



SCIENCE AND TECHNOLOGY FOR RURAL DEVELOPMENT: SPECIAL REFERENCE TO TRIPURA

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ABSTRACT

Rural Development (RD) is a dynamic concept. It is necessary to accelerate the pace of overall economic development of the country. RD is more than just economic growth and indicates the positive change of social, economic and political sectors along with other aspects. It not only includes upgrading in physical infrastructures but also rise in production and consumption, fulfilment of basic needs as well as improvement in quality of life.

In the Aspect of developing countries, the importance of science and technology for rural development has been familiar to a much greater level. within rural area, there have been improvements in different areas such as the occupation of the people, educational institutions, , small scale industries, agriculture, sources of energy, water, housing, information technology, women and employment opportunity. Developments and growth in every one have been as a result of consumption of original techniques and science.

Agriculture is the chief work in rural areas and people have become conscious of advanced agricultural techniques, irrigation methods, seeds, and fertilizers and so forward. This paper basically focus on science and technology from an Indian perspective as well as Tripura perspective for Rural Rural Development.

Keywords: Science, Technology, Development, Rural Development, Economic Growth

I. INTRODUCTION:-

Developing countries appear the challenge of recovering living standards of rural people for their sustainable livelihoods. Maximum of developing nations are agrarian economies categorized by low productivity functioning on smallholdings with inadequate and poor communications. India is a developing country therefore India also face such kinds of challenge in this field and Tripura also a part of India's Territory in the north-eastern zone. In Tripura 80 percent above people living in the rural areas. Therefore

improvement of rural areas is much more essential. This improvement can be possible by the help of Science and Technology.

Science and technology:-

Science is a methodical endeavour that builds and organizes knowledge in the figure of explanations and predictions regarding nature and the universe. Technology is the collected works of techniques, methods or process use in the production of goods or services.

Development:-

Development is a method to facilitate growth, progress, positive change or the addition of physical, economic, environmental, social and demographic mechanism. The function of development is an increase in the level and quality of life of the population and so on without harmful the resources of the environment.

Rural development:-

Rural development is the method of recovering the quality of life and economic welfare of people living in rural areas. Rural development is a comprehensive term. It essentially focuses on action for the development of areas outside the mainstream urban economic system. It focus on the action for the growth of areas that are lagging at the back in the on the whole development of the village economy.

II. Statement of the Problem:-

Science and Technology for Rural Development: Special reference to Tripura

III. Objectives of the study:-

1. TO explain the significance of Science & Technology for rural development.
2. To describe some of the major programmes of rural development.

IV. Methodology:-

Here both qualitative and quantative methods used in order to support the findings. The primary data were collected form Field survey as well as Internet for this study where as secondary data collected from different journals as well as from different books which is collected from Tripura Tribal welfare library as well as Tripura Central library (Tripura University).

V. Analysis and Interpretation of data:-

Technologies uses for Rural Development:-

The appropriate technologies that have been used in rural development have been stated as follows:

1. Information and Communications Technology: There have been development of computers which are low in cost; Computers are the technical means that are used on a wide scale, when implementing research in a particular area, internet is used, it is the most comprehensive and appropriate areas to find out information regarding any area, topic, subject or problem.

2. Construction: For the purpose of construction of houses or any buildings; technology is used such as rammed earth, dutch brick, and cob; these materials are generally available and are inexpensive. The rural

people are capable to right of entry these resources in a convenient way so that their structure is carried out in a suitable way.

3. Energy: Electricity can be provided from solar cells, wind power or micro, hydro, with energy stored in batteries. Biodiesel, biogas and vegetable oil are considered to be sources of energy. But with transformations taking place, rural areas are also acquiring electricity, as it is necessary to augment one's living conditions.

4. Cooking: Stoves that are smokeless and wood conserving lead to greater efficiency, saves time and labour, reduced deforestation and significant health benefits.

5. Health care: Through the make use of of technological factors and advancement in the field of science, medicines and innovative machines are coming into existence in hospitals and health care centres in rural areas.

6. Refrigeration: There are certain food items that need to be refrigerated, in rural areas in hot weather situation, people would like to consume cold water, and hence, there has been provision of pot refrigeration system, which keeps things in cold temperature even without electricity.

7. Television and Radio: Television and radio systems have become their major sources of entertainment and they even learn various things that they concern in their daily works. Like Agricultural and horticulture related programs.

8. Agricultural Technologies: The cultivation of crops such as rice, wheat and maize has been considered to be the major advancement in agricultural technologies.

9. Computers: Research has indicated that individuals in rural areas are making use of computers to augment their understanding in terms of various concepts. Students and youth are the ones, who are making use of computers to a major extent.

10. Mobile Phones: The use of mobile phones is common among rural individuals. The individuals, belonging to various age groups are making use of mobile technology. They usually make use of mobile phones for communicating and for recreational purposes.

V. Applications of science and technology in Tripura Rural Areas:-

1. Science communication Division:-

The Science Communication Division of the Council openly outfit number of programmes in relation with School Education Department (mainly SCERT), Higher Education and Nagar Panchayats. All District Offices of Dept. Of Science, Technology and Environment also have been implicated in Science Communication performance.

2. Entrepreneurship Development:-

The Council constituted a Task Force for identification of application of Science and Technology in diverse sectors for economic growth of the State. The Task Force has recommended six mission mode performance, one amongst them is on HRD from first to last Vocational Training among youths. A concept note on the same has been prepared for consideration of the Council.

3. Biotechnology Division:-

Since a element of Societal Application of Technology and State relevant R&D exercises, the Council has taken up a number of activities in the ground of biotechnology with financial support from the Department of Bio-Technology & Department of Science & Technology, Government of India throughout last combine of years.

4. Water:

Water is the most vital single reserve for the survival of human life. Each attempt will have to be complete to get better the availability of drinking water in rural areas; it is necessary to develop and apply scientific methods for water harvesting, conservation and recycle. Clean water deliver in the rural areas has to be given the highest priority with it is going on Tripura rural areas.

5. Housing:

Several technologies have been implemented to develop low cost building materials, designs and construction techniques in Tripura Rural Areas.

6. Biotechnology:

In the ground of biotechnology, developments relating to bio-fertilizers, aquaculture, biomass manufacture throughout tissue culture techniques, embryo-transfer skill to promote cattle, herds, etc. have enormous, probable for employment generation and increasing efficiency. In Tripura such types of activities is now going on.

7. Information Technology:

Draw on of information technology in sectors like agriculture, irrigation, health, family planning, education, employment and transportation are crucial for bringing about a major transformation in the rural sector. This things also same in Tripura rural areas.

8. Employment:

Employment opportunities inside the rural areas can be generated through inputs of science and technology in the areas of agricultural practices, animal husbandry, training and skill progress of the rural people. In Tripura whole district this process is now working.

VI. Recommendations/Suggestions:

VII. Limitation of the study:-

Few books were gathered for this Research study.

VIII. Conclusion:-

Tripura being a state with around 70% population in the rural areas, rural development has always been an important issue in all discussions pertaining to economic development. Thus, The policy makers recognized this importance. Therefore employment generation, improving health facilities, sustainable livelihood

enhancements, protecting the environment and reducing rural urban migration and fostering social equality in this state.

IX. References:-

Primary sources:-

- 1.
2. Field survey
3. Lone ,Aadil Altaf **Science Technology and special Programmes for Rural Development in India**
4. <https://www.researchgate.net/publication/287344229>

Secondary Sources:-

1. Subramanian, K. S. (2000). Tribal insurgency and rural development in Tripura. *Economic and Political Weekly*, 35(8/9), 601-602.
2. Choudhury, J., & Ghosh, R. (2015). E-Governance and rural development: an assessment of CSCS in Tripura. *IBMRD's Journal of Management & Research*, 4(1), 18-29.
3. Singh, K., Dey, M. M., Rabbani, A. G., Sudhakaran, P. O., & Thapa, G. (2009). Technical Efficiency of Freshwater Aquaculture and its Determinants in Tripura, India. *Agricultural Economics Research Review*, 22(2), 185-195.
4. Deb, T., & Saha, S. Upliftment of Rural areas of Tripura through ICT: A composite review.
5. Rai N and Kumar V.(2012) "Role of Science and Technology in Making Rural India Shine". *IJDMS* 6.1 (2012): 59-72.
6. Ananth PN and Karthikeyan M. "Application of Science and Technology in Rural Areas (ASTRA): An Ethiopian Context". *Journal of Food and Agriculture Science* 4.1 1-12.
7. Chelladurai john (2015) Gandhijis vision on sanitation, *Kurukshetra a journal of Rural Development*, vol.63, No.12 pp-76.
8. Reddy, A. K. (2004). Science and technology for rural India. *Current Science*, 889-898.
9. Tripathi, A. M., Singh, A. K., & Kumar, A. (2012). Information and communication technology for rural development. *International Journal on Computer Science and Engineering*, 4(5), 824.
10. Arora, R. C. (1979). *Integrated rural development*. Integrated rural development.