Analysis of Technological Progress and Innovation in Regional Economic Development

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**ABSTRACT**

It is necessary to have psychological and social requirements for regional development in the same way as economic needs. The reason for this is that political, social, cultural, religious and economic trends have a combined effect on national investment policy. The economic development of a country basically depends on how strong is the desire of the people to adopt new values and institutions. Technological innovations have special significance in the path of regional development.

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**KEYWORDS**

Innovation, Technological Progress, Economic Development

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**INTRODUCTION**

Technological innovations have special significance in the path of regional development. These are the result of research and research. Changes in technology expand labor productivity, capital and other means of production. The technology works like a smooth oil for rural development. The study of advanced countries makes it clear that technological progress has a distinct contribution in comparison to natural human and other resources in the economic development of such countries. Major technological advances improve the production process and enhance the product. It expands knowledge and strengthens competencies. It exploits and exploits the resources which are necessary for the growth of production and productivity.

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**METHODOLOGY**

Various students of development, such as Hayami and Rustom (1970), Schultz (1964) and Rostow, have developed technological progress somewhere at the core of their development theories. Shultz believes that the transition period of agriculture in the traditional way of modernization was largely influenced by technological progress and new innovations. According to Rostov, once the traditional stage of traditional life is constrained, then the society goes through the later stages.

1. The pre-condition of development  
2. The state of maturity and  
3. The state of maximum consumption.

Kuznets have also acknowledged the importance of technological development progress in modern economic development, believing that new innovation is an important technical element for economic development. Kuznets believe that underdeveloped countries should import modern technologies in the short term that expand their productive capacity, as these countries cannot wait until they discover such advanced technology themselves. But if they use imported technology. Then they should expand their technical efficiency. Schumpeter considers two types of dynamic effects for the accelerated growth of an economy –

1. The enforcement effect on factor availability called the growth component, and  
2. The impact of technological and social changes.
According to Schumpeter’s model of economic development, entrepreneurs are the focal point of production. He brings revolutionary changes in the process of production by inventing new techniques. Schumpeter acknowledges the importance of technological progress and new innovations in the structure of business cycles. According to him there is no limit to the per capita product growth. The important question is how to expand the huge amount of technological changes? Prima facie simple economic background is essential for new innovations and technical competencies. Individuals should get inspirations for research and new structural activities. The country where there is availability of middle-class and organized families, can give birth to a scientist, technical scholar and investigator. Educational institutions are beneficial for the country at every level.

Before 1965, the landscape of the agricultural sector of India was very blurred, but after 1965 a revolutionary change took place with the use of various techniques like improved seeds, chemical fertilizers, soil conservation, pesticides and agricultural implements. Speaking in the Presidential Speech of the Indian Economic Association in 1970, M.L. Dantwala (1970) highlighted the role of many economic, technical, institutional and organizational elements that can be helpful in green revolution using the new method. He clarified that land, credit, market, education related taxes and grants etc. have less importance than new technology. He had come to the conclusion that in the pre-1965 and post-Green Revolution, innovation and innovation have been the key factors for the Green Revolution. It is absolutely true that new technology is a necessary condition for development, but if the new technology is not encouraged by the appropriate organizations and institutions, then it cannot bring enforcement in traditional agriculture.

India used the latest available new technology in the field of crop production in 1965, but till present time its average food grain production is 2,879 kg / ha. In comparison, in China it is 6017 kg / ha. Was. What elements can be responsible for such a large production gap? Certainly, knowledge of natural resources and technology is not necessary for this, rather the use of innovative technology has an important role in making this difference, which is the result of incentive institutions and organizations. Which includes government policies and programs in the areas of prices, credit, marketing, grants and land reforms. Fertilizer production here is 75 kg / ha as the main reason for low level of crop productivity in Indian agriculture. Whereas it was 352 kg / ha in Japan. And 448 kg / ha in South Korea. Was. Although there has been a wide expansion of infrastructure for agricultural research in India, 45 research institutes, 10 project directorates, 30 national research institutes, 4 national bureaus and 86 All India Coordinated Research Projects have been constituted by the Indian Council of Agricultural Research (ICA). .R), but the agricultural sector is yet to achieve the expected success.

Todaro believes that three basic divisions of technological progress can be made: neutral labor savings and capital savings. Neutral technology savings are related to higher product levels, while higher levels of production can be achieved by equal amounts of labor and capital. Division of labor and specialization can also increase production and capital-intensive technology also increases production, but there is a big difference between the two. Todaro has clarified that capital-intensive technology is easier to use in countries where there is more capital than labor, whereas in third world countries, due to lack of capital and multiplicity of labor, only labor-intensive technology is used here. is done. The result of using both types of techniques is to increase production.

When new methods are being tested in the field of regional development, then we should take great care in their use because on one hand the use of these methods increases the production, on the other hand they also have negative effects in the atmosphere. In semi-developed countries, these methods are used very fast, but it also pollutes the environment here very fast. For example, indiscriminate use of chemical fertilizers and residual substances from firms such as naphthal, sulfuric acid and other alkaline elements pollute the waters of the rivers and also affect the air and land causing human life crisis. Therefore, it becomes necessary that before considering the wide consumption of new methods, they should be consumed judiciously and seriously considering their consequences.

It is clear from the above analysis that technological progress has a major contribution in the rural development of any country. Highly sophisticated technology has played a major role in recent development in Western Europe, America and Japan, while the developing nation is struggling to meet its scientific and technological requirements. The technology not only increases production and productivity, but highly sophisticated technology ensures its effective distribution by reducing production costs to a large extent. Through technology, the choices of products are expanded and by improving the quality of products, resources can be diverted to other expenditure items. Efforts produced by advanced sophisticated technology increase demand and this leads to higher selling prices from the goods produced. Sophisticated technology saves capital investment for industrial development by saving time, human resources and economic resources, which can be applied for the establishment, development and revival of other industries.
Social and Institutional Elements:

Regional development is influenced by many elements - natural resources, human resources (labor), capital, technology and social and institutional elements. Although eminent and newly eminent economists have mainly attributed natural resources to rural development. According to him, labor, capital and technology and social and institutional elements have no major contribution in the development process. He believes that the development of institutional structure is not necessary for development. In fact, these economists argue for minimal government intervention in the process of development and advocate a restrictive market policy. Karl Marx has been an institutional economist who has highlighted the role of social and institutional elements in the process of development. An economic organization plays its important role in the development of an economy. It motivates the private entrepreneur to come forward in the production process and creates the appropriate background for them. It expands civilian capabilities in the country. Government and non-governmental organizations, including cooperatives, etc. show the path of development for the economy.

Institutions and organizations have a major contribution in the process of development which affects agriculture and regional development in different ways. Positive changes in these bring changes in production and development. Although it is difficult to discuss the effects of these factors on development, they play an important role in the process of rural development. Many organizations are being set up by the government for India's agriculture and rural development in the near future. Development is being seen as a major issue by the government. Many efforts are being made by the government to improve the standard of living of the rural people. At the institutional level, property and contract rules have a serious impact on economic development. The important question is (A) What can a person do with his property?

(B) What can others do with his property?

(C) In what kind of economic activities can he employ himself?

Some societies like Japan etc. promote individual firms and privatization without any hindrance, while other countries implement strict instructions for this method. All these questions pertain to the effective business activities of the government. The question is how various types of business activities are conducted by the government? How taxation, taxation, contribution and other items discourage these actions? And encourages another? How do the rules of taxation and succession overcome the inequality of distribution of income in the process of economic development? All these powers and elements determine the catalysts for economic production. Indian organizations and companies can play an important role for agricultural development. In fact, many reputed companies like Tata, Mafatlal, Larsen and Toubro and Hindustan Lever Ltd. Indians play their major role in agriculture and rural development. Corporates can bring benefits in modern science and technology and encourage rural development by increasing agri-growth in the world market.

It is necessary to have psychological and social requirements for regional development in the same way as economic needs. The reason for this is that political, social, cultural, religious and economic trends have a combined effect on national investment policy. The economic development of a country basically depends on how strong is the desire of the people to adopt new values and institutions. In fact, these social, psychological and institutional elements as non-economic elements are the catalytic forces of economic development. Pro. Ragnar Narkase believes that "economic development has a close connection with human values, social trends, political conditions and historical events." According to a report published by the United Nations, "Economic progress is impossible in the absence of a suitable environment." Rural development requires that people have a strong desire for progress, they are ready to make every possible sacrifice for it, they are aware to adapt themselves to new ideas and their social, economic, political and legal institutions Help to translate these desires into action." The main reason for the economic backwardness of Least Developed Countries has been social and institutional elements. In these countries, the caste system, untouchability, joint family system, rules of succession, faulty system of land holding, attachment to land and property, superstition, orthodoxy, religious hypocrisy, hatred and opposition to change, social dissipation and false pride the elements have always created obstacles in the path of economic development. Economic development of these countries cannot be possible until these social, cultural and religious institutions are newly renovated. Therefore, it is necessary from this point of view that the orthodox perceptions of the people are changed, physical attitudes should be created and education should be expanded so that these people can adapt themselves to new ideas.
The level of development depends on the social structure of a country. Many social values and institutions are such that impede the process of development. Some factors are helpful in this. There are also some institutions and values in India, which are slowing down the process of development. For example: Indian society is divided into four varnas (Brahmins, Kshatriyas, Vaishyas and Shudras). All castes and subcastes are divided into these four varnas. One occupation has been determined for each caste. Changing business is against the caste system. The caste system is hindering development in many ways. Its principles do not match the principles of democracy. Brotherhood, goodwill, friendly behavior, freedom and integration are necessary for democracy. The caste system puts obstacles in all this. Due to caste system, the entire society has been divided into small units. This type of division is against democracy and hinders economic development. Many programs have been devised to overcome the problem of unemployment in the schemes. New routes of occupation have been drawn, which is different from its ethnic system. Like poultry, all castes are not ready to do the job of pig rearing. Joint family system is also hindering development when two or three generations of people live together, it is called joint family system. Joint family system provides all types of protection to its members. Provides for his food, clothes, pleasures. This protection provided in a joint family is a hindrance in development, because not all family members work hard. Some depend on the family without working. In this way, the contribution of all the members is not available in the development work, the protection from the family helps in increasing inactivity. Thus, joint family system is a hindrance in development work than a single family. Lack of mobility also hinders development. Mobility is of two types, one is business mobility, which means doing business other than one's ancestral business. The second is local mobility. It means moving from its original place of residence to another place. There is a lack of local mobility in India, because the person does not like to work except in his village, district and state. The result of this lack of mobility is that many people cannot get employment and have to live in poverty.

Improper accumulation of wealth also hinders development. There is an ancient tradition of growing jewelry in India. The money that goes into making jewelry, its capital cannot be invested, it cannot be used for development work. If this money is deposited in the post office and banks, then the person will be special and beneficial for the whole nation. In rural areas, people are unable to deposit their money due to the bank and post office being away. The entire amount is not saved, which is unsuitable and unproductive from the point of view of development. Here we spend more than necessary on festivals and festivals. A new tradition to celebrate birth day has begun. If this money can be used for development, then the nation can become more prosperous. Lack of courage also hinders development. We like to do the same employment or business in which there is no possibility of loss. Comfort is encouraged rather than work. The person likes to do the work which is simple, do not have to work hard. Apart from these, there are some other social factors which hamper development. These factors are born due to the development process itself, and undue influence on development. For example, due to urbanization and industrialization, slums are created, the health of the people living in it is often poor, because the person cannot get pure climate. The person becomes afflicted with the disease. This reduces his work capacity. Due to decreasing work capacity, a person becomes poor and indebted, a lot of his money is spent on medicine. Staying sick also reduces his income and development is affected by repetition of the same cycle.

Therefore, if we want to realize the vision of regional development, then these social and institutional factors have to be paid attention to. To accelerate the pace of development in India, rationality, working on the principles of democracy and modernization are desirable.

Development is a use and sophistication of natural and human resources for human needs and quality of human life, which takes proper care of short-term and long-term profit and loss of alternative work. It is necessary to have a vigilant perspective on social, economic, cultural and political factors, so as to make socially desirable and economically sustainable development possible, but for a long time the term development remained synonymous with economic development, whereas under development only economic development. Not only that, by making all citizens of the country avail the opportunity of proper food and service, to reduce the economic gap between them, Discuss the appropriate conditions and circumstances required. Scientific and Technological progress has given man unprecedented authority over nature. We can literally remove mountains, and transform vast deserts into fertile deserts. We can make fundamental changes in the natural world. Our productive and economic, scientific and technical activities have expanded to space. At the same time, it has become clear that human beings cannot deal with nature irrationally by making huge changes in it without thinking about encroachment on natural elements and otherwise. And you really shouldn't do it either. Climate change, global warming, heat wave in winter, tsunami waves and storms, landslides, earthquakes, outbreaks of various new diseases, stressed human life, etc. are the terrible consequences of this. We cannot ignore any situation of ecological imbalance due to changes in the biosphere through productive operations.
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