



A STUDY ON THE ROLE OF THE INFORMATION TECHNOLOGY ON THE DEVELOPMENT OF RURAL AREAS

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Abstract : Now-a-days rural development plays a role in ever-growing media attention on the success of Information Technology. Its focus is on the internet or the World Wide Web. Generally, there is an IT friendly atmosphere in the country. Information Technology is increasingly moving to the core of national competitiveness strategies around the world. Information Technology has given enormous power to individuals to gain information and knowledge with important consequences in terms of providing education and access to markets of doing business and social interactions among others. Approximately 70% of the Indian population lives in rural areas. Today rural development is essential for the development of the Indian Economy. The role of Information Technology has increased from providing only the Networks to set-up the basis of updated technological programs in rural areas. The rural market of India is showing an impressive growth largely due to changing lifestyle patterns, better communication networks and rapidly changing demand structure of consumers of rural areas.

KEY WORDS – IT, Rural development, economic growth, rural area

INTRODUCTION

Today, Rural development is essential for the development of the India economy. Rural economy can be developed by using modern information technology (IT). The development of rural economy is associated with development of agricultural activities, availability of employment opportunities, better education and health, improved public services and decrease in poverty. These rural based information provide the facility of email, electronic networks, access to databases and libraries. They can also link the internet to local media such as radio, television, computers, mobile phones etc.

IT In advanced technology of ICT plays a role in development of the rural sectors like

- Education
- Healthcare
- Agriculture
- Communication
- Employment
- Women Empowerment

Knowledge of IT is important because

- IT is everywhere
- IT can help you to be more productive
- IT will enhance your career
- IT will give you a word of opportunity

All over the world, IT has empowered individuals with unprecedented access to information and knowledge, with important consequences in terms of providing education and access to markets, of doing business, and of social interactions, among others. Information Technologies (IT) is increasingly moving to the core of national competitiveness strategies around the world.

SCOPE OF THE STUDY

This study is an attempt to determine the impact of IT on rural development. The study tries to capture the ability of the respondents to access information through the use of different applications and portals. The study will give valuable insights to the policy makers, planners, administrators and social science researchers in understanding the gaps and formulating the appropriate policies to harness the full potential of ICT for the development of rural area.

STATEMENT OF THE PROBLEM

This study focus on the role of Information technology in the development of rural areas. During past decades, IT has increased its accessibility and convenience in carrying these handheld smart devices even in the rural and remote areas. This should have implications for agricultural activities, improvement in education and health, transparency in government mechanism and empowerment of rural people, particularly women and people from scheduled castes, scheduled tribes and weaker sections. All this reflects the nation's growth. Since there is always a gap in the development of rural and urban areas, it is necessary to find out to what extent ICT will be able to remove the rural-urban gaps. The trends in the use of IT tools records the speed with which rural population is shifting to modern IT sources.

OBJECTIVES

The objectives of the study are as follows:

- To understand the future empowerment of the IT in rural areas.
- To examine growth of Information technology in rural areas
- To determine the accessibility and utilization of Information technology tools in rural areas
- To find impact of information technology in rural development
- To determine factors influencing IT services to rural areas

RESEARCH METHODOLOGY

- The study is based on a survey method.
- The simple random sampling technique is used to collect the required information from the responses.
- A sample of 120 people living in rural area were selected on the basis of sampling method with the point of view of utilising the information technology by rural people's. The study is based on both primary data and secondary data. The required data was collected through questionnaire. And also various additional information that is required for the study is collect through various magazines, journals, books, reports and various websites.
- The study was carried out during the period January to May, 2023.
- The tools used are Simple Percentage Analysis, Weighted Average Method, Mean Score Ranking Method, Chi-Square Analysis, Bivariate Correlation Analysis.

LIMITATIONS OF THE STUDY

- The study has been carried out within a period of 4 months.
- This study covers only the role of Information technology on the development of rural areas. The sample size was limited to 120.
- Hence this may be suitable for research done in a wide range. Primary data have been collected only from my village.

REVIEW OF LITERATURE

- **Jain and Ishita Sirsikar (2022)**, This study focuses on the "Technology Development". Digital literacy and connectivity have strengthened the labour market, provided a platform to people in rural areas and helped them become financially independent. Enhanced innovation has helped the rural areas improve their growth prospects, and the policymakers support reforms beyond subsidies and sector-specific approaches.
- **Beriya, Abhishek (2022)**, "The Role of Information and Communications Technologies In Rural Entrepreneurship in India". In this paper, we shall review how ICTs can help the Indian rural youth turn to entrepreneurship. Potential areas for intervention and examples are then listed and some recommendations are discussed before concluding the paper. This paper is part of the work for a TERI-Columbia University collaboration project 'Towards a New Indian Model of ICT led Growth and Development' where we have been studying the potential of ICTs in achieving the Sustainable Development Goals.
- **Deepak Shah (2022)**, "Role of Information and Communication Technology in Agricultural Development of India". The study not only addresses issues relating to the applications of ICT for economic change in the agricultural sector of India but also identifies the past and present major ICT initiatives in agriculture, the factors responsible for the success of ICT services and the elements of an appropriate framework for assessing the impact of ICT on agricultural development. It is observed that the application of ICT solutions for the development of rural India have been opening a vast range of possibilities to a majority of the population living in rural settings to cross the digital divide.
- **Jayadatta , Gangadhar Sheeri, Praveen B Patil, Nitin Bhasker (2021)**, "A study on significant usage of technology in rural development with specific reference to Indian context". This is a study article in which the researcher tries to emphasize the use and benefits of technology for the development of rural regions. Healthcare, medical, education, transportation, tourism, industry, business, management, administration, banking, and rural development are all areas where technology has become essential in today's society. This is due to the fact that over 70% of India's population lives

in rural regions, and therefore rural development will effectively contribute to the country's development.

- **Dr. Brajesh Srivastava (2021)**, "Role Of Information Technology (IT) In Rural Development in the context of India". A major handicap in mass application of IT in rural areas is that the information content is generally not directly relevant to people for whom it is developed. The contents are written or designed by people who have themselves not lived in rural areas. As a result, these systems have a heavy urban-bias. Such systems, therefore, have limited utility and are commercially unviable. This problem can be overcome by developing relevant content in local languages.

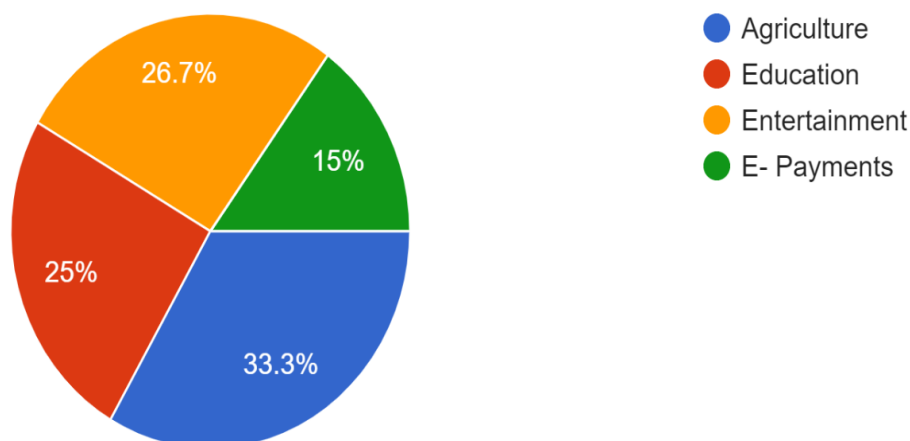
ANALYSIS AND INTERPRETATION

SIMPLE PERCENTAGE ANALYSIS: HIGH FOCUS OF USING IT DEVICE

| S.No | High focus of using IT device | No.of Responses | Percentage |
|------|-------------------------------|-----------------|------------|
| 1 | Agriculture | 40 | 33.3 |
| 2 | Education | 30 | 25 |
| 3 | Entertainment | 32 | 26.7 |
| 4 | E- Payments | 18 | 15 |
| | Total | 120 | 100 |

INTERPRETATION:

The above table shows that, out of 120 responses taken for the study, 33.3% of the responses are Agriculture, 25% of the responses are Education, 26.7% of the responses are Entertainment, 15% of the responses are E- Payments.



WEIGHTED AVERAGE METHOD:**LEVEL OF SATISFACTION**

| Particulars | Highly satisfied | Satisfied | Neutral | Dissatisfied | Highly dissatisfied | Total | Mean Score |
|--------------------|------------------|-----------|---------|--------------|---------------------|-------|------------|
| Factors | 1(5) | 2(4) | 3(3) | 4(2) | 5(1) | | |
| Education | 23 | 39 | 54 | 4 | - | 120 | 3.67 |
| | 115 | 156 | 162 | 8 | - | 441 | |
| Job | 28 | 43 | 41 | 6 | 2 | 120 | 3.74 |
| | 140 | 172 | 123 | 12 | 2 | 449 | |
| Entertainment | 20 | 45 | 47 | 8 | - | 120 | 3.64 |
| | 100 | 180 | 141 | 16 | - | 437 | |
| E-Payments | 24 | 40 | 48 | 7 | 1 | 120 | 3.65 |
| | 120 | 160 | 144 | 14 | 1 | 439 | |
| Daily updates news | 37 | 31 | 48 | 3 | 1 | 120 | 3.83 |
| | 185 | 124 | 144 | 6 | 1 | 460 | |

INTERPRETATION:

The above table shows that Level of satisfaction .The highest mean score raises 3.83 for the Daily update news of the IT Tools/Services.The lowest score raises 3.64 for the Entertainment of the IT Tools/Services.

MEAN SCORE RANKING METHOD:**LEVEL OF SATISFACTION**

| Particulars | Highly satisfied | Satisfied | Neutral | Dissatisfied | Highly dissatisfied | Total | Mean Score | Rank |
|--------------------|------------------|-----------|---------|--------------|---------------------|-------|------------|------|
| Factors | 1(5) | 2(4) | 3(3) | 4(2) | 5(1) | | | |
| Education | 23 | 39 | 54 | 4 | - | 120 | 3.67 | III |
| | 115 | 156 | 162 | 8 | - | 441 | | |
| Job | 28 | 43 | 41 | 6 | 2 | 120 | 3.74 | II |
| | 140 | 172 | 123 | 12 | 2 | 449 | | |
| Entertainment | 20 | 45 | 47 | 8 | - | 120 | 3.64 | V |
| | 100 | 180 | 141 | 16 | - | 437 | | |
| E-Payments | 24 | 40 | 48 | 7 | 1 | 120 | 3.65 | IV |
| | 120 | 160 | 144 | 14 | 1 | 439 | | |
| Daily updates news | 37 | 31 | 48 | 3 | 1 | 120 | 3.83 | I |
| | 185 | 124 | 144 | 6 | 1 | 460 | | |

INTERPRETATION:

From the above Table Ranking analysis, it was found that majority of the responses prefer Daily update news and ranked as I , next most of the responses prefer Job and ranked as II, next most of the responses prefer Education and ranked as III , next most of the responses prefer E- Payments and ranked as IV, next most of the responses prefer Entertainment and ranked as V.

CHI- SQUARE ANALYSIS:**RELATIONSHIP BETWEEN THE OCCUPATION AND HIGHLY FOCUS ON IT SECTOR**

| OCCUPATION | HIGHLY FOCUS ON IT SECTOR | | | | TOTAL |
|--------------|---------------------------|-----------|-----------|---------------|-------|
| | Agriculture | E-Payment | Education | Entertainment | |
| Business | 9 | 2 | 5 | 2 | 18 |
| Professional | 1 | 3 | 0 | 2 | 6 |
| Salaried | 6 | 9 | 14 | 18 | 47 |
| Student | 24 | 4 | 11 | 10 | 49 |
| TOTAL | 40 | 18 | 30 | 32 | 120 |

To find out the association between occupation and the highly focus on IT sector of the respondents, the chi square test is used and the result is given below.

HYPOTHESIS

There is no significant between the occupation of the respondents and highly focus on the IT sector.

CHI – SQUARE TEST

| Factors | Calculation value | Df | Table value | Remarks |
|------------|-------------------|----|-------------|----------|
| Occupation | 25.662 | 9 | 16.919 | Rejected |

INTERPRETATION:

It is clear from the above table shows that the calculated value of chi-square value of 0.05% level is more than the table value. Hence the hypothesis is rejected. So, there is significant relationship between the Occupation and highly focus on the IT sector.

BIVARIATE CORRELATION ANALYSIS:**RELATIONSHIP BETWEEN EDUCATION AND CONVENIENT SOURCE****HYPOTHESIS**

H0: There is no relationship between the reason for selecting the education and convenient source.

H1: There is relationship between the reason for selecting the education and convenient source.

TEST THE CONDITIONS (R value =+1) (+1 to -1)

If R values +1 accept H1 and reject H0, If P value -1 accept H0 and reject H1

The following table gives the reason for selecting the education and convenient source.

BIVARIATE CORRELATION ANALYSIS

| FACTORS | MEASURES | EDUCATION | CONVENIENT SOURCE |
|-------------------|---------------------|-----------|-------------------|
| EDUCATION | Pearson correlation | 1 | .231* |
| | Sig. (2- tailed) | | .011 |
| | No. of. Response | 120 | 120 |
| CONVENIENT SOURCE | Pearson correlation | .231* | 1 |
| | Sig. (2- tailed) | .011 | |
| | No. of. Response | 120 | 120 |

INTREPRETATION:

There is a relationship between reason for selecting education and convenient source because the P value is less than 1, so the Null hypothesis is rejected, Alternative hypothesis is accepted.

FINDINGS, SUGGESTIONS AND CONCLUSION**FINDINGS:****SIMPLE PERCENTAGE ANALYSIS**

- The majority 33.3% of the responses in High focus of using IT device are Agriculture.

WEIGHTED AVERAGE METHOD

- The above table shows that Level of satisfaction. The highest mean score raises 3.83 for the Daily update news of the IT Tools/Services. The lowest score raises 3.64 for the Entertainment of the IT Tools/Services.

MEAN SCORE RANKING METHOD

- From the above table Mean score Ranking method, it was found that majority of the responses prefer Daily update news and ranked as I, next most of the responses prefer Job and ranked as II, next most of the responses prefer Education and ranked as III, next most of the responses prefer E- Payments and ranked as IV, next most of the responses prefer Entertainment and ranked as V.

CHI-SQUARE ANALYSIS

- There is significant relationship between the occupation of the respondents and highly focus on the IT sector.

BIVARIATE CORRELATION ANALYSIS

There is a relationship between reason for selecting education and convenient source

SUGGESTION:

- Awareness should be created among the rural masses and also encourage and train to utilize these technologies in their day to day life for their enrichment.
- The rural masses should be encouraged to start their own units based on ICT through Self Help Groups. There is a need to connect rural communities, research and Extension networks and provide access to the much needed knowledge, technology and services.
- Public officers need to be motivated to improve the effectiveness of rural development programs. Identifying some of the major unsolved problems in ICT, where rural people can play a significant leadership role.
- NGOs should be encouraged to promote ICTs in the rural areas. Researches should be promoted for innovating improved and low cost equipment which can be useful for farming, household technology etc.
- Rural youth has to be formed into self help groups and they need to be provided with the vocational skills in ICT. These vocational training programmes should promote their occupational skills, income, and employability in the ICT field or in current occupation.

CONCLUSION:

From this study we conclude that the internet is a worldwide network of networks. It has become the world's fastest growing media worldwide and it has spread its wings in most of the sectors. It has opened a number of possibilities and opportunities to our rural young generations. Information Technology provides a wide range of services. It can be used for the development of rural people and our country also. The increased acceptance of information technology thus definitely boosts up economic growth of rural peoples. Information Technology is reducing poverty by improving poor people's access to education, health, government and financial services. IT can also help small farmers and artisans by connecting them to markets. ICT in rural areas is the solution for gradual elimination of traditional barriers for Development by increasing access to information, expanding their markets, increasing job opportunities and better access to the Governmental services. India is a growing economy in the world and to maintain its development in different sectors including Rural development Information technology can sustain rural development.

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