

The Role of Agriculture in Economic Development: An Indian Perspective

Rameen Devi*

Research Scholar, Department of Economics, Kurukshetra University, Kurukshetra, Haryana

*Corresponding Author

Rameen Devi

Email: rameenpillania@gmail.com

Abstract: This study examines the potential role that primary sector activity can play in long term economic growth. It provides an overview of conceptual arguments and empirical evidence on contribution of agriculture sector to economic growth, sector's linkages with the wider economy, role it plays in economic transformation in India which is a developing country. This paper concentrates on the role and importance of agriculture sector in the Indian economy in terms of its share in national income, and providing employment, food and raw materials.

Keywords: Economic growth, Economic transformation, Indian economy.

INTRODUCTION

Agriculture, as a primary industry, plays a major role in the process of economic development of a country. But the contribution of the agriculture sector to the overall economy varies from country to country depending upon the level of economic development. In early stages of economic development, normally, agriculture is the major contributor to national income and it provides employment to a majority of people. At later stages of a fairly high level of economic progress, the importance of agriculture gradually declines. However, agriculture with its fundamental importance makes contribution throughout the unending process of economic development. At present, agriculture away from farming includes forestry, fishing, dairy, fruit cultivation, floriculture poultry, mushroom, and processing, marketing and distribution of crops and livestock products etc. are all acknowledged as part of current agriculture. Thus agriculture sector could be referred to as the production, processing, promotion and distribution of agricultural products. In this way the growth of agriculture and allied sectors is still a critical factor in the overall performance of the Indian economy. Agriculture is the main stone of economic system of a given country. In addition to providing food and raw material, agriculture also provides employment to 52 percent of country work force and is the single largest private sector occupation. Moreover, this sector supplies food, fodder, and raw materials for a very large segment of our economy. Hence, the growth of Indian agriculture can be considered a necessary condition for 'inclusive growth'. The total share of agriculture and allied sectors in terms of percentage of GDP is 13.9 percent during 2013-14 at 2004-05 prices. Agriculture sector constitute one fifth of the total export of the country. Agriculture sector can make a positive

contribution to growth; in the long term sustained economic development requires conditions that allow resources to shift from primary agricultural production to other sectors. Evidence from study shows that as economies grow primary agriculture's share in the national economy will decline.

Objective of Study

- To study role played by agriculture sector in process of economic development.
- To study about the importance of agriculture in structural transformation of Indian economy.

LITERATURE REVIEW

Aremu [1] in this article examine the role of agriculture in economic growth and development of Nigeria from 1981 to 2012. the result of study indicate that agriculture play an important role in economic development of the nation. He also identify barrier in performance of agriculture sector.

Raza, Ali, and Mehboob [2] in their paper analysed the role of agriculture in economic development of Pakistan taking data from the year 1980 to 2010. The result of the study suggests that there is the significant role of agriculture sub-sector towards the economic growth only forestry showed insignificant relationship with GDP.

Thomas and Sheikh [3] in their article study about the growth performance of Indian agriculture export from 1991-92 to 2009-10. After using the compound annual growth rate and percentage share in total exports of India as well as Gross Domestic Product they conclude that agriculture export had been

occupying the place of pride in the national export. Even though, there is an increase in the absolute quantity of agriculture export but there is consistent decline in the percentage share of agriculture products in total export.

Olajide *et al*[4] in their article analyses the relationship between agriculture resource and economic growth in Nigeria. The empirical result indicates a positive cause and effect relationship between gross domestic product and agriculture output in Nigeria.

Chebbi and Lachaal [5] in their study examine the agriculture sector role into economic growth and interactions with other sectors of the economy. The empirical result show that in the long run all economic sectors tend to move together. But, in the short time period, agriculture sector seems to have a limited role in the growth of the other sector.

Winters and Stamoulis [6] in their study identifying the role of financial surplus of agriculture has been a central factor for economic development. They examine the role of the agriculture resource surplus for industrial development, and industrialisation in history and theory. They prove that prices indeed play an important role in transferring a surplus from agriculture to benefit of the rest of the economy.

Kao [7] main objective of this paper is to examine the factor contribution effect of the agriculture to Taiwan economic development in the post war period. He discussed about two types of factor contribution which are capital and labour contribution to the process of growth. He also discussed how agriculture export expanded despite a rapid population growth and added foreign exchange earnings for development of the country.

Johnston and Mellor [8] in this paper study about interrelationships between agriculture and industrial development and to analyze the nature of agriculture's role in the process of economic growth and found highly relevant.

ROLE AND FUNCTIONS OF AGRICULTURE

Supply of food grains and fodder:

Agriculture sector is important for many reasons. Agriculture primarily provides adequate food and nutrition supplies to the fast growing population. Agriculture sector provide fodder for home animals. Cow gives milk to a person which is a form of protective food. Moreover, domestic animals also meet people's food requirements.

Supply raw material

The agriculture has to supply the raw materials such as cotton and jute fabric, sugarcane, tobacco, coffee as well as tea for growing manufacturing industries. Moreover, many other industries such as processing of fruits as well as vegetables and sugar, vanaspati industry get their raw material largely from agriculture. If agriculture sector in a country fails to supply adequate quantity of raw material, the gap is to be filled up with imported raw material. Imported raw material is most likely to cost more, leading to a higher price of final product with consequent adverse effect on the marketability of products.

Supply of surplus labour

In underdeveloped economies, the agriculture sector with surplus labour can supply manpower, as Arhus Lewis has put it, has to release the labour force for industrialisation. For such labour transferred to the industrial sector, agriculture should also provide food, clothing and other essentials goods. In the early stages of economic development, manpower for manufacturing sectors can be drawn easily from agriculture. Agriculture sector can even provide much labour at zero opportunity costs because a considerable part of the labour force in agriculture is redundant in the sense that its marginal productivity is zero. In agriculture where the amount of labour is limited, labour can be transferred to the industrial sector through higher productivity per man in the agriculture sector. On the other hand, in countries where the size of population is large and its rate of growth is also high, transformation of agriculture becomes operative to prevent overflow of population to the cities, in a futile search for employment.

Demands for industrial goods

The agriculture creates demand for more and new industrial goods. As agriculture development takes place, the per capita farm income well improve. Now the farmers would be in a position to buy more of modern agriculture inputs and consumers goods from the industrial sector. Further, with the development of processing, packing and distribution services in the agriculture sector, there is greater scope for marketing of agriculture products. The improved inputs enhancing productive efficiency in agriculture, leading to more of marketable surplus, can be exchanged for goods and services in the industrial sector.

Marketable surplus

The growth of agriculture sector contributes to marketable surplus. Many people engage in manufacturing, mining as well as other allied activity. As agriculture sector start development, production increases and this leads to development of marketable

surplus. This may be exported to other countries to earn foreign currency.

Significance in transport

Agriculture is the main support for railways which transport mass of agricultural produce from farm to mandies and factories. Internal trade is mostly take place in agriculture products. Besides, the finance of the government, also to the large extend, transport depends upon the prosperity of agriculture sector.

Source of government income

In India, many state government get sizeable revenue from agriculture sector. Land revenue, agriculture income tax, irrigation tax and some other types of taxes are being levied on agriculture by state governments. Moreover, the government earned revenue by way of excise duty and export duty on agricultural products. Raj committee on agriculture taxation has suggested imposition of taxation on agricultural income for raising revenue.

Source of saving

Development in agriculture may also increase savings of farmers for development of the economy. We see today, the rich farmers started saving particularly after green revolution. This surplus made by farmers may be invested further for development of agriculture sector.

INTERDEPENDENCE BETWEEN AGRICULTURE AND INDUSTRY

Production not only accelerates the growth of industries, but also brings also stability to the industrial sector. Thus, agriculture industry and is also helped simultaneously by industry in many ways. There is, thus, a continuous process of feedback in the economic system. Agriculture and industry, therefore, are not conflicting alternatives, but complementary one.

The agriculture sector contributes to industrial development by way of:

- Providing food to the growing industrial workers.
- Providing labour to the industry.
- Creating demand for industrial products.
- Providing raw material to industrial development of both large-scale as well as small-scale industries.
- Helping capital formation required for industrial development.

IMPORTANCE OF AGRICULTURE IN THE NATIONAL ECONOMY

Importance if agriculture in our economy can be judged through mainly through its contribution to national income, employment, trade and employment.

India is an agriculture based country, where 70 percent population is depending on agriculture. This forms the main source of income. The share of agriculture in the national income in India is more, hence, it is said that agriculture in India is a backbone of Indian economy.

Agriculture's Share of GDP

Agriculture is the most important source of national income for many developing countries. Direct contribution of agriculture in economic development of a country can be reflected through its contributions in total value added in the economy. Agriculture share of GDP in India was 29 percent in 1990 but in recent its share has come down. In 2013 agriculture contributed around 18 percent to GDP. Evidence shows that as economy grow share of agriculture in GDP have continued to decline over the year.

Table- 1: Agriculture, value added (% of GDP)

Year	Percentage Share of agriculture in GDP
1990	29
1995	26.3
2000	23
2005	19
2006	18
2009	18
2010	18.2
2011	18.4
2012	18
2013	18

Source: World Development indicators

Linkages Across the Economy

Agriculture continues to be a prime pulse of the Indian economy and is at core of the social-economic development of the country. Growth of the other sector and overall economy depends on the performance of agriculture to a great extend. Agriculture contribution to economic development has traditionally been undervalued, since it is measured using information about harvests and sale of raw material, mainly crops and livestock. As a result, the backward and forward linkages with agro industry, the services and the trade sectors and in general rest of economy, are undervalued. The value added generated by these linkages through the economy does not appear in the basic agriculture statistics of most countries. Agriculture is not only a source of livelihood and food security for large population of India but also has a great significance for low income, poor and vulnerable sections. Agriculture sector contribute in economic growth by providing food to all sector of economy and supplying raw material to other sector of the economy and absorbing input from other sector of the economy.

Share of Agriculture in Employment

Agriculture is the main stay of Indian economy. It is the occupation largest section of India's population. Agriculture sector is significant as it provides great employment opportunity in the construction of irrigation projects, drainage system and other such activities related to agriculture. With the quick growing population the occurrence of unemployment and disguised unemployment is increasing in backward countries day by day. It is only agriculture sector which provides more employment opportunity to the labour force. It is the key source of livelihood of people in rural areas. In this way, importance of agriculture sector emerges more and more.

Table- 2 Agriculture share in employment

Year	Percentage share of agriculture in employment
1994	61
2000	60
2005	56
2010	51
2012	47

Source- World Development Indicator

Agriculture employment is going downward from 61 percent in 1994 to 47 percent in 2012. It indicates that labour force is migrated in industry and other sector of the economy

Share of Agriculture in National Export

Nation's export trades depend largely on agriculture sector. India has emerged as a significant agriculture exporter in a few crops such as rice, cotton, oil meals, pepper, and sugar. As per the world trade organisation's trade statistics, the shares of India's agriculture exports and imports in world trade in 2013-14 were 2.69 percent and 1.31 percent respectively. Agriculture exports as a percentage of agricultural GDP have increased from 9.10 percent in 2008-09 to 14.05 percent in 2013-14. It demonstrates that export of agriculture product also continues to be important source of earning country foreign exchange. Thus agriculture makes an important contribution in foreign exchange earnings.

Table-3: Agriculture share in national export

Year	Share of Agriculture in national export
2008-09	2.1
2009-10	10.0
2010-11	9.7
2011-12	12.3
2012-13	13.7
2013-14(p)	13.4

Source- C.S.O

Table show that agriculture shares in nation export is increasing year by year. It is 2.1 percent in 2008-09, 9.7 percent in 2010-11 and increased at 13.4 percent in 2013-14.

Share of Agriculture in Capital Formation

Table-4: Share of agriculture sector in gross capital formation

Year	Agriculture share in capital formation
1990-91	18.4
1995-96	7.4
2000-01	10.2
2004-05	7.5
2008-09	8.3
2009-10	7.7

Note- All the figures are at 2004-05 prices

Source- C.S.O.

CONCLUSION AND POLICY IMPLICATIONS

This study covered a very broad topic in relatively few pages. The result of our analysis is that recent years have seen tremendous changes, in economic development of India in general, but for the agriculture sector in particular. This coincides with a renewed debate on the role of agriculture, whereby the realization of the important role of agriculture is not only reaffirmed, but also the importance of the linkages between agriculture and other sector of the economy. The Conclusion is quite clear: policy makers in India need to once again pay adequate attention in agriculture sector.

REFERENCE

1. Aremu YS; Role of Agriculture in economic Growth & Development: Nigeria perspective. MPRA Paper No-55536, 2014.
2. Raza SA, Ali Y, Mehboob F; Role of Agriculture in economic Growth of Pakistan. International Research Journal of finance and economics, 2012; 83:181-185.
3. Thomas S, Sheikh W; Growth and Composition of Indian Agricultural Exports during Reform Era. The Journal of Research in Commerce and management, 2012; 1(6):92-104.
4. Olajide OT, Akinlabi BH, Tijani AA; Agriculture Resource and Economic Growth in Nigeria. European scientific journal, 2012; 8(26):103-115.
5. Chebbi HE, Lachal L; Agriculture Sector and Economic Growth in Tunisia: Evidence from co-integration and error correction mechanism. Paper prepared for presentation at the I Mediterranean conference of agro-food social scientists, 2007.
6. Winters P, Stamoulis K; The Role of Agriculture in Economic Development: Visible and Invisible

Surplus transfers (Working paper No. 814). Retrieved from Department of Agricultural and Resource Economics Division of Agriculture and Natural Resources University of California at Berkeley, 1997.

7. Kao CHC; The Factor Contribution of Agriculture to Economic Development: A study of Taiwan. *Asian Survey*, 1965; 5(11):558-565.
8. Johnston BF, Mellor JW; The Role of Agriculture in economic development. *The American Economic Review*, 1961; 51(4):566-593.