

# Role of Agriculture in Economic Development in Karnataka –An Analysis

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## **Abstract:**

The role of agriculture in economic development can be traced since the time immemorial, but particularly in the eighteenth century in the writings of the Physiocrats in France. But the mercantilist had looked upon trade, particularly foreign trade and commerce, as the most important sector for initiating economic development. The Physiocrats argued that the non-agricultural sector was sterile, it means constant and unproductive. It does not generate any economic surplus or net product. Therefore, the agricultural sector plays the most strategic role in economic development. The rate of growth of non-agricultural sectors is limited compare to the growth of agricultural sector.

**Keywords:** National product, labour absorption, livelihood, population. Market, factor. Output, former

## **Introduction:**

Particularly the developing country like India must need the modernized and developed agriculture to strengthen the economy. Speedy growth of agriculture helps the process of economic growth in backward areas in many respects. Agricultural development means higher levels of production of food and other farm products, higher income and better standard of living for farm families.

The physiocrats' leader Francois Quesnay also opined that "only the agriculture can generate the surplus and size of the surplus was determined by the technique of farming". But capital is very important in agricultural development. The poor farmers with no agricultural capital, who only drew from the land by his labour, produce little value. Therefore, Quesnay gave the great importance to the accumulation of agricultural capital as a Pre-condition for the growth of agricultural output. He reached this fundamental conclusion that economic development in a country is not possible without agricultural growth. When the agriculture sector grows, the impact of its development is felt in other sectors of the economy and it extends the overall economic development. Thus, Joseph S. Davis opined that "Agriculture is the Foundation of Manufacture and Commerce".

Further, the value of agriculture by stating in the words of Bernard M. Baruch i.e., "the cities are but the branches of the tree of national life, the roots of which go deeply into the land, we all flourish with the farmer". Without the help of agriculture, it is very difficult to develop country's economy and maintain stability. The development of the agricultural sector is a sine-qua-non for the growth of the economy.

Agriculture plays very dominant role in terms of contribution to gross national product, labour absorption and provisions of livelihood to the population. Its share in the total output is well over 40% in the developing economies.

The level of national product is mainly depending on the agricultural output. The increase and decrease in the agricultural output directly impacts on the level of national product. Looking back to Indian experiences, it can be seen that the fluctuations in agricultural production have led to similar fluctuations in the level of income.

Well known economists and several international organizations have sufficiently attempted to categorize the contributions of agriculture. According to Simon Kuznets, three important works done by the agriculture to assist the economic development. They are

- a. Agriculture makes a product contribution by increasing the supply of food.
- b. Agriculture makes a market contribution through its trade contact with other sectors.
- c. Agriculture makes a factor contribution by releasing labour force for non-agricultural sector.

According to W.A. Lewis: He has undertaken the old theoretical interest in the role of agriculture in economic development. In his famous article entitled “Economic Development with Unlimited Supply of Labour”, he argued that there is unlimited supply of labour in the agriculture sector. These workers are perhaps maintained in the agriculture sector at near subsistence level and participate in many types of seemingly useful agricultural operations. In reality however they are in a state of disguised unemployment, as their original productivity is zero or negligible due to the pressure of population on agriculture. Hence, Lewis argued that it is possible to achieve the “Economic development through the transfer of surplus labour from agricultural sector to industrial sector”. The supply of labour to industry in an under developed economy is perfectly elastic at a given wage rate. The transfer of surplus labour from the rural sector cannot reduce agricultural output because their contribution to the marginal product in agriculture is almost zero. If the surplus labour transferred to industry these labourers begin to contribute positively to the marginal product in industry, which is greater than the wage rate required to effect the transfer from agriculture to industry. In this way, the transfer of surplus labour from the rural sector to the industry will increase national output.

John Mellor indicates that “a change in the domestic terms of trade towards agriculture has also effects on the economic development, these are three:

- a. If savings in the agriculture sector are lower than in the non-farm sector, a transfer of resources from the latter to the farmer because of a change in the domestic terms of trade between the two sector would slow down the rate of capital formation. However, it is possible that the rise in the agriculture prices, as compared with industrial prices would encourage the entrepreneurial class to become interested in the modernization of the agriculture, which would lead to surplus production.
- b. A relative rise in the domestic agricultural prices will no doubt adversely affect the exports of primary products which contribute the bulk of exports of the developing countries. If this happens, it will reduce the country’s net foreign exchange earnings and have adverse repercussions on the development of the economy as a whole.
- c. Higher food prices will discourage the migration of farm workers to the urban sector. Higher food prices will also rise the level of normal wages in industry. This will put a downward pressure on profit and high wages will retard the process of economic transformation.

Johnston Bruce and Mellor further classified the contribution of agriculture for Economic development under five heads:

- a. Economic development is characterized by a substantial increase in the demand for agricultural products, and failure to expand food supplies in pace with the growth of demand can seriously slow down economic growth.
- b. Expansion of exports of agricultural products may be one of the most promising means of increasing income and foreign exchange earnings, particularly in the earlier stages of development.
- c. The labour force for manufacturing and other expanding sectors of the economy must be drawn mainly from agriculture.
- d. Agriculture, as the dominant sector of an underdeveloped economy, because of its more contribution is required for capital formation and industries expansion.
- e. Rising net cash income of the farmer's population i.e. agriculture is important as a stimulus to industrial expansion for development.

According to Kindle Berger following are the important contributions of the Agricultural sector to the economic development. Viz.,

- a. It can provide labour to industry.
- b. It can furnish demand for industrial output, it can provide savings for use in industry.
- c. It contributes taxes to the government.
- d. Agriculture earns foreign exchange through exports.
- e. It provides food for industrial workers.

Finally, Agriculture serves as a source of market, for industrial Products. The overall economic development is possible only when the agricultural sector is strengthened. However, if it is traditional, it cannot be expected to make a significant breakthrough in the process of economic development.

The following are the Kuznets classification of the contributions of agriculture to economic development in three groups, viz.,

### **1. Product-Contribution**

Contribution of the agriculture for increasing the production: By increasing the agricultural production we have various good effects on the growing economy of the country. The first and the foremost thing is the supply of food that agriculture makes available as basic necessity of life. The demand for food from the non-farm sector steadily increases and it is the increased farm production that meets this growing demand for food, failing which it adversely affects the economy as a whole. "If food supplies fail to expand automatically will lead to rise in the prices of food. It leads to pressure on wage rates with consequent adverse effects on industrial profits, investment and economic growth". As a consequence of this food imports, must be increased, at the expense of diverting scarce foreign exchanges resources from the import of the capital goods needed for industrialization". Thus food is basic requirement for all.

The role of agriculture is greatly noticed particularly in developing countries, as a means of surplus production. Surplus production means that the total food production exceeds the total food consumption of the farm population. The development of the country's economy largely depends upon this surplus. If higher the surplus, more will be the foreign exchange and smoother will be the development. "Therefore agricultural surplus becomes necessity for a total economic development".

Another role of agriculture is supply of raw materials to the growing industries. Supply of cheap raw materials is possible only by the agriculture, and also it is quite necessary for Agro-based industries and other major industries. In the initial stages, sugar, tea-plantation, cotton, jute, all these industries directly depend on agriculture. There are also some industries which are dependent on agriculture indirectly. “According to the U.N.O. estimation”, “Industries dependent on agricultural raw materials accounted for 51 percent of the value added and 64 percent of the employment in all manufacturing in the underdeveloped countries”. Therefore, agriculture plays very important role in the supply of raw materials and also in the growth of industries.

Finally, the agriculture provides better health for farm families by producing nutritious food. If the production is very low, it is the major cause for under-nutrition and low level of living. The higher proportion of production will be consumed by the farmers and therefore little will be the impact on the speed of economic growth. But better nutrition enables the farmer to improve his labour productivity. He can work for longer hours. And also he can spend more time for farm-bed preparation, applying pesticides, plant care, weeding, irrigation and other farm-works. If there is a shortage of nutrition food, it is impossible to reach a high rate of output. Disease and Lathergy are caused by deficiencies of protein and other essential nutrients. Further, Burk and Ezekiel state that our concern regarding the low level of food consumption and poor nutritional status of substantial number of people in the less developed countries is not simply humanitarian.

Poor nutrition and lack of food, affects the labour productivity and also their psychological attitude and social behaviour. By knowing all important qualities of the nutritious food, we came to conclude that nutritious food is quite necessary for farm-families for raising more agricultural output.

Agriculture increases the income and purchasing capacity of the farm families. By the increased income farmers can buy well equipment, machineries, etc., for their farms, and also they make permanent improvements on the farm. By improving the conditions or standardity of the farm, we will increase the production. This surplus production earns more foreign exchange, and various beneficial effects on the economy.

“Nicholls, while stating “the role of agriculture in economic development” says “the increased supply of agricultural commodities will help the developing country to increase the level of exports and to earn the much needed foreign exchange”.

Lastly, it promotes the status of farm families in rural areas. Commercialization of the agriculture will increase the productive capacity of the farmers and income of the farm-families. This increased income has considerable effect on the farmers’ living standard and the upgrading of his status in the rural society. All the above discussion about the agriculture showed us the importance of agriculture in economic development and we come to conclude that it is an outstanding factor that accelerates the process of economic development. For the economic growth an agricultural surplus must come into existence and must persist.

## **2. Its Market Contribution: Development of Trade**

Contribution of agriculture sector to the market or trade is very important aspect from the viewpoint of all-round development of the economy. If the agriculture is modernized, there will be steady increase in production and income, and as a result there will be great demand for industrial products by agriculturists. “the higher rural incomes enhance the market for the industrial goods”. Higher income leads to a greater and more concentrated rural purchasing power. It can bring an expanded and more diversified consumer demand.

In this connection, Mellor J.W. states that “A dynamic agricultural sector where incomes are growing is a great source of demand for the products of the non-agricultural sector. The development of agriculture has almost been associated with the farm inputs produced by the industrial sector”. For the development of agriculture and excess or over production, we need some inputs like fertilizers, pesticides etc., But from all these inputs only we can produce in industries, the production in these industries is greatly increased due to the demand generated by the agricultural sector. In addition, the demand arises in respect of products of the non-agricultural sector. This creates the demand for various types of consumer and capital goods. Greater demand for all these goods provides incentive for the development of non-agricultural sector. Thus the agricultural sector has a great capacity to change the marketing system of the economy.

### **3. Its Factor Contribution**

Factor contribution by the agriculture is also considered as a most important aspect in the development of country's economy. Agriculture sector supplies more labour force to the non-farm sectors. According to Kindleberger, “another important function of agricultural development is to provide workers to the industry”. In most of the underdeveloped countries agricultural sector has excess labour force. Therefore, it is a reservoir to the industrial sector. The redundant labour becomes an important source for industrial development. After their transformation into productive force, it is supposed that they would produce more output than in the agricultural sector. This kind of change is of great value to underdeveloped countries like India. Several economists like Lewis, Ranis and Fei, Jorgenson etc., stressed the significant role of labour contribution by the agricultural sector.

According to Lewis, “in underdeveloped countries, supply of labour is unlimited”. The marginal physical production of labour is negative or zero. If some of these labourers are taken out from the work, and transferred to other sectors, the total output is not coming down. Because M.P.P. of the surplus labour in agriculture is zero. So Lewis explains that the capitalist grows with an advantage of cheap supply of labour from the agricultural sector at a wage level equal to institutional wage prevailing in the subsistence sector. Therefore, according to Lewis, economic development is possible only when transferring of labour from agriculture sector to non-agriculture sector takes place. Thus according to Lewis, subsistence sector (agriculture) acts as a reservoir and stimulator to overall development of the economy.

Imposing taxes on the farm-families is another resource for capital formation. By imposing taxes on the agricultural sector we can increase the income of the government. It reduces the expenditure on consumer goods, but it is inevitable on the part of the policy makers. This type of policy was adopted by the Japanese Government during 1880 to 1920. Agricultural production during this period was considerably increased and this induced the government to impose heavy taxes on agriculture. As a result of taxation huge capital accumulation took place but the level of living of the farm-families did not increase much the above mentioned discussion highlights the factor contribution by the agricultural sector.

Simon Kuznets, states that, "If agriculture itself grows it makes a product contribution; if it trades with others, it renders a market contribution; if it transfers resources to other sectors, these resources being productive it makes a factor contribution". From the above discussion of all contributions made by the agricultural sector, we can conclude that agriculture plays most vital role in promoting the overall growth of an under developed economy.



**Conclusion:**

To sum up, in a developing economy like India, agriculture is the most important sector in terms of contribution to gross national product, labour absorption and provisions of livelihood to the population. Its share in the total output is well over to presence in the developing economies. Whatever may be the increase or decrease in the agricultural output, it will have a relative impact on the level of national product. The modern agricultural inputs are far more superior to the traditional inputs. Again, the superiority of the modern inputs lies in their innovations based on science and their constructive translation through practical application i.e., technology. In these days, science and technology are promising humanity more than ever before. Thus, one of the key features of the modern agriculture is that its current level of production and to an ever greater extent increments in production are based on a set of purchased inputs of a farm not found in traditional agriculture. broadly speaking, infrastructure for agricultural growth includes all Transportation means, Electricity supply, Irrigation facilities, Implements, processing, Storing and Grading facilities, Distributions centers for supply of the inputs, Expansion of education centers, agencies for plant and animal protection, disease and pest control organizations, financial institutions and various other allied kinds of servicing centers. Development of these various infrastructure facilities, along with the use of all kinds of inputs in the country not only strengthen the agricultural sector but also help in the overall development of the country's economy, including development of small and large scale industries. In other words, infrastructure facilities induce both agricultural and industrial development in the economy.

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