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Strategy To Enhance The Ict Utilization By The Agricultural Officers

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ABSTRACT
ICT is one of the important interventions to be incorporated in all the walks of life. As agricultural extension is the vital component for the growth and development of the society, the inclusion of ICT in agricultural extension system, will definitely produce more unimaginable growth in field of agriculture.The Agricultural Officer is the key stake holder at the grass root level extension and his performance has direct bearing on the welfare of the farming community. Hence, the present investigation was carried out in Nellore, Srikakulam, Ananthapur districts purely covering all the three regions viz., Coastal Andhra, North Coastal and Rayalaseema regions in the newly formed state of Andhra Pradesh. The main objective of the study was to propose a strategy to enhance the ICT utilization by the Agricultural Officers in Andhra Pradesh. Ex post facto research design was followed for the study. A total 120 respondents covering the three districts equally were selected for the study. Keeping in view of the profile characteristics, attitude towards ICT utilization, extent of ICT utilization, relationship between profile characteristics and attitude and extent of ICT utilization, constraints and suggestions given by the Agricultural Officers, a strategy has been proposed consists of six components awareness, attitudinal change, mandatory ICTs, capacity building, infrastructure and budget allocation to enhance the ICT utilization by the Agricultural Officers in Andhra Pradesh.
Key words: *strategy, ICT, Agricultural Officers.*

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INTRODUCTION

ICT is a broad based term that encompasses the gathering (acquisition), organization (packaging), storage and retrieval (dissemination) of information that can be in textual or numeric (books and documents), pictorial and vocal forms (audio-visual), using combination of all the above (multimedia) including computers and telecommunications (telephones).This definition encompasses the full range of ICTs from radio and television to telephones (fixed and mobile), computers and the internet (Wirsiy and Shafack, 2002). The Academy for Educational Development and Win rock International (2003) defines Information and Communication Technologies as the combination of hardware, software, and the means of production that enable the exchange, processing, and management of information and knowledge. ICTs can facilitate the processing and transmission of information electronically. The application of ICT in agricultural extension has significantly increased in several countries where it has provided a medium to adequate access to agricultural information (Richardson, 2003). ICT can bring new information services to rural areas where farmer tend users will have much greater control than ever before, over current information channels. Access to such new information source is a crucial requirement for the sustainable development of the farming system (Meera *et al*., 2004). The importance of ICTs in development process was long recognized and access to ICTs was even made one of the targets of the Millennium Development Goal No. 8, which emphasizes the benefits of new technologies, especially ICTs in the fight against poverty. The same report also observed "connectivity – whether the Internet or mobile phones -- is increasingly bringing market information, financial services, and health services to remote areas, and is helping to change people's lives in unprecedented ways" (Asenso-Okyere and Mekonnen, 2012). Agricultural Extension, which depends to a large extent on information exchange between and among

farmers, has been identified as one area in which ICT can have a particularly significant impact (Ballantyne and Bokre, 2003). ICT is essential for agricultural extension workers because it enable them to access current information and expert knowledge that facilitate the discharge of their daily responsibilities as front liners in agricultural extension service delivery (Tologbonse *et al.,* 2011). The agricultural extension sub-sector to be alive in her responsibilities, it is necessary that the front line extension workers have adequate access to ICTs for current and up to date farm knowledge and information for onward dissemination to farming families. The study comprises of analyzing the profile characteristics, attitude towards ICT utilization, extent of ICT utilization, relationship between profile characteristics and attitude and extent of ICT utilization, constraints and suggestions given by the Agricultural Officers to enhance the ICT utilization by the Agricultural Officers in Andhra Pradesh.

MATERIAL AND METHODS

Ex post facto research design was followed for the study to enhance the ICT utilization by the Agricultural Officers in Andhra Pradesh. The present investigation was carried out in Nellore, Srikakulam, Ananthapur districts purely covering all the three regions viz., Coastal Andhra, North Coastal and Rayalaseema regions in the newly formed state of Andhra Pradesh. From each of the selected district, forty Agricultural Officers were selected as respondents by following simple random sampling procedure. The sample constituted to a total of 120 respondents. The present investigation was carried based on exhaustive analysis of profile characteristics, attitude towards ICT utilization, extent of ICT utilization, relationship between profile characteristics and attitude and extent of ICT utilization, constraints and suggestions given by the Agricultural Officers, a strategy has been proposed to enhance the ICT utilization by the Agricultural Officers.

PROPOSED STRATEGY TO ENHANCE ICT UTILIZATION BY THE AGRICULTURAL OFFICERS

The proposed strategy was designed based on the critical observations documented through appropriate statistical tools. As per the results of the study, the two basic limiting factors of ICT utilization by the Agricultural Officers were lack of awareness and lack of accessibility to the ICT tools. Hence, the strategy was initiated with creating awareness on different ICT tools as well as accessibility on ICTs. Further, the important elements like capacity building, infrastructure and budget allocation were included in the strategy.

Awareness:

The findings of the study revealed that, there was only 35.00 per cent of awareness on different ICTs, which directly affecting the extent of ICT utilization by the Agricultural Officers. Hence, all the Agricultural Officers must be exposed to the different ICT tools as well as latest developments in the digital field. This facilitate the Agricultural Officers to know the different ICT tools and their utilization in their day to day operations. Awareness camps have to be organized by utilizing different state level and district level meetings organized by the State Department of Agriculture.

Attitudinal change:

Explaining the pros and cons of different ICT tools as well as their application in real life situation will establish a positive attitude towards different ICTs. The attitude will definitely helps in attracting the Agricultural Officers towards better utilization of ICTs.

Mandatory ICTs:

It is also proposed to make it mandatory of using different ICTs in different activities by the Agricultural Officer. This enforces the Agricultural Officer to use ICTs replacing age old traditional tools. The process will lead to create awareness on ICTs and further application in different activities.

Capacity building:

This component focuses more on enrichment of Knowledge and skills further provides the scope for updating the ongoing developments in ICTs. Three important components were proposed to meet the objective of capacity building were

a) Training needs identification

The most important area under training of Agricultural Officers on ICT is training need identification. Training programmes on ICT were generally organized on blanket basis without considering the needs of the Agricultural Officers. Each Agricultural Officer differs in their level of awareness, knowledge and skills in using different ICTs in their day to day activities. For strengthening the ICT utilization of the Agricultural Officers of the department, documentation of an inventory of the available ICT tools in the department as well as the analysis of the awareness, knowledge, skills, attitude and extent of utilization of the existing ICT tools by the Agricultural Officer has to be taken up for proper Identification and assessment of ICT training needs of the each Agricultural Officer.

b) Organizing training programmes

Focus must be given for application of ICT tools as well as the reinforcement of the learned content for better practice of the ICT tools. Long term and short term training programmes has to be organized at regular intervals to enrich the knowledge and skills of Agricultural Officer.

c) Conducting workshops and seminars

To up keep the efficiency of ICT utilization as well as exposure to innovative ICT tools, there is every need to organize workshops at frequent intervals. This acts as opportunity for the Agricultural Officers to refresh their existing knowledge and skills. ICT interventions and refinement of existing ICTs also will emerge out of workshops. Hence the entire Department of Agriculture should be given opportunity to attend these workshops regularly.

Infrastructure

This component focuses more on basic facilities, services and installations needed for providing the scope and opportunity for better utilization of the ICT by the Agricultural Officer. Two important components were proposed to meet the objective of infrastructure were

a) ICT enriched offices

At the office of Agricultural Officer, there must be common ICT facility has to be made available, so that the Agricultural Officer uses them frequently and develop their proficiency. This facilitates the Agricultural Officers to upgrade their skills.

b) Individual ICT tools

Each Agricultural Officer should be provided with one laptop access to internet, establishing WIFI in all the agricultural offices, high internet speed, uninterrupted power supply and related audio visual aids so that they can have more access to such ICT definitely be an inspiration for the Agricultural Officer so as to effectively use ICT in their extension activities. At the office of Agricultural Officer also common ICT facilities has to be made available so that they can use them freely with lot of enthusiasm and pride.

Budget allocation

Special budget should be allotted every year to replace the outdated ICT tools and programmes and for proper annual maintenance of ICTs. This facilitates the Agricultural Officer for better access and application of ICTs and in turn leads to increasing in the ICT utilization by the Agricultural Officer.

CONCUSION

Information and Communication Technologies have great potentials in improving agricultural extension delivery. Awareness camps have to be organized to know the different ICT tools by the Agricultural Officers. A policy of continuous training and re-training of extension personnel on the use of modern ICTs for improved job performance and delivery. The proposed comprehensive strategic model depicts the more practical and possible road map for enhancing ICT utilization by the Agricultural Officers in Andhra Pradesh.

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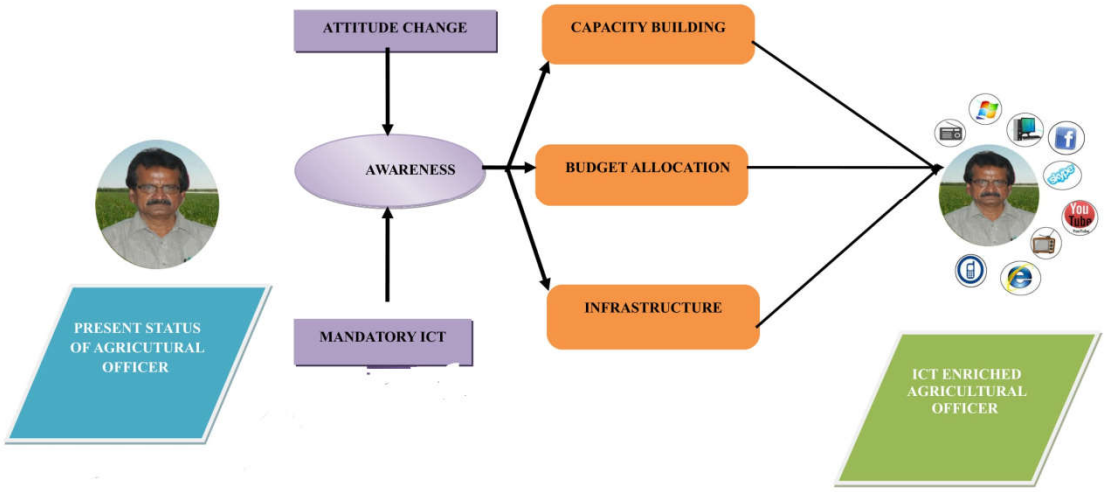

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