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Constraints in use of ICT among women farmers in farming practices with special reference to E-commerce in Agriculture

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Abstract

Nowadays, ICT performs a leading role in any kind of business for marketing. While radio, television and print media were primarily used to perform these tasks earlier, with the advent of the new ICTs, these have now been considered as traditional ICTs. The new ICTs are commonly referred to evolving applications that rely on the Internet, telecommunication networks, mobile phones, personal computers and databases. These new ICTs have the potential of getting vast amounts of information to rural population in a more timely, comprehensive, cost effective and interactive manner. The study mainly focused as how the rural women farmers use ICT for their farming practices and agribusiness. Based on the findings, researcher concluded from the study, the women farmers perceived from their experience, the infrastructure is a main constraint to use the ICT for e-commerce in agricultural business. Some important implications for future research are also derived from the study.

Key Words: ICT, Constrain, E-Commerce.

Introduction

ICTs generally refer to an expanding assembly of technologies that are used to handle information and aid communication. These include hardware, software, media for collection, storage, processing, transmission and presentation of information in any format (i.e., voice, data, text and image), computers, the Internet, CD-ROMs, email, telephone, radio, television, video, digital cameras etc. While radio, television and print media were primarily used to perform these tasks earlier, with

the advent of the new ICTs, these have now been considered as traditional ICTs. However, many of these traditional ICTs are effective than web-based solution, as they can resolve issues such as language, literacy or access to the Internet (UNDAW, 2002). Online services for information, education and training, monitoring and consultation, diagnosis and monitoring, E-Commerce for direct linkages between local producers, traders, retailers and suppliers. The facilitation of interaction among researchers, extension workers and farmers, Question and answers services where experts respond to queries, ICT services to block and district level up to date information supplied to farmers as early as possible about subjects such as packages of practices, market information, weather forecasting, input supplies and credit availability. Creation of databases with details of resources of local villages and villagers, site specific information systems, expert systems, provision of early warning systems about diseases/pest problems, information regarding rural development programmes and crop insurances, postharvest technology. Improved marketing of milk and milk products; services providing information to farmers regarding business and management; increased efficiency and productivity of cooperative societies through the computer communication network and the latest database technology.

The Agricultural Informatics and Communication Network (AGRISNET), constituted by the Department of Agriculture, provide improved services to farmers through information technology and seek to establish Indian agricultural online. Vari-

ous states including Tamilnadu have implemented AGRISNET, in collaboration with various agencies with customizations to suit local conditions.

Review of Literature

In the article, author has argued that Agricultural Information dissemination through IT is cost effective, time saving and speed of communication is very high, classified information and information storage capacity is enormous. Thus Extensions through IT is getting popular now a days. Few experiences are encouraging and open a great space for IT applications in agricultural extension (Chandra Shekara.P, 2001). Another research (Goldman Sachs, 2000) he concluded that despite significant growth in use of the internet by farmers, it is still far from universal and likely to stay so for considerable time. The reasons for non-adoption according to some research have to do with utility, relevance and affordability of the product; though technical limitations (Speed of rural telecommunications links) still have an influence. Goldman Sachs also argues that the potential for B2B e-Commerce is greater in industries. The Increasing adoption of information Technology leads of course to direct production gains and at the same time to reductions in operating costs. Rural women in Africa are generally not highly educated and there is an obvious gap in their understanding of business models and information technology and its potential benefits to the community. This is clearly demonstrated in their inability to utilize the telecentre effectively. Women with access to ICT services increase their ability to generate income and are enabled to help empower other rural women (Richardson, 2000).

Purpose of the Study

To know how women farmers have to constraints in use of ICT practices in taking up cultivation.

Objective of the Study

To know whether any relationship between constraints in use of ICT practices of e-commerce and experience.

Hypothesis of the Study

H1: There is no significant difference in the constraints of e-commerce factors based on experience of women farmers.

H2: There is no significant difference between constraints of e-commerce factors influence to constraints of e-commerce.

Period of the Study

This study covers a period of three months from March to May 2016.

Methodology

Sample Frame

The sample chosen for the study covers the farmers of different village of Perambalur District. Totally 300 farmers are selected on convenient sampling method from the randomly selected 30 villages in Perambalur District. 10 farmers are selected in each village.

Data Collection Method

Primary data collected from respondents by administering a structured questionnaire dealing with various aspects of workplace sequences. This study was carried out through a survey method using questionnaires as the main instrument.

Statistical Tools

Primary data were collected, tabulated. A pilot study was carried out to revise the questionnaires and for item analysis. The validity and reliability of the questionnaires were measured. The internal consistencies of scale were assessed through computing Cronbach's Alpha. Correlation was used in this study.

Limitations of the Study

- 1) Time constrain is a major limitations to the study and forced to restrict the respondents within a stipulated time.
- 2) The study concentrated only on using ICT in e-commerce.
- 3) The information provided by the respondents is purely based on their perception only.

Statement of Problem

Agricultural marketing reform was considered an essential step to improve e-agro farm and e-agricultural marketing in India. A major setback to agriculture industry is its failure to plan production according to market requirements. In fact, it is this difference between man and women in using ICT and other industries and agriculture

which puts it in a disadvantages position. Market oriented production will surely benefit the farmers in India. It is to determine the role of e-commerce, combined with the concept of communities of practice can play to improve productivity in farms and knowledge of the women farmers.

Findings

Table - 1 Distribution of Level of Experience and Descriptive Statistics

	Frequency	Percent	Mean	S.D
Less than 5 yrs	45	15.0	3.48	1.568
5-10 yrs	62	20.7		
11-15 yrs	29	9.7		
16-20 yrs	31	10.3		
Above 20 yrs	133	44.3		
Total	300	100.0		

Source: Primary Data

H1: There is no significant difference in the constraints of e-commerce factors based on experience of farmers.

As shown in the table no.2,there is high degree of correlation between constraints of e-commerce factor namely cost of implementation and infrastructure with experience. Based on correlation value, since P value less than 0.01, null hypotheses rejected at 1% level. Constraints of e-commerce factor namely obstacles, benefit and lack of trust were not correlated with experience. There is a significant difference between constraints of e-commerce factor namely cost of implementation and infrastructure with experience of farming practices.

	Infrastructure	Cost of Implementation	Obstacles	Benefits	Lack of Trust	Years of Experience
Infrastructure	1					
Cost of Implementation	.337** .000	1				
Obstacles	.242** .000	.237** .000	1			
Benefits	.236** .000	.150** .009	.278** .000	1		
Lack of Trust	.240** .000	.069 .236	.231** .000	.334** .000	1	
Years of Experience	.165** .004	.225** .000	.042 .469	.045 .441	-.001 .987	1

Table No: 2 Correlation Matrix

Source: Primary data* Significant at 5% level ** Significant at 1% level

H2: There is no significant difference between constraints of e-commerce factors influence to constraints of e-commerce.

Table No: 3 Correlation Matrix

	Infrastructure	Cost of Implementation	Obstacles	Benefits	Lack of Trust	Constrains
Infrastructure	1					
Cost of Implementation	.337** .000	1				
Obstacles	.242** .000	.237** .000	1			
Benefits	.236** .000	.150** .009	.278** .000	1		
Lack of Trust	.240** .000	.069 .236	.231** .000	.334** .000	1	
Constrains	.640** .000	.611** .000	.619** .000	.639** .000	.603** .000	1

Source: Primary data ** Significant at 1% level

As shown in the above table no.3, reveals that the constraints factors associated with constraints of e-commerce practices using correlation analysis. P - Values are significant at 1% level. Based on the P-value in the above table, the infrastructure and benefits of E-Commerce is highly influencing in constraints of e-commerce Practices.

Conclusion

In the present study, based on the above findings, there is a significant relationship between constraints of e-commerce factors based on experience of farmers. From the correlation matrix, high degree of correlation between constraints of e-commerce factor namely cost of implementation and infrastructure with experience. Based on the findings, factors namely infrastructure and benefits of E-Commerce is highly influencing in constraints of e-commerce Practices. The researcher concluded from the study, the women farmers perceived from their experience, the infrastructure is a main constrain to using the ICT for e-commerce in agricultural business.

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