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Asses the degree of awareness and examine the opinions of Kisan card holders regarding the Kisan card program

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Abstract

Kisan card boosts the farming industry and increases resource production. In order to guarantee that farmers in India have access to credit facilities on time, the government and higher financial institutions, such as NABARD and the Reserve Bank of India, have adopted numerous credit regulations and schemes. The Kisan Credit Card (KCC) program is one of such as well. An investigation into farmers' perceptions of KCC and their degree of understanding was carried out in the Tamil Nadu district of Coimbatore. According to research, 87.00% of respondents had positive opinions overall about the program, and among them, 60% of participants stated it was very beneficial. Just 30.16 percent of participants claimed that the loan on the warehouse helped them get through the difficult transaction. Ninety-eight percent of the sample as a whole said they didn't find the insurance useful, and twenty-six percent said they had issues with the KCC program because of the shorter repayment time.

Keywords: KCC, awareness, Kisan card, production, livelihood

Introduction

Agriculture in India is the backbone of the country as majority of people earns their livelihood from it. The share of agriculture and allied sector activities (agriculture, forestry, fishing) in GDP has declined from 55.3 percent in 1950-51 to 14.5 percent in 2010-11 to 13.9 percent in 2011-12. The gross capital formation in agriculture and allied sector as a proportion of total GDP around 20 percent and also GDP growth rate of agriculture and allied sector has declined from 3.5 percent in 2010-11 to 2.5 percent in 2011-12 (Kumar *et al.*, 2010) ^[1]. Agriculture at present provides livelihood to 66 percent of the total population. The sector provides employment to 52 percent of country's workforce and is the single largest private enterprise. Agriculture also plays a crucial role in industrial development of our nation as it is the source of raw materials for many industries like cotton, jute, textile industries, sugar, vanaspathi industries are directly depending on agriculture (Adams, 2012) ^[2]. India's foreign trade is deeply associated with agriculture. Agriculture and allied sector accounts for about 9.1 percent of the total export earnings. Agriculture and its related goods contribute 20 percent in the total exports of the country. Expanding agricultural production increases the demand for other sectors like fertilizers, pesticides, machineries, transportation and communication varying with the level of technology (FAO, 2013) ^[3].

With the adoption of new farm technology, the credit needs of the agriculture increased tremendously and it was found that the cooperatives alone could not covering with the growing credit needs of developing agriculture. Consequently, 14 major commercial banks were nationalized in 1969 to accelerate the flow of bank credit to agriculture. Later in the year 1975 a third agency, *viz* the Regional Rural Banks (RRBs), designed to pay focused attention to the credit needs of the weaker sections in the rural areas, was introduced in the credit delivery system (Chavan, 2013) ^[4]. Thus a multiagency approach to rural credit was brought into force, each agency complementing the efforts of the other agency (Gulati & Bathla. 2002) ^[5].

As a result of development and expansion of the institutional network the share of the institutional agencies in the debt of cultivators raised from a meagre 4 percent in 1951 to 60 percent in 2001. The increasing dependence of rural household on institutional sources reflects substitution of traditional sources. Special programmes have been launched to take care of the marginal and small farmers and other weaker sections of the rural community.

The institutional financing agencies have been directed to give priority to marginal and small farmers and other weaker sections of the rural community in advancing loans (RBI, 2018) [6].

The Kisan Credit Card Scheme was introduced in 1998-99 as a step towards providing adequate and timely credit to the farmers from the banking sector. Recently Government of India has implemented new guidelines for issuance of Kisan ATM cum Debit Card for all new and existing KCC Account holders NPCI has been entrusted with the responsibility of facilitating on its domestic card scheme called "RuPay". NPCI has been working with all the major banks for on boarding them on the RuPay platform & issuing the RuPay Kisan Cards, thus playing a pivotal role in enabling electronic payments through ATM and POS to reach the rural people (Barik, 2010) [7].

This new electronic means to transact reduces the transaction costs of the farmers in visiting branches for cash withdrawals and saving precious man-days in the process. Bank of Maharashtra has been the 1st bank to launch RuPay Kisan Card. As on date 19 mainstream banks & 5 Regional Rural Banks have been certified by NPCI to issue the RuPay Kisan Cards viz., Allahabad Bank, Andhra Bank, Bank of Baroda, Bank of India, Bank of Maharashtra, Canara Bank, Central Bank of India, Dena Bank, Indian Bank, Indian Overseas Bank, Oriental Bank of Commerce, Punjab National Bank, Punjab and Sind Bank, State Bank of India, Syndicate Bank, UCO Bank, Union Bank of India, United Bank of India, Vijaya Bank. RRB's which are issuing Kisan Debit card are Chaitanya Godavari Gramin Bank and Rushikulya Gramya Bank of Andhra bank and South Malabar Gramin Bank, Shreyas Gramin Bank and Pragathi Gramin Bank of Canara Bank (Bhaskar, 2006) [8].

On a whole, it could be concluded that, the RuPay Kisan Card schemes, developments in banking to improve access to farmers and improved managerial practices has been introduced to mitigate the traditional constraints that deter financial institutions in providing one stop shop services to farmers. In the light of the developments, it is imperative to analyse the awareness and use of RuPay Kisan Card by farmers, so as to understand the effectiveness of the utilization and problem faced by the farmer. Hence, a study addressing all the above aspects was undertaken in Coimbatore District, which is basically an agricultural belt with progressive and innovative farmers.

Materials and Methods

Selection of study area

In Coimbatore district, three branch offices of Indian Overseas Bank exclusively catering to agricultural development serving the credit needs of the farmers were purposively selected for conducting the study on the awareness, utilization and problems of using RuPay Kisan Card.

Sampling design

In Coimbatore district, three branches of Indian Overseas Bank such as kottur, Branch, pollachi branch and Thondamuthur branch were selected. From each branch, 40 farmers were selected randomly from the list of farmers using RuPay Kisan Card was collected from the bank. The details are presented in Table 1.

Table 1: List of Selected Branches for the study

S. No	Branch	Number of farmers
1.	Kottur	40
2.	Pollachi	40
3.	Thondamuthur	40
	Total	120

Method of data collection

The data required for the present study were collected using well-structured interview schedule. For collection of data, interview schedule for selected farmers was constructed based on the objectives of the study which included details about basic farmers profile, knowledge level, perception, extend of utilization, and problems and suggestion regarding in using of RuPay Kisan Card. The data required for the study was collected by personally interviewing the selected farmers.

The data collected from the sample farmers included the details like age, educational status, occupational status, family type, social participation, farming experiences, landholding pattern, crops grown, farm income etc.,

The secondary information about the district like the location of the study area, demography, rainfall pattern, land use pattern and irrigation sources were collected from the records of Assistant Director of Statistics and Joint Director of Agriculture, Coimbatore district and also through internet. The data were also supplemented by different magazines, literatures, periodicals, books and publications, News Papers, internet etc. related to banking fields.

Period of the study

Data was collected through field survey during the months of February and March 2013. The data collected from the farmers pertained to the year 2012-2013.

Tools of analysis

The collected data were tabulated and analyzed. The tools of analysis used in this study are as follows:

1. Percentage analysis

Percentage analysis was used to study the general characteristics of the sample farmers which included age, gender, education level, occupation, farming experience, size of land holding, annual income etc.,

$$\text{Percentage analysis} = \frac{\text{Number of respondents}}{\text{Total sample size}} \times 100$$

2. Mean and standard deviation

In this study mean and standard deviation were used wherever to classify the respondents into different categories. Mean plus one standard deviation indicated high level and mean minus one standard deviation referred to low level. The range in between the \pm standard deviation indicated the medium level.

3. Garrett ranking technique

This technique was used to rank the factors which motivated to join the scheme by the sample farmers. The sample farmers were asked to rank each reason and data were analyzed. The Garrett's ranking technique was adopted by using the following formula.

Percent position = $100 (R_{ij}-0.05) / N_i$

Where,

R_{ij} = Rank given to i^{th} attribute by j^{th} individual.

N_i = number of factors ranked by j^{th} individual

By referring to the table given, the percent position estimated was converted into score for each reason and the score of various sample farmers was added and mean score value was calculated. The means scores values were arranged in a descending order. The reason which obtained the highest mean score was considered to be the most important reasons for joining the scheme.

3. Extent of utilization of Kisan credit card

To assess the extent of utilization of kisan credit card (kcc) by the farmers, statements were framed out, on various aspect of kcc utilization. The response of farmers were recorded in four point continuum scale i.e. ‘Full utilized’, ‘Partial utilized’, ‘Least utilized’ and ‘Not utilized’ with the score of ‘4’, ‘3’, ‘2’, ‘1’ respectively.

The extent of utilization of kisan credit card by the each respondent was calculated by using the following formula.

$$EUKCC = \frac{O}{S} \times 100$$

Where,

EUKCC = Extent of utilization of kisan credit card.

O = Total score obtained by the farmers.

S = Total obtained score (Pramod 2012).

4. Multi Dimensional Scaling Technique

In this approach, the sample respondents were requested to indicate on a five point scale whether they strongly agree, agree, neutral, disagree and strongly disagree with the attributes, for evaluating their perception of RuPay Kisan Card holder towards RuPay Kisan Card scheme.

The responses were recorded and the scores were given to their responses to obtain the mean score. The score for each factor responses are presented in the Table 2. The score were added to obtain the total score of their perception about the factors influencing scheme.

Table 2: Five point scale for the multidimensional scaling analysis

S. No	Particulars	Scale
1.	Strongly agree	5
2.	Agree	4
3.	Neutral	3
4.	DisAgree	2
5.	Strongly DisAgree	1

The scores are summed up and the mean of each attribute is calculated and ranked based on it.

The mean score is calculated by using the following formulae.

$$\frac{\sum W_i X_i}{\sum X_i}$$

W_i - Weight of the variable.

X_i - Variable.

5. Multiple regression analysis

Regression is primarily concerned with using the relationship for the purpose of predicting one variable from knowledge of the other. Multiple regression is an extension of simple linear regression analysis. The number of variables will be more than two out of which one will be the dependent variable and others are independent variables. Multiple regression analysis is used to find out the relationship between the knowledge level and the factors that influence the level of knowledge about RuPay Kisan Card scheme was analyzed using the MS Excel.

The multiple regression equation is given by

$$Y = a + b_1 X_1 + b_2 X_2 + \dots + b_n X_n$$

Where,

a = Intercept

y = Dependent variable, y = 1 if the farmers having knowledge about RuPay Kisan Card.

Y = 0 if the farmers are not having knowledge about RuPay Kisan Card.

b_1 to b_n = Partial regression coefficient

X_1 to X_n = Independent variable

X_1 = Age in years

X_2 = Educational status

X_3 = Farming experience in years

X_4 = Size of land holding in hectares

X_5 = Annual farm income in rupees

X_6 = Social participation of the farmers

X_7 = Crop grown in numbers

X_8 = Farmers Satisfaction level

Results and Discussion

Knowledge level analysis of RuPay Kisan Card scheme

The analysis was carried out to assess the extent of knowledge possessed by sample farmers about RuPay Kisan Card scheme. The result are given in the Table.

It could be noticed from the table that 15 percent of the sample farmers possessed low level of knowledge about details of Rupay Kisan Card scheme followed by medium and high level of 49.17 percent and 35.83 percent about the knowledge of RuPay Kisan Card scheme.

Table 3: Distribution of sample farmers according to their knowledge level of RuPay Kisan Card scheme (n=120)

S. No	Category	Number of farmers	Percentage
1.	Low	18	15
2.	Medium	59	49.17
3.	High	43	35.83
	Total	120	100.00

Majority of the sample farmers possessed medium to high level of knowledge about RuPay Kisan Card scheme. This might be due to education status, farm income, crop grown, farm experience etc and also getting information from the bank staff and also from their friends.

Contribution of characteristic towards knowledge level

The multiple linear regression analysis was performed to find out the relative contribution of each variable towards the knowledge level of the sample farmers. The results has been analysed and presented in the Table 4.

Table 4: Contribution of characteristic towards knowledge level
n=120)

Variable number	Variable (X)	Partial regression coefficient 'b'	Standard error	't' value
X ₁	Age	-0.2720 ^{NS}	0.1712	-1.5889
X ₂	Educational status	0.3631**	0.1515	2.3984
X ₃	Farming experience	0.5514*	0.3286	1.6776
X ₄	Size of land holding	-1.3954	0.2253	-6.1933
X ₅	Annual farm income	1.8633***	0.2363	7.8851
X ₆	Social participation	-0.6359	0.3425	-1.8563
X ₇	Crop grown	2.0830***	0.2815	7.3987
X ₈	Farmers Satisfaction level	-0.6841	0.3895	-1.7562

Note: R² value = 0.81

Adjusted R² = 0.80

***Significant at 1% level

**Significant at 5% level

*Significant at 10% level

NS-Non Significant

From the Table 5.2.2, the result reveals that the out of eight variable only four variable i.e education status (X₂), farming experience (X₃), annual farm income (X₅), crop grown (X₇) were found positively significant with the knowledge level of farmers. Remaining three variable i.e size of land holding (X₄), social participation (X₆) and satisfaction level are negatively significant and age (X₁) is non significant with the knowledge level. The result shows that about 81 percent of the variation in dependent variable was explained by the independent variable considered in this analysis.

Educational status of farmers had positively significant influence over knowledge level. If the educational status increased, there is a probability of 36 percent increase in knowledge level of farmers towards RuPay Kisan Card. Education plays a important role in decision making towards joining the scheme. Similarly farming experience in years had positively influenced over knowledge level. An increase in farming experience by years would result an increase in 55 percent of knowledge level. Farmers with more experience could be convinced with proper repayment of loan and also have option to take benefit of Crop Insurance, Assets Insurance, Personal Accident Insurance Scheme (PAIS), and Health Insurance. Surprisingly, Size of land holding had significant but negative influence in the knowledge level of scheme. Annual farm income had positively significant influence over knowledge level. This is due to they have the capacity to return loan amount on time to the bank and also bank will prefer the farmers those who maintain good records in farming. Unfortunately social participation had a significant negative influence on the knowledge of the RuPay Kisan Card scheme, which contradicts with the expectations. Crop grown by the farmers had positively significant influence over knowledge level. Here the amount of card disbursed based on proposed crop for cultivating during the year. Farmers satisfaction level negatively significant influence over the knowledge level.

Perception of RuPay Kisan Card holders towards RuPay Kisan Card scheme

The perception rating gives an idea to what extent the sample farmers were satisfied with the scheme. Hence the sample

farmers were asked to rate their perception of the attributes of RuPay Kisan Card scheme using five point scale – Strongly Agree, Agree, Neutral, DisAgree, Strongly DisAgree. The data were analysed and the results were presented in the Table 5.

Table 5: Perception of the sample farmers (n=120)

S. No	Description	Mean score
1	RKC scheme help to meet the short term credit requirements for cultivation of crops	4.86
2	Credit limit of the RKC scheme is not adequate	4.69
3	Scale of finance of the crop has to be increased	4.69
4	Credit limit is to be fixed depending upon the crops cultivated by the farmers	4.55
5	Revolving cash credit facilities is convenient	4.42
6	Facilities of with drawal through ATM is more convenient	4.38
7	RKC scheme interest rate is affordable	4.13
8	Repayment period of the RKC scheme for the year is quite manageable	4.09
9	Farmer beneficiaries should be made aware of the insurance cover available and their consent is to be obtained, at the application stage itself	4.09
10	Awareness about post harvest expenses loan	4.04
11	Farmers should be aware of produce marketing loan	3.95
12	Consumption requirements of farmer household	3.75
13	Working capital for maintenance of farm assets and activities allied to agriculture like dairy animals, inland fishery etc.	3.55
14	Investment credit requirement for agriculture and allied activities like pump sets, sprayers, dairy animals etc.	3.55
15	Processing charge should be decreased	3.17

Analysis of the perception of the sample farmers about RuPay Kisan Card holders towards RuPay Kisan Card scheme revealed that high score was given to RKC scheme help to meet the short term credit requirements for cultivation of crops with 4.86 followed by 4.69 were given to credit limit of the RKC scheme is not adequate and 4.69 score were given to scale of finance of the crop has to be increased.

Very low score were given for processing charge should be decreased with 3.17. The sample farmers were not satisfied with processing charges and they revealed that the time taken for sanctioning loan should be decreased and they want to sanction on time by the staff. But overall they strongly agreed that the RuPay Kisan Card scheme is highly useful for their credit needs.

Conclusion

Logit result revealed that out of five variables only three variable i.e education status, land holding and social participation were found positively significant with the knowledge level of farmers. Remaining two variable farm experience and income was non-significant with the knowledge level. The result shows that about 84 percent of the variation in dependent variable was explained by the independent variable considered in this analysis. Analysis of the sample farmers perception on RuPay Kisan Card revealed that high score (4.86 score) was given to RKC scheme and the scheme helped to meet the short-term credit requirements of crop cultivation followed by (4.69 score) Agricultural Credit limit sanctioned through RKC scheme was inadequate and Scale of finance (4.69 score) were inadequate as well as it may be increased and agricultural Credit limit may be fixed

based on the crops cultivated by the farmer (4.55 score). Sample farmers were given low score (3.55 score) to RKC loan processing charges may be decreased/reduced. However, in overall farmers were strongly agreed that the RuPay Kisan Card scheme was greatly useful for their credit needs.

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