

Factors Affecting Perception of Farmers towards Agriculture Loan

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ABSTRACT

Agriculture is backbone of Indian economy. In India, government has taken many initiatives to improve the farming and status of farmers. In the country farmers are facing challenges regarding credit facilities. This paper highlighted the awareness of farmers regarding agriculture loan. Data from farmers of Israna, Panipat is collected. The study highlighted the perception of farmers regarding usefulness of loan, recovery of loan and socio-economic role of agriculture loan. Credit facilities are considered as the good source of production improvement and help the farmers in agricultural development activities. The study concluded that farmers need to emphasis on the procedural framework for availing credit facilities.

Keywords: Agriculture, Credit, Farmer, Loan, Government

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INTRODUCTION

Indian rural population has a large pool of farmers, small scale industry workers and agricultural labourers. India is country whose 70 % population resides in villages and exhibit dependency on agriculture [1, 2]. The results of agricultural activities serve as the foundation for raising the standard of living for rural populations. This positive effect demands for more intensification and development of agricultural activities (Economic survey, 2013). While comparing the growth rate of Indian agriculture, the researcher came to know the sustainability then the positive aspect has appeared after analyzing various year-o-year comparisons. More than 75% of total farmers of India fall in category of small and marginal ones and to sustain the agricultural activities, they are heavily dependent on credit. Main credit institutions are commercial banks, co-operative society and regional rural banks [3]. Main nodal agencies that account for more agricultural activities and their core responsibilities are equitable distribution of credit facilities and necessary inputs for agricultural likewise seeds, pesticides, agricultural equipments [4].

Besides aforementioned agencies, moneylenders also fall in category of agricultural credit which ensures the availability of all necessary things for upliftment of Indian rural population. Rural credit has secured its roots from two centuries and ownership patters varies in all organizational types likewise RRBs, Gramin banks and NABARD. But the governing body is RBI which keeps track on activities of all credit institutions [5]. In comparison of all major sectors of Indian economy, Indian agricultural has not seen any upward swing. Previous research shows regarding the agricultural sector reforms show that farmers have large expectations from public sector banks and reforms were aimed to improve the productivity and viability of credit institutions. Several incentives include falling interest rates and liberalizing controls on loans [4].

Agricultural loans are necessary for the development of farmers and to use in the production process for increased crop yield. The perceptions and degree of knowledge of farmers on various financial facilities

have been extensively researched. The effective flow of agricultural activities in the economy generates the need of market-based loans [6, 7]. The study emphasised the subsidised agricultural loan and argues that economy needs to provide agri-loan at reasonable price. Agri loan should be provided timely in order to improve the efficiency and productivity. Cheap and adequate agri-loan will help to improve the self-sufficiency [8]. In the period 1992-2000, agri-loan grew at a faster pace.

The rural farming and non-forming communities have been greatly aggravated by the absence of finance, especially when it comes to institutional finance issues that affect agricultural and non-agricultural loan operations. According to a survey of the literature, academics and researchers have given the issue a lot of attention, but fewer studies have been done on the need for expanding credit and evaluating the success of co-operative loans. Non-repayment has been a serious issue for the cooperative in recent years, making it difficult for many cooperative banks to grant new loans. The very future of cooperative banks will be in peril if these terms remain in place.

MATERIAL AND METHODS

Objectives of the Study

The primary goal of the study is to determine the awareness level of farmers with regard to agricultural loans in the rural economy of India. The sub objectives of paper are as follow:

- To determine the factors determining farmers' opinions about agricultural loans.
- To examine the perception of farmers towards agriculture loan.

Research Methodology

After discerning the relevance and capacity of rural credit in raising the standard of living of rural masses, a structured questionnaire has been created to gather farmers' opinions on agricultural loans. The scale consists of the items developed by Reddy and Ravisankar [2]. The thought of questionnaire meant for farmers was to measure the perception regarding agriculture loan procurement. The current investigation was carried out in the Israna Block, Panipat, state Haryana. Random sample of 217 farmers have been taken for study. Convenient and purposive sampling is used. In some ways, the study is descriptive in nature because it describes the facts and the farm loan phenomena.

RESULTS AND DISCUSSION

For analyzing the data, statistical software package SPSS 16.0 is used. Internal consistency and reliability of data is checked with the help of Cronbach's alpha. Minimum level required for Cronbach's alpha is 0.60 [9] and the data in this study has shown the value of 0.78 which is acceptable to perform further statistical analysis. Table 1 characterizes the demographic profile of the respondents. Out of the 217 respondents, the maximum respondents are in the age group of above 50 years (71) followed by the respondents of age group of 41-50 years (56). As far as education level of the respondents is concerned, only 8 farmers possessed professional qualification and 26 farmers were not graduated. Majority of them are not well qualified. Out of 217 respondents only 76 were having land more than 10 acres.

Table- 1: Demographic Profile of the Respondents

Particulars	Demographics	Frequency
Age	21-30	40
	31-40	50
	41-50	56
	Above 50	71
Education	No education	52
	Below high school	44
	Higher & Secondary	56
	Under Graduation	28
	Post graduation	29
	Professional	8
Farm Size	Less than 5 acres	62
	5 to 10 acres	79
	10 acres above	76
Experience in Agricultural Activities	Less than 5 years	64
	5-10 years	56
	10-20 years	44
	More than 20 years	63

Source: Primary data

Awareness about agricultural loans

Farmers are aware about agriculture loan facility but while discussing in detail very few have complete knowledge about the same. The farmer's awareness arrived at presented in following table 2.

Table 2 indicated that among 217 farmers, all are aware about agriculture lending facility. 139 farmers knew very little about agriculture loan facility but 78 knew the lending criteria, funding amount, interest rate etc. in details. It shows that only 35.9 % farmers are aware about the full lending procedure.

Table 2 Awareness among Farmers about agriculture loans

Awareness	No of Farmers	Percentage
Medium	139	64.1%
High	78	35.9%

Source: Primary data

Exploratory factor analysis is used to reduce the data into significant factors. In order to withdraw factors, principal component analysis with varimax rotation is applied. To perform factor analysis, it is important that value of KMO and Bartlett test should be significant. Kaiser-Meyer-Olkin criterion (KMO) is used to retain the factors having eigen value more than one [10]. Value of KMO test should lie between 0.5 to 1. Score of KMO is 0.767 which is found acceptable. Further, Bartlett test of sphericity is also calculated and the value of this test should be less than 0.03. As shown in table value of Bartlett test is 0.00.

TABLE 3: DESCRIPTIVE NAMES OF FACTORS

Factors	Descriptive Names of Factors	Eigen value	Variance (%)	Cumulative Variance
F1	Socio-economic improvement	5.595	31.082	31.082
F2	Usefulness	3.645	20.249	51.331
F3	Procedure framework	1.975	10.970	62.301
F4	Production Improvement	1.918	10.657	72.958
F5	Recovery factors	1.229	6.828	79.787

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization

Table 4: Factor Loadings

Variables	Factor Loadings	Cronbach's Alfa	Mean	SD
Socio-economic improvement		0.835		
Taking agricultural loans generate more employment	0.916		3.502	0.986
Getting agricultural loan is against prestige and status of farmers	0.887		3.198	1.214
Usefulness		0.844		
Agricultural loan will help farmers	0.806		2.801	1.198
Agricultural loans are easily accessible	0.864		2.695	1.315
Agricultural loan system is helpful to rich farmers only	0.892	2.806	1.430	
Procedural framework		0.977		
Illiterate farmers are unaware of the procedure of getting loan	0.933		3.949	1.198
Farmers have to spend money initially forgetting agricultural loans sanctioned	0.965		3.986	1.160
Influence is required to get the agricultural loans	0.933		3.824	1.219
Present procedure of lending of agricultural loan is not satisfactory	0.941		3.917	1.102
Too much of procedural delay is involved for obtaining agricultural loans	0.964		3.990	1.197
Agricultural loan system is good, if it lays down a specific procedure to be followed by the society or bank	0.938	3.990	1.305	
Production Improvement		0.804		
Agricultural loan amount per acre is not adequate to meet all the production expenses	0.729		3.557	1.053
Productivity will be increased by agricultural loans	0.790		3.843	1.123
Agricultural loan system creates interest to the farmers to increase the production by increasing area under cultivation	0.861		3.783	1.060
Food problems of our country can be solved by this agricultural loan system	0.688	3.981	1.174	
Recovery Factors		0.714		
Seasonality is fixed in the recovery of agricultural loans	0.813		3.972	0.917
Farmers are not getting higher prices as they have to repay the agriculture loan system	0.711		3.843	0.959
Rate of interest is high under agricultural loan system	0.845	4.004	0.920	

Source: Primary data

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Table 3 illustrates the results obtained from factor analysis. Factors having eigen value more than one are extracted for the study. Five factors are extracted as renamed as Socio-economic improvement (F1), Usefulness (F2), Procedure framework (F3), Production Improvement (F4), Recovery factor (F5). All the

factors have eigen value more than one and have explained cumulative variance 79.787%. Zenk & Eckhardt (1970) elucidated that 50% variance explained is considered as satisfactory in the social science studies. First factor explained the variance 31.082% which is higher than other factors. Second factor accounted for 20.249% variance and third factor accounted for 10.970% of total variance.

Table 4 depicts the factor loadings of various variables along with mean and stand deviation. It is evident that Cronbach alfa for each factor is significant. Factor 1 incorporates the statement related to socio-economic improvements and shows higher loading of factors. Further, factor second is renamed as usefulness as it includes the statements regarding accessibility and usefulness of loans. Next factor contains the statements regarding process followed in the lending the credits. Hence, it is renamed as procedural framework. Agricultural loan is helpful in production. So, factor fourth is related to the production improvements. Finally last factor involves recovery factors related to agricultural loans.

Table 4 also indicates the mean score of various variables. Farmers rated the usefulness factor at a considerably lower mean score. Farmers are not very much agreed about the accessibility of the loan because loan is not easily available. Further, table 4 indicated the lower mean score of socio-economic factor. Two variables within this factor had lower means score i.e. 3.502 and 3.198. The considerably lower mean score of the socio-economic factor suggested that agriculture loan does not helpful in employment and improving standard of living.

Farmers rated procedural framework at very high score. Farmers are agreed that procedure to avail loan is very difficult for illiterate persons. Farmers are of the opinion that influence/ reference is required to avail loan facility. Farmers are of the opinion that procedure for getting agriculture loan should be simplified so that illiterate persons can also understand the financial measures. Farmers rated the production improvement factor at high scale. Farmers were agreed that agriculture loan helps in meeting all production expenses. All of the variables were higher than the overall factors' mean score of 3.50. They rated the interest facility a slightly lower mean of 3.78. This implies that farmers are very concerned about interest charged by banks. Recovery of agriculture loan is also an important aspect. Farmers' perception regarding recovery is also measured. Seasonality is considered as important for loan recovery. Farmers are agreeing that after excluding production expenses, they left with very less profit so it became very tough to pay back loan with high interest.

Five factors are identified with the help of exploratory factor analysis. All these factors vary significantly according to farm size and level of education of farmers. In order to check the significant difference in the perception of farmers following hypothesis are framed:

H1: Perception of farmers regarding agriculture loan differ significantly on the basis of farm size.

H1a: Perception of farmers regarding socio economic improvement differs significantly on the basis of farm size.

H1b: Perception of farmers regarding usefulness of agriculture loan differs significantly on the basis of farm size.

H1c: Perception of farmers regarding procedural framework of agriculture loan differ significantly on the basis of farm size.

H1d: Perception of farmers regarding production improvement of agriculture loan differ significantly on the basis of farm size.

H1e: Perception of farmers regarding recovery factor of agriculture loan differ significantly on the basis of farm size.

H2: Perception of farmers differs significantly on the basis of education level.

H2a: Perception of farmers regarding socio economic improvement differs significantly on the basis of education level.

H2b: Perception of farmers regarding usefulness of agriculture loan differs significantly on the basis of education level.

H2c: Perception of farmers regarding Procedural framework of agriculture loan differ significantly on the basis of education level.

H2d: Perception of farmers regarding production improvement of agriculture loan differs significantly on the basis of education level.

H2e: Perception of farmers regarding recovery factor of agriculture loan differ significantly on the basis of education level.

Table 5: Perception of farmers on the basis of farm size

Factors	Less than 5 acres		5 to 10 acres		10 acres above		F	Sig (p-value)	Hypothesis
	Mean	SD	Mean	SD	Mean	SD			
Socio-economic improvement	3.435	0.964	3.126	1.186	3.513	0.848	3.116	0.046	H1a*
Usefulness	2.397	0.948	2.970	1.179	2.859	1.213	4.834	0.009	H1b*
Procedural framework	3.865	0.813	3.903	0.820	4.039	0.583	6.044	0.003	H1c*
Production Improvement	4.352	0.703	3.827	1.242	3.730	1.226	0.355	0.702	H1d
Recovery factors	3.818	0.789	3.835	0.891	3.723	0.932	1.088	0.339	H1e

Source: Primary Data

*Significant at 5% Level

*SD stands for Standard Deviation

Table 5 shows the comparison between perceptions of farmers regarding agriculture loan depending upon the farm size. To check the perception of farmers regarding agriculture loan on the basis of farms owned by them, one way ANOVA has been applied at 5 percent level of significance. SPSS 16 is used to perform the analysis. Moreover, farmers having land more than 10 acres, are also stated that loan system is not much helpful in case of necessity. Mean and standard deviation of the five factors has been calculated [11]. The results signify that farmers who owned land more than 10 acres have perceived highest mean score as compared to other farmers who owned land less than 5 acres. Moreover, it is also found that farmers have positive perception about Socio-economic improvement, Procedural framework and Production Improvement by showing higher mean values. Further, F-test statistics shows that p value is less than 0.05 regarding socio-economic improvement, usefulness and procedural framework. Hence, it can be concluded that H1 is statistically significant at 5 percent level of significance for socio-economic improvement, usefulness and procedural framework.

Table 6: Perception of farmers on the basis of Educational Qualification

Factors	No Education		Below High School		Higher and Secondary		Under Graduation		Post-Graduation		Professional Education		F	Sig (p-value)	Hypothesis
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD			
Socio-economic improvement	2.942	1.078	3.079	1.205	3.723	0.666	3.553	0.936	3.448	1.096	3.812	0.258	4.718	0.000	H1a*
Usefulness	3.256	1.202	2.469	1.116	2.386	1.080	3.000	0.989	2.908	1.094	2.583	1.065	4.360	0.001	H1b*
Procedural framework	3.657	1.286	3.844	1.081	4.032	1.106	4.464	0.650	3.862	1.175	4.187	1.352	2.135	0.063	H1c
Production Improvement	3.802	0.894	3.931	0.915	3.767	0.863	3.562	0.963	3.844	0.714	3.718	0.930	0.646	0.665	H1d
Recovery factors	4.192	0.580	3.939	0.611	3.631	0.984	4.047	0.542	3.919	0.727	4.166	0.356	3.604	0.004	H1e*

Source: Primary Data

*Significant at 5% Level

*SD stands for Standard Deviation

Table 6: Perception of farmers on the basis of Educational Qualification

Factors	No Education		Below High School		Higher and Secondary		Under Graduation		Post-Graduation		Professiona l Education		Sig (p-value)	F	Hypothesis	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD			H1a*	H1b*
Socio-economic improvement	2.942	1.078	3.079	1.205	3.723	0.666	3.553	0.936	3.448	1.096	3.812	0.258	4.718	0.000	H1a*	
	3.26	1.22	2.49	1.16	2.36	1.00	3.00	0.99	2.98	1.04	2.53	1.05	4.30	0.01	H1b*	
Usefulness	3.67	1.26	3.84	1.01	4.02	1.16	4.44	0.60	3.82	1.15	4.17	1.32	2.15	0.03	H1c	
	3.82	0.84	3.91	0.95	3.77	0.83	3.52	0.93	3.84	0.74	3.78	0.90	0.66	0.65	H1d	
Procedural framework	4.12	0.50	3.99	0.61	3.61	0.94	4.07	0.52	3.99	0.77	4.16	0.36	3.64	0.04	H1e*	
	3.67	1.26	3.84	1.01	4.02	1.16	4.44	0.60	3.82	1.15	4.17	1.32	2.15	0.03	H1c	
Production Improvement	3.82	0.84	3.91	0.95	3.77	0.83	3.52	0.93	3.84	0.74	3.78	0.90	0.66	0.65	H1d	
	4.12	0.50	3.99	0.61	3.61	0.94	4.07	0.52	3.99	0.77	4.16	0.36	3.64	0.04	H1e*	
Recovery factors	3.67	1.26	3.84	1.01	4.02	1.16	4.44	0.60	3.82	1.15	4.17	1.32	2.15	0.03	H1c	
	3.82	0.84	3.91	0.95	3.77	0.83	3.52	0.93	3.84	0.74	3.78	0.90	0.66	0.65	H1d	

Source: Primary Data

*Significant at 5% Level

*SD stands for Standard Deviation

Table 6 shows the perceptions of farmers regarding agriculture loan as per the educational qualification. Hence, to test the same one-way ANOVA has been applied at 5 percent level of significance [12]. The results denote that farmers who possess professional qualification have shown positive perception and highest mean score about the socio-economic improvement (3.812), procedural framework (4.187) and procedural Improvement (4.166) of agriculture loan. This imply that famers who possess professional education have shown positive attitude towards the process of agriculture loan. F-test shows that farmers who possess professional education perceived a significant difference regarding socio-economic improvement, usefulness, and recovery factors and H2 is statistically significant at 5 percent level of significance.

DISCUSSION

The results of this study are in line with those of Beck (2007), who found that extension services are essential for equipping farmers with farming knowledge, skills, and management abilities. Additionally, extension services give farmers crucial knowledge about agricultural interventions such farm productivity methods, farm management tools, and marketing and processing equipment. According to Machethe [13], without support services, smallholder farming would see growth that is incomprehensible. In Ethiopia it was found that repayment duration was a significant factor in influencing access to credit, despite logistic results for this study showing diminishing requirement for obtaining credit with unitary increases for the remaining predictor variables. Although they are not exclusive to

agricultural output, risks and uncertainties are significantly more obvious in farming than in the majority of non-farming industries. Farmers confront different kinds and levels of hazards depending on their farming systems, environmental circumstances, economic conditions, and policies in place [15]. Farm households are deterred from borrowing when credit providers are placed further away from their farming operations, according to Hussien [16]. According to a study by Atieno [17], among other factors, the value of owned agricultural assets is an important variable that explains the participation of smallholder farmers in formal loan markets. The findings of the total value assets study are in conflict with this finding. Farmers' experience is a key element in their adoption of contemporary technologies and asset accumulation. The conclusion that more asset building will lead to less reliance on loans is reasonable and representative of reality.

CONCLUSION

Public sector banks offered a number of schemes for farmers. Very few farmers are aware about lending facilities. Farmers who possess high educational qualification are more aware about the lending schemes. Hence, an adequate awareness is still required to utilize the lending facilities for improving production in agriculture. It is the need of the hour to aware illiterate farmers and farmers having land less than 5 acres in order to encourage the overall development of agriculture sector. Finally, concluded that farmers need to update regarding agricultural finance facility so that farmers can avail the funding for their benefits.

Declaration of competing interest

The authors affirm that they have no known financial or interpersonal conflicts that would have perceived to have an impact on the research presented in this study.

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