THE APPLICATION AND ROLE OF ICT IN RURAL AREA

Dr.U.Vani*   Priya. J**

Assistant Professor, Department of Commerce (Aided), PSG College of Arts & Science, Coimbatore, Tamil Nadu, India.
**Research Scholar, Department of Commerce, PSG College of Arts & Science, Coimbatore, Tamil Nadu, India.*

Abstract
The major purpose of this study was conducted to identify the in application and role of ICTs in rural areas of Coimbatore, ICT stands for Information and Communication Technology. The concepts, methods and applications involved in ICT are constantly evolving in our daily lives. The Rural area in India is one of the most important factors for growth of the Indian economy. The present strategy of rural area mainly focuses on poverty alleviation, better livelihood, provision of basic amenities and infrastructure facilities. Even after so many years after independence India have not been able to move to the stage of "developed nation", the nation is still developing. Public administration, governed by bureaucratic structures built on rationale principles, that dominated the twentieth century, has failed to respond to the changing requirements of the present times. Application of ICT is a paradigm shift to the traditional approaches that the government has been using past so many decades. With the use of ICT, government renders services and information to the public using electronic means. With the rising awareness amongst the citizens and their better experiences with the private sector– the demand for better services on the part of government departments became more pronounced. The infusion of Information and Communication Technology (ICT) is playing a prominent role in strengthening such a demand. Combining ICT in Rural Area can not only speed up the area process but it can also fill the gaps between the educationally and technologically backward and forward sections of the society.

Keywords: ICT: Rural area, Application of ICT, Role of ICT.

INTRODUCTION
India is a country of villages and about 50% of the villages have very poor socio-economic conditions. Since the dawn of independence constant efforts have been made to emancipate the living standard of rural masses. The five-year plans of the central government also largely aim at Rural Area. The Ministry of Rural Area in India is the apex body for formulating policies, regulations and acts pertaining to the area of the rural sector. Agriculture, handicrafts, fisheries, poultry, and diary are the primary contributors to the rural business and economy. Rural Area which is concerned with economic growth and social justice, improvement in the living standard of the rural people by providing adequate and quality social services and minimum basic needs becomes essential.

The present strategy of rural area mainly focuses on poverty alleviation, better livelihood opportunities, provision of basic amenities and infrastructure facilities through innovative programmes of wage and self-employment. ICT is the new tool for rural area. Information and Communication Technology, if used properly can be of great advantage for the area at grass root levels. At the same time challenge remains with the administration to capture the minds of the rural masses, mostly illiterate, to make them adapt the new technology which is completely alien to them. There are various rural area schemes run by the government of India and also organizations are present to look after the implementations of these programmes.

SCOPE OF ICT IN RURAL AREA
Recent areas in Information and Communication Technology (ICT) have introduced a plethora of opportunities for area in every conceivable area. ICT as an enabler has broken all bounds of cost, distance and time. The fusion of computing and communications, especially through the internet has reduced the world indeed into global village creating new actors and new environments.

One of the major components and driving force of rural area is communication. Conventionally, communication includes electronic media, human communication & now information technology (IT). All forms of communications have dominated the area scene in which its persuasive role has been most dominant within the democratic political frame work of the country. Persuasive communication for rural area has been given highest priority for bringing about desirable social and behavioral change among the most vulnerable rural poor and women. Initially, the approach lacked gender sensitivity and empathy of the communicators and area agents who came from urban elite homes. Added to these constraints is political will that still influences the pace and progress of rural area.

Technological changes further compounded the direction of rural area as information and communication technology (ICT) has been thought by communication and area workers as a panacea for other ills that obstructs the area process. It has lead to

Indiscriminate applications and use of ICT in every aspect of information dissemination, management & governance of area. While there are few shining examples of achievements of ICT in area, there are a large number of failures and unauthenticated claims.

The closing decade of twentieth century was the opening of historic information and communication technology interventions for area. This period has witnessed enormous and unprecedented changes in every aspect of communications technologies

OBJECTIVE OF THE STUDY
- To analyse the role and scope of ICTs in rural area.
- To suggest course of actions that should be taken so as to utilize ICTs in better way for rural area.
- To study the ICT and its relevance to rural area.
- To examine the current status of ICT in India.
- To find out the conclusion and a suitable suggestion to a better implementation of ICT in rural areas.

REVIEW OF LITERATURE
The focus here is on the role and importance of ICTs in rural area. The context of rural area has changed rapidly in recent years (Ashley and Maxwell, 2002). Around three-quarters of the world's poor still live in rural areas. In case of India rural area becomes most important because India is basically agriculture based country and almost 70% of Indians live in rural areas.

Comprehensive training in agriculture, livestock and natural resources through promotion of ICT for rural residents and optimizing their decision making, and above all of these their participation in developing programs seems essential.
In 1986, National Informatics Centre introduced IT to facilitate planning, monitoring and exchange of information between various agencies in the area of Rural Area administration.

Area is not simple or straight forward linear process. It is a multi-dimensional exercise that seeks to transform society by addressing the entire complex of interwoven strands, living impulses, which are part of an organic whole". (Haqqani 2012)
Duncombe and Heeks (2012) describe ICTs as an "electronic means of capturing, processing, storing and disseminating information".

Rural economies can be benefitted from ICT by focusing on social production, social consumption and social services in rural areas (Malhotra, 2010).

THE APPLICATION OF ICT IN RURAL AREA
ICTs alone can't bring about rural area. Education is one of the basic problem for application of ICT as 40% of India's population is illiterate. All modern economies have demonstrated in the past that education is the first step to building the capacity which people can then use. If the Indian economy grows at 5-6 per cent per annum as it has been growing over last 2-3 years, then over 10-15 years the size of the Indian economy would have doubled. Even with this level of growth it cannot by any means bridge disparities and eradicate poverty. Therefore introducing ICTs alone will not meet the area challenge. For ICTs to succeed in India, education for all must be the first priority.

It is, of course, important to note that the proportion of the economy involved in some or other form of adaptation or usage of ICT is still very small. The proportion of people involved in the ICT Industry, especially in the rural areas is negligible. Thus, another priority action, in order for the benefits of ICT to trickle down as well as contribute to the rural prosperity, would involve setting up several rural and village level micro-enterprises.

The basic challenges that usage of ICT for rural area faces are-
Illiteracy amongst the vast multitude of people
- Major power-cuts and 'brown-outs' affecting the country-side ranging from 5 to 12 hours every day. Even though uninterrupted power supply systems are used; yet they prove insufficient to cope up with the power breakdowns.

- Serious band-width issues and connectivity problems. Even though technology is available to upgrade the band-width; not enough resources have been budgeted by the Government to change this scenario. However once a few projects for the up gradation of the band-width on the anvil get commissioned, there should be a significant improvement in the connectivity.

- Financing difficulties encountered by the local grass root level institutions as well as by the state governments. Drastic steps are needed to inject funds for the area of the ICTs in the rural areas; increasingly by the participation of the private sector.

- Acute shortage of project leaders and guides who could ensure implementation of the ICTs at the grass root levels. Unfortunately most professionals want to work in the urban areas where there are ample opportunities available to them for growth as well as prosperity. In the absence of these 'techno-catalytic' resources; area of ICTs in the rural areas will always be very slow.

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. With the IT boom in India technology is easily accessible to the government machineries with relevantly cheaper and convenient manner. 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 area

E-Governance for Rural Area
Several states have initiated the creation of State Wide Area Networks (SWAN) to facilitate electronic access of the state and district administration services to the citizens in villages. The Information and Communication Technologies (ICT) are being increasingly used by the governments to deliver its services at the locations convenient to the citizens. The rural ICT applications attempt to offer the services of central agencies (like district administration, cooperative union, and state and central government departments) to the citizens at their village door steps. These applications utilize the ICT in offering improved and affordable connectivity and processing solutions.

Computerization of land records have been a great success in application of ICT in rural area. Land records are great importance to contemporary socio economic imperatives and their revision and updation are necessary for capturing the changes in rural social dynamics. Land records are an important part of rural area. The govt. of India started the centrally sponsored scheme of Computerization of Land Records (CoLR) in 1988-89 with main objectives of Creating database of basic records Facilitating the issues of copies of records Reducing work load by elimination of drudgery of paper work Minimizing the possibilities manipulation of land records, and Creating a land management information system`The farmers were largely benefited CoLR. The farmers can get all necessary records when they need it, these records are free from human arbitrations, the updating becomes easy, free from harassment and the farmers had direct access to information regarding their property.

Tele-Education
Education is a primary right for every citizen of India. By the constitution of India, Article - 45 says education must be provided to children up to 14 years. Even after 64 years of independence some States in India are still struggling to achieve quality education. There are more than one million rural schools among 6,38,000 villages in India. Schools in rural areas are promoted to raise the level of education and literacy in rural India.

ROLE OF ICTs IN AREA OF RURAL AREAS IN COIMBATORE
Improved Communications
One of the main attractions of ICTs in rural areas in Coimbatore has been the ability to get in touch with relatives in urban areas and abroad. This accounted for the high rate of telecommunication centres in rural areas in the 1990s. Most people in rural areas in the country relied on communication centres for access to telecoms services, but the popularization of mobile phones in the country has reduced this tremendously (Frempong et al., 2005). Mobile telephony networks have now reached most parts of rural Coimbatore. Rural dwellers in Coimbatore use the mobile phones to communicate easily with their relatives and friends in Coimbatore and abroad. Before such ICTs areas, contacts were mainly by post and personal contacts.

Enhanced Decentralization
The decentralization of government in Coimbatore also means that rural areas must be capable of playing the new roles prescribed by the central government. Some of these include the promotion of rural tourism which is done better and more cheaply with the use of web pages than traditional advertising media, participation in governance at the local level through the District Assemblies and initiation of area projects with funds generated at the local level. Through the numerous Frequency Moderation (FM) and Community Radio stations and the advent of mobile phones in the rural areas, rural dwellers are able to bring their views and problems to the attention of their District Assemblies for response.

Research Paper
Impact Factor: 3.072
Peer Reviewed, Listed & Indexed

IJBARR
E- ISSN -2347-856X
ISSN -2348-0653

Attraction of Micro and Small Enterprises (MSEs)
Another role of ICTs in rural area in Coimbatore is the attraction of Micro and Small Enterprises (MSEs) to the rural areas. With the improvement of ICTs in the rural areas in the last decade, there have been significant improvements in the number of MSEs and Rural Banks thereby creating enabling avenues for employment and financial assistance for the rural folks. For example, results from the Coimbatore Living Standard Survey-3 indicate that about 69% of the population of Coimbatore is employed in the MSE sector, with a significant number of them located in the rural areas (Coimbatore Statistical Service, 2010).

SMEs in rural areas are now taking advantage of the Community and FM radio stations to advertise their products and services to many communities within and beyond their areas of operation. This enlarges the frontiers of their market and ensures the sustainability of their businesses.

Automation and Networking of Rural Banks
One of the major beneficiaries of ICTs in rural areas in Coimbatore are the rural banks. Through ICTs and the internet many rural banks in Coimbatore are now automated and networked. This has saved many MSEs, traders and farmers in rural areas from carrying huge sums of money on them for their transactions since they can now deposit their money at one bank and withdraw it in another rural bank with ease. Some rural banks like urban Rural Bank in the Coimbatore District of the Western Region of Coimbatore and pallavan Rural Bank in the Central Region of Coimbatore have moved a step further to provide International Money Transfer Services for the rural dwellers in their areas of operation. In Coimbatore, a vibrant MSE sector in the rural areas is very important since 56.2% of the population reside in these areas where poverty is more pronounced with 86% of the population living below poverty line (Coimbatore Statistical Service, 2002).

ICT-enhanced Distance Learning Services for Rural Dwellers
The introduction of distance education in Coimbatore by most public universities in Coimbatore provides learning opportunities to rural people, who, because of geographical distance to the centres of education or for limited financial resources, would be otherwise excluded from improving on their educational qualifications. The use of radio, television and video in education is now common in Coimbatore. All the four universities have study centres in most of the ten regions and some district capitals in the country. Computers have been acquired for the Study Centre's so that both tutors and students can make use of them to facilitate effective teaching and learning.

The extension of the ICT-enhanced distance education to the rural areas has reduced the annual problem of teachers and agriculture extension workers seeking transfer from the rural areas to the urban areas to upgrade themselves. Other workers are now willing to accept postings to the rural areas since they can now take advantage of the ICT-enhanced distance education to upgrade their knowledge and skills. She indicated that she would continue to stay in the community and help them with her newly acquired knowledge. It was also gathered from an interview granted by an Assistant Director of Education in charge of Training and Manpower in the Upper West District in the Central Region of Coimbatore that Sixty-Seven (67) Post - Secondary Certificate teachers have upgraded themselves to diploma and degree levels through distance learning in the district between 2003 and 2010. He added that as a rural district it is very difficult to attract and retain qualified teachers and as result, the distance learning programmes have contributed immensely to the area of education in the area. The impact of this area is that people with requisite knowledge and skills can be retained in the rural areas and more attracted to help in the area of these areas.

Networking and Information Sharing
Networking and information sharing among rural dwellers is another major role being facilitated by ICTs in the area of rural areas in Coimbatore. With the proliferation of mobile phones, community information centres and community radio stations in the rural areas, information sharing and networking have been greatly enhanced. Information and experiences on agriculture, fishing, marketing of produce, health, education and climate change and environmental pollution is easily shared among rural dwellers for the improvement in their standard of living. In the Upper Denkyira East District in the Central Region of Coimbatore, a community radio station, Solar FM, has a programme called "Social Forum" which is aired on Friday evenings. Prominent farmers, agriculture extension officers, health and other rural workers are hosted to share their experiences and expertise with the rural folk. A similar programme called "Farmers Hour" is aired by the Rainbow Radio another community radio at Sefwi Juaboso in the Western Region of Coimbatore to educate farmers on new areas in agriculture.

Telemedicine Services
Information and Communication Technologies (ICTs) contribute to improving the coverage of national health services in rural areas (Zappacosta, 2001). The application of ICTs to health-care delivery, called telemedicine, enables access to

professional expertise irrespective of the geographical location of the patient or the doctor. ICTs have helped rural health workers to communicate easily with the district and regional health directorates for fast and prompt supply of drugs and medical equipment to save lives in the rural areas. Patients are also able to communicate easily through mobile phones with health workers to report side effects of drugs administered to them at health centres and clinics for advice in the rural areas most of which have poor road and irregular transport networks.

Information Gathering for rural Area
There is also the important role being played by ICTs in gathering and updating information from rural areas to help the central government to build databases on issues such as climate change, environmental pollution, food production and deforestation. In particular, satellite and remote sensing technologies are increasingly being used for planning purposes and the rural areas stand to benefit from them.

Source of Entertainment
Another role of ICTs in rural area is in the area of entertainment. Different forms of entertainment can now reach rural areas through the diffusion of ICTs such as radio and video (VHS cassettes and DVD) and television broadcasting. This has not only improved the quality of life for rural people, but has also reduced their isolation and cultural distance from urban areas. In spite of the fact that most rural people lack electricity, they have an ingenious way of receiving transmission by using dry cell batteries for their radios and car batteries for their television set whiles the well to do ones use fuel powered generators.
Visibility for Rural Non-Government Organizations (NGOs).

ICTs have also enabled non-governmental organizations (NGOs) that are based in rural communities to gain visibility at regional, national and international levels. Rural NGOs are widely and effectively using ICTs, particularly e-mail, to contact people and international organizations, to organize events, coordinate actions and to establish networks.

CONCLUSION
There is a great potential for the use of ICTs for rural development in Coimbatore. Unlike some other African countries, Coimbatore is fortunate to have developed an ICT policy, which indicates the government's commitment to support ICT programmes in the rural areas. What is required now is policy implementation with emphasis on the provision of information to the rural areas.

One of the ways of improving access to ICT in the rural areas in Coimbatore is through the promotion of community ICT Centres. This has the advantage of mass usage, maintenance, the security of both service and equipment and the easier collection of charges. Individual communities should be assisted to build their own knowledge centres where indigenous knowledge is combined with exogenous knowledge to improve livelihoods.

The government alone cannot carry out this programme. Support is needed from various non -governmental organisations, corporate bodies and individuals in this area. In all these, the urban-rural disparity in the distribution of ICTs which has created a localized digital and information divide must be tackled and dealt with decisively if the rural areas in Coimbatore are to take full advantage of these technologies to enhance their socio - economic development.

REFERENCES
1. Alemna, A.A. (1993) Agricultural information provision in Coimbatore.
2. FAO. Cobbinah, J.R.(2003)Enhancing strategic competitiveness in information and communication technology (ICT) Coimbatore Country Paper. Telematics and Informatics.
3. Falch, M. (2004) Telecentres in Coimbatore. Telematics and Informatics.
4. Coimbatore Government, (2002) Final Report on Population and Housing Census. Accra: Coimbatore Statistical Services.
5. Coimbatore Government, (2003) Local Government Service Act, (2003), Act 658, Tema: Assembly Press.