

A Study on Strong Rural Development Through Agriculture Infrastructure in Tamilnadu

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ABSTRACT

Agricultural infrastructure is the most essential input for the development of agriculture in Tamil Nadu as one third population of the state depends on agriculture sector directly or indirectly. Agriculture infrastructure includes agriculture inputs, irrigation agriculture credit position and agriculture marketing ect., is generally concerned and defined to a tragedy I has been for the agriculture sector in Tamil Nadu. While we celebrate he agricultural production in the country reaching an all time high, at the country is unable to store the excessive produce along with land, labour and capital the income emanating from agriculture is being directly linked to the quality of infrastructure. The agriculture infrastructure includes all of the basic services, facilities, equipment, and institutions needed for the economic and efficient functioning of the food and fiber markets. Infrastructure is basically supporting both physical and organizational structures needed for the operation of a society or enterprise, or the services and facilities necessary for an economy to function. Infrastructure has been one of the much neglected aspects of Indian agriculture.

1. INTRODUCTION

Having realized the importance of infrastructure to achieve faster rate of economic growth, the Government of India as well as the State Governments have ventured into making heavy investment in agricultural infrastructure especially from the First Five-Year Plan onwards. The major focus of infrastructural investment has been on irrigation, transportation, electric power, agricultural markets, etc and these not only contributed to the agricultural growth at the macro level but also to wide disparity between different regions in terms of agricultural growth. Since the responsibility of providing infrastructure is with the state which aims at rapid growth of agricultural production for attaining other kinds of developmental goals such as poverty alleviation, there exists a tendency among the decision-makers to invest heavily in those areas where there is a potential for fast agricultural growth. This is also supported by the financial resources available with the concerned governments. Agricultural sector is very importance of the livelihoods in nations so, infrastructure is contributed by economic development.

2. OBJECTIVE OF THE PRESENT STUDY

Keeping this in view, the present paper proposes to investigate into the role of infrastructure in accelerating agricultural development and especially to bring out strong rural development Through agriculture infrastructure in Tamil Nadu Economy. Following are the major objectives of the present study:

- To estimate the trends in major components of infrastructure for agricultural

- development in the country across major contribute states so as to understand the Tamil Nadu Economy.
- To analyse the level of development of various agriculture infrastructural indicators , Tamil Nadu economy.
- To provide broader policy on infrastructural development in Tamil Nadu state.

3. METHODOLOGY

The study is mainly focused on the secondary data at state level for all the information regarding agricultural development and major infrastructural variables Various collected by the journals, and government record on the sources various books collected in the paper. It has wide range of income and employment generating opportunities.

INFRASTRUCTURE INCREASES AGRICULTURAL PRODUCTION INCREASED

It should be noted that the infrastructure in the agricultural sector enhances the comparative advantages of that region in which the infrastructural investment is made. When the region gains comparative advantage in the agricultural activities, the net result is increase in the production and productivity of various agricultural goods and services in general. The increased level of production and productivity results in a shift in the supply curve upwards, which has its positive implications on the price factor depending on the nature of the elasticity of demand for the commodity under consideration.

INFRASTRUCTURE REDUCES COST OF PRODUCTION

Development of agricultural infrastructure in a particular region not only enhances the agricultural production and productivity but in many cases, leads to reduce the marginal cost of production. have proved that there exists a negative correlation between level of infrastructure investment and the marginal cost of production.

INFRASTRUCTURE INCREASES THE REGIONAL VALUE ADDED

An important benefit derived from the agricultural infrastructure is that it helps to increase the level of .value added. in the region. Increased level of agricultural infrastructure in a particular region would lead to extend investment in allied sectors which can produce high value added products. The increased level of capital formation in a region due to the availability of agricultural infrastructure leads to derived demand. for the investment in the industries that produce value added commodities. For example, increased banking or agricultural training facilities introduced in a particular region may attract new kind of investment in areas such as food processing, etc. This would increase the regional income and employment that will have its multiplier effect.

INFRASTRUCTURE AND THE SOCIAL BENEFITS

Provision of initial level of agricultural infrastructure or enhancement of the existing one may lead to a different kind of cropping pattern from the existing one that would generate some indirect positive benefits that may be called social benefits. These benefits are enjoyed not only by the regional economic activities but also by activities beyond the administrative and political boundaries of the region. For example, introduction of a new technology such as sprinkler

irrigation in a region may reduce the exploitation of groundwater in that region and this would make more amount of groundwater available for downstream farmers several miles away. This would probably save the marginal cost of digging bore-wells, preventing failure of wells, etc that would save considerable cost to the farmers downstream.

TABLE NO 1
STATE WISE PERCENTAGE OF IRRIGATED AREA TO THE TOTAL CROSS
CROPPED AREAS

STATE	2001-2002	2011-2012
Punjab	52.12	49.06
Tamil Nadu	35.78	44.79
Utter Pradesh	41.37	45.92
Andhra Pradesh	32.63	32.77
Haryana	43.91	45.36
West Bengal	22.06	21.04
Gujarat	24.06	27.05
Kerala	11.03	11.82
Karnataka	17.97	18.85
maharashtra	9.31	11.82
Bihar	31.92	35.74
Himachal Pradesh	10.06	11.09

Source: Indiatat.com

INFRASTRUCTURE AND THE ECONOMIES OF SCALE

Infrastructure may result in increased economies of scale that would increase the agricultural income. The economies of scale is realised when the cost of production of a particular firm declines due to external advantages. Provision of one particular infrastructure for a specific objective may result in satisfying multiple objectives thereby increasing the economies of scale in the production activities. For example, rural electrification for providing electricity for the agricultural sector or rural road network may attract small-scale industrial units that also consume electricity and road in the production process. The small-scale units in this case need not have to spend additional amount of expenditure on the infrastructure required for consumption of electricity (such as electricity posts, etc) or road since that kind of facility is readily available for immediate consumption. This adds to saving of costs, increasing the private benefits.

TABLE NO 2
PLAN EXPENDITURE –STATE SCHEMES

Details	2012-13	2013-14	2014-15
Agriculture and Allied Services	219641.32	27960.37	328974.10
Rural Development	45409022	453552.58	1241865.62
Irrigation and flood control	75483.34	86644.93	136535.28
Power	15160864	300556.20	273977.42
transport	205060.92	356163.71	370536.28

Source: State Planning Commission (2014-15) Chennai -600005.

Infrastructure and Accelerator Effects

It should be noted that a particular type of agricultural infrastructure in one region will have its multiplier as well as accelerated effects in other areas, especially in urban centres. For example, additional area of land can be brought under cultivation due to construction of an irrigation dam in a particular region. This would lead to increased consumption of fertilizer which would either warrant expansion of the reserved capacity in the fertilizer industry or would require investment in the new fertilizer units in urban areas. This multiplier effect in turn would lead to increase the investment in the .producer goods.. such as machines required for the fertilizer units. putting the accelerator effect in operation. In this way, infrastructure in one area may have cascading effects in other areas, resulting in increased real output and employment.

INFRASTRUCTURE AND INCREASED

WELFARE OF PRODUCERS AND CONSUMERS

Certain types of agricultural infrastructure enhances improvements in both producer as well as consumer surplus. Increase in the number of regulated market committees, increased availability of banking operations in rural areas, increased availability of transportation facilities, etc prevent the middle-men and the money lenders from appropriating a substantial amount of producer and consumer surplus. It should be noted that the welfare of the producers and the consumers improves from the fact that increased infrastructural facility brings producers and consumers to one place where producer could get an higher price for his products and consumers could pay lower price for the same product. The presence of infrastructure such as roads and regulated markets is expected to increase the efficiency of both marketing and production since they reduce transaction costs and ensure competitive pricing.

CONCLUSION

Though Tamil Nadu State has achieved an impressive growth rate in the overall infrastructural development Assuming that the level of agricultural growth rate has a positive strong correlation with the overall development in general and the agricultural development in particular, the unequal distribution of infrastructure would result in regional imbalances affecting the welfare of the individuals. This provides a strong case for increasing the level of agricultural infrastructure in some of the districts that we have identified as lacking adequate level of infrastructure. One of the limitations of our study is that the methodology that we have used has not suggested any optimum level of infrastructural facilities required in the agricultural sector in the State. However, the methodology that we have used provided some useful results to understand which are the districts that should be created with agricultural infrastructure on a priority basis. Another issue with our methodology is that selection of variables for the analysis might have been biased but we are satisfied that we have chosen appropriate variables for our analysis.

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