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Information and Communication Technology for Education in Rural Sector - A Review

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Abstract: ***ICT stands for Information and Communication Technology. Now a days we see use of ICT in almost every field for various development activities. The overall concept involved in the process of ICT are constantly evolving in our daily lives. As Development in Rural Area is the key factor for the growth of the Indian Economy it become necessary for the government to develop and improve the Rural Sector. ICT plays a major role in developing and improving a Rural Sector and has helped to develop the rural sector in tremendous way. It is used in rural area for the growth of various field like education, agriculture, medical treatment and many other. As now a day's education has played a major role in an individual growth it become necessary for every individual to get educated. As the overall development depend upon the skilled workforce which is possible only through quality education. ICT can provide information to people in a better way. Using ICT in Education will make the teaching learning process easy and interesting. This paper is an overall explanation of ICT in Rural Education. The Need of ICT in Rural Education for the Development of Rural People which will affect the world economic conditions, the various role of ICT in Rural Education, Positive and Negative Impact and the Challenges Faced by ICT in Rural Sector.***
Keywords: ICT, Rural Area, IT, Rural Development, ICTs in Education, Challenges, Quality Education

I. INTRODUCTION

ICT stands for "Information and communication technology". It refers to technologies that provide access to information through telecommunication. It is similar to Information Technology (IT) but focuses primarily on communication technologies. This includes the internet, wireless networks, cell phones and other communication mediums. It means we have more opportunities to use ICT in teacher training programmes now days and improve quality of teacher for teach effectively [10].

Rural development has been receiving an increasing attention of the governments across the world. India is a country of villages and its development depends with development of the people living in rural areas [2]. Information and Communication Technologies (ICT) is being used by the government and non-government organization for developing the rural and urban areas [14]. Particularly in the field of education its development is tremendous [7]. The government of India is providing high priority to rural development with the objective to achieve rural- urban integration in growth process. The focus of development is to include disadvantaged sections of society i.e 'quality in growth' and 'equality of opportunity', 'higher learning process', 'quality in education' [5].

ICT is one of the rapid development technological fields in the global society [14]. ICT is an effective mechanism to make tremendous change and advancement in traditional education scenario. The use of ICTs in education aims to improve the quality of teaching and learning as well as democratize the access to education [14]. All modern economies have demonstrated in the past that education is the first step to building the capacity which people can then use [13]. There is no doubt in the near future's development will based on ICTs [7]. They are influencing all aspects of life. The influences are felt more and more at schools. Because ICTs provide both students and teachers with more opportunities in adapting learning and teaching to individual needs, society is, forcing schools aptly respond to this technical innovation [10]. For ICTs to succeed in India, education for all must be the first priority [13]. However, benefits of ICTs are not reached expected level in the rural areas still the rural population living with minimum level of ICTs facilities especially the poorest of the poor. The main reason beside this is improper structure of ICT in rural area [14].

II. NEED FOR ICT IN EDUCATION

ICT helps to keep pace with the latest developments with the help of different technologies included in it [10]. Information and Communication Technologies are defined as all devices, tools, content, resources, forums, and services, digital and those that can be converted into or delivered through digital forms, which can be deployed for realising the goals of teaching learning, enhancing access to and reach of resources, building of capacities, as well as management of the educational system.

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These will not only include hardware devices connected to computers, and software applications, but also interactive digital content, internet and other satellite communication devices, radio and television services, web-based content repositories, interactive forums, learning management systems, and management information systems. These will also include processes for digitisation, deployment and management of content, development and deployment of platforms and processes for capacity development, and creation of forums for interaction and exchange [11].

Why do we need ICT in schools? Was education not happening before computers came into existence? Why is this paradigm shift necessary? The shift is necessary because this is the age of information and technology, an age that requires that teachers facilitate the gathering of this information and not merely teach.

Unfortunately, in India, ICT is largely associated with the use of computer and Internet. What one uses ICT for and how one uses it, is not addressed sufficiently. Schools and colleges acquire computers, Internet connection, LCD projectors and then send their teachers for crash courses that supposedly teach them to use technology. The trouble is this whole approach is devoid of focus. But, until teachers are made to realize the need of ICT, no amount of computerization can help. A question I often hear teachers who are unwilling to take the ICT plunge is, 'Can the student learn anything without the teacher explaining or intervening? And my answer to that is, 'Students also have ideas of their own and knowledge that they gathered from daily life; this knowledge and ideas are not accepted or utilized by teachers. Using ICT this can be achieved in a big way.' Teachers have to be trained to facilitate the learning process, make the process real, achievable, challenging, yet exciting and not intimidating. Reducing teacher talk and encouraging student discussion is extremely important. Everything need not be written on the blackboard to be considered as taught. Many teachers think the computer is used only to make the content look attractive! They need to know that in 21st century, information is not difficult access, instead organizing, sharing, and collaborating become essential skills. Hence, ICT is not merely to portray information but to interact, share, and thus learn. ICT provides meaningful, absorbing media that makes teaching-learning more productive [11]. ICT is learner centric and hence brings about active involvement of students in the learning process. Students get motivated when learning activities are challenging, authentic, multi-sensorial and multi-disciplinary [11].

ICT is the convergence of computer, communication and content technologies. It has attracted the attention of academia, business, government and communities to use it for innovative profitable propositions. In order to compete in a global competitive environment, a highly skilled and educated workforce with aptitude and skill sets in application of ICT is inevitable for every nation. ICTs are a potentially powerful tool for extending educational opportunities, both formal and non-formal, to previously underserved scattered and rural populations, groups traditionally excluded from education due to cultural or social reasons such as ethnic minorities, girls and women, persons with disabilities, children with special needs and the elderly, as well as all others who for reasons of cost or because of time constraints are unable to enrol on campus. Use of ICT will catalyse the cause and achieve the goals of inclusive education in schools. There is no conclusive research to prove that student achievement is superior when using ICTs in the education space, either in the developed or in developing countries. However, there is a general consensus among practitioners and academicians that integration of ICTs in education has an overall positive impact on the learning environment [11].

Different Strategies for applying ICT in Teacher Education [8]:

1) Providing adequate infrastructure and technical support.
2) Applying ICT in all subjects.
3) Applying new Pre-service teacher Education curriculum.
4) By using application software, using multimedia, Internet e-mail, communities, understanding system softwares

III. ROLE OF ICT IN EDUCATION

In India, Education plays an important role as government has provided various scheme and awareness programs regarding the importance of education and nowadays, education with the use of ICT is becoming popular day-by-day [5].

ICT in education simply means teaching and learning with ICT. It has become indispensable part of the education system. It has gradually transformed educational society into knowledge and information society which in result transforming economy to knowledge economy and supporting nations to create wealth by exploring knowledge. It is a modern and qualitative technological approach and has a deep impact on education system. It has introduced qualitative changes and increased productivity and changed the overall style and functioning of the educational system and its governance. It has contributed, contributing and will contribute immensely in the development of education [12]. To make the best use of ICT tools, teachers must understand the relevance, usefulness and usability of ICT tools [6]. It is also a universal fact that it cannot replace teachers as they are core part of quality teaching and technology cannot succeed without them.

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The only thing which can be changed, modified and upgraded is technology, way, method and mode of teaching. These innovative changes due to ICT forced all the educational participants to think futuristically and educational institutions, administration and teachers must adjudicate their roles, approach and vision accordingly [12]. ICT based distance education in India has primarily been confined to university-level education and is often considered being sub-par when compared to traditional courses. The long-term purpose of the present study is to develop a sustainable model of distance-learning that is cost-effective and leads to a more fulfilling learning experience for the children [1]. The range of technologies is increasing all the time and there is a convergence between the new technologies and conventional media". There is no conclusive research to prove that student achievement is superior when using ICTs in the education space, either in the developed or in developing countries. However, there is a general consensus among practitioners and academicians that integration of ICTs in education has an overall positive impact on the learning environment. ICTs have the potential to innovate, accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change. ICT as Medium of Teaching and Learning refers to the tool for the purpose of teaching and learning itself [11].

A. Various Role of ICT in Educations [5]

1) Application of ICT has the potential to improve living standards of people in rural areas and by providing important educational benefits, social and commercial awareness.
2) Providing adequate infrastructure and technical support.
3) To increase variety of education services and medium.
4) To promote technology literacy.
5) ICT is helping in modernizing agriculture, in medical surgery, to educate and to trained workers for industry.
6) To support schools in sharing experience and information with others.
7) To increase a variety of educational services i.e. development of learning skills, expansion of optional education, distance education.
8) To promote equal opportunities to obtain education and information.
9) ICT helps teacher for organizational preconditions (vision, policy, and culture).
10) It helps in effectiveness of classroom as well as innovative teaching.
11) ICT helps teacher in both pre-service and in-service teachers training.

B. There are Many Initiatives Taken In The Field Of Education By The Government Like [15]

1) *E-Basta:* This project has made a framework to make textbooks accessible in computerized structure as digital books to be read and utilized on tablets and PC, the primary thought is to bring many publishers (free as well as commercial) and schools together on one platform.
2) *National Digital Literacy Mission:* This programme being launched with a aim of not only bringing the dynamic and integrated platform of digital literacy awareness, yet in addition to shape education and capacity programs that will assist the rural communities with taking lead in the worldwide digitalized economy and help them in keeping up the competitiveness and furthermore shape a technologically enabled society.
3) *SWAYAM:* India enters new age of digitized education through its drive named as swayam (study web of dynamic learning for youth aspiring mind). It is launched by HRD ministry and aims offering on the web courses to Indian citizens by teachers of recognized educational institutions like 11T, 11M, and other central universities. It is a made in India platform which offers interactive courses liberated from cost from class IX to post graduation, which can be get access by anybody, anyplace whenever and so on.

IV. BENEFITS OF ICT IN EDUCATION

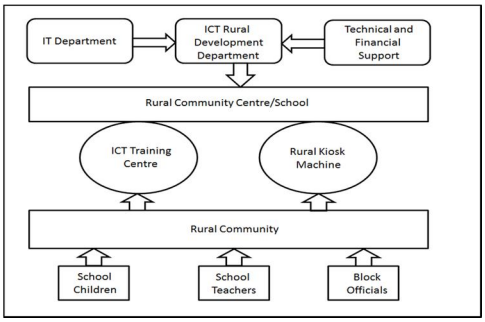
A. Various Benefits of ICT in Education [11]

1) It has the potential to improve education system of the nation
2) It can transform the nature and quality of education as a whole
3) It helps to enhance the quality of education by facilitating new forms of interaction between students, teachers, education employees and the community

4) It acts as and provides students and teachers with new tools that enable improved learning and teaching and adds to skill formation
5) It improves the learning process through the provision of more interactive educational materials that increase learner motivation and facilitate the easy acquisition of basic skills
6) It makes education more accessible for all, bringing education to the doorstep of children living in remote rural locations by means of enabling distance learning
7) It provides access to a vast treasure of educational resources and content for improving literacy
8) It leads to integration of technologies with traditional educational activities although it can never replace the conventional teacher-student relationship that is so crucial to the development process
9) It offers more challenging and engaging learning environment for students of all ages
10) It enables a knowledge network for students
11) It provides greater flexibility and individualized learning facilities to learners
12) It enhances the overall teaching-learning process
13) It avails high speed delivery of uniform quality content at reduced cost bringing the cost of education from very high to very low
14) It can serve multiple teaching functions and diverse audiences
15) It facilitates in enhancing the efficiency and effectiveness of educational administration and policy by improving the quality of administrative activities and processes
16) Schools tend to witness a higher attendance, motivation levels, academic accomplishments and effective communication as an outcome of ICT programs and projects.
17) Teachers too gain as a result of ICT initiatives. They find ICT to be useful for teaching as well as for personal and professional work. Application of ICT in teaching makes teaching more innovative, interesting, interactive, easy and effective. It complements the traditional teaching-learning process. While imparting knowledge with the aid of ICT educators find that students are more receptive and responsive. Also, ICT can help to impart more information and knowledge to students in a shorter time, enabling maximum utilization of resources and time.

V. PROPOSED MODEL FOR ICT

In the proposed model we have considered all these points and for technical connection we are using RKM (Rural Kiosk Machine) which will provide physical communication between the ICT - RDD (Rural Development Department) and Rural Community [3]. Then these RKM's will be connected to Different Departments, by using area wise wireless connection according to local needs. Initially people will be trained by ICT – RDD in the Community Training Centres i.e ICT-TC and then people itself will be able to use RKM for getting the information [7].



Model for ICT Rural Education

A. Rural Community Center

Rural Community Centre is the central component which consists of Rural Kiosk Machine (RKM) and ICT-Training Centre (ICT-TC). Rural school building will act as a Rural Community Centre which will hold RKM and facilitate the people for 24 hours. The same building will also work as ICT-TC for discussion and trainings in the evening timings for the rural community. ICT teacher/instructor of that ICT-RDD department will help the people that how to use the RKM and how to get information from that machine directly.

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B. Rural Kiosk Machine

Rural Kiosk Machine will contain the information in local languages. Most of the Indian peoples speak Hindi (Devnagari) language as an official language. English is rarely been spoken in rural areas. That's why there is a need for such a kiosk which can present information in Hindi as well as in Regional languages. RKM depicts stored information in textual, audio and video information, live stock, market prices, weather forecast, health etc. This machine will consist of user friendly interface in local language having all the required information needed for the Rural Community. All the related information will updated on hourly basis by using wireless connection by ICT-RDD department which will take information from concerned department. RKM installation will be sponsored by Ministry of IT. These machines are connected directly through wireless connection to the ICT-RDD. All the RKM Machines will be operated centrally through ICT-RDD Department.

C. ICT- Training Centres (ICT-TC)

ICT-RDD department will responsible for providing basic education for use of RKM for each faction of rural area by establishing ICT-Training Centre at each school in every village even though it is very small. If school is not available in the village then RKM should be placed at well known secured central place of the village. These centres will provide education on how to get information from the RKMs on almost every rural aspect.

D. ICT- Rural Development Department (ICT-RDD)

This department will get latest information from IT and other related departments and will update the RKM's and will provide training to ICT instructors for the latest updates at rural community centre. The purpose and theme of the ICT Rural Development Department is the same with an amendment that it will work only for the development of the 70% population which need more attention and care and can be more productive for the development of country, but its cyclic process and hope it will accelerate rapidly with the passage of time.

VI. POSITIVE IMPACT OF ICT IN EDUCATION

Present world is moving on technology and expected future is the same. Expecting things without technology is impossible. In present era of civilization, it is difficult to imagine learning environment without ICT. Use of ICT in modern society has grown tremendously and became a critical vehicle and has impacted the complete learning process. By adopting ICT teachers become more collaborative, competitive and futuristic and extended learning beyond the classroom. By using educational ICT educators became able to create learning communities in which educator, fellow educators of the institutions, educators and experts in various discipline from other institutions and across the world, students, parents, local's community organizations, museums, libraries and alimony programs are active participant. Educational ICT uses enhanced collaboration and enabled educator to develop standard pedagogy, specialized curriculum, teaching methodology, course content and other supportive materials. By using ICT tools and resources educators are efficiently and effectively managing, assessing and evaluating their quality and usefulness and impacting students learning. By using ICT educator have become global, they are not only mentoring their institute students, but they are also mentoring learners across the world. They became able to prepare pedagogy professionally, became able to rethink, readjust, redesign and revise their course content and study material along with instructional approaches, techniques, tools, skills and their respective expertise. By the use of ICT, they became more mature learners and also co learners with their student's colleague and experts and explored academic potential to the full and build academic strength. By using the ICT, they became collaborative engineer, architect of learning experience, a guide and a change agent. By using educational ICT like videoconferencing, online chat, collective social media sites, educators are integrating, coordinating, and collaborating rural and urban learners with experts and peers and making classroom learning relevant and authentic. ICT provided platform to the academic participants and encouraged them to invest in it personally and developed their teacher leadership plans. ICT converted traditional education and knowledge society into knowledge economy and enhanced the skills of educators and learners. ICT reduced the cost of educational material and enabled students to adopt rapidly changing technological environment with ease, they became able to use technology to explore opportunities and shape their lives, their community and the world. The use of net has enabled the sharing and easier accessibility of books and scientific books which has increased students' knowledge and learning. Introduction of ICT in classrooms has impacted positively, digital boards attractive features have improved learning base of students. Use of educational ICT helped nations in reducing the teachers to student's ratio where they were high in comparison to international recommended standards. ICT use helped the institutions to identify their social, regional and global status.

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It helps institutions to make effective and authentic SWAT analysis of their institutions and take necessary action for the betterment of the institution. The greatest achievement of educational ICT is that it converted world into village and helped education to penetrate deep in society at low cost with ease in the form of distance education and online education [12].

VII. NEGATIVE IMPACT OF ICT IN EDUCATION

Presence of technology does not mean that it is the ultimate and last resort to all educational problems and will ensure equity and accessibility in learning. There are complexities of intellectual property rights which arise when software is downloaded or shared without proper permission. Due to net and easy accessibility plagiarism has increased which impacted decline in educational standards. Due to access technology unwanted, baseless and fake information are also on rise and impacting learners and researchers. Maximum study materials are available in short and for more they charge high cost. Frequent change in technology also impacts negatively as users have to pay for advance version. Instructor cannot adopt and afford the cost of frequently changing ICT gadget, and also, they are not clear about the benefit of the technology. Frequently changing technology and software's also de-motivate educator as they have to invest time in preparing the course content according to the new technology and software. ICT is general purpose technology (GPT) and is considered as immature by nature and it needs to be specified to meet the needs expressed by the students. Before adopting ICT fully, it is needed to explore its possibilities, potentialities, accessibilities and reliabilities by the academic institutions. Apart from educative information and study material accessibility many social damaging information's and video materials (pornography) are available on net and have impacted society very drastically. ICT has also created digital divide, students have computer and other facilities in institutions but not at home and poor nation's institutions do not have proper facilities in institutions and students do not have any technical excess at home. Technology converted world into village but created distance among the society, due to increase technology society lost human relation and converted responsibilities into opportunities. Learners highly depending upon ICT lose their analytical skills, mathematical skills and judgmental skills [12].

VIII. CHALLENGES FACED BY ICT IN RURAL EDUCATION

Although ICT has the potential to improve education system of a country to a great extent, yet it is not the case in the developing countries. There are multiple issues and challenges confronting the implementation of ICT education in schools and educational institutions in these countries and the problems are much more magnified in case of schools located in remote villages and rural areas [11]. The integration of ICTs in education systems may face various challenges with respect to policy, planning, infrastructure, learning content and language, capacity building and financing. ICT-enhanced education requires clearly stated objectives, mobilization of resources and political commitment of the concerned bodies [4].

Some of the Challenges Faced are:

1) Lack of trained teachers is a major obstacle in the use of ICT in rural education is the lack of knowledge and skills. There is dearth of dynamic teachers formally trained in ICT. Moreover, there is hardly any quality training imparted on a regular basis to teachers involved in ICT education [11].
2) The infrastructure challenges that may exist are absence of appropriate buildings and rooms to house the technology, shortage of electric supply and telephone lines, and lack of the different types of ICTs. Because of this, one need to deal with infrastructure related challenges before the planning of ICTs integration to education systems [4].
3) ICT integration in education should parallel with teachers professional development. The school leadership also plays a key role in the integration of ICT in education. Lack of support from the school administration is also a big challenge. Thus, for the effectiveness of ICT integration, administrators must be competent and have a broad understanding of the technical, curricular, administrative, financial, and social dimensions of ICT use in education [4]. There is resistant from teachers, basically from older teachers as compared to younger ones, to apply ICT in their subject. Hence teachers need to update their knowledge and skills as per change in the curriculum and technologies [11].
4) Paucity of software, lack of funds, inadequate time and lack of technical skills were also found to be the major barriers to the usage of technology in most Jordanian schools [11].
5) Shortage of time in schools, teachers are usually burdened with multiple tasks other than teaching. Moreover, they have to teach all types of subjects along with ICT. They do not have time to design, develop and incorporate technology into teaching and learning. The teacher needs time to collaborate with other teachers as well as learn how to use hardware and software and at the same time keep oneself updated with the latest technology [11].

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6) Issues of maintenance and upgrading of ICT equipments in rural schools is subject to their limited financial resources. Largely, the government initiatives are restricted by budgetary constraints. The ICT projects in rural schools are not self-sustainable. When the projects launched by government or private sector phases out, the maintenance of equipments need to be borne by the students. The students often with weak economic backgrounds are unable to fund the maintenance and computing facilities expenses [11].
7) Overall the school level barriers can be further classified into two categories: one related to school ICT infrastructure and other related to technical and administrative support provided by the school. It was evident from the literature that barriers to the use of ICT in secondary school include lack of motivation; lack of confidence; lack of funding; lack of skilled personne; poor ICT infrastructure; low connectivity; lack of awareness; inadequate maintenance of hardware and software and power interruptions [11].

IX. THE POSSIBLE SUGGESTIONS FOR BETTER IMPLEMENTATION OF ICT IN RURAL SCHOOLS OF INDIA

At present in India, ICT in school education is strictly limited to a handful of elite schools. Beyond that, it's just a computer lab that's held apart from the conventional educational process. Though computers came to Indian classrooms in the year 1984-85, the level of adoption of modern technology in the teaching and learning process has been limited and uneven. Various ICT tools must be available and it must be accessible at demand. Many schools have limited resources for buying books, stationery, furniture and other classroom materials. Role of private sector providing services in such sectors may be taken into account. Rural population may not be able to pay hefty amount to utilize such ICT resources for education. One of the great challenges for quality control in education is lack of standards for parameters to measure the quality of education. India is developing as a knowledge economy and it cannot function without the support of ICT. The gap between demand and supply of education has necessitated the government and institutions to formulate policies for more beneficial use of ICT. In order to bridge the gap, it is necessary to evolve cooperation between public and private stakeholders. There is a need to focus on improving four aspects of ICT - access, usage, economic impact and social impact [11].

The study makes the following suggestions for improving and enabling ICT education in rural India [11]:

1) Based on the size of the school, needs of the ICT programme and time sharing possibilities, States will define an optimum ICT infrastructure in each school. Not more than two students will work at a computer access point at a given time. At least one printer, scanner, projector, digital camera, audio recorders and such other devices will be part of the infrastructure.
2) In composite schools, exclusive laboratories with appropriate hardware and software will be provided for the secondary as well as higher secondary classes.
3) In addition, at least one classroom will be equipped with appropriate audio-visual facilities to support an ICT enabled teaching-learning.
4) Computer access points with internet connectivity will be provided at the library, teachers' common room and the school head's office to realise the proposed objectives of automated school management and professional development activities.
5) ICT enabled education can be significantly enhanced and the range of classroom practices expanded with the introduction of digital devices like still and video cameras, music and audio devices, digital microscopes and telescopes, digital probes for investigation of various physical parameters. These will also form a part of the infrastructure. States will make appropriate choices and promote the use of such devices in classrooms.
6) Teachers and students will be educated on issues related to the safe use of internet Firewalls and other security measures will be implemented to guard the school network against cyber attacks and misuse of the ICT facilities. Appropriate guidelines for network security will be developed.
7) Regular and regulated supply of electricity, appropriate electrical fixtures, adequate power backup and support, including alternate sources of energy, where needed, will be ensured. Students and teachers will also be trained in the safe use of electrical outlets and fittings.
8) Physical facilities like an adequately large room, appropriate lighting and ventilation, durable and economic furniture suitable for optimisation of space and long hours of working will be established. Alternate layouts and arrangements facilitating interactions amongst students and with the teacher will be encouraged.
9) Adequate safety precautions and rules for use will be established. Each laboratory will be equipped with a portable fire extinguisher and students and teachers trained in its use. An appropriate fire drill will also be implemented.

10) School heads will play an important role in establishment and optimal utilisation of ICT and ICT enabled education practices in the school. All school heads will undergo appropriate orientation in ICT and ICT enabled education training programmes. This will also help them in building up digital resources for the school.

11) States will explore the possibilities of sharing the infrastructure partly or wholly with the community to extend education or train youth after school hours or similar purposes. Care will be taken to ensure that such usage does not compromise the school's educational or ICT programmes. The BOOT agency and/or the school may also utilise it for augmentation of resources. States will try out and establish appropriate community partnership models for optimum utilisation of infrastructure and resources, while ensuring safety of school property.

12) Finally, Programme Monitoring and Evaluation Group (PMEG) of the Department of School Education & Literacy, Ministry of HRD, Government of India, will be tasked with the overall responsibility of guiding the implementation of the ICT programme in schools across the country. The PMEG may set up task groups and invite institutions or established professionals with substantial expertise in that sector to develop norms, specifications, guidelines, evaluation reports, white papers etc. to guide the States in implementing the ICT programme.

X. CONCLUSION

1) Information and Communication Technology has great relevance in today's world. If implemented properly ICT can surely bridge the gap between economically and technology backward and forward classes [13]. Information Technology indirectly impacted the rural economy and helping in rural development which is major issue for developing countries like India. However, it is important that the government should take more efforts to use of ICT in its development programmes. People of rural areas should be educated to use ICT effectively and efficiently [2]. Proper training and implementation of ICT programmes in simple way and language which is easily understandable by the rural people can surely bring about revolution in rural development [13].

2) The role of ICTs in the education is recurring and unavoidable [9]. ICTs are exerting impacts on pedagogical approaches in the classrooms. Their contribution to changes in teaching practices, school innovation, and community services is considerable [4].

3) The use of such technology in teaching training programmes the quality of teaching will increase effectively. A well-designed teacher training program is essential to meet the demand of today's teachers who want to learn how to use ICT effectively for their teaching. It is thus important for teacher trainers and policy makers to understand the factors affecting effectiveness and cost-effectiveness of different approaches to ICT use in teacher training so training strategies can be appropriately explored to make such changes viable to all. So if use of ICT in teaching training programmes by the institute of conducting teaching training programmes, our teaching learning process will too smooth and able to understand for every type of students of our country [10].

4) Although ICTs are not a solution for development, they play an important catalytic role. It is however encouraging to note that ICTs are top priority on many governments' agendas. Given that government is one of the stakeholders of Education, the prioritisation of ICTs has great impact on its performance [3].

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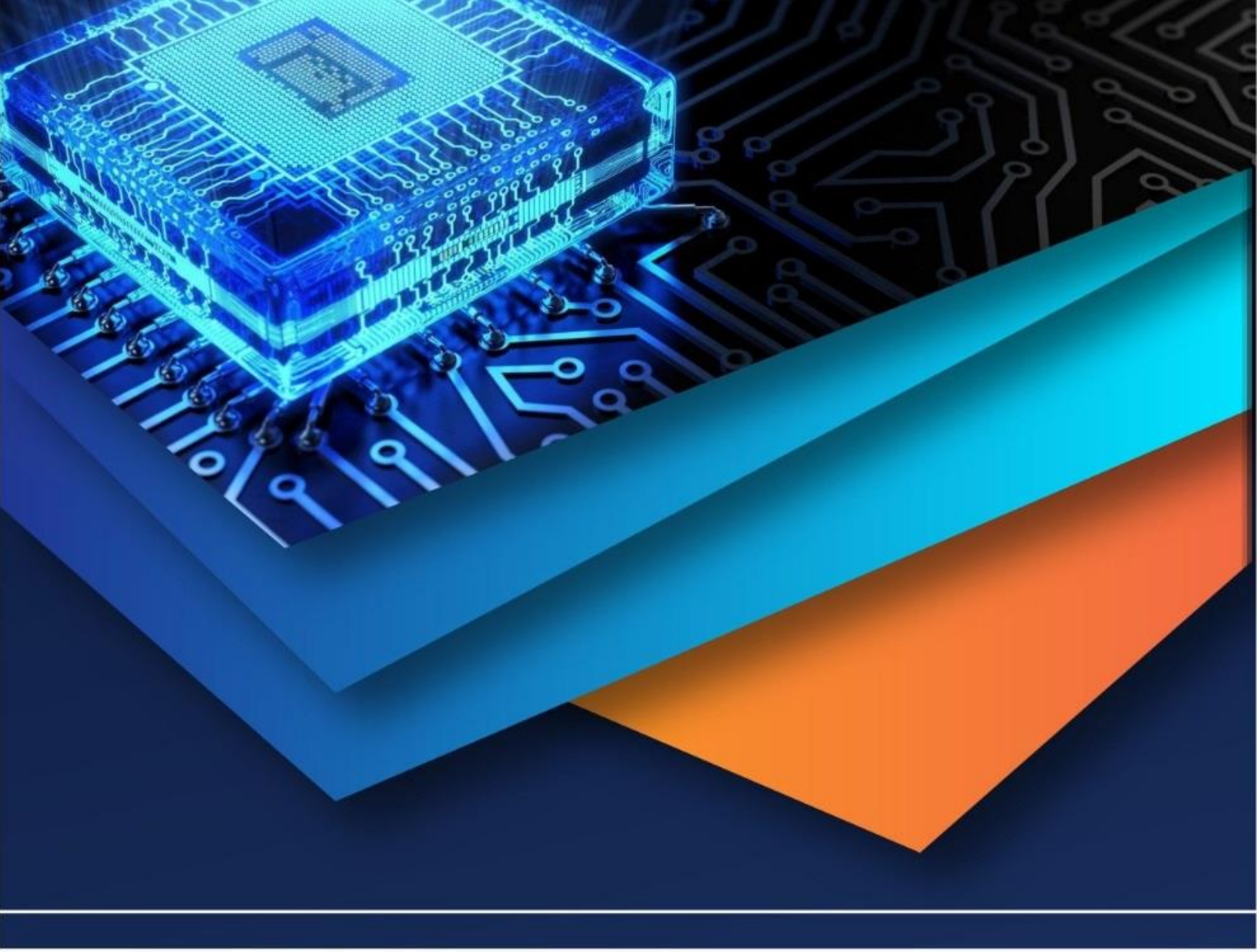

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