

PERCEPTION OF AGRICULTURE INSTRUCTORS TOWARDS ICT INITIATIVES IMPLEMENTED BY THE DEPARTMENT OF AGRICULTURE: A CASE STUDY

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Introduction

Use of computer based information support systems found to be providing excellent opportunities for the extension workers to be more effective in meeting farmers' information needs with advanced and viable technologies (Dhaka and Mann, 2003). Thus many developing countries are increasingly being adopting ICT based mechanisms to reach farmers efficiently and effectively. The Department of Agriculture (DoA) recently initiated four such ICT projects to disseminate agricultural information to the end-users namely cyber agricultural extension, toll free advisory service, DoA website, and the wikigovia website.

Cyber extension is an agricultural information exchange mechanism over cyber space, which utilizes the power of networks, computer communications and interactive multimedia to facilitate information sharing mechanism (Wijekoon et al, 2003). Under the cyber extension project, Cyber Extension Units (CEUs) were established in selected Agrarian Service Centers and the selected Agricultural Instructors were given the responsibility to implement other ICT mechanisms to supplement the present conventional extension

methods. Thus it was felt necessary and important to assess the perception of the AIs towards the ICT initiatives implemented by the DOA. Accordingly the objectives of the study were to (i) examine the level of use of ICT initiatives, (ii) identify the attitudes towards the use of ICT material in agricultural extension, and (iii) to provide suggestions to improve the use of ICT interventions in agriculture knowledge dissemination.

Methodology

Thirty one out of the 85 CEUs established in the country are established in the Eastern province thus Eastern province was selected as the study area. All the AIs attached to CEUs in the eastern province were interviewed using a pre-tested questionnaire to collect primary information. Key informant discussions were conducted with officers from DoA and from provincial Department of Agriculture, Eastern province. A focus group discussion was conducted with a group of AIs those who are not attached to CEUs. Data analyzed using descriptive statistics, and relationships among variables were tested using Pearson correlation analysis, and Chi-square tests.

Results and Discussion

Majority of the respondents were below 35 years (90%) of age and had less than four years of working experience (66.7%). Their computer exposure ranged from 1-6 years since many officers have started using a computer only after they have joined the present job. Majority (70%) of the officers have maximum 3 years of computer experience.

Under the cyber extension project, each CEU was provided with a computer and a set of Interactive Multimedia CDs on various agricultural practices. The AIs were supposed to use these offline resources as supplementary training materials to conduct farmer training programmes. Further it was expected that farmers and officers will use these CDs as self learning materials to learn agricultural practices. According to the findings, many AIs were using computers to develop training materials (83.3%), conduct farmer training classes (43.3%), and for office work (90%) at least once a month.

A few (16.7%) AIs mentioned that farmers were provided with copies of IMMCDs so that they can watch the

CDs in their home or in a neighbour's place during leisure time. Interestingly none of the AIs allowed the farmers to use the computer at the CEU to self study the CDs although this was one of the important objectives of establishing CEUs.

Almost all the respondents have made calls to the Toll free agricultural advisory service to clarify issues related to agricultural practices, while majority (76.7%) have seek advice from the above service several times. Similarly almost all the respondents have visited the DoA website. However none of the AIs in the Eastern province were able to update the 'farmer database' maintained in the website due to lack of internet access. More than half (56.7%) of the respondents have visited the Wikigoviya website and most (82.4%) of them in the view that the website is useful to deliver agriculture related information.

Majority of respondents showed favourable attitudes towards Cyber Extension (63.3%) and Toll Free Agriculture Advisory Service (73.3%). Table 1 shows the distribution of respondents by the attitudes.

Table 1: Distribution of respondents by attitude

Attitude	Frequency	Percent
Favourable	19	63.3
Neutral	11	36.7
Unfavourable	0	0
Total	30	100

AIs were interviewed to rank the major problems and challenges faced by them when implementing the ICT initiatives during the study.

According to the findings, lack of computer skills (60%) was ranked as the major problem in implementing ICT initiatives. Inadequate resource

availability (36.7%) and less accessibility to internet (33.3%) were

ranked as second and third major problems respectively (Table 2).

Table 2: Distribution of AIs by the problems faced when implementing ICT mechanisms

Problems	Rank 1	Rank 2	Rank 3
Inadequate computer skills	60.0%	26.6%	6.7%
Inadequate resource availability	23.3%	36.7%	23.3%
Poor accessibility to internet	16.7%	20.0%	33.3%

Computer exposure was higher among the young AIs ($r=0.487$, $p=0.01$) thus found to be using ICT facilities quite frequently (Spearman $\rho =0.429$, $p=0.05$). Higher the frequency of internet usage, higher the Frequency of Visiting to the DOA and Wikigoviya websites among the AIs ($r=0.634$, $p<0.01$). AIs' computer exposure had positive effects on their attitudes towards cyber extension ($r=0.623$, $p<0.01$) and the Wikigoviya website ($r=0.482$, $p<0.01$).

Conclusions and Recommendations

Level of use of ICT materials found to be satisfactory among the AIs attached to the CEUs in the Eastern province. However the AIs those who are not attached to CEUs are hardly aware on these ICT initiatives. Majority of the AIs share favourable attitudes towards ICT initiatives but inadequate computer skills and less accessibility to internet facilities in the CEU has limited their use of these facilities effectively. It is necessary to provide adequate training and provide ICT infrastructure in order to successfully utilize ICT interventions in agricultural extension.

References

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