

RESEARCH NOTE

e-Readiness of Development Functionaries for Agricultural Development

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ABSTRACT

Experiential acquisition of knowledge is the most proper form of information attainment. Information seeking is thus a natural and necessary mechanism of human existence. The present era is the era of information and knowledge revolution. Many electronic resources are available. The increase in information availability on the web has affected information seeking behavior. To provide empirical evidence to the concept, an attempt was made to understand the process of 'm-learning' of farmers in Shivarajpur block of Kanpur district. The respondents (75) were analysed using before after method of experimental design. The study revealed that there was significant difference in gain in knowledge in seeds and sowing, plant protection measures and harvesting and marketing aspects. Extension professionals were ready to provide services and at the same time farmers were ready to accept services which are of their need. All these aspects where the difference was significant in the areas which are directly related to market. The study indicates that farmers are becoming e-ready, the beginning is through mobile services. In due course of time they will be prepare themselves for e-mediated extension services. Hence the study conceptualized e-readiness as "e-readiness is the degree to which an individual is able to afford information and communication technology tools and techniques, possess Skill of application of Information and Communication Technology (ICT) tools and techniques for his/her development and he/she can access the communication tools and has the necessary infrastructure and policy support to exploit the potentials of ICT". The primary level of readiness includes the individual e-readiness, then the Institutional, the state or the nation will automatically become in the "ready". Hence an attempt has been made to define the concept of "e-readiness" at three levels (Individual, Institutional and National).

Key words: *e-Readiness; m-Learning; ICT; Extension service provider; Extension educationist;*

Direct, experiential acquisition of knowledge is the most proper form of information acquisition. There is a universal assumption that man was born innocent or ignorant and should actively seek knowledge. Information seeking is thus a natural and necessary mechanism of human existence. The present era is the era of information and knowledge revolution. Many electronic resources are available. The increase in information availability on the web has affected information seeking behavior. Innumerable types of information, in a large variety of containers and in many different locations, are all available in one place. In the modern society, the types of information and the media which present them have become manifold and

multifarious, offering men and women a vast selection.

Information and communication technologies (ICTs) are devices to transmit information from source to receiver without noise. The word ICT was verbalized by Stevenson in the year 1997 in his report entitled "Information and communication technology in UK School; An independent enquiry" to the government and promoted the new national curriculum document. It is to denote a wide range of services, application and technologies, using various types of equipments and softwares, often running over telecommunication network (*De and Jirli, 2010*). It is not only the technology but also the function in access to knowledge, information and communication.

Access to information and communication technologies (ICTs) implies access to channels and modes of communication that are not bound by the barriers. New forms of social organizations and productive activities have been emerged, which if nurtured, can become transformational factors as important as the technology itself.

Role of ICT in agriculture research in India : ICAR is the nodal agency for agricultural research and development at the national level. With the inception of ICT tools the management of information at the apex level with the help of websites (<http://www.icar.nic.in>) has made the process ore simple. The websites designed includes organizations, research activities, agriculture research information system (ARIS), International linkages, publication offices, National Agriculture Technology Project (NATP), State Agriculture University (SAU) and announcement of Agricultural Scientists Recruitment Boards (ASRB) besides ARIS News (www.icar.nic.in).

Role of ICT in agricultural development: ICTs can give a new shape to the social organizations and productive activities of agriculture which, if nurtured effectively, can become transformational factors. With the help of ICTs, the traditional knowledge itself can be able to bring forth a new technology for overall agricultural development. ICT can also play an important role in bringing about sustainable agricultural development when used to document both organic and traditional cultivation practices. Developing countries like India can create Traditional Knowledge Digital Libraries (TKDL) to collect and classify various types of local knowledge so that it can be shared more widely. These libraries can also integrate widely scattered references to Indigenous Technical knowledge (ITK) system in a retrievable form. Thus IT can act as a bridge between traditional and modern knowledge systems.

METHODOLOGY

The study was conducted in Shivrajpur block in Kanpur district. The Villages selected were Ratanpur, Joravarpur and Dadupur. The total number of farmers selected as the respondents of this study was 75. Experimental research design, before and after experiment was adopted for the study. For the purpose of study two dependent variables namely knowledge level of the farmers before mobile learning and knowledge level of the farmers after mobile learning, and six independent variables were selected. The selected independent variables were age, education, land holdings, family income and occupation. In order to measure the impact of mobile learning, the interview schedule was prepared. The data were collected on same set of questionnaire before and after the application of mobile learning and direct questioning to the selected farmers.

Experiments on perceptions of extension professionals and m-learning of farmers: A study was conducted to analyze the difference between the perception of Extension educationists and Extension Service Providers of state Agricultural Universities and ICAR organizations spread throughout the country was studied. The results of the study states that the majority of extension researchers (78%) are come under medium level of perception, 9% are come under high level of perception and 13% are come under low level of perception regarding ICT in extension service. In case of extension service providers majority (73%) are come under medium level of perception, 14% are come under high level of perception and 13% are come under low level of perception regarding ICT in extension service. The results of 'z' test indicated that the Z-value was non-significantly related with the difference in perception level between extension educationists and extension service provider regarding ICT, in extension service.

Table 1. Knowledge gain by m-Learning in Shivarajpur Block of Kanpur District

Activities	Before <i>m-Learning</i>	After <i>m-Learning</i>	Difference	'Z' Calculated
Land Preparation	60.22	66.12	5.9	1.84NS
Irrigation Management	63.56	68.89	5.33	1.88NS
Seeds and Sowing	55.00	64.17	9.17	3.46*
Fertilizer Management	55.56	61.11	5.55	1.95NS
Plant Protection Measures	38.67	68.89	30.22	11.89*
Harvesting and Marketing	51.11	63.56	12.4	8.96*

NS= Non-significant, *Significant at 5% level of significance; For two tailed test $Z_{\text{tab}} = 1.96$ at 5% level of significance

Hence, the study confirms the null hypothesis that there is no difference in perception level between the extension researcher and extension provider regarding ICTs in extension service.

Keeping the perceptions of extension educators and extension service providers another study was conducted to assess the 'm-learning' of farmers in Shivarajpur block of Kanpur district revealed that there was significant difference in gain in knowledge in seeds and sowing, plant protection measures and harvesting and marketing aspects. Extension professionals were ready to provide services and at the same time farmers were ready to accept services which are of their need. All these aspects where the difference was significant in the areas which are directly related to market. The study indicates that farmers are becoming e-ready, the beginning is through mobile services. In due course of time they will be prepare themselves for e-mediated extension services.

The potential value of mobile learning to facilitate information access is that it could allow the delivery of tailored information, as and when needed by the farmer. For this to be realised, the farmer must know, 'trust' and be able to connect with a range of information sources that can meet his information needs. Several farmers in our study group noted that they felt mobile learning had the potential to be a more reliable source

to obtain information as compared to other available sources – mainly because they felt that mobile communication was more personalised.

CONCLUSION

It is evident from the experiments on computer literacy for low or illiterate communities (the average time for gaining familiarity with basics (Win 95) - 2 weeks, time taken to transact data on wireless - 3 sittings, time taken to gain preliminary knowledge of HTML - 1 week, word 97 - 2 days, power Point 97 - 1 week and use of Win 95 keyboard for Tamil Fonts - 10 days) the extensionists can become e-ready in the shortest possible time but the perquisites are affordability, network accessibility, policy support and necessary skills to acquire the same. The efforts of knowledge economy can develop e-ready extension professionals in the shortest possible time. There was significant difference in gain in knowledge through m-learning by farmers for the elements which have economic implications. e-ready extension professional can deliver better services with accountability to the target communities. It can wipe out the differences between the reached and unreached. At last, e-readiness is a state of mind if you wish; you will be e-ready.

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