



Identify Attitude and Perception of Farmers on Mobile Based Agriculture: Reuters' Market Light (RML)

P. Anbarasan^{1*}

¹*Department of Agricultural Extension, School of Agricultural Innovations and Advanced Learning (VAIAL), Vellore Institute of Technology, Vellore-632014, India.*

Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Article Information

DOI: 10.9734/AJAEES/2019/v34i330200

Editor(s):

(1) Dr. Mohamed Hssan M. Abdel Aal, Professor, Faculty of Agriculture, Cairo University, Egypt.

Reviewers:

(1) Kalpana L. Chaudhari, Shah and Anchor Kutchhi Engineering, India.
(2) Zafar Iqbal Buhroo, Sher-e-Kashmir University of Agricultural Sciences and Echnology of Kashmir, India.

(3) K. D. V. Prasad, The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India.

Complete Peer review History: <http://www.sdiarticle3.com/review-history/50222>

Original Research Article

Received 11 May 2019
Accepted 21 July 2019
Published 31 July 2019

ABSTRACT

Farmers need dynamic information relating to agriculture and rural development. Therefore, to satisfy the need of information and knowledge, Reuters Market Light (RML) offers highly customized and localized agricultural related information service. RML provides information services via mobile phone-based Short Message Service (SMS) primarily aimed at farmers. The study was carried out in the Erode district of Tamil Nadu state. The results revealed that majority of the respondents had a strong positive attitude towards market and the respondents had a high level positive perception towards mobile phone with regard to farm information and technology transfer.

Keywords: Reuters market light; short message service; gratification; constraints; mobile telephone.

1. INTRODUCTION

The new paradigm of agricultural development in India necessitates incorporation of Information

Technology for driving over all societal transformation. Information technology revives the social organizations and productive activity of agriculture, which if nurtured effectively, could

*Corresponding author: E-mail: arasan005@rediffmail.com;

become transformation factor. Agricultural extension, in the current scenario of rapidly changing world, is recognized as an essential mechanism for delivering information and knowledge packages as input to modern farming, harnessing ICTs in agricultural development is inevitable [1].

Hence, a venture promoted and supported by Thomson Reuters, Reuters Market Light (RML) offers highly customized and localized agricultural and related information service. Using a subscription model, RML provides information services via mobile phone-based Short Message Service (SMS) primarily aimed at farmers. RML SMS covered localized weather forecasts, crop advisory, proximate market data and crop prices; in addition to relevant policy and national and international news. With such information, a farmer subscribing to the RML service is equipped to overcome the information asymmetry that impedes agricultural communities' growth and earnings, especially in the context of falling yields. Equipped with information, farmers can thus make informed decisions about their agricultural practices and sales and will be able to create wealth through a rise in agricultural productivity and income while waste and market inefficiencies are likely to be minimized [1]. With the hope to spark the ideas to mobilize the convergence of ICT in agriculture, the present research has been carried out to investigate various researchable issues to delineate the pre-requisites of a sound strategy of ICTs in agriculture [2]. Since RML operates in the study area for the past three years it is important to study the different perspectives like Attitude and Perception, by the registered RML users in utilizing the market price information provided through SMS. So as to know the give some possible suggestions to improve the services provided by RML to enable farmer as the strongest player in the market the present study entitled "Attitude and Perception of farmers on Mobile based Agriculture: Reuters Market Light (RML)" was designed and executed.

2. RESEARCH METHODOLOGY

The study has been carried out in the Erode district of Tamil Nadu state. Among 32 districts of Tamil Nadu, Erode district was identified as the study area of this district which constituted a major group of beneficiaries of Reuters Market Light (RML) through mobile telephones. In Erode District of Tamil Nadu Reuters Market Light (RML) utilizes Pallavan Grama Bank (Agricultural Rural Bank which is sponsored by the Indian

Bank) to distribute the messages [3,4]. RML gets the farmers' data base from the PallavanGrama Bank and in terms it sends the messages to farmers'. There are fourteen PallavanGrama Banks functioning in Erode District. All the fourteen banks were selected for the study, from these fourteen banks 180 respondents were drawn by using the Stratified Random Sampling with Proportional allocation method. Then Simple Random Sampling without replacement procedure was adopted, with the help of Random number table the respondents who availed the Reuters Market Light (RML) service through the mobile phone Short Message Service (SMS) were selected for the study. The collected data was analyzed with appropriate statistical tools (SPSS) and techniques. The salient findings of the study are given below.

3. RESULTS AND DISCUSSION

3.1 Attitude towards Market

The attitude of the respondents towards market was analyzed by using six statements about market. Likert scale was used to assess their attitude towards market. The attitude statements with their obtained mean score are tabulated in Table 1.

Table 1 reveals that the mean score obtained by the respondents for the given statements on attitude towards market namely:

(i) Selling the produce at market places does not necessarily mean good price being a negative statement it obtained a mean score of 4.23 which inferred that the respondents strongly disagreed to this statement, because the respondents expressed that they would sell the produce at markets only when they felt that the offered prices were good and also they added that market was the only place where they could find various alternatives to sell the produce for a good price.

(ii) It is cumbersome to sell the produce at market obtained a mean score of 3.25, as it is a negative statement it revealed that farmers disagreed with this statement because they felt that a responsible farmer should not consider marketing his produce in the market as a cumbersome process because the ultimate aim of producing a commodity is to achieve some profit out of it and it could be obtained only when the farmer involved marketing of his produce at the market.

Table 1. Distribution of respondents based on their attitude towards market

		(n=180)
S. no.	Statement	Weighted mean score
1.	Selling the produce at market places does not necessarily mean good price.	4.23
2.	It is cumbersome to sell the produce at the market.	3.25
3.	Disposing the produce in the village is economical than selling it in the market.	3.6
4.	It is wastage of time to sell the produce in market.	3.8
5.	Good price for the produce is obtained only when marketed outside village.	3.25
6.	Only middlemen will be benefitted if the produce is sold at the market.	4.80

(iii) Disposing a produce in the village is more economical than selling it in the market secured a mean score of 3.6 as a negative statement revealing that respondents disagreed with this statement.

(iv) It is wastage of time to sell the produce in market was another negative statement by which the farmers disagreed with a mean score of 3.8. For both the statements they felt that selling the produce in the market is economical. Farmers felt that if the produce was disposed at the village there might be a chance of losing the existing demand and competition for their produce which in turn provided better profit to the farmers when sold in the market and hence farmers expressed that disposing a produce in the village was not economical.

(v) Good price for a produce is obtained only when marketed outside the village got a score of 3.25 and the respondents agreed to this positive statement because they felt that market was the only place with a structure that fetched maximum price for a good quality produce because of its consumer preference.

(vi) The last statement, only middlemen will be benefitted if the produce is sold at the market is a positive statement which was accepted by the respondents strongly, this statement secured a score of 4.80. The respondents expressed that the only major constraint experienced by them was the exploitation by the middlemen. Respondents felt that middle men were the strongest link in the process of marketing because of their well established linkage with traders in the market. They also added that no farmer can enter a market and have a direct transaction with the traders without the intervention of middlemen. They strongly stated that middlemen only reaped the maximum

benefit out of a produce which was produced by farmers and sold by traders. They also urged the researchers and policy makers to find ways to restrain the middlemen from the marketing chain so that the ultimate producer could be benefitted.

From the above discussion it is inferred clearly that the respondents selected for this study had a positive and strong attitude towards market. In spite of various constraints faced by them in the process of marketing like, packaging, transportation, storage, exploitation by middlemen, *etc.*, and the farmers still preferred to go and sell their produce in the market because of the following reasons. Bargaining and negotiations could be done only when the produce reached the market, since the produce produced by precision farmers were of superior quality; the advantage of competition could be exploited by farmers provided if there is a demand for his produce in the market.

3.2 Perception towards Mobile Phone in Farming

Individual's perception is a result of interplays between past experience, including one's culture and the interpretation of the perceived. If the percept does not have support in any of these perceptual bases it is unlikely to rise above perceptual threshold [5].

Farmer's perception towards using mobile phones in learning farm related technologies, receiving all agriculture related information was an important factor to be studied in this research because it intended to study the information utilization behaviours of farmers receiving the Reuters Market Light (RML) information through mobile telephone. The relevant data required to study this variable were collected and the results were tabulated in Table 2.

Table 2. Distribution of respondents based on their perception towards mobile phone in farming**(n=180)**

S. no.	Item	Mean score
1.	Easy to learn	1.68
2.	Too expensive	2.608
3.	Absolutely essential	1.25
4.	Swift rapid information transfer	1.65
5.	Age is no bar	1.88
6.	Exclusive for literate groups	3.78
7.	Plethora of information transfer	1.25
8.	Used in contingencies	1.25
9.	Used in emergencies	1.69
10.	Portable	1.76

Table 2 reveals that the respondents obtained a mean score of 1.25 for the positive statements like mobile phone technologies are easy to learn, age is no bar for utilizing mobile phone technologies, used in contingencies, used in emergencies and are portable inferring that farmers have a positive (high level) and strong perception towards these statements followed by statements like mobile is absolutely an essential tool and plethora of information transfer can be done through mobile telephones which obtained a mean score of 1.25 which can be interpreted that farmers are in an undecided state with regard to these statements. Farmers have a negative and low perception towards statements like mobile phones are too expensive (2.068), rapid transfer of information is possible through mobile phones (1.65) and Mobile phones are exclusively intended for literate groups only (3.78). In general, most of the respondents had a high level of positive perception towards using mobile phone for farm information and technology transfer. It shows that farmers perceive mobile phone as the most essential and potential tool for exchange of information, faster learning tool, modest gadget for easy interpretation of information.

4. CONCLUSION

The value of information is universal and paramount. Providing information to those who do not have access to it and who are in critical need is an important service, independent of the specific benefits to farmers. Value additions in

the Indian agriculture sector as well as value added services in the mobile phone industry are in urgent need of attention – and both hold promise for improving the situations of farmers, while creating value for several stakeholders including the mobile service companies and content aggregators like RML.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Balasubramaniam R. Designing and testing the effectiveness of computer – based expert system on cognitive and domains of rubber growers. Unpub. Ph.D. Thesis, TNAU, Coimbatore. Tamil Nadu; 2010.
2. Agriculture Today. The Agriculture Today Yearbook, New Delhi. India; 2009.
3. Khalif, A. 2011. Text to speech service supporting farmers in Kenya. New Agriculturalist. Sundaresan CS. Sustainable agri-business, Agriculture Today Yearbook , New Delhi; 2009.
4. ICT uses for inclusive value chains (2013)". FAO; 2015.
5. Chadha KL. Horticulture: The next in agriculture, Agriculture Today Yearbook, New Delhi; 2009.

© 2019 Anbarasan; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<http://www.sdiarticle3.com/review-history/50222>