

1 **Identify Attitude and Perception of farmers on Mobile based Agriculture: Reuters' Market Light**
2 **(RML)"**

3 **Abstract:**

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

12 **Key Words:** Reuters Market Light, Short Message Service, Gratification, Constraints, Mobile
13 telephone

14 **Introduction:**

15 The new paradigm of agricultural development in India necessitates incorporation of
16 Information Technology for driving over all societal transformation. Information technology
17 revives the social organizations and productive activity of agriculture, which if nurtured
18 effectively, could become transformation factor. Agricultural extension, in the current scenario
19 of rapidly changing world, is recognized as an essential mechanism for delivering information
20 and knowledge packages as input to modern farming, harnessing ICTs in agricultural
21 development is inevitable. (Chadha, 2009)

22 Hence, a venture promoted and supported by Thomson Reuters, Reuters Market Light
23 (RML) offers highly customized and localized agricultural and related information service. Using a
24 subscription model, RML provides information services via mobile phone-based Short Message

25 Service (SMS) primarily aimed at farmers. RML SMS covered localized weather forecasts, crop
26 advisory, proximate market data and crop prices; in addition to relevant policy and national and
27 international news. With such information, a farmer subscribing to the RML service is equipped to
28 overcome the information asymmetry that impedes agricultural communities' growth and earnings,
29 especially in the context of falling yields. Equipped with information, farmers can thus make
30 informed decisions about their agricultural practices and sales and will be able to create wealth
31 through a rise in agricultural productivity and income while waste and market inefficiencies are
32 likely to be minimized. With the hope to spark the ideas to mobilize the convergence of ICT in
33 agriculture, the present research has been carried out to investigate various researchable issues to
34 delineate the pre-requisites of a sound strategy of ICTs in agriculture. Since RML operates in the
35 study area for the past three years it is important to study the different perspectives like Attitude
36 and Perception, by the registered RML users in utilizing the market price information provided
37 through SMS. So as to know the give some possible suggestions to improve the services provided by
38 RML to enable farmer as the strongest player in the market the present study entitled "**Attitude and**
39 **Perception of farmers on Mobile based Agriculture: Reuters Market Light (RML)**" was
40 designed and executed.

41 **Research Methodology**

42 The study has been carried out in the Erode district of Tamil Nadu state. Among 32
43 districts of Tamil Nadu, Erode district was identified as the study area of this district which
44 constituted a major group of beneficiaries of Reuters Market Light (RML) through mobile
45 telephones. In Erode District of Tamil Nadu Reuters Market Light (RML) utilizes Pallavan
46 Grama Bank (Agricultural Rural Bank which is sponsored by the Indian Bank) to distribute the
47 messages. RML gets the farmers' data base from the Pallavan Grama Bank and in terms it sends

48 the messages to farmers'. There are fourteen PallavanGramma Banks functioning in Erode
 49 District. All the fourteen banks were selected for the study, from these fourteen banks 180
 50 respondents were drawn by using the Stratified Random Sampling with Proportional allocation
 51 method. Then Simple Random Sampling without replacement procedure was adopted , with the
 52 help of Random number table the respondents who availed the Reuters Market Light (RML)
 53 service through the mobile phone Short Message Service (SMS) were selected for the study. The
 54 collected data was analyzed with appropriate statistical tools (SPSS) and techniques. The salient
 55 findings of the study are given below.

56 **Result and Discussion**

57 **Attitude towards Market**

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

61 **Table 1: Distribution of respondents based on their attitude towards market**

62 (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

63

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

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

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

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

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

85 (v) *Good price for a produce is obtained only when marketed outside the village* got a score of
86 3.25 and the respondents agreed to this positive statement because they felt that market was the

87 only place with a structure that fetched maximum price for a good quality produce because of its
88 consumer preference.

89 (vi) The last statement, *only middlemen will be benefitted if the produce is sold at the market* is
90 a positive statement which was accepted by the respondents strongly, this statement secured a
91 score of 4.80. The respondents expressed that the only major constraint experienced by them was
92 the exploitation by the middlemen. Respondents felt that middle men were the strongest link in
93 the process of marketing because of their well established linkage with traders in the market.
94 They also added that no farmer can enter a market and have a direct transaction with the traders
95 without the intervention of middlemen. They strongly stated that middlemen only reaped the
96 maximum benefit out of a produce which was produced by farmers and sold by traders. They
97 also urged the researchers and policy makers to find ways to restrain the middlemen from the
98 marketing chain so that the ultimate producer could be benefitted.

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

107 **Perception towards mobile phone in farming**

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

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

116 **Table 2: Distribution of respondents based on their perception towards mobile phone**
 117 **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

118 Table 2 reveals that the respondents obtained a mean score of 1.25 for the positive
 119 statements like mobile phone technologies are easy to learn, age is no bar for utilizing mobile phone
 120 technologies, used in contingencies, used in emergencies and are portable inferring that farmers have
 121 a positive (high level) and strong perception towards these statements followed by statements like
 122 mobile is absolutely an essential tool and plethora of information transfer can be done through
 123 mobile telephones which obtained a mean score of 1.25 which can be interpreted that farmers are in
 124 an undecided state with regard to these statements. Farmers have a negative and low perception
 125 towards statements like mobile phones are too expensive (2.068), rapid transfer of information is

126 possible through mobile phones (1.65) and Mobile phones are exclusively intended for literate
127 groups only (3.78). In general, most of the respondents had a high level of positive perception
128 towards using mobile phone for farm information and technology transfer. It shows that farmers
129 perceive mobile phone as the most essential and potential tool for exchange of information, faster
130 learning tool, modest gadget for easy interpretation of information.

131 **Conclusion**

132 The value of information is universal and paramount. Providing information to those who
133 do not have access to it and who are in critical need is an important service, independent of the
134 specific benefits to farmers. Value additions in the Indian agriculture sector as well as value
135 added services in the mobile phone industry are in urgent need of attention – and both hold
136 promise for improving the situations of farmers, while creating value for several stakeholders
137 including the mobile service companies and content aggregators like RML.

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