

# Application and Role of ICT in Rural Development

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**Abstract:** - For any country to progress rural development plays a vital role, but due to short scarcity of information and use of ICT in rural area development is at low rate. In fact, 67% of the populations are situated in rural areas, while 33% make up the populations in the larger cities. Information and communication technology increasing day by day, so rural people should be conscious of it how ICT will help in development. This paper deal with how effective we can use ICT in rural development for their growth and improvement. There are various aspects on which the rural development is based such as agriculture, living standard, education, farming, women empowerment, health care facility and many more. But first the active response of people in rural area is necessary to implement this entire thing. In this paper we will discuss all the point which is necessary for rural development.

**Keyword:-**ICT, Communication, Education, Agriculture, Rural Development, Living Standard

## I. INTRODUCTION

We are living in 21<sup>st</sup> century, and India is a developing country. People live in rural area. Information and Communication Technologies (ICT)

Can be used in rural area for their proper development but rural people are less aware about ICT. Due to lack of knowledge about ICT people of rural area can't easily

communicate to the current market and each other. This paper spotlights the main barriers and solutions which are responsible for obstacles in rural progress and how ICT can be used in the development of rural areas.

There are many aspects in which ICT can be effectively used such as agriculture, Education, improving standard of living, imparting education, women empowerment and many more.

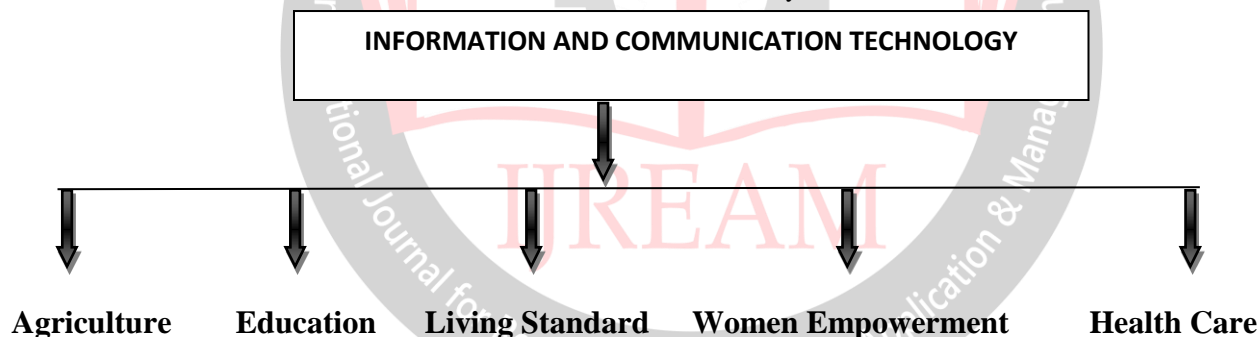


Fig 1: Applications of ICT in various sectors in remote areas.

**AGRICULTURE:** Agriculture is the main occupation in rural India and about 60% of the population in rural area depends on agriculture. The position of farmer in remote area is not so strong. They are facing many problems because they are not so educated and they don't know how to effectively use ICT. The large business investment can be done in agriculture occupation like animal husbandry. Even farmer can use mobile phone for proper communication.

**EDUCATION:** Education plays a main role in development of rural area in India. Education is a backbone of any nation. Literacy rate in rural areas was 71 per cent last year, compared to 86 per cent in urban areas, while among the age group of seven years and above, male literacy rate was found higher than the female literacy rate,

according to NSSO survey released today. So, first students should be educated. In rural areas, it is seen that teachers are not much interested to teach the students. Additionally, teachers have to provide additional knowledge and teach the students with different teaching aids and methods, and students can select the best among them which is suitable for them. Parents don't know the importance of education for their children.

**LIVING STANDARD:** The living standard of rural area is very low. We need to improve the standard of living. For this, money is the important source. The self-employment is the powerful way to achieve this. The small business need to be setup in rural area for gaining money. With the help of

ICT communication can increase in rural area and some technology can be used to improve the living standard.

**WOMEN EMPOWERMENT:** Women play a main role in society but women have restricted access to technologies in India. It is commonly held view that women are less engaged with ICT than men. Information and communication technology is for everyone and women have to equally take advantage offered by technology.

**HEALTH CARE:** Medical facility is mostly neglected by the rural people the reason being there is no proper hospital and doctors available in rural area. The doctors of your country are not ready to stay in village due to lack of facilities and there growth. In many rural areas there are no proper hospitals and facilities available. All the highly educated doctors want to run in urban area. Due to this reason rural people suffer from so many diseases and this give rise to child death and mother death.

ICT can play a great role in health section in rural area. With this ICT based services internet can be access in rural area which will be very helpful for all.

## II. PROBLEMS IN IMPLEMENTING ICT SOLUTIONS

While implementing ICT, the first barrier is language. The information available on internet is in English as it is a world-wide accepted International language. So, education status is essentially needed to be improved

**1) Illiteracy:** Illiteracy is the most common issue in the rural area. Since, the rural people does not understand the importance of education, it is difficult to encourage them to become illiterate. This is not the case in urban India. According to Celsius 2011 Literacy rate in rural areas stand at 68.90% whereas literacy rate in urban areas stand at 85.0%.

**2) Poverty:** In rural area most of the people are lived under below poverty line and they have to do lots of effort for their daily needs. So, for them accessing the internet is so costly for communication.

**3) Connectivity is not available in most rural areas.** There are other problems too like electricity. We need to focus on this too because rural development is a very vast subject which covers all the socio-economic, cultural and technological development and that's what is the rural development. ICT does not include only the Internet but a gamut of other tools which could be used individually or in convergence with each other

**4) Problems in establishing network:** This is a technical issue to establish a network. The first point is the large investments needed to establish a strong network along with infrastructure. To achieve the balance between rural and urban areas, communication is important. This communication is well established through internet. The

facility of internet is not so costly to connect from one place to another. The rural area is neglected in this case. At start of the invention of mobiles and telephones, this technology was unknown to rural areas. One important reason is the prohibitive cost of connecting India's vast rural areas with telecommunications. Once an Internet connection is established in villages, it can serve as a multipurpose platform for imaginative entrepreneurs.

**8) Financial problems are faced by most of the rural families.** This is the root cause for poor standard of living. ICT platforms help in generating incomes through new ways of carrying out business, reducing cycle times or increasing productivity. Many government schemes are provided for those who want to start a new business, loan facilities are also available. The rural citizens should take benefits of such schemes

**9) Lack of Knowledge:** Rural people are not aware about the importance of ICT and their uses. So, first awareness is most important for proper use of ICT.

## III. OVERCOMING OBSTACLES: PLAN OF ACTION

In order to implement ICT in remote areas, we need to try to execute the following points:

- **LAN Connectivity:** In remote area to access internet LAN connectivity is most important. The local area network should be implemented at lower cost.
- **Desktop and PC's:** desktop and PC's facility should be available in remote area as they are inexpensive, portable, user friendly. We can also provide the computer facilities in the schools and some language friendly software can be used for student's education.
- **Teacher Training:** In remote area education system is not good so, proper teacher training facility should be given time to time for the proper development of teachers.
- **Mobile Phones:** Mobile phones can be used to seek for help during urgent situations or get support during emergencies.
- **Market Information for Agriculture:** Mobile phone provide a great help to farmers in the field of agriculture, with the use of mobile phones they can access internet and can make decision about when to sell their crop..ICT provide great help in remote area for agriculture.

## IV. CONCLUSION

The conclusion of this paper is that ICT plays a main role in rural development. Rural development is necessary for nation progress. By use of ICT remote development can be easily increased. This paper also discussed the various applications of ICT in the field of education, women empowerment, living standard, health care and communication media. But the first and foremost thing to

implement is education; if the people are educated the rural people will develop.

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