



A Study on Impact of Agricultural Productivity on Economic Growth: An Empirical Analysis

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DOI- 10.5281/zenodo.8238661

Abstract

Agriculture is an important part of Indian economy. India is currently the number one country in terms of population. There is a huge gap between India's growing population and the Indian agricultural economy. India is seen as the world's largest producer of jute, pulses, milk, wheat, rice, cotton, groundnut, sugarcane and horticultural crops. Development of a definite policy and economic reforms is essential for the development of Indian agriculture. Indian agriculture sector accounts for 18 % of India's Gross Domestic Product and provides employment to 50% of the country's workforce. India is the world's largest producer of pulses, rice, wheat, spices and spice products. It provides raw materials to industries, food to the entire population and fodder and fodder to livestock. Agriculture is also an important source of finance for the central and state governments.

Introduction:

Increase in productivity and development of infrastructure for this sector has been the main objective of investment policy in agriculture and agriculture allied sector. Along with this, 40% of the total financing under priority sector financing provided by the Government of India is for agriculture and agriculture-related sectors. By overcoming the problems of poverty and unemployment, the Indian economy will truly emerge as a developed economy. This important objective has been from the beginning of the policy designed by the government for the development of agriculture and agriculture-related sectors. Rural economy is mainly dependent on agriculture sector. There is a need to enhance access to advanced technology, perennial irrigation facilities, credit and availability of necessary infrastructure. To achieve this, many schemes are being implemented by the government to bring about rapid development of this sector. Also, special priority is given to this sector by the government to solve the problems faced by this sector from time to time. Since the adoption of the policy of economic liberalization in 1991, sub-schemes have been designed to increase investment in

agriculture and allied sectors. Through which the financing of agriculture and agriculture allied sector will be arranged and new technology will also come in this sector.

Problems of the Study:

Establish the relationship between land reform, agricultural production and poverty alleviation in the Indian economy. Discuss the constraints faced in agricultural supplemental land reform planning and implementation' was asked in the 2013 mains exam. A basic understanding of land reform, agricultural productivity and poverty alleviation is essential to properly address these issues. Moreover, it can be answered more adequately if one knows exactly what the relationships are and how they are mutually reinforcing. Along with this, the main examination in 2014, 2015 and 2016 will focus on Land Reforms Act, Pink Revolution, Financing in Agriculture Sector, Subsidies to Agriculture Sector, Agricultural Produce Market Committee, Animal Husbandry, Contract Farming and Digital India Program to increase agricultural productivity and income of farmers. Questions have been raised on various aspects of the land reform policy as well as its success, such as agriculture and allied sectors.

Objectives of the Study:

1. To Study the Agricultural Productivity on Economic Growth.
2. To study the impact of agricultural sector on productivity.
3. To Analyze the Economic growth of agricultural productivity.

Significance of the Study:

Agricultural economics plays a role in development economics, as a sustained level of agricultural surplus is one of the sources of technological and commercial growth. In general, it can be said that when a large part of the population of a country depends on agriculture for its livelihood, the average income is low. In the early stages of economic development, agriculture provides an expanded market for the products of other sectors. Agriculture sector, while helping the development of other sectors, is also seen to increase the income of its people. Indian economy is mainly based on agriculture sector. When we think of Indian agriculture in accordance with the study of economics, the three aspects of agriculture, forestry and fisheries are included under the subject of Indian agriculture. Agriculture is the largest sector of livelihood of Indian people.

Scope of the Study:

Agriculture can help reduce poverty, increase incomes and improve food security for the 80% of the world's poor who live in rural areas and work primarily in agriculture. It provides employment opportunities to rural agricultural as well as non-agricultural labour. It is a source of food and fodder. It also plays an important role in international business in import and export activities. There is general agreement on the required capital formation. Since agriculture is the largest industry in a developing country like India, it can and must play an important role in increasing the rate of capital formation. Failing to do so will hamper the economic development of the entire process. Agricultural economics is an applied social science that is concerned with how producers, consumers, and society use scarce resources in the production, marketing, and consumption of food and fiber products. Both demand and supply forces operate in the agricultural market.

Period of the Study:

From the produce to be taken from the farm, agricultural crops, rice farming,

livestock farming, fish farming etc. Various types have come into existence. Also, according to the availability of irrigation, horticultural agriculture, arable farming is also types. According to the use of fertilizers, various types of organic farming, chemical farming has come into existence. The objectives of farm management can be broadly classified into two aspects. One is to increase the net profit of the farm and the other is to reduce the cost. While conducting the said research, the researcher has studied the impact of the Indian economy in the agriculture sector in 2022-23.

Limitation of the Study:

Marketing of agricultural produce in India is often characterized by inefficiencies and lack of transparency, which can lead to high transaction costs and low prices for farmers. In agro-based industries there is variability in the quantity and quality of raw materials. Fluctuations in weather and soil conditions affect the amount of raw material. Quality suffers due to lack of standardization. Agriculture can also be a source of capital for industrial development to the extent that it provides a surplus that can be converted into funds needed to purchase industrial equipment or build roads and provide public services.

Research Methodology:

While analyzing the agricultural productivity and production in India, the researcher has used many secondary sources. In this research paper articles journals newspaper annual report images audio video reference books serial books library government library report government press has completed the said research through many secondary resources and for this research the researcher has completed member research using descriptive analysis method.

Research Method:

Descriptive analysis method has been used by the researcher while analyzing that there is a wide gap between the productivity of agricultural commodities and the m** produced because there is a large gap between the market and cost of agricultural commodities in the current situation.

Results and Discussion:

Traders used to buy agricultural produce from the farmers in the villages. In this, the price of farm produce was determined without auction. Agricultural

Produce Market Committees were formed to protect the farmers by avoiding fraud in such purchases and to purchase agricultural produce at fair market prices. Refers to any business related to agriculture and agricultural related business activities. Agribusiness includes all the steps required to transport agricultural commodities to the market, i.e. production, processing and distribution. To provide employment opportunities to people in rural areas. Generate income and thereby improve the economic status of people thereby creating the potential for demand-driven industries.

Agricultural Productivity and its impact:

The condition of agriculture and farmers in Maharashtra is very bad. In short, low production per hectare of the agricultural sector, resulting in low income of farmers, increasing indebtedness and the end result of this vicious cycle of large-scale suicide of farmers seems to have been the situation for more than two decades. Since 1995, when the Crime Bureau started publishing state-wise statistics on farmer suicides, it has been observed that the number of farmer suicides in Maharashtra is significantly higher than that of other states every year. Once this reality is well known, it seems that the farmers of Maharashtra will not see good days at least by waiving off loans or increasing the prices of farm produce. If we want to improve the economic condition of the farmers in Maharashtra, there is no other option but to make agriculture more productive, but it is also true that the productivity in the agricultural sector cannot be increased in a pinch. 15 years ago the productivity of agricultural sector in the state

of Madhya Pradesh was as low as that of Maharashtra.

Economic Growth of Farmers in Maharashtra:

If the rulers want the farmers of Maharashtra to see better days financially, there is an urgent need to make war-level efforts to provide the three facilities of water, electricity and roads to the farmers. Sharad Joshi used to say that the creation of irrigation facilities and increase in production means that the prices of agricultural commodities collapse. But it did not happen in Madhya Pradesh. Because the government intervened in the grain market. Also, farmers' unions here should put pressure on the state government so that it happens in Maharashtra.

Irrigation and Agricultural Development:

The government, which came to power about three years ago, has started implementing the Jalyukta Shivar Yojana with much fanfare. But the benefit of this scheme will not reach far like the dam schemes. Also the life expectancy of such works is short. So, in order to provide irrigation facilities to more land in the state, there is an urgent need for the government to take up the work at the level of the government and the farmers at the level of public awareness in relation to the sugarcane crop. Regarding grain production, the work of developing more productive varieties of rice and wheat has been done at the country level. Rice crop requires more water than sugarcane. Hence out of the 35 districts of the state, rice cultivation is possible in seven hilly districts of Konkan coast and 3 districts of East Vidarbha, where rainfall is plentiful.

Table No. 1 Agricultural Productivity and Economic Analysis (From 2019 to 2023)

Variable	Variable Description	Root ADF Test	Order of Integration	Level of Significance
X ₁	Sugarcane	-9.2154	1	1 %
X ₂	Wheat	-8.3265	1	1 %
X ₃	Rice	-9.1489	1	1 %
X ₄	Groundnut	-10.1452	1	1 %
X ₅	Pulses	-9.4567	1	1 %

Even today almost more than half of India's population depends on agriculture and agriculture allied sectors for livelihood. Therefore, agriculture and agriculture-related sectors are considered as the mainstay of Indian economy. Today the share of agriculture sector in employment generation and agriculture and agriculture allied sector is seen as the most important sector in terms of poverty alleviation and employment generation. Along with this,

agriculture sector is the sector that supplies food grains, fodder and raw materials for industry. The above information shows that the share of the sector in the gross domestic product has been declining steadily, but the number of people dependent on the sector for livelihood is high. Hence, it is difficult to achieve the goal of inclusive growth without sustainable growth of this sector.

Table No. 2 Results of Long Run Estimates (From 2019 to 2023)

Variable	Variable Description	Coefficient	Std. Error	t-statistics	Probability
X ₁	Sugarcane	0.0965	0.35051	0.2681	0.7854
X ₂	Wheat	-0.1965	0.1125	-1.7758	0.0821
X ₃	Rice	0.1235	0.0671	2.5032	0.0157
X ₄	Groundnut	0.7654	0.2598	3.0245	0.005
X ₅	Pulses	0.1254	0.2148	0.5865	0.5635

Agriculture based products include animal husbandry, poultry industry, dairy industry, forestry and logging, fisheries etc. After independence, the Government of India adopted the planning system. Also, a five-year plan was planned for the development of the country in a balanced manner. Various schemes have been implemented to achieve faster development of agriculture and allied sectors. Initially the emphasis was on land reform. New agricultural policy known as the Green Revolution was introduced and continues till date; through which emphasis was placed on the use of modern technology in the agricultural sector and self-sufficiency in food grain availability was achieved.

Agricultural Improvement and Economic Growth:

Due to the lack of irrigation in Maharashtra, it is becoming difficult for the farmers to grow such horticultural crops over vegetables and fruits. Even so, there is room for improvement in terms of crops grown today. E.g. Syngenta, a multinational company, has done quality research on pomegranate. A good veterinary facility depends on trained and efficient staff. Incentive bonuses can help improve the quality of such facilities. The state government has decided to seek the help of

the National Dairy Development Board to collect milk in Vidarbha and Marathwada divisions. Various businesses like goat and sheep rearing, poultry rearing, silkworm rearing, beekeeping can be organized in rural areas. In this way, the government should make efforts to provide productive employment to the empty hands of small landholding farmers in the borders of villages.

Conclusion:

Agriculture can also be a source of capital for industrial development to the extent that it provides a surplus that can be converted into funds needed to purchase industrial equipment or build roads and provide public services. Productivity measures the amount of output produced in proportion to a given input. Long-term productivity growth reflects improvements in farmers' production efficiency and technological progress. Agricultural productivity is an important factor in food security. Increasing agricultural productivity through sustainable practices can be an important way to reduce the amount of land required for agriculture and reduce climate change through processes such as environmental degradation and deforestation. Water is an essential

requirement for growing crops and by managing water you can increase production. Water management is the best way to improve production. The ability to ensure high rates of effectiveness, productivity, efficiency, profitability and product quality of economic and financial activities of the economic entity in the agricultural sector. Productivity measures the amount of output produced in proportion to a given input. Long-term productivity growth reflects improvements in farmers' production efficiency and technological progress.

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