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Survey based on Impact of Information and Communication Technology (ICT) tools by rural farmers in Vellore District of TamilNadu, India

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Abstract*— India is a developing nation among world nations, where ICT infrastructure is well developed in urban and semi urban areas, whereas rural people lacks ICT infrastructure. Therefore ICT plays an dominant role in bridging the gap and eventually set of poverty alleviation to greater extent. E-Agriculture is an emerging field focused on the enhancement of agricultural practices and rural development by improving facilities of information and communication technology, In this paper, we have an analysis based on usage of ICT tools among rural people categorized under various phenomenon like age, gender, education, salary and so on. From the information gathered from this analysis we may come to a conclusion about the development of ICT in rural Vellore.

Keywords: ICT-Information Communication Technology

I. INTRODUCTION

The agricultural sector continues to be one of the most important in the economy in developing countries such as India. In India, it employs a major percentage of the total work force [1] with the majority of population in India relying directly on agriculture [2,3].The most effective tool for the farmers is information to acquire knowledge and make decisions based on that knowledge [5]. Farmers depend on research data that is produced by government agencies to provide relevant information for their specific farming situation however nearly 60 per cent Indian farmers do not access any information on modern technology from any source at all India level [6] . The major concern is that the farmers are not taking full advantage of the potential of the ICT [7].This survey is based on the use of Information and Communication Technology (ICT) Tools by Rural farmers

II. ABOUT THE SURVEY & STUDY AREA

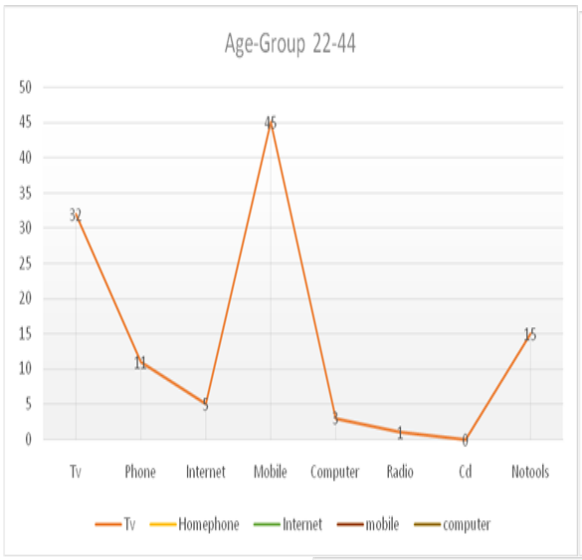
The study was conducted in 15 villages of VELLORE District in state of Tamilnadu, India. The district was well known for the agriculture.Vellore district is located in northern part of Tamil Nadu and it falls under the North Eastern Agro Climatic Zone of Tamil Nadu. The district is bound on the north by Karnataka State and Chithoor district of Andhra Pradesh State, on the east by Thiruvallur and Kancheepuram districts, on the south by Thiruvannamalai district and on the west by Krishnagiri district. There were eight taluks and 20 blocks. Also, there were seven agricultural divisions in the district. Average rainfall in Vellore district (967.3 mm) during 2007 was slightly lesser than the normal rainfall. Almost one – fifth of the total geographical area (19 per cent) was under problem soils in the district. The degraded and fallow lands like cultural waste and current and other fallow lands accounted for 21.7 per cent of the total geographical area. Vellore district is located in northern part of Tamil Nadu and it falls under the North Eastern Agro Climatic Zone of Tamil Nadu. The district is bound on the north by Karnataka State and Chithoor district of Andhra Pradesh State, on the east by Thiruvallur and Kancheepuram districts, on the south by Thiruvannamalai district and on the west by Krishnagiri district. There were eight taluks and 20 blocks. Also, there were seven agricultural divisions in the district. Average rainfall in Vellore district (967.3 mm) during 2007 was slightly lesser than the normal rainfall. Almost one – fifth of the total geographical area (19 per cent) was under problem soils in the district. The degraded and fallow lands like cultural waste and current and other fallow lands accounted for 21.7 per cent of the total geographical area.Data collection was undertaken with the help of a structured questionnaire of randomly selected group of farmers from five of the taluks of vellore district during the period of july to September 2013. The number of respondents from each village ranges from 3 to 6 persons. The number of participants are 100 farmers.

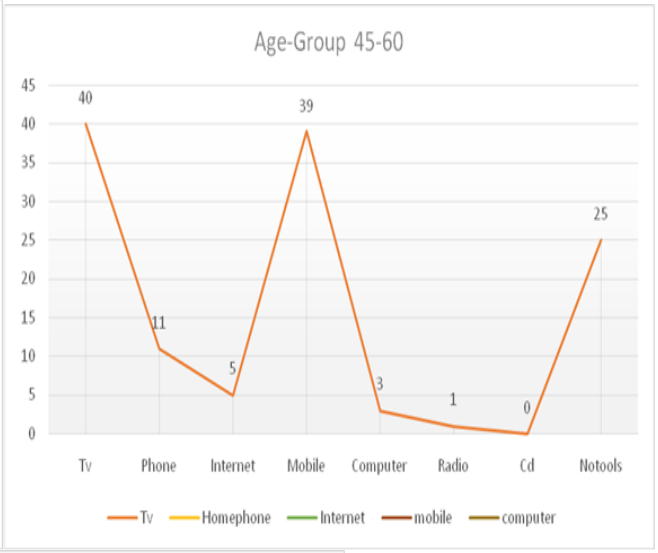
III. SURVEY RESULT BASED ON VARIOUS FACTORS:

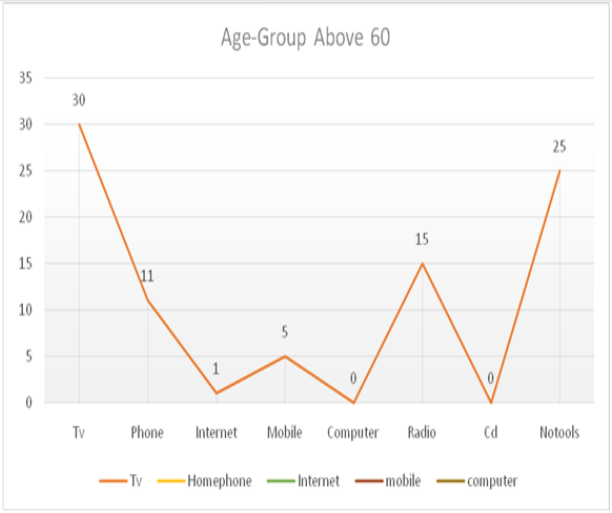
A. BASED ON AGE-GROUP :

The survey was conducted on 200 participants, in which 80% were male and 20%were female. The majority of the participants were between 22-44 years, and followed by the participants those who are between 45-60 years and above 60 years. Between 14-21 years no participants were found. It was found that 75% of farmers were educated.It was reported that the age group 22-44 has a higher usage of the majority of the ICT tools compared with participants from the age group of 45-60 years and those participants above 60 years. The 22-44 age group is considered to be the most active group in agricultural sector. The participants from the 22-44 years age group had a greater usage of mobile phones

whereas; TV is the mostly used as ICT tool in age groups of 42 years and older. Overall, the use of mobile phones was preferred over TV by all the groups.

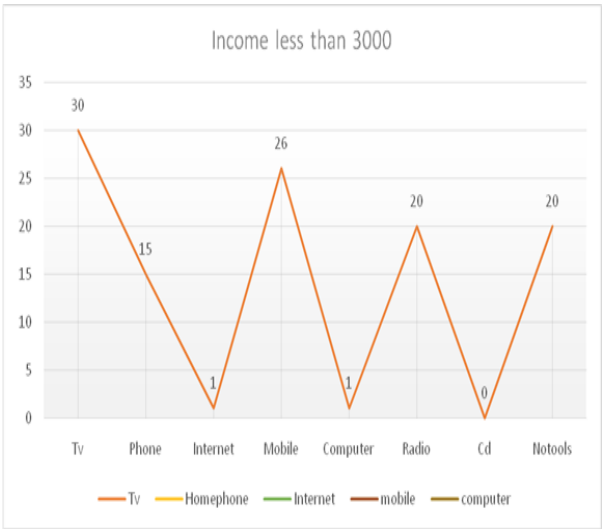


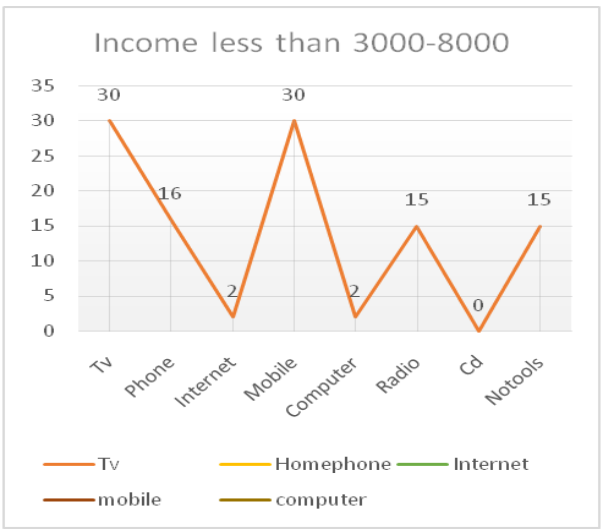


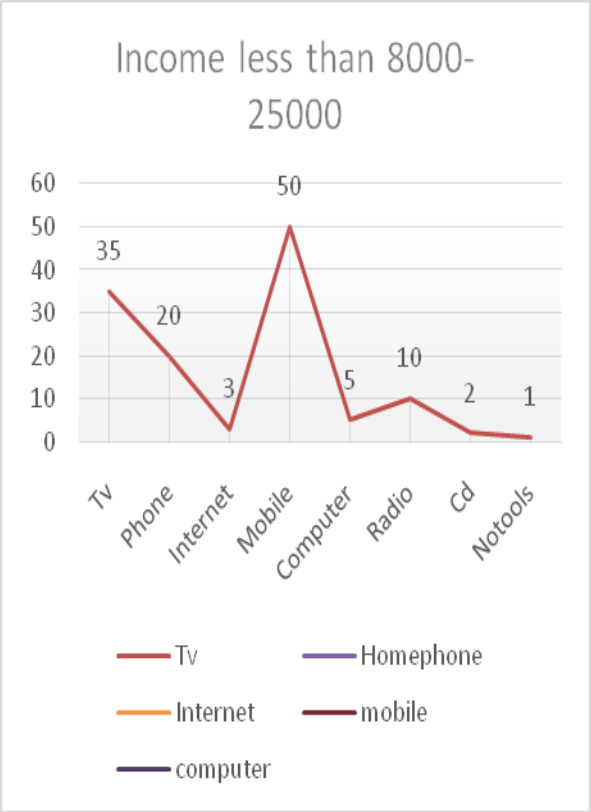


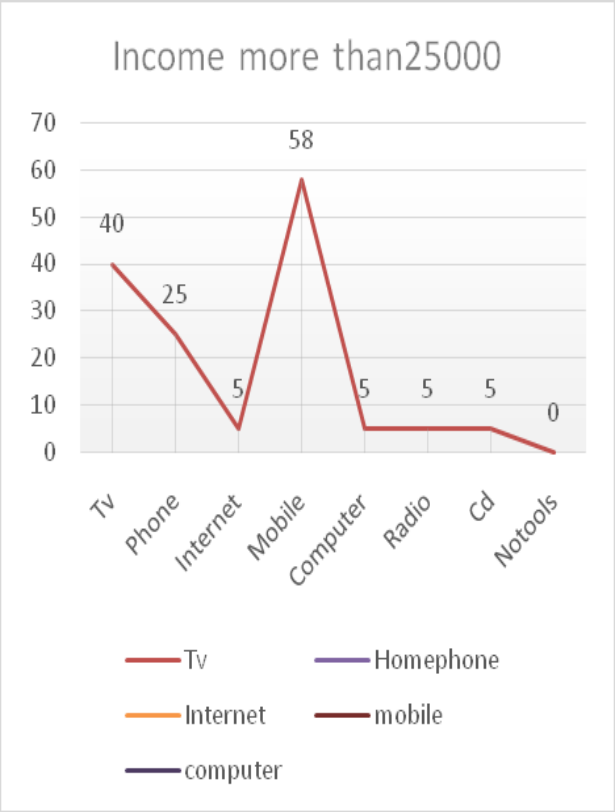
B. BASED ON INCOME LEVELS:

On the report it was found that among farmers, the majority had earnings of Rs.3000 per month . For other farmers it was found that for earnings of Rs.3000 -8000 & Rs.8000-25000 and more than Rs.25000 it shows that there is variation in earnings among the farmers.This is the most important relationship. Buying of the new ICT tool is depending directly on the Income level of a farmer. It is the evident that this is the main factor to determine whether the farmers can access ICT tools or not. Survey noted that farmers who earning more than 8000/month were using ICT tools in large scale .So income is definitely a major factor on determining the use of ICT tools by farmers.



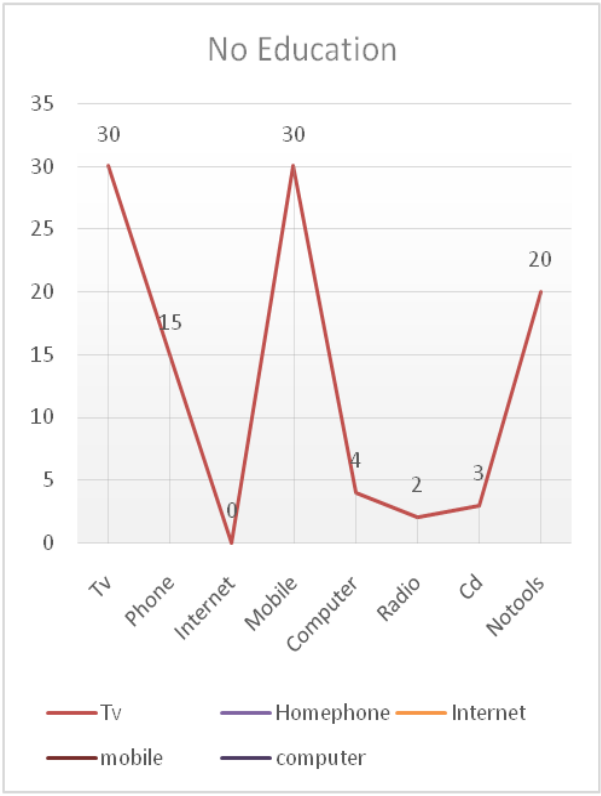


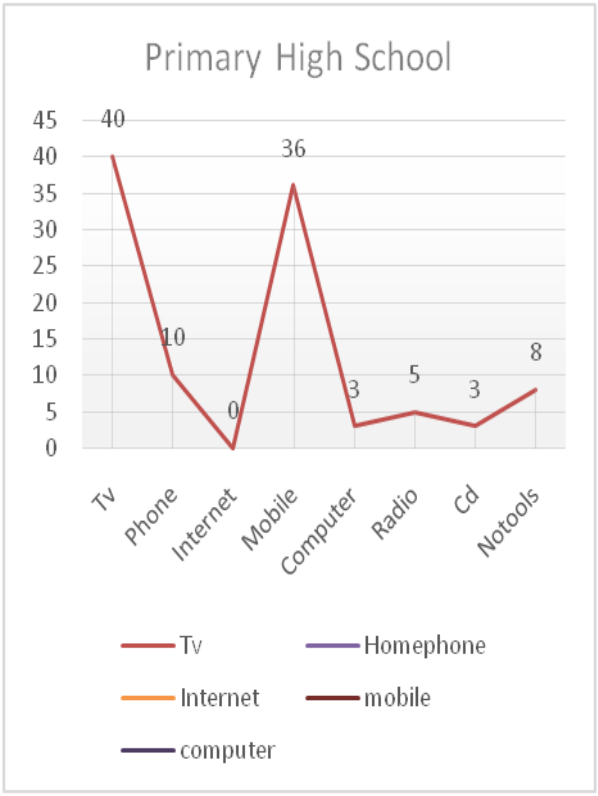


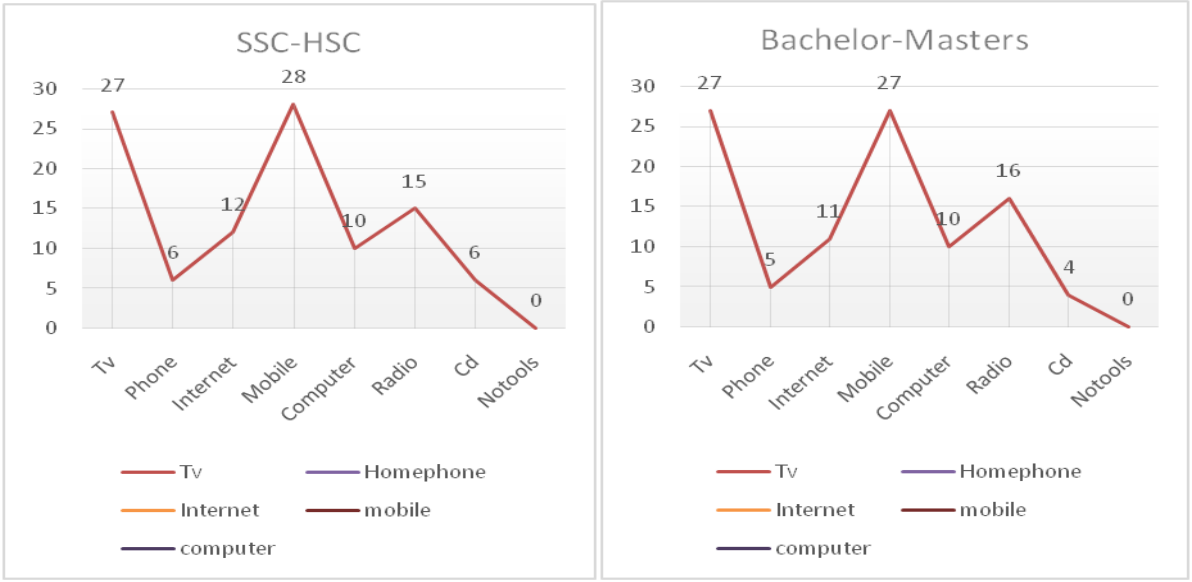


C. BASED ON EDUCATION QUALIFICATION :

On examining the survey based on education levels, found that out of the 100 farmers all had completed at least primary education, High school , S.S.C. or H.S.C. Only a little amount of percentage has completed higher education including Bachelor Degrees and Master Degree other than that all are found to be uneducated.The relationship between use of ICT tools and qualifications was found to not be significant.The results indicate that most of the farmers are not highly educated. The illiterate farmers did not use any of the ICT tools for getting information . The qualification group primary/high is using TV more and they did not know about the internet and not even having a basic knowledge about operating computer, they fully based on mobile phones to a greater extent.







IV. CONCLUSION

It is important to remember that while the technologies can support the transition to more sustainable relevant content, and someone to pay for the dissemination of that information. Further more to the context as per the survey any new technology will have early adopters. In India, with low educational levels, ICT would be the medium to reach the vast population at affordable cost. ICT in education is likely to have better assimilation as students are open to adopting and learning new things. The farmers who used ICT tools in order to get the information about the agriculture are the big scale producers as per the survey result.Hence the conclusion is those farmers who used ICT to get agricultural information may implemented better practices and produced a big variety of agricultural products.

REFERENCES

[1] I.V Malhan, and S. Rao, "Impact of Globalization and Emerging Information Communication Technologies on Agricultural Knowledge Transfer to Small Farmers in India", Department of Library Science, Paperpresented in World Library and Information Congress: 73rd IFLA General Conference and Council, 19-23 August 2007, Durban, South Africa.

[2] World Bank "Africa development indicators." Washington: 2007.Accessed on April 10, 2009, fromhttp://siteresources.Worldbank.org/INTSTATINAFR/Resources/adi2007_final.pdf.

[3] X. Diao, Hazell, P., Resnick, D., &Thurlow. J. "The role of agriculture in development:Implications for Sub-Saharan Africa", IFPRI, Washington, 2007.

[4] C., Blurton, New directions of ICT-Use in education. Available online. 2002 http://www.unesco.org/education/educprog/lwf/dl/edict.pdf; Accessed 7 April 2010.

[5] Armstrong L., Diepeveen D. and Gandhi N. "Effective ICTs in agricultural value chains to improve food security:An international perspective" WICT Conference World Congress On Information and Communication Technologies (WICT), 2011, Issue Date : 11-14 Dec. 2011 On page(s):1217-1222 Print ISBN: 978-1-4673-0127-5 Digital Object Identifier : 10.1109/WICT.2011.

[6] P.K. Aggarwal, "Impact of climate change on Indian agriculture",J. Plant Biol., 30, 2003, pp.189-198.

[7] R. Jain, A., Alka and A. Usha, "Clustering Approach to Diagnose Determinants of ICT Empowerment to Women Farmers", in Editors: L.J. Armstrong and J. Clayden "Proceedings of the Knowledge Discovery for Rural Systems Workshop 2010" at the 14th Pacific-Asia Conference on Knowledge Discovery and Data Mining., IIIT Hyderabad, Hyderabad India , 21-24 June, 2010 -Hyderabad, India 2010.

[8] L. J. Armstrong, D. A. Diepeveen and K. Tantisantisom An eAgriculture-based Decision Support Framework for Information

[9] Armstrong, L.J. ; Gandhi, N. ; Lanjekar, K. Communication Systems and Network Technologies (CSNT), 2012 InternationalConferenceon **"**Use of Information and Communication Technology(ICT) Tools by Rural Farmers in Ratnagiri District of Maharastra, India" Digital Object Identifier: 10.1109/CSNT.2012.202 Publication Year: 2012 , Page(s): 950 - 955

