
- e) Provision of agricultural credit on a priority basis.
- f) This period also witnessed a number of market intervention measures by the Central and State Governments. The promotional measures relate to the development and regulation of primary markets in the nature of physical and institutional infrastructure at the first contact point for farmers to sell their surplus products. Crops, Production, Productivity, Inputs and Surpluses

Production performances

As per the estimates for 2011-12, total food grains production is estimated at a record level of 250.42 million tonnes which is 5.64 million tonnes higher than that of the previous year production. Production of rice is estimated at 102.75 million tonnes, Wheat is 88.31 million tonnes, coarse cereals 42.08 million tonnes and pulses 17.28 million tonnes. Oil seeds production during 2011-12 was 30.53 million tonnes, sugarcane production was 347.87 million tonnes and cotton production was 34.09 million bales (of 170 kg. each). Jute production was 10.95 million bales (of 180 kg each). Despite inconsistent climatic factors in some parts of the country, there has been a record production, surpassing the targeted production of 245 million tonnes of food grains by more than 5 million tonnes during 2011-12. Growth in the production of agricultural crops depends upon acreage and yield. Given the limitations in the expansion of acreage, the main source of long-term output growth is improvement in yields. In the case of wheat, the growth in area and yield have been marginal during 2000-01 to 2010-11 suggesting that the yield levels have plateaued for this crop. This suggests the need for renewed research to boost production and productivity. All the major coarse cereals display a negative growth in area during both the periods except for maize, which recorded an annual growth rate of 2.68 per cent in the 2000-01 to 2010-11 periods. The production of maize has also increased by 7.12 percent in the latter Period. The

biggest increase in the growth rates of yields in the two periods, however, is in Groundnut and Cotton. Cotton has experienced significant changes with the introduction of Bt. cotton in 2002. By 2011-12, almost 90.0 percent of cotton area is covered under Bt. cotton, production has more than doubled (compared to 2002-03), yields have gone up by almost 70.0 percent, and export potential for more than Rs 10,000 crore worth of raw cotton per year has been created.

During 2017-18, food grain production was a record 284.83 million tonnes. In 2018-19, Government of India is targeting food grain production of 285.2 million tonnes. Milk production was 165.4 million tonnes during financial year 2017, while meat production was 7.4 million tonnes. As of September 2018, total area sown with Khariff crops in India reached 105.78 million hectares. Table-2, provides the area and production of major crops in the recent years. (Area in Million Hectares, Production in Million tonne, Yield Kg/Hectare)

Table-2: Area and Production performances of major crops in India

Commodity	Variables	2029-20	2020-21	2021-22	2022-23	2023-24
Food grains	Area	127.0	129.8	130.2	132.2	132.1
	Production	297.5	310.7	315.6	329.7	332.3
	Yeild	2343	2394	2425	2494	2515
Sugarcane	Area	4.6	4.9	5.2	5.9	5.7
	Production	370.5	405.4	439.4	490.5	453.2
	Yeild	80	84	85	83	79
Cotton	Area	13.5	13.3	12.4	12.9	12.7
	Production	36.1	35.2	31.1	33.7	32.5
	Yeild	455	451	428	443	436
Tea	Area	0.6	0.6	0.6	0.6	0.6
	Production	1.4	1.3	1.3	1.4	1.3
	Yeild	2138	2016	2112	2219	2042
Cofee	Area	0.4	0.4	0.5	0.5	0.5
	Production	0.3	0.3	0.3	0.4	0.4
	Yeild	713	718	725	734	780

Source: ES & E Division, Department of Agriculture and Farmers Welfare

Note: Cotton production in million Bales of 170 Kg each; Yield: Kg/Ha

India is the second largest fruit producer in the world. Production of horticulture crops is estimated at record 314.7 million tonnes (mt) in 2018-19 as per third advance estimates. Total

horticulture production in India during 2024-25 is estimated to be 369.06 million tonnes (third advance estimate). This is a significant increase from previous year, with fruit production at 114.51 million tonnes and vegetable production at 219.67 million tonnes.

Total agricultural exports from India grew at a CAGR of 16.45 per cent during 2010-18 to reach US\$ 38.21 billion in 2017-18. In 2018-19 agriculture exports were US\$ 38.54 billion. India is also the largest producer, consumer and exporter of Spices and Spice products. Spice exports from India reached US\$ 3.1 billion in 2017-18. Tea exports from India reached a 36 year high of 240.68 million kg in 2017 while Coffee exports reached record 395,000 tonnes in 2017-18. Food & Grocery retail market in India was worth US\$ 380 billion in 2017. Gross Value Added by agriculture, forestry and fishing is estimated at Rs 18.53 trillion (US\$ 271.00 billion) in 2017-18. The Gross Value Added (GVA) for India's agriculture and allied sectors grew by 3.8 percent, following a strong rebound in both food grains and horticulture output during 2024-25.

The Indian food industry is poised for huge growth, increasing its contribution to world food trade every year due to its immense potential for value addition, particularly within the food processing industry. The Indian food and grocery market is the world's sixth largest, with retail contributing 70.0 per cent of the sales. The Indian food processing industry accounts for 32.0 per cent of the country's total food market, one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth. It contributes around 8.80 and 8.39 per cent of Gross Value Added (GVA) in Manufacturing and Agriculture respectively, 13.0 per cent of India's exports and 6.0 per cent of total industrial investment.

According to the Department for Promotion of Industry and Internal Trade (DPIIT), the Indian food processing industry has cumulatively attracted Foreign Direct Investment (FDI) equity inflow of about US\$ 9.08 billion between April 2000 and March 2019. Some major investments and developments in agriculture are;

- Investments worth Rs 8,500 crore (US\$ 1.19 billion) have been announced in India for ethanol production.
- The first mega food park in Rajasthan was inaugurated in March 2018.
- Agree-food start-ups in India received funding of US\$ 1.66 billion between 2013-17. During the period of 2017 to 2022, agree-food startups, in India, received significant and rapidly increasing funding, with investments more than doubling in the final year. The total

investment in Indian agree-food tech startups for the fiscal year 2021-22 alone reached \$4.6 billion.

- In 2017, agriculture sector in India witnessed 18 mergers and acquisitions (M&A) deals worth US\$ 251 million. Indian agree-tech companies are projected to receive investments worth US\$ 30-35 billion by 2025, indicating strong investor interest in the sector.

Government Initiatives

Government has been continued to assist Indian agriculture promotions. Some of the recent major government initiatives in the sector are;

- Prime Minister of India, launched the Pradhan Mantri Kisan Samman Nidhi Yojana (PM-Kisan) and transferred Rs 2,021 crore (US\$ 284.48 million) to the bank accounts of more than 10 million beneficiaries on February 24, 2019.
- The Government of India has come out with the Transport and Marketing Assistance (TMA) scheme to provide financial assistance for transport and marketing of agriculture products in order to boost agriculture exports.
- The Agriculture Export Policy, 2018 was approved by Government of India in December 2018. The new policy aims to increase India's agricultural exports to US\$ 60 billion by 2022 and US\$ 100 billion in the next few years with a stable trade policy regime.
- In September 2018, the Government of India announced Rs 15,053 crore (US\$ 2.25 billion) procurement policy named 'Pradhan Mantri Annadata Aay SanraksHan Abhiyan' (PM-AASHA), under which states can decide the compensation scheme and can also partner with private agencies to ensure fair prices for farmers in the country.
- In September 2018, the Cabinet Committee on Economic Affairs (CCEA) approved a Rs 5,500 crore (US\$ 820.41 million) assistance package for the sugar industry in India.
- The Government of India is going to provide Rs 2,000 crore (US\$ 306.29 million) for computerization of Primary Agricultural Credit Society (PACS) to ensure cooperatives are benefited through digital technology.
- 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.
- 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.

- The Government of India planed to triple the capacity of food processing sector in India from the current 10.0 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..
- 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.

Achievements

- Sugar production in India has reached 27.35 million tonnes (MT) in 2018-19 sugar season, as of March 15 2019, according to the Indian Sugar Mills Association (ISMA).
- The Electronic National Agriculture Market (eNAM) was launched in April 2016 to create a unified national market for agricultural commodities by networking existing APMCs. Up to May 2018, 9.87 million farmers, 109,725 traders were registered on the e-NAM platform. More than 1000 mandis in India have been linked
- Agriculture storage capacity in India increased at 4.0 per cent CAGR between 2014-17 to reach 131.8 million metric tonnes.
- Coffee exports reached record 395,000 tonnes in 2017-18.
- Between 2014-18, 10,000 clusters were approved under the Paramparagat Krishi Vikas Yojana (PKVY).
- Between 2014-15 and 2017-18 (up to December 2017), capacity of 2.3 million metric tonnes was added in godowns while steel silos with a capacity of 625,000 were also created during the same period. 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.

Role of Market in promoting Agriculture

All said and done, major problem related to agriculture is price fluctuation and market constraints to raise the price of agricultural commodities to the level of its cost. This in fact controls the revenue realization by the farmers for their products. Moreover, more than farmers who grows agricultural product by investing, market intermediaries are earning more profit. In few crop cases farmers are not even covering their cost incurred or in some cases even they are not realising the interest (shadow price) on their land values. Seasonal and regional natures of agricultural commodities with perishable nature are taken advantage by the market intermediaries.

In such controlled market situation farmers are not able to get fair revenue for their marketed products. Of course, price policy measures are supporting farmers, but then market behaviour has to be made favourable for farmers to sustain in agriculture.

Conclusion

Change is happening in rural India but it has still a long way to go. Agriculture has benefited from improved farming techniques but the growth is not equitable. Land use is changing in rural areas as farmers are getting good value for their holdings. Measures and ways to be found to stop the migration to urban areas. Wholesale prices are primarily used to monitor the weekly price movements.

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.

The government of India targets to increase the average income of a farmer household at current prices to Rs 219,724 (US\$ 3,420.21) by 2022-23 from Rs 96,703 (US\$ 1,505.27) in 2015-16. Going forward, the adoption of food safety and quality assurance mechanisms such as Total Quality Management (TQM) Good Manufacturing Practices (GMP) and Good Hygienic Practices (GHP) by the food processing industry will offer several benefits. But, such benefits share should reach to the farmers and hence rural development in real can be achieved.

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