

**TRAINING NEED ASSESSMENT OF FINAL YEAR STUDENTS OF  
RURAL DEVELOPMENT AND AGRICULTURAL EXTENSION OF  
AMBO UNIVERSITY, AMBO, ETHIOPIA, ON CYBER EXTENSION TOOLS**

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**ABSTRACT**

In Africa, agriculture provides a livelihood for most of the 75 percent of the people who live in rural areas. One of the causes of the low incomes in rural Africa is the low productivity of agriculture. Lack of technological and market information has been given as the major reason for the low productivity in African agriculture. Agricultural extension can play a critical role in the transformation process to transfer technology, support learning, assist farmers in problem-solving, and enable farmers to become more actively embedded in the agricultural knowledge and information system. Cyber extension systems in Agriculture involves effective use of ICT, local & international information networks, the internet, multimedia learning systems and computer experts to ameliorate information access to the rural farmers, extension workers, research scientists, universities etc. For the efficient delivery of information, the extension officers should have sufficient knowledge of and skill in using the cyber extension tools. Today's students will be the future extension officers. Therefore, the final year students of Rural Development and Agricultural Extension were assessed on the awareness, knowledge and skill in using cyber extension tools. The 32 students of Rural Development & Agricultural Extension enrolled in the final year in the Department of Rural Development & Agricultural Extension, Ambo University, and Ambo, Ethiopia were selected as the respondents. The responses from 29 students were obtained. The responses were tabulated and frequency and percentage were used to analyse the data. Based on the need assessment study conducted it is concluded that majority of the students did not possess sufficient knowledge of and skill in using cyber extension tools. Therefore, it recommended that a training programme should be arranged on cyber extension in order to equip the students to face the requirements of the job industry. Also, it is recommended that the cyber extension should be built as a part of the curriculum in the future so that the students will be better prepared to meet the requirements of the job.

**KEYWORDS:** ICT, Training Need Assessment

**INTRODUCTION**

In Africa, agriculture provides a livelihood for most of the 75 percent of the people who live in rural areas. Unfortunately, the rural areas in Africa have the largest concentration of poverty and food insecurity. One of the causes of the low incomes in rural Africa is the low productivity of agriculture. Lack of technological and market information has been given as the major reason for the low productivity in African agriculture. Agriculture in Ethiopia is the foundation of the country's economy, accounts for 46.3% of the nation's Gross Domestic Product (GDP), 83.9% of exports and 80% of the labour force in 2006-2007.

As technological advancements have soared in recent decades, farmers around the world have taken advantage of innovations to streamline their farming operations and maximize crop output. These productivity enhancing advancements, however, have thus far been slow to reach Ethiopia and its 15 million smallholder farmers (ATA, 2014; Quoted in Ethiopian Herald, December 30 2014). To achieve this, the country will need to invest heavily to disseminate the knowledge and new technology to farmers with the aim to improve its yield. Increasing the grain yield would significantly contribute to Ethiopia's economy and food security.

Agricultural extension can play a critical role in the transformation process to transfer technology, support learning, assist farmers in problem-solving, and enable farmers to become more actively embedded in the agricultural knowledge and information system (Christoplos & Kidd, 2000). Agricultural technology can be codified into two major types as Material Technology and Knowledge based Technology. Under Knowledge based Technology, the collaboration of agricultural extension services and Information Technology comes with the term "Cyber Extension" (Hettige, n.d). Cyber extension is defined as "utilization of power of online networks, computer communication & digital interactive multi-media to facilitate the dissemination of technology". According to Wijekoon (2003) Cyber extension is "an agricultural information exchange mechanism over cyber space, the imaginary space behind the interconnected computer networks through telecommunication means". Cyber extension systems in Agriculture involves effective use of ICT, local & international information networks, the internet, multimedia learning systems and computer experts to ameliorate information access to the rural farmers, extension workers, research scientists, universities etc.

"Cyber extension opens the gates of information flow to reach their palmtop". The main focus of ICT in agriculture is meeting the information needs of farmers. General agricultural news, information on latest techniques and technologies, weather forecasting, early warning and management of diseases and pests, post-harvest technology, input prices and availability, information on insurance, market information, information about rural development programs and subsidies, are some mandatory needs of farmers that seem to be essential for the growth and development of agriculture. To make cyber extension to be effective there are some "imperative tools" to be set up. Websites, emails and e-newsletters, expert panels' demonstrations, related internet browsing for extension information, video conferencing, call centers and satellite communication networks, TV programs, news and discussion groups are included in these tools. Implementation and blending of cyber extension systems into agricultural activities is revolutionary.

For the efficient delivery of information, the extension officers should have sufficient knowledge of and skill in using the cyber extension tools. Today's students will be the future extension officers. So, an imperative need to improve the knowledge and skill of the students on cyber extension is mandatory. Before, introducing a training programme, the needs of the students should be assessed. Therefore, the final year students of Rural Development and Agricultural Extension were assessed on the awareness, knowledge and skill in using cyber extension tools.

## **METHODOLOGY**

The 32 students of Rural Development & Agricultural Extension enrolled in the final year in the Department of Rural Development & Agricultural Extension, Ambo University, and Ambo, Ethiopia were selected as the respondents. The responses from 29 students were obtained. The responses were tabulated and frequency and percentage were used to analyse the data.

**FINDINGS AND DISCUSSIONS**

Awareness is the individual learns of the existence of the new idea but lack information about it. At this stage, the individual is aware of the idea, but lacks detailed information about it (Ray, 2014). Therefore, the student’s awareness of Cyber Extension tools was studied and the details are presented in Table 1.

**Table 1: Awareness of Cyber Extension Tools (n=29)**

S. No.	Dimensions	Response	Number	Percentage
1	Awareness of Cyber Extension Tools	Aware	19	65.50
		Unaware	10	34.50
2	Knowledge on Cyber Extension Tools	Yes	3	10.30
		No	26	89.70
3	Skill in using Cyber Extension Tools	Yes	-	-
		No	29	100.00
4	Training requirement on Cyber Extension Tools	Yes	25	86.20
		No	4	13.80

Source: Author’s own Survey, 2016

It was found that majority of the students (65.40 %) were aware of the term “Cyber Extension Tool”. However, a noticeable percentage of students (34.50%) were unaware of it. Awareness is the preceding stage of interest in the adoption process. Therefore, it may be concluded that majority of the students would have interest in knowing further about cyber extension tools.

It is evident from Table 1 that majority of the students (89.70%) did not possess sufficient knowledge on cyber extension tools. Knowledge is the first step in innovation decision process. Once the individual acquire sufficient knowledge, it persuades the individual to learn more, evaluate the information based on the utility, make decision and implement it. Therefore, it may be concluded that if sufficient knowledge is given, the knowledge will persuade the individual and finally leads to successful implementation.

It is obvious from Table 1 that all the students (100.00%) surveyed lack skill in using cyber extension tools. Knowledge alone is not sufficient. Knowledge alone will not serve the purpose. Even though a student acquires sufficient knowledge on cyber extension tools, if he/she did not possess enough skill to use the cyber extension tools, the purpose of the knowledge is not fulfilled. Therefore, it is imperative to provide required skill for the students to use the cyber extension tools for the efficient dissemination of information.

Upon enquiring the students about their willingness to participate in the training programme on cyber extension tools, majority of the students (86.20%) reported that they are willing to be a participant in the training programme. The willingness of the students demonstrates their interest in acquiring the knowledge on and skill in using cyber extension tools.

**CONCLUSIONS**

Based on the need assessment study conducted it is concluded that majority of the students did not possess sufficient knowledge of and skill in using cyber extension tools. Therefore, it recommended that a training programme should be arranged on cyber extension in order to equip the students to face the requirements of the job industry. Also, it is recommended that the cyber extension should be built as a part of the curriculum in the future so that the students will be

better prepared to meet the requirements of the job.

## REFERENCES

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