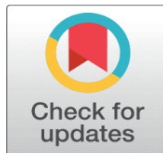
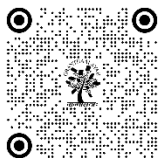


CONSTRAINTS ENCOUNTERED BY THE FARMERS IN ACCESSING INSTITUTIONAL CREDIT IN HARYANA

Lucky Verma ¹, Prof. Ajay Suneja ²

¹ Research Scholar, Department of Commerce, kurukshetra University kurukshetra

² Professor, Department of commerce, kurukshetra University kurukshetra



DOI

[10.29121/shodhkosh.v5.i6.2024.5117](https://doi.org/10.29121/shodhkosh.v5.i6.2024.5117)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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ABSTRACT

India relies heavily on agricultural sector, which employs over 55% of the population. The growth of this sector is crucial for the overall economy, providing livelihoods and supporting related industries. This study tries to access the various challenges that are faced by the farmers while getting institutional credit. This study based on collected data from 363 farmers in 8 districts of Haryana state. The present study applied exploratory factor analysis, and identified seven factors that contained 63.423% of the total variance, with a KMO value of 0.884. The findings highlight several critical challenges faced by farmers in accessing institutional credit. These include complex procedural requirements, uncooperative attitudes of bank employees, and instances of discrimination. In addition, issues such as time consumption in processing applications, widespread illiteracy, and a lack of awareness about available credit facilities also pose significant barriers for farmers.

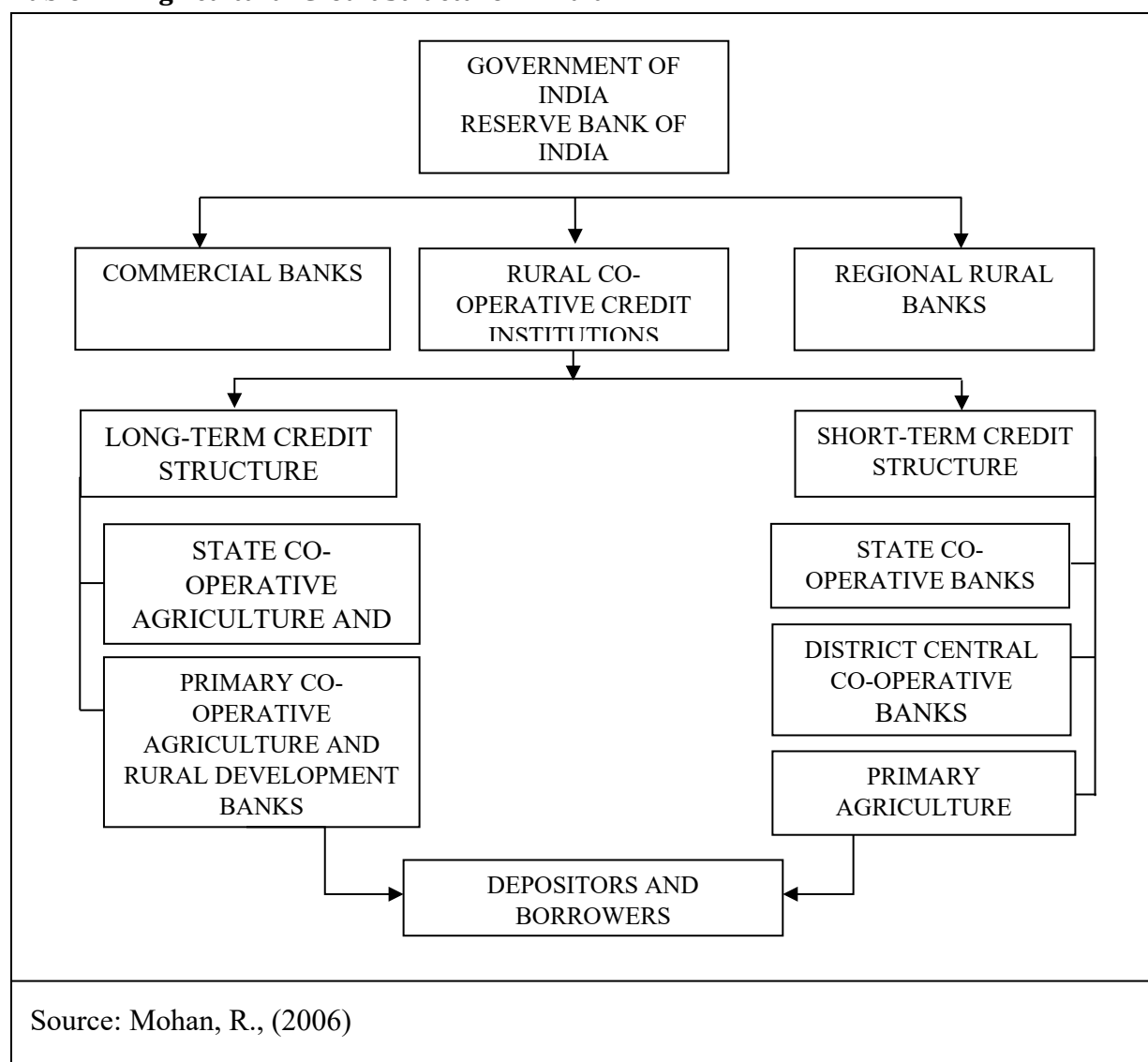
Keywords: Farmers, Constraints, Agriculture, Agricultural Credit and Institutional Credit

1. INTRODUCTION

India's financial system has played a crucial role in its remarkable economic growth, as noted by Iqbal and Sami (2017). By effectively utilizing its abundant natural resources, implementing sound policies, and benefiting from a skilled workforce, India has successfully transformed from a struggling economy to one that is rapidly expanding. The importance of sectoral development in driving this growth is undeniable. The introduction of the New Economic Policy in 1991, often referred to as the LPG reforms (Christina¹ & Muthumurugan, 2022), marked a significant shift by dismantling the mixed economic system that had been in place for over four decades. Agriculture is a key sector that influences the economies of both developing and developed nations. It is especially vital for rural populations, providing livelihoods and sustenance for more than 45% of the population (Banerjee & Bhattacharya, 2011). For many, agriculture goes beyond mere survival, playing a crucial role in the broader economic framework of India (Deshmukh & Khatri, 2012). As Dr. Bright Singh notes, agricultural production is closely linked with rural income growth, industrialization, and urbanization, driving increased demand for industrial goods. Access to institutional credit is a critical factor in promoting agricultural sector growth (Golait, 2007). This is particularly important for alleviating rural poverty in both developing and underdeveloped nations (Gautam et al., 2022). Institutional credit helps to ease capital constraints for

farming activities, improves farmers' ability to manage risk, and boosts consumption through income diversification (Zeller et al., 1997; Khan et al., 2007). In India, the combined efforts of commercial banks, Regional Rural Banks (RRBs), Co-operative banks, along with the Reserve Bank of India (RBI) and the National Bank for Agriculture and Rural Development (NABARD), have reduced the reliance on non-institutional sources of agricultural credit (Mohan, 2006; Golait, 2007; Sahu & Rajasekhar, 2005; Satyasai, 2008). These financial institutions offer loans for various agricultural needs, including irrigation, seed purchase, fertilizers, machinery, and land acquisition (Seena, 2015; Narayanan, 2016). However, while the contributions of the RBI and the government in promoting institutional agricultural credit is widely acknowledged (Mohan, 2006; Sahu & Rajasekhar, 2005; Satyasai, 2008), challenges remain in the efficient delivery of credit. Despite the increased access to credit, a significant portion of rural farmers, especially small and marginal ones, still struggle to obtain loans from banks (Balana & Oyeyemi, 2022). This issue is particularly evident in the Indian context (Sarap, 1990; Hussain & Thapa, 2012; Usapfa, 2015). To enhance the effectiveness of agricultural credit systems, these barriers must be addressed and overcome (Balana & Oyeyemi, 2022). A summary of the agricultural credit landscape in India is provided in Table 1.1.

Table 1.1: Agricultural Credit Structure in India



2. REVIEW OF LITERATURE

Numerous government and RBI policies have been implemented to improve the availability of agricultural credit for farmers, but achieving widespread access remains a significant challenge. Osabohien et al. (2022) highlight the critical role of formal credit in enhancing agricultural performance, citing a 93.65% improvement in farming outcomes through institutional credit in Nigeria. However, various obstacles continue to limit farmers' access to financial support. These include rationing based on land ownership size, with small and marginal farmers most affected, as shown by Makar et al. (2009), and Hussain and Thapa (2012), where only 10% of respondents accessed formal credit.

On the supply side, issues such as bureaucratic dominance, political interference (Akoijam, 2012), inadequate rural infrastructure, and a lack of coordination between lending institutions contribute to the problem. Larger landowners have easier access to formal credit (Sarap, 1990), often leaving poorer farmers at a disadvantage. On the demand side, exclusion arises due to farmers' lack of awareness and illiteracy, with Dev (2014) finding that many farmers are unaware of bank policies and lending procedures. Social factors such as caste-based discrimination and the absence of collateral security also drive farmers to rely on non-institutional sources (Pal, 2002). Caste biases were found to influence lending practices, with commercial banks displaying the least bias (Kumar, 2012). Bureaucratic barriers, inefficient staff, and the complexity of the borrowing process further discourage farmers from accessing formal loans. Wonge and Naho (2022) note that the absence of credit-related information and the complicated procedures undermine trust in banks. Additionally, Fletschner et al. (2010) found that high transaction costs and risk rationing further hindered access to formal credit, with factors such as land titles, farmer education, and asset availability playing key roles. The complex formal credit system often leads farmers to seek quick loans from informal lenders who do not require collateral (Guirking, 2008). Balachandran and Dhal (2018) pointed out that borrowers frequently become trapped in a cycle of debt due to the repayment structure of non-institutional loans, often having to sell their entire crop to repay these lenders. Van (2023) identified distance as a key obstacle to credit access in Vietnam, while Badiru (2010) noted that financial instability among farmers further exacerbates the problem. Other challenges such as high interest rates, collateral requirements (Pal, 2002), and complicated borrowing procedures continue to pose barriers to accessing institutional credit. Regional imbalances in credit distribution, as discussed by Sidhu and Gill (2006), also hinder agricultural productivity.

All of these studies have examined various aspects and gaps in the institutional agricultural credit delivery system, including the distance between banks and borrowers, lack of awareness, rationing based on land size, exclusion of small and marginal farmers, and issues with collateral. The aim of this paper is to investigate the specific barriers faced by farmers in Haryana in accessing institutional credit, using a proposed scale to identify and explore these constraints in the region.

3. DATA AND RESEARCH METHODOLOGY:

Data Analysis and Interpretation:

To conduct the survey for this study, a questionnaire was developed through in-depth interviews, pilot research, and field observations, guided by the literature review. According to Stone (1978), a questionnaire is an essential and appropriate tool for collecting primary data. A 5-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree," was used in the questionnaire. The reliability of the questionnaire was assessed using Cronbach's alpha. A pilot survey was first conducted with 60 farmers from the Kurukshetra and Jind districts of Haryana. After incorporating the necessary modifications, the final version of the questionnaire was distributed to 363 farmers across 8 selected districts of Haryana, using a multi-stage sampling method. Haryana was divided into four agro-climatic zones—Central, Northern, Southern, and Western—with two districts from each zone, chosen based on the highest agricultural population according to the Agricultural Census of Haryana (2015-16). For factor extraction, Principal Component Analysis (PCA) with varimax rotation was used in the exploratory factor analysis of the primary data. PCA is a widely used method for analyzing proposed scales to reduce data, allowing for the identification of underlying components and dimensions, following a theoretical definition approach and numerical analysis (Carpenter, 2018).

Table 1.2: Respondents' Profile

Characteristics	Frequency (No.)	Percentage (%)
Gender		
Male	357	98.34
Female	6	1.66
Age		
Up to 35 Years	92	25.34
From 35 to 41 Years	137	37.74
From 41 to 50 Years	101	27.82
Above 50 Years	33	9.09
Educational Qualification		
Illiterate	69	19
High school	95	26.2
Senior Secondary	98	27
Graduate	63	17.4
Postgraduate/ Other	38	10.5
Source of Income		
Agriculture	221	60.9
Agriculture and Allied Activities	142	39.1
Total	363	100
Land size owned		
Upto 1 Acre (Marginal)	23	6.3
1.1-2.0 Acres (Small)	83	22.9
2.1-4.0 Acres (Semi-Medium)	135	37.2
4.1-10.0 Acres (Medium)	105	28.9
More than 10 Acres (Large)	17	4.7
Total	363	100

Source: Primary Data

Table 1.2 portrays the demographical characteristics of the respondents Such as Gender, Age, Educational qualification, Income Source and Land size owned based on 363 observations. It represents that out of total sample, Maximum respondents were male (98.34%). Majority of the farmers were from 35-41 age group i.e., 37.74% followed by 27.82 % of the age group of 41-50 age. Further, 25.34% aged upto 35 years and least 9.09 % to more than 50 years age group. Only 10.5 % farmers were post-graduate and 19% were illiterate. 17.4% were Graduate; 27% were qualified up-to senior secondary level and 26.2 % upto high school qualification. Agriculture was the major mode of earning for the farmers (60.9%) whereas 39.1 % earned through agricultural and allied activities. The majority (37.2%) farmers were Semi-Medium and had 2-4 acres of land followed by 28.9% (Medium Size Farmers) holding 4-10 acres of land.

Small and Marginal farmers comprised of 6.3% and 22.9% respectively of total sample where as only 4.7% were Large sized as they owned more than 10 acres land.

Table 1.3 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.884
Bartlett's Test of Sphericity	Approx. Chi-Square	10964.185
	Df	780
	Sig.	.000
Cronbach's Alpha		0.702

Source: Primary Data.

Table 1.3 shows fitness of the data collection instrument. The results given in Table 1.2 show that extracted value of KMO statistic was 0.884 which indicates higher adequacy of data for application of Factor Analysis (Yong & Pearce, 2013).

Exploratory Factor Analysis can be applied in the current study if the test value of KMO is greater than .60 (Tabachnick & Fidell, 2013; Williams *et al.*, 2010). Hence, EFA can be applied in the study. The approx. Chi-Square value was 10964.185 at 780 degrees of freedom which was significant at 5% level of significance which supports the data adequacy for further action. The value of Cronbach's alpha is found 0.702 which is greater than minimum acceptable value i.e. 0.6 (Kaiser, 1974). Hence reliability of the data is proved. Additionally, the observed values in PCA are standardised i.e., mean=0 and standard deviation=1 and matrix diagonals = 1.

The data presented in table 1.4 explains Eigen values and variance. Theoretically, first principal component indicates the majority of variance of the data and so on (Alavi *et al.*, 2020). Eigen values being more than 1 in all the factors derived by using principal component analysis with Varimax rotation method:

Table 1.4 Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	Percentage of Variance Explained	Cumulative Percentage Variance Explained
1	5.322	13.327	13.327
2	5.192	12.279	25.606
3	4.571	9.805	35.411
4	3.867	7.284	42.695
5	2.811	7.168	49.863
6	2.279	7.087	56.950
7	2.107	6.473	63.423
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.			
Source: Primary Data. Data processed through SPSS 23.0			

All the factors given in table 1.4 have Eigen value above 1 which indicates their acceptability. All the Seven factors explain total 63.423 percent of total variance. Now, the table 1.4 exhibits the communalities extraction and factor loadings of each variable to the factor:

Table-1.5 Rotated Component Matrix

Sr No.	Statement	F1		F 2	F3	F4	F5	F6	F7
1	Time taken to process the loan application is too long.	0.847							
2	It takes too much time to visit their branches.	0.837							
3	Money from formal sources is available without delay.	0.827							
4	There is long distance between the Financial Institutions/Banks and residence of farmers.	0.818							
5	Visiting the Financial Institutions/Banks branch for a number of times consumes a significant part of my time.	0.798							
6	I have to visit various counters to get the loan application processed.	0.777							
7	Time consumed in availing the credit from formal sources is more than informal sources which increases dependency on informal sources.	0.651							
8	A long time gets wasted waiting in queues for appointment with bank officials.	0.586							
9	The procedures for Institutional borrowing are complex.		0.829						
0	Land possessed by me is not sufficient for the amount of loan needed.		0.823						
1	Fulfilment of the formalities related to agricultural loan application involves a lot of expenses.		0.814						
2	Terms and conditions offered by the institutional lenders are easily understandable.		0.771						
3	Amount of loan sanctioned by the Financial Institutions/Banks is always less irrespective of land size.		0.742						
4	Lending Institutions use ownership rights of land as the principal document to grant loan.		0.712						
5	The terms and conditions for taking formal loan are very flexible.		0.676						
6	It is very difficult to fulfill the formalities related to agricultural loan application.		0.612						
7	In case of non-repayment, I lose ownership rights of collateral due to which I do not borrow from Financial Institutions/Banks.		0.579						
8	Financial Institutions do not give me loan because I belong to lower caste.				0.859				
9	Behaviour of lending institutions/bank employees is negative towards farmers belonging to lower caste.				0.851				
0	Farmers belonging to upper caste/social class get loan conveniently.				0.85				
1	Farmers with more landholding size get better access to formal credit successfully.				0.824				
2	Financial Institutions discriminate on caste basis while offering loan to farmers.				0.77				

3	2	Farmers hesitate to borrow from banks because they feel that banks can commit fraud with them.					0.836			
4	2	I possess sufficient information about the loan borrowing procedure.					0.773			
5	2	Inadequate promotion of various credit related schemes being run by government/financial institutions causes less awareness.					0.722			
6	2	Brochures/ printed materials of Financial institutions give me sufficient information of agricultural loan scheme.					0.674			
7	2	Website of Financial institutions provide requisite information for obtaining agricultural loan.					0.671			
8	2	Financial Institutions/Bank employees properly guide in completing documentary requirements for obtaining agricultural loan.						0.865		
9	2	Financial Institutions/Banks always provide full information related to their agricultural credit programmes/products.						0.779		
0	3	The financial advice provided by Financial Institutions/Banks related to credit is essential.						0.752		
1	3	Financial Institutions/Bank employees promptly respond to my queries regarding agricultural credit.						0.591		
2	3	Credit counselling centre provide information related to credit, financial literacy more than the banks.						0.561		
3	3	I do not face any language problem while obtaining agricultural credit.							0.851	
4	3	Attitude of bank employees towards the farmers seeking agricultural loan is positive.							0.774	
5	3	I have good relations with the Financial Institutions/bank executives therefore there is no hindrance in borrowing from banks.							0.712	
6	3	Financial Institutions/Banks have nothing to do with farmers' economic conditions, social class while giving loans to farmers.							0.711	
7	3	Low level of education among farmers makes comparison between cost of borrowing from formal and informal sources makes more difficult.								0.815
8	3	Difficulty in understanding terms and conditions in loan documents makes the procedure more cumbersome.								0.815
9	3	Illiteracy causes less awareness of various credit related schemes being run by the government/banks.								0.573
0	4	I am not sanctioned loan from banks because I am illiterate/less literate.								0.502
		Total Variance Explained	13.327	12.279		9.805	7.284	7.168	7.087	6.473
		Cumulative Variance Explained	13.327	25.606		35.411	42.695	49.863	56.95	63.423
		Eigen Value	5.322	5.192		4.571	3.867	2.811	2.279	2.107

Source: Primary Data. Data processed through SPSS 23.0.

In the table 1.5, the factor analysis represents high factor loading in the factors.

Factor 1 'Time Consumption' highlights the problem of time constraint. This includes long distance between home and bank branch, time consumption in loan application processing etc. All such instances consume significant part of

time of a farmer which is on cost of time investment in the farms. This factor contains 8 statements representing 13.327% of total variance and 5.322 Eigen value.

Factor 2 'Cumbersome Procedure' indicates the intricacy of lending procedures of the banks. Farmers confront quantity rationing, collateral requirements, difficult terms and conditions of the contract and cost involved in its fulfillment. Hence this factor is termed as 'Cumbersome Procedure'. This factor explains 12.279% variance and 5.192 Eigen value.

Factor 3 'Discrimination by the Employee' includes problems related to caste bias, negative behavior of employees, easy access by better off farmers etc. Hence this factor is titled as 'Discrimination by the Employee' showing variance of 9.805% and 4.571 Eigen value.

Factor 4 'Lack of Awareness' is related to farmers' lack of awareness, which includes distrust of banks, leading to the deliberate avoidance of accessing institutional finance. Consequently, the farmer is not familiar with the borrowing procedure, different schemes being run by the institutional players and not possessing adequate information as well. It includes 7.284% variance and 2.867 Eigen value.

Factor 5 'Poor customer service' is another important factor which contains 7.168% of total variance and 2.811 Eigen value. It entails the statements related to unsatisfactory dealing by the banks or related issues. Misinterpretation or insufficient information provided by the bank staff causes such problems.

Factor 6 'Attitude of the employees' reported the casual behavior of the bank employees towards the economic conditions and emergent credit need of the applicant. This factor represents 7.087% of total variance and 2.279 Eigen value.

Factor 7 'Problem of Illiteracy' is one of the most critical issues amongst all the problems in agriculture. Lack of education inhibits the farmer to adopt diversified cropping pattern, latest irrigation techniques etc. In context of accessing formal credit, farmers are unable to compare the cost of borrowing from formal and informal sources. They find non-institutional sources to be cheaper and quickly accessible. It explains 6.473% of total variance and 2.107 Eigen value.

4. COMPARISON OF ISSUES IN AGRICULTURAL CREDIT ON THE BASIS OF LANDHOLDING SIZE:

This section builds upon the factors extracted through factor analysis in the previous section. Here, we use Analysis of Variance (ANOVA) to aim at determining whether significant differences exist among the challenges encountered by farmers based on the classification of landholding size:

Table-1.6 ANOVA of Constraints According to Landholding Size

Sr No.	Factors	Land Size Owned	Mean	SD	F-value	Sig.
	Time Consumption	Upto 1 Acre (Marginal)	3.97	0.86	15.391	.000
		1.1-2.0 Acres (Small)	3.26	1.18		
		2.1-4.0 Acres (Semi-Medium)	2.81	1.09		
		4.1-10.0 Acres (Medium)	2.58	0.95		
		More than 10 Acres (Large)	1.88	0.44		
		Total	2.88	1.12		
	Cumbersome Procedure	Upto 1 Acre (Marginal)	3.97	0.56	3.654	.006
		1.1-2.0 Acres (Small)	4.04	0.68		
		2.1-4.0 Acres (Semi-Medium)	4.01	0.51		
		4.1-10.0 Acres (Medium)	3.80	0.77		
		More than 10 Acres (Large)	3.56	0.68		
		Total	3.93	0.66		
	Discrimination by the Employee	Upto 1 Acre (Marginal)	3.20	1.08	16.034	.000

		1.1-2.0 Acres (Small)	3.31	1.34		
		2.1-4.0 Acres (Semi-Medium)	2.33	1.14		
		4.1-10.0 Acres (Medium)	2.22	0.96		
		More than 10 Acres (Large)	2.05	0.55		
		Total	2.56	1.21		
	Lack of Awareness	Upto 1 Acre (Marginal)	2.92	1.17	1.032	.390
		1.1-2.0 Acres (Small)	2.54	1.05		
		2.1-4.0 Acres (Semi-Medium)	2.54	0.89		
		4.1-10.0 Acres (Medium)	2.51	0.98		
		More than 10 Acres (Large)	2.76	1.31		
		Total	2.57	1.00		
	Poor customer service	Upto 1 Acre (Marginal)	2.90	1.12	1.256	.287
		1.1-2.0 Acres (Small)	3.09	1.11		
		2.1-4.0 Acres (Semi-Medium)	3.11	0.89		
		4.1-10.0 Acres (Medium)	3.30	0.83		
		More than 10 Acres (Large)	3.28	1.09		
		Total	3.16	0.96		
	Attitude of the employees	Upto 1 Acre (Marginal)	2.97	1.02	7.093	.000
		1.1-2.0 Acres (Small)	2.73	1.16		
		2.1-4.0 Acres (Semi-Medium)	3.25	1.07		
		4.1-10.0 Acres (Medium)	3.49	0.87		
		More than 10 Acres (Large)	3.47	0.75		
		Total	3.19	1.06		
	Problem of Illiteracy	Upto 1 Acre (Marginal)	3.25	1.01	8.559	.000
		1.1-2.0 Acres (Small)	2.93	1.11		
		2.1-4.0 Acres (Semi-Medium)	2.42	0.97		
		4.1-10.0 Acres (Medium)	2.41	0.95		
		More than 10 Acres (Large)	1.96	0.53		
		Total	2.56	1.03		

Source: Primary Data. Data processed through SPSS 23.0.

Table 1.6 presents a comprehensive comparison of different issues faced by farmers, categorized by their landholding sizes. An analysis of variance (ANOVA) has been employed to evaluate the impact of extracted factors. Out of the seven factors derived from exploratory factor analysis (EFA), five factors have been identified as significantly influencing farmers with varying land sizes. These factors include Time Consumption, Cumbersome Procedure, Discrimination by Employees, Employee Attitudes, and Illiteracy Challenges.

The findings indicate that Marginal Farmers experience the greatest challenges in terms of 'Time Consumption', with a mean value of 3.97. Conversely, Large-holders are relatively less affected by this issue, with a mean value of 1.88. The second factor, 'Cumbersome Procedure', is most burdensome for Small farmers, as indicated by their mean value of 4.04, while Large farmers report a lower level of suffering with a mean value of 3.56.

Regarding 'Discrimination by Employees', Small farmers encounter the highest levels of discrimination, with a mean value of 3.31, whereas Large-holders experience the lowest levels, with a mean value of 2.05. Medium farmers express

the greatest dissatisfaction (mean value of 3.49) in terms of 'Attitude of Employees', while small farmers seem to be more content with employee attitudes (mean value of 2.73). The issue of 'Problem of Illiteracy' shows that Marginal farmers have the highest mean value of 3.25, reflecting their greater struggles, while larger farmers exhibit the lowest mean value.

5. CONCLUSION

This study has explored into the various constraints faced by the farmers in Haryana state. Data was collected from 363 farmers of selected 8 districts on 5 point Likert scale. The analysis of factors affecting farmers' access to institutional finance reveals significant challenges within the agricultural sector. The identified factors - 'Time Consumption', 'Cumbersome Procedure', 'Discrimination by Employees', 'Lack of Awareness', 'Poor Customer Service', 'Attitude of Employees', and 'Problem of Illiteracy' paint a comprehensive picture of the barriers faced by farmers in obtaining formal credit. Marginal farmers, in particular, bear the brunt of 'Time Consumption', while 'Cumbersome Procedure' disproportionately impacts small farmers. The issue of 'Discrimination by Employees' seems to affect small farmers the most, and 'Problem of Illiteracy' highlights the struggles faced by marginal farmers. These findings underscore the need for targeted interventions and policy measures to address these challenges, promote financial inclusion, and ensure equitable access to credit across different farmer categories, ultimately fostering sustainable agricultural development.

6. FUTURE IMPLICATIONS OF THE STUDY

The factor 'Time consumption' represents highest variance which indicates that the banks shall look after this issue. This study arrives at the results that despite such immense efforts of Commercial banks, NABARD, RBI and the government, farmers are still facing difficulties in accessing institutional credit to finance their agricultural activities. More and more banks branches shall be established to ensure timeless access by the farmer. Access to credit is a major issue in a country like India where it is mainstay of rural population. In addition, proper training shall be provided to the bank employees to have a fair and justified deal with the applicant. On the other end, farmer education is necessarily to be increased to improve accessibility and agricultural productivity. Attitude of the employees and caste based discrimination (**Kumar, 2013**) further worsens the situation. There is dire need of removing these hindrances on the part of institutional players so as to ensure adequate availability of credit to all categories of the farmers and the small and marginal ones.

7. LIMITATION AND FUTURE SCOPE:

On the basis of the literature included in the study, various gaps were identified which indicate financial exclusion or quantity rationing encountered by the farmers. These gaps serve as the basis of further studies in future. This study has made attempt to address these gaps or the constraints. But major limitation of the study is that it has covered specifically 8 districts of Haryana state only. There is scope for further exploration of new aspects or lacunas in agricultural credit system or inter-state or inter district comparison.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

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