

Agriculture Growth in India: Issues and Challenges

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ABSTRACT

The country of India is well-known as the "Land of Villages" because large number of populations live in villages around 65 percent of the population. Their main profession is agriculture and agricultural-related activities. Agriculture employs approximately 70% of the Indian population, making it the largest and most vital sector of our economy. Agriculture is critical to the Indian economy. While its influence to GDP is now roughly two-thirds of what it was, it employs 43 percent of the Indian workforce. Furthermore, the forward and backward linkage effects of agricultural expansion have enhanced non-agriculture sector earnings. Large regions that had suffered from recurrent rainfall failures have gotten irrigation systems, and new crops have emerged to play an important role in the country's output and commerce. Rural indebtedness and the predatory tactics of village moneylenders are far less prevalent. While there have been farmer-friendly efforts, such as those to promote institutional credit to rural areas, improved access to inputs, fertiliser and electricity subsidies, minimum support prices, and so on, these have not been completely successful in protecting the interests of farmers in general, and small/marginal farmers in particular. Farmers on the margins and small farms have borne the brunt of the agricultural downturn. The most disturbing manifestation of this misery is the recent wave of farmer suicides in several locations. Accelerating agricultural output development must be viewed as critical to more inclusive growth. The expansion of some commercial crops offers tremendous potential for increasing agricultural commodity exports and hastening the development of agro-based enterprises.

Keywords: Agriculture development, Agriculture Work force, Major commercial crop, Agriculture Issues and challenges

INTRODUCTION

Every developing country's primary objective is to achieve high-income status. Agriculture has a crucial role in changing economies and attaining other important development goals such as guaranteeing food security and increasing nutrition in order to achieve the aim. As a result, agricultural transformation must become a reality in order to eradicate hunger and undernutrition while also increasing economic growth.

Almost every country began off impoverished, and only a few have progressed to a high-income level. Those who succeeded, on the other hand, began with agriculture and underwent an economic transition that boosted growth while reducing hunger and undernutrition.

Agricultural modernisation improves worker productivity, increases agricultural surplus to accumulate capital, and increases foreign exchange via exports, all of which help to set the ground for industrialisation. Modernization also aids humanitarian aims by increasing impoverished farmers'

earnings and production, decreasing food prices, and enhancing nutrition. Indeed, upgrading agriculture may boost human capital by better feeding the people and preventing long-term debilitating effects of hunger like child stunting. In general, a well-nourished youngster develops better, becomes more productive, and earns more money later in life than a starving child. Increased agricultural productivity and income increases consumers' ability to purchase manufactured goods and invest in agricultural modernization, creating a virtuous cycle that helps propel further economic transformation.

Excess labour moves from rural farm jobs to urban manufacturing jobs as agriculture becomes more productive. While this stage results in a lower agricultural contribution of GDP and labour force, the process of agricultural modernization is crucial for economic change, food security, and improved nutrition.

To make agricultural transformation a reality, two important areas must be addressed. First and foremost, current

technology must be made available. While both the private and public sectors can contribute to modern agricultural technologies, national governments must play a significant role in agricultural research and development (R&D). This is owing to the fact that it is difficult for a private company to completely reap the benefits of creating such technology. National agricultural research systems must collaborate with provincial agricultural research systems to develop new technologies that are appropriate for local conditions, and the state must have extension systems to disseminate these technologies.

The acceptance of contemporary technology is the next major issue for agricultural change, as farmers may not embrace such technologies even if they are available. Many technologies, such as high-yielding seeds, have strict water, input, and know-how requirements. As a result, governments must provide circumstances for farmers to acquire these inputs and sell their agricultural products, such as irrigation and enhanced market infrastructure. Governments will also need to invest in human capital in order to ensure that a skilled workforce is available to master new technology, manage logistics, and boost each value chain node.

Agriculture is the fundamental engine to restart the process of economic growth, which is a process of structural transformation. Hunger and malnutrition elimination are equally essential aims for agricultural modernisation and economic development. While only a few nations have yet to attain high-income status, all of them have the ability to do so, and it all begins with modernising agriculture.

REVIWE OF LETRATURE

Jahagirdar (2001) studied district wise growth of area production and productivity of important crops in Maharashtra. The study concluded that the growth rates of area, production and productivity of different crops indicated mixed behaviour in cereals, consistency in pulses and increasing trend in crops.

Ramaswamy and Selvaraj (2002) estimated the growth rates of area, production and yield of pulses, oilseeds and coarse cereals. They concluded that the productivity

increase of coarse cereals was not substantial as in case of superior cereals. Coarse cereals like jowar and bajra had recorded negative growth rate in respect of area for the period from 1970-71 to 1999-2000.

Marawar et al. (2003) studied the growth in area of important cereals, pulses and oilseeds in Vidarbha region and estimated the compound growth rate of area using exponential function for the period 1980-81 to 1998-99. The study concluded that the area under cereals was decreasing at the rate of 2.1 per cent per annum, while the area under pulses and oilseeds had increased at the rate of 3.45 and 5.57 per cent respectively.

Banafar et.al. (2004) revealed that the material at different stages of processing was simultaneously handled. The cost of processing was increased due to involvement of large number of labours. The reduced recovery and use of inefficient machines was also a problem of soybean processing industry. The high market price paid by the consumer was no incentive to the grower.

Varghese and Singh (2006) studied the problems and prospects of agro-processing industries in Bikaner district of Rajasthan. The study found that the production of raw material like pulses, oilseeds was not stable as a result of availability of raw material for processing was not ensured. The power fluctuations and irregular supply of water also constrained the development of processing industries.

Chatterjee and Giri(2010) studied on assessment of National Food Security Mission in India with special reference to West Bengal and found that in none of the NFSM 72 districts under pulses, actual production seemed to have surpassed the targeted production level up to 2008-

09. it is expected that the initial hurdle in the implementation of programmes will soon be removed and the programme will gain momentum eventually, provided the weather factor does not disturb the programmes.

OBJECTIVES

1. To study the condition of Indian Agriculture.

2. To know about the issues and challenges of Indian Agriculture.
3. To analyse the distribution of the workforce across economic sectors.
4. To know about the contribution percentage of Agriculture in different economic sectors.
5. To study the Agricultural production in major commercial crops.

RESEARCH METHODOLOGY

The research methodology and research design of the study is an important component of research. To analyze various objectives of the study, an appropriate methodology describing selection of study area, sampling design, sources of data collection and tools of analysis are important. This chapter presents the methodology adopted in the present study. The chapter is presented under the following heads:

Source of data

Types of Research: The study is a kind of quantitative research. It is also descriptive in nature.

Data Collection: The present analysis is based on the secondary data sourced from various government publication and websites such as Agricultural Statistics at a Glance, Ministry of Government of India, Pocket Book of Agricultural Statistics- Ministry of Agriculture. The data were collected for the period from 2009-10 to 2020-21 for the percentage of distribution of the workforce across economic sectors which shows the contribution percentage of Agriculture in different economic sectors and to study the Agricultural production in major commercial crops.

Hypothesis:

HO- There is no significant difference between Agricultural production in major commercial crops and contribution percentage of Agriculture in different economic

sectors.

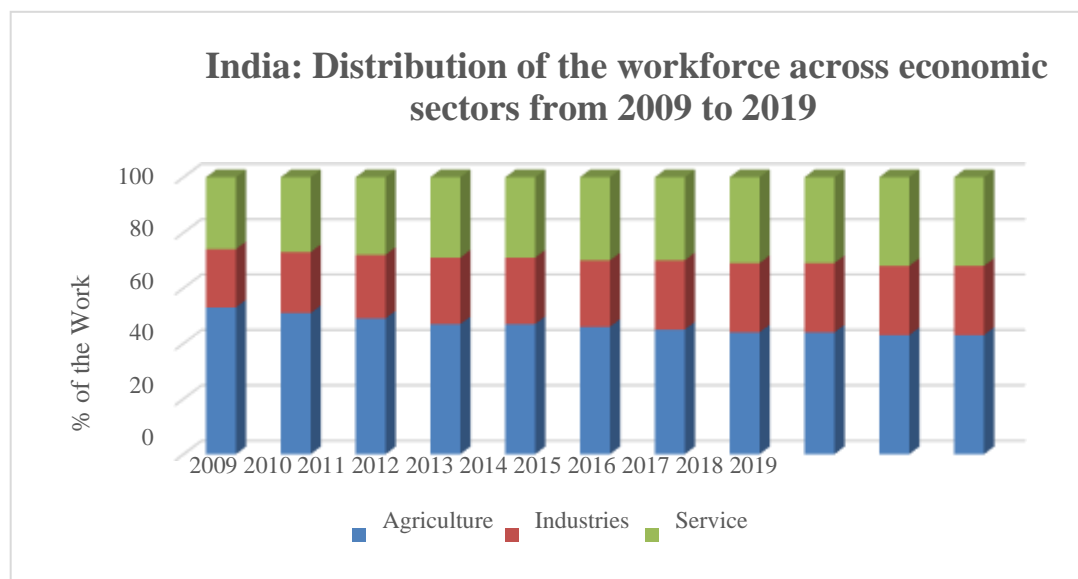
H1- There is significant difference between Agricultural production in major commercial crops and contribution percentage of Agriculture in different economic sectors.

Statistical Techniques Employed

The present study analyzes the per cent change year by year in Agricultural production in major commercial crops and contribution percentage of Agriculture in different economic sectors for the period from 2009-10 to 2020-21.

$\% \text{ change} = \frac{\text{current year} - \text{previous year}}{\text{previous year}} \times 100$

Table 1- Distribution of The Workforce Across Economic Sectors From 2009 to 2019



Source-statisa.com

In 2019, 42.6 percent of the workforce in India were employed in agriculture, while the other half was almost evenly distributed among the two other sectors, industry and services. While the share of Indians working in agriculture is declining, it is still the main sector of employment.

Table 2- Agricultural Production - Major Commercial Crops (Lakh Tonnes)

Year	Oilseeds				Coffee \$	Cotton @ (Lint)	Raw Jute & Mesta	Sugarcane	Tea \$	Tobacco
	Groundnut	Rapeseed & Mustard	Soyabean	Total Oilseeds						
2020-21	102	101	129	361	3538	354	96	3993	12803	-
2019-20	100	91	112	332	2980	361	99	3705	13608	8
2018-19	67	93	133	315	3195	280	98	4054	13500	7
2017-18	93	84	109	315	3160	328	100	3799	13251	10
2016-17	75	79	132	313	3120	326	110	3061	12505	8
2015-16	67	68	86	221	3480	300	105	3484	12331	8
2014-15	74	63	104	275	3270	348	111	3623	11972	9
2013-14	97	79	119	328	3045	359	117	3521	1208	7

									8	
2012-13	47	80	147	309	3182	342	109	3412	1135	7
2011-12	70	66	122	298	3140	352	114	3610	1095	8
2010-11	83	82	127	325	3020	330	106	3424	9667	9
2009-10	54	66	100	249	2896	240	118	2923	9912	7

Notes: 1. Data for 2020-21 are based on Fourth Advance Estimates.

2. Oilseed data comprises total for nine oilseeds out of the eleven in all.
3. Coffee and Tea data measured in Lakh kg.
4. Cotton data measured in Lakh bales of 170 kg each.
5. Raw jute and the Mesta data measured in Lakh bales of 180 kg each.

Source: Ministry of Agriculture & Farmers Welfare, Government of India, Coffee Board of India, Tea Board of India.

In Table 2 saying that total oilseed production was increasing but 2015-16 production was 221 lakh tones which was less than previous years and 2020-21 production was 361 lakh tones which is the highest Agricultural production - major commercial crops, whereas cotton 2017-18 production was 328 lakh tones which was less than previous years and 2019-2020 production was 361 lakh tones which is the highest Agricultural production - major commercial crops, while Sugarcane 2009-10 production was 2923 lakh tones which was less than previous years and 2018-2019 production was 4054 lakh tones which is the highest Agricultural production - major commercial crops and Tea 2010-11 production was 9667 lakh tones which was less than previous years and 2019-2020 production was 13608 lakh tones which is the highest Agricultural production - major commercial crops

Issues and Challenges in Indian Agriculture

- ❖ **Instability:** India's agriculture is seriously reliant on the monsoon. As a result, food grain output varies from year to year. A year of abundant crop production is frequently followed by a year of severe scarcity. This, in turn, causes variations in price, income, and employment.
- ❖ **Cropping Pattern:** Crops farmed in India are classified into two categories: food crops and non-food crops. Food grains, sugarcane, and other drinks are included in the former, whereas fibres and oilseeds are included in the latter. A decrease in agricultural productivity has occurred in recent years, owing mostly to a decrease in the output of non-food items. Furthermore, in the late 1990s, rabi production has overtaken kharif production. This points to a shift in agricultural production structure.
- ❖ **Land Ownership:** Although agricultural land ownership in India is reasonably evenly dispersed, there is considerable concentration of land ownership. The fact that land ownership in India changes often contributes to inequity in land distribution. It is said that significant tracts of land in India are held by a tiny group of wealthy farmers, landlords, and moneylenders, whereas the great majority of farmers possess very little land, if any at all.

- ❖ **Holding Subdivision and Fragmentation:** Due to population expansion and the breakdown of the joint family structure, agricultural land has been continuously subdivided into smaller and smaller portions. To satisfy their debts, small farmers are often obliged to sell a section of their land. Land is further subdivided as a result of this. Subdivision, in turn, leads to holdings fragmentation. Cultivation becomes uneconomic when the size of the property gets smaller and smaller. As a result, a significant amount of the land is not ploughed.
- ❖ **Land Tenure:** India's land tenure structure is also far from ideal. The majority of renters in the pre-independence period experienced tenancy instability. They might be kicked out at any moment. After Independence, however, several initiatives were made to ensure tenancy security.
- ❖ **Agricultural Labourer Circumstances:** The majority of agricultural labourers in India work in deplorable conditions. There's also the issue of surplus labour, commonly known as "hidden unemployment." As a result, wage rates are pushed below the subsistence level.
- ❖ **Inadequate use of manures and fertilisers:** Indian agriculture is substantially less productive than Japanese or Chinese agriculture due to insufficient use of manures such as cow dung or vegetable refuse, as well as artificial fertilisers.
- ❖ **Agricultural Marketing:** The difficulty in marketing Indian farmers' produce is one of the key causes of their poor income. The production per acre is poor due to the modest size and dispersed nature of agricultural estates. As a result, collecting these surpluses for the purpose of marketing offers a significant challenge.
- ❖ **Agricultural Credit:** The average Indian farmer is in debt

practically all of the time. The farmer is always in debt. Once a farmer slips into debt due to crop failure, low crop prices, or moneylender fraud, he will never be able to recover. In reality, 'ancestral debt' accounts for a significant portion of a farmer's obligations. As a result, he passes on his debt to his heirs along with his landed property.

Finding and Suggestions

We exposed that major crop output is growing compared to the previous year. This article covers all of the objectives, and H₀ is rejected while H₁ is approved. Aside from the growth trend, an investigation of agricultural output variability (instability) is critical for understanding the nature of food security and income stability. Broad variations in crop yield not only impact prices and cause dramatic oscillations, but also result in a wide range of farmers' discretionary income. The magnitudes of the oscillations are determined by the type of agricultural production technology, its weather sensitivity, the economic situation, the availability of material inputs, and a variety of other factors. The government is now attempting to educate farmers. Colleges and universities for agriculture have been established. They provide young farm students with a wide range of agricultural science expertise. Orientation classes for farmers are held at these institutions and universities. These courses teach students how to farm using current techniques and procedures. Farmers are also being educated about modern agricultural practises through Doordarshan and Aakashvani. They've created unique programmes for farmers, such as Krishl Darshan and Kheti Ki Baten.

CONCLUSION

Although its proportion of the economy has dropped over the last 50 years, India's agriculture industry remains vital to the Indian economy. In recent decades, India has achieved major strides in agricultural productivity, including the introduction of high-yield seed types, greater fertiliser use, and better water management systems. Land reforms, water management reforms, and food

distribution system reforms would boost production and enable India fulfil its rising food demand. India requires land reforms, with a focus on land consolidation and the identification of true farmers. The government is attempting to assist farmers in a variety of ways. It has established entities such as the Food Corporation of India to buy farm produce directly from farmers at Government rates, preventing middlemen from taking advantage of them. As a result, we can see that every effort is being made to grow our agricultural and increase its output. We must not linger here. We should continue to work to improve our agricultural sector.

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