

Utilization of Science and Technology in Rural Communities have contributed significantly in enriching their Lives

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**Received Date 20/02/2021 , Accepted 20/03/2021 , Published Date 25/03/2021**

## **Abstract**

The primary objective of this research paper is to find out how the utilization have contributed significantly in enriching their lives. In rural communities, the individuals are rendering a significant contribution towards leading to up-gradation of technical skills among themselves. They are getting enrolled in training centres and pursuing programs. The science and technologies have proven to be beneficial to the individuals in number of areas. These are, agriculture and farming practices, production of artworks, handicrafts, pottery making, silk weaving, garments manufacturing and so forth, education, implementation of household responsibilities, leisure and recreation purposes and so forth. The utilization of science and technology have been beneficial to the rural individuals on a large scale. The reason being, they are able to put into practice their tasks and activities in a less time consuming and efficient manner. Furthermore, they need to be well-equipped in terms of utilization of modern, scientific and innovative methods. Therefore, it is of utmost significance for the individuals to augment their knowledge and understanding in terms of utilization of various types of technologies. The main areas that are taken into account in this research paper are, benefits of science and technologies to rural individuals, how science and technologies have promoted well-being of rural individuals and utilization of technologies in enhancing career prospects.

**Keywords:** Activities, Living Conditions, Programs, Rural Communities, Science, Tasks, Technology

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When research is conducted in terms of science and technology in rural communities, major emphasis is put on the aspect, how these are being used by the rural individuals in leading to up-gradation

of their living conditions. In rural areas, agriculture and farming practices are the primary occupations of the rural individuals. In these occupations, the rural individuals are making use of modern,

scientific and innovative methods in the implementation of their job duties. Through the use of these methods, the rural individuals have rendered an important contribution in leading to an increase in productivity and profitability. There are various types of technologies that are put into operation in the agricultural sector and farming practices. The agricultural labourers and farmers are augmenting their knowledge and understanding in terms of these methods. In urban and in rural communities, there are establishment of training centres, which are offering programs in terms of agricultural and farming technologies. Therefore, it can be stated, it is necessary for the rural individuals to get enrolled in training programs to augment their knowledge and understanding in terms of science and technologies.

Apart from agricultural sector and farming practices, from the stage of early childhood, the rural individuals develop interest in various types of creative activities. These activities are, production of artworks, handicrafts, pottery making, silk weaving, garments manufacturing and so forth. In the past, they made use of traditional methods in the implementation of the production and manufacturing processes. But with the advent of technologies, they are making use of

technologies and machines in the implementation of job duties. In urban and in rural communities, there are establishment of training centres, which are offering programs in terms of development of skills and abilities in terms of production of artworks and handicrafts. Furthermore, programs are also offered in terms of other aspects, such as, pottery making, silk weaving, and garments manufacturing. When the job duties are put into practice through the utilization of technologies, the tasks and activities can be carried out in a less time consuming and efficient manner. Therefore, one can understand well that utilization of technologies in the implementation of the production and manufacturing processes will contribute significantly in generating the desired outcomes.

The rural individuals are making use of technologies in their lives to a major extent. The rural individuals, belonging to various age groups, categories and backgrounds are making use of technologies in leading to enrichment of their living conditions. In one's lives, the use of internet has acquired prominence. The rural individuals are making use of internet in their lives for various purposes. In training centres, there are programs offered that are imparting information and augmenting knowledge among rural

individuals in terms of technical skills. Technologies are made use of for numerous purposes, i.e. communicating, generating information in terms of various areas, looking for employment opportunities, educational programs, leisure and recreation purposes and so forth. When the rural individuals are well-equipped in terms of various types of technologies, they are able to enhance their living conditions. Normally, rural individuals do not feel comfortable with the utilization of technologies. But getting engaged in regular practice will enable them to hone their technical skills. Therefore, it can be acknowledged that making use of technologies contribute in a satisfactory manner in leading to enrichment of the living conditions of rural individuals.

## **Benefits of Science and Technologies to Rural Individuals**

The benefits of science and technologies to rural individuals are stated as follows:

*Leading to Increase in Productivity in the Agricultural Sector and Farming Practices* – Agriculture and farming practices are the primary occupations of the rural individuals. In these occupations, the rural individuals are making use of modern, scientific and innovative methods in the implementation of their job duties.

Through the use of these methods, the rural individuals have rendered an important contribution in leading to an increase in productivity and profitability. There are various types of technologies that are put into operation in the agricultural sector and farming practices. When the agricultural labourers and farmers are making use of technologies, they are able to contribute significantly in managing the crops. The utilization of information technology have contributed significantly in crop management (Top 5 Technologies that Aid Agriculture, n.d.). Furthermore, the technologies have been effectual in other tasks as well, such as, irrigation, putting in fertilizers, insecticides and so forth. Therefore, it can be acknowledged that making use of technologies contribute in a satisfactory manner in leading to an increase in productivity in the agricultural sector and farming practices.

*Leading to Increase in Productivity in various types of Creative Activities* – The rural individuals develop interest in various types of creative activities. These activities are, production of artworks, handicrafts, pottery making, silk weaving, garments manufacturing and so forth. In the past, they made use of traditional methods in the implementation of the production and manufacturing processes.

But with the advent of technologies, they are making use of various types of technologies and machines in the implementation of job duties. Crafts technologies combines transformational engineering, manufacturing and material sciences to develop wear parts, components, assemblies and custom tooling. When craft technologies are made use of, the individuals will be able to meet the expectations of the clients (Ottwell, 2010). Furthermore, the individuals are able to put into practice their tasks and activities in a less time consuming and efficient manner. Therefore, it can be acknowledged that making use of technologies contribute in an appropriate manner in leading to an increase in productivity in various types of creative activities.

*Communication Purposes* – The communication takes place in a verbal and written manner. The verbal communication takes place face to face or through phone. On the other hand, written communication takes place through the utilization of technologies. When technologies are made use of to facilitate the communication processes, the individuals send emails and messages. In emails and messages, they are able to exchange all types of information such as, articles, reports, letters, pictures, images,

videos and so forth. When the rural individuals communicate through the utilization of technologies, they incur the feelings of pleasure and contentment. When their family members are located at a distance, they need to facilitate the communication process through the utilization of technologies. The rural individuals are well-equipped in terms of various types of technologies. This can be facilitated by getting engaged in regular practice and in addition, they will enable them to hone their technical skills. Therefore, one can understand on a comprehensive basis that utilization of technologies for communication purposes has rendered an important contribution in leading to enhancement of their living conditions.

*Generating Information in terms of Various Areas* – It is apparently understood that rural individuals aspire to hone their educational skills and get engaged in employment opportunities. The rural individuals, belonging to various age groups, communities, cultures, occupations, categories and backgrounds are making use of technologies in leading to enrichment of their living conditions. In one's lives, the use of internet has acquired eminence. The rural individuals are making use of internet in their lives for various purposes. In training centres, there

are programs offered that are imparting information and augmenting knowledge among rural individuals in terms of technical skills. Technologies are made use of for numerous purposes. One of the common purposes is, generating information in terms of various areas. In pursuing education and looking for employment opportunities, they make use of technical skills. The internet is being made use of to a major extent. Therefore, it is understood, when technologies and internet are being made use of to generate information in terms of various areas, the rural individuals are able to benefit to a major extent.

*Leisure and Recreation Purposes –*  
It is of utmost significance for the individuals to take out time for leisure and recreation purposes. The rural individuals are making use of technologies for leisure and recreation purposes. Whether they are engaged in the agricultural sector and farming practices, creative activities, or implementation of household responsibilities, they make use of technologies for two purposes on a large scale. These are, communicating and leisure and recreation. Through the utilization of technologies, the individuals take pleasure in listening to music, watching movies, and other television shows. Furthermore, the rural individuals

learn to read jokes and other information on the internet. The internet is being made use of to a major extent. In some rural households, there are not any televisions. Hence, when the individuals aspire to listen to music, watch movies, and other television shows, they make use of technologies. When they feel they can generate a source of entertainment through technologies, they feel pleasurable and contented. Therefore, it is understood, when technologies and internet are being made use of for leisure and recreation purposes, the rural individuals are able to benefit on a large scale.

*Promoting Health and Well-being*  
– Health is wealth. It is of utmost significance for the individuals to be well-equipped in terms of measures and strategies to promote health and well-being. When they will be healthy, they will contribute in an efficacious manner in enhancing their living conditions. In rural communities, when the individuals experience health problems and illnesses, they usually obtain herbs and medicinal plants from the forests. In other words, they make use of traditional methods. But with the advent of technologies, in medical and health care centres, technologies are being made use of. The rural individuals are making use of modern, scientific and innovative methods in the treatment of

wounds and other types of health problems. The use of science and technology in the medical and health care sector have alleviated the pressure on rural individuals to migrate to urban communities. But there is a need to bring about improvements in medical and health care facilities. Therefore, it is acknowledged on a comprehensive basis, when technologies and internet are being made use of for promoting health and well-being, the rural individuals are able to benefit to a major extent.

*Implementation of Household Responsibilities* – In rural households, the individuals need to pay attention towards implementation of various types of household responsibilities (5 Reasons to Switch to Intelligent Housekeeping Technology, 2018). These include, preparation of meals, cleaning, fetching water, washing, rearing of livestock and so forth. The technologies are made use of in the implementation of household responsibilities and in taking care of the needs and requirements of family members. The main utilization of technologies is recognized in the case of preparation of food. The rural individuals have brought about transformations in their cooking methods by replacing gas stoves. In the past, they made use of mud stoves. But in the present existence, they

are making use of gas stoves. In rural households, there are utilization of refrigerators and various other kitchen appliances. Furthermore, computers and mobile technologies have been put into practice by the rural individuals in generating information in terms of various areas. In some of the households, there are television and radios as well. Therefore, it can be stated, when the rural individuals are making use of technologies in the implementation of household responsibilities, they are able to contribute significantly in bringing about improvements in their overall quality of lives.

*Construction Purposes* – The rural individuals work as construction labourers in urban areas (Construction Technology, 2021). In rural communities, they normally feel that they will not be able to enhance their livelihoods. The reason being, the rural areas are not in a well-developed state as compared to urban areas. Hence, they migrate to urban areas. In urban communities, they work as construction labourers. When they adopt this profession, they need to be well-equipped in terms of technologies that are used for construction purposes. On the construction sites, rural individuals are making use of modern, scientific and innovative methods in the implementation of their job duties.

Through the use of these methods, they have rendered a significant contribution in leading to an increase in productivity and profitability. The technologies that are made use of in construction combines transformational engineering, manufacturing and material sciences to develop wear parts, components, assemblies, equipment and tools. When various types of technologies are made use of, the construction labourers need to make use of proper gear, and safety measures. Therefore, when the individuals are well-equipped in terms of various types of technologies and use efficiently in their job duties, they are able to lead to improvements in their overall quality of lives.

*Knowledge Management through Digital Technologies* – In rural schools, technologies are made use of in the implementation of teaching and learning methods. It is apparent that instructors need to be well-prepared in terms of lesson plans, before they come to class. Hence, the utilization of technologies contribute significantly in augmenting knowledge among rural individuals in terms of academic subjects and concepts. The technologies are gaining prominence in promoting student learning and helping them to provide solutions to their academic problems. On the other hand, the students

also need to be well-equipped in terms of technologies and make use of them in an efficacious manner. The students are making use of technologies in augmenting their learning and understanding in terms of academic subjects and lesson plans. When digital technologies are made use of to put into practice the teaching-learning methods in an effectual manner, it promotes knowledge management through digital technologies. Therefore, it can be stated, knowledge management through digital technologies is a benefit of science and technologies to rural individuals, which have contributed significantly in enriching their lives.

*Technologies in Sanitation* – In rural areas, it is of utmost significance for the individuals to maintain cleanliness. They need to be well-aware in terms of approaches to preserve the environment and keep it free from pollution. The different types of pollution are, air pollution, water pollution and land pollution. The rural individuals are making use of technologies for sanitation purposes. In most cases, waste material find their way into the land and water bodies without adequate treatment. The ultimate consequence is pollution of water resources. The air pollution is caused due to the emission of greenhouse gases, such as, methane and carbon dioxide. The

utilization of waste-to-energy technologies have proven to be favourable and beneficial in allowing treatment and processing of wastes, before they cause any type of pollution in the environment (Science & Technology for Rural India, 2018). Therefore, one is able to understand that use of technologies for sanitation purposes render a significant contribution in creating an environment, which is free from all types of pollution and clean to a major extent.

### **How Science and Technologies have promoted Well-being of Rural Individuals?**

In rural areas, the individuals are residing in the conditions of poverty and backwardness. They make attempts to alleviate these problems. When they alleviate these problems, they are able to achieve personal and professional goals and lead to enhancement of their overall quality of lives. When science and technologies are being used in the agricultural sector and farming practices, and in various types of creative activities, the individuals will contribute effectively in leading to an increase in productivity. When modern, scientific and innovative methods are utilized in the implementation of their job duties, the use of materials will be less. In this manner, the rural

individuals will contribute in an efficacious manner in alleviating the problems of poverty and backwardness. In the past, they made use of traditional methods in the implementation of the production and manufacturing processes in the agricultural and farming practices as well as in creative activities. But with the advent of technologies, they are making use of various types of technologies, tools and machines in the implementation of job duties. Therefore, it can be stated, science and technologies have played an important role in promoting well-being of rural individuals.

In rural areas, there have been establishment of computer centres. In these computer centres, well-qualified, skilled and capable trainers are recruited. These trainers are required to carry out the job duty of imparting knowledge and understanding among individuals in terms of utilization of technologies. The various types of technologies that are utilized in computer centres are, computers, photocopiers, scanners and printers. When one is well-equipped in terms of these, they will be able to make use of them in an effectual manner. The individuals make use of these technologies in the implementation of tasks and activities. In rural communities, there are establishment of computer training centres as well, which are offering



programs in terms of development of skills and abilities regarding various types of technologies. After the rural individuals have led to an increase in production of goods, they need to be aware in terms of marketing strategies. Hence, through making use of internet, they are able to generate information in terms of various aspects. Therefore, it is comprehensively understood, science and technologies have rendered an important contribution in promoting well-being of rural individuals.

When the rural individuals are making use of technologies for various purposes in their personal and professional lives, they need to inculcate the traits of morality and ethics. In rural communities, there are establishment of training centres, which are offering programs in terms of technologies. The instructors are not only imparting knowledge and understanding among individuals in terms of utilization of technologies, but it is also their responsibility to generate awareness among rural individuals that they should be ethical and abide by the norms, principles and values, when they are making use of various types of technologies. When the rural individuals will inculcate the traits of morality and ethics, they will be able to carry out their job duties in an efficient manner. Therefore, it can be stated, it is necessary

for the rural individuals to get enrolled in training programs to augment their knowledge and understanding in terms of science and technologies. In addition, they will contribute in promoting well-being of rural individuals, provided they implement the traits of morality and ethics.

In rural households, the individuals belong to various age groups. The individuals belonging to all age groups need to put emphasis towards implementation of various types of household responsibilities. These include, preparation of meals, cleaning, fetching water, washing, rearing of livestock and so forth. The technologies are made use of in the implementation of household responsibilities, promoting health and well-being and in taking care of the needs and requirements of the family members. The main utilization of technologies is recognized in the case of production of food. The rural individuals have brought about transformations in their cooking methods by replacing mud stoves with gas stoves. Through the utilization of internet, the rural individuals are augmenting their knowledge in terms of ways needed in the implementation of various types of household responsibilities and taking care of the needs and requirements of the family members. In rural households, there are utilization of refrigerators and various

other kitchen appliances. Furthermore, computers and mobile technologies have been put into practice by the rural individuals in generating information in terms of various areas. Therefore, it is well-understood, science and technologies have rendered a vital contribution in promoting well-being of rural individuals.

### **Utilization of Technologies in Enhancing Career Prospects**

The rural individuals are making use of technologies for various purposes in their personal and professional lives. They aim to enhance their career prospects. The career prospects of the individuals can be enhanced through acquisition of education and getting engaged in employment opportunities. Through making use of technologies and internet, the rural individuals are able to look for educational programs and employment opportunities. The rural individuals are putting emphasis upon up-gradation of their technical skills. The internet is being made use of to a major extent. As it will render a significant contribution in making provision of information in terms of various aspects. Therefore, it is acknowledged, when technologies and internet are being made use of to generate information in terms of various areas, the rural individuals are able to benefit to a major extent.

The rural individuals have recognized the meaning and significance of education. They not only possess the desire to get engaged in the agricultural sector and farming practices, or in various types of creative activities, but they aspire to pursue education and get engaged in reputed jobs. The research studies have indicated that the individuals belonging to rural communities pursue fields such as, education, medical, health care, engineering, science, technology, architecture, management, administration, law and so forth. In rural areas, the system of education is not in a well-developed state. Hence, the rural individuals aspire to migrate to urban communities to achieve educational goals. Through the utilization of technologies, they are able to generate awareness and augment their knowledge and understanding in terms of various areas. When they need to acquire information in terms of educational institutions, programs and other factors, they make use of the internet. Therefore, one is able to understand on a comprehensive basis that the utilization of technologies helps in acquiring information in terms of various factors and in enhancing career prospects.

In some cases, it is not easy for the rural individuals to acquire employment opportunities. Even when they are

educated, they experience problems in acquiring employment opportunities. Through the utilization of technologies and internet, they are able to generate awareness and augment their knowledge and understanding in terms of various types of employment opportunities. The technologies are made use of to augment knowledge and understanding in terms of various types of jobs. When the individuals work from homes, the technologies and internet are regarded as indispensable. In some cases, the poverty stricken families in rural areas send their minor children to urban areas to work as domestic helpers. When they get employed in urban households to work as domestic helpers, they are usually enrolled in schools to acquire education. Apart from the acquisition of education, they are provided with information in terms of utilization of various types of technologies. As they grow they are able to augment their technical skills. Therefore, it is well-understood, through the utilization of various types of technologies and internet, they are able to augment their knowledge and understanding in terms of various areas.

The rural individuals, belonging to all age groups usually develop interest in various types of creative activities. Some of the common activities are, production of

artworks, handicrafts, pottery making, silk weaving, garments manufacturing and so forth. In the past, they put into practice the production and manufacturing processes manually. But with the advent of technologies, they are making use of various types of technologies and machines in the implementation of job duties. Through the utilization of various types of technologies and internet, they are able to augment their knowledge and understanding in terms of modern and pioneering methods in the implementation of tasks and activities. For example, when they aim to hone their skills in terms of utilization of tools in the case of production of various types of handicrafts, they will make use of technologies and internet. Therefore, it can be stated, through the utilization of technologies and internet, they are able to hone their skills.

## **Conclusion**

The science and technology in rural communities are utilized by the rural individuals in leading to up-gradation of their living conditions. In urban and in rural communities, there are establishment of training centres, which are offering programs in terms of development of skills and abilities in terms of augmenting their skills and abilities in terms of various types of technologies. The benefits of science and technologies to rural

individuals are, leading to increase in productivity in the agricultural sector and farming practices, leading to increase in productivity in various types of creative activities, communication purposes, generating information in terms of various areas, leisure and recreation purposes, promoting health and well-being, implementation of household responsibilities, construction purposes, knowledge management through digital technologies and technologies in sanitation. The science and technologies have played an important role in promoting well-being of rural individuals. The rural individuals are utilizing technologies in enhancing career prospects. Finally, it can be stated, when the rural individuals make use of various types of technologies and internet in the implementation of tasks and functions, they are able to achieve personal and professional goals and lead to enhancement of their overall quality of lives.

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