

Financial Inclusion and Farmers: Association Between Status and Demographic Variables



Ashwani Kumar, Hariom Gupta

Abstract: Financial inclusion is an excellent tool for empowerment of farmers. The current study examines the level of financial inclusion and study the association between various demographical variables and financial inclusion among the farmers. A survey of 360 farmers across Prayagraj district was conducted, this survey found that 71.4% of farmers had his bank accounts while 23.6% of farmers were actively using their bank accounts in past 3 months and only 10.6 % of farmers were taken loan from banks or other formal financial institutions. The survey shows that farmers were financially inclusion: as 72.8% have poor financial inclusion, 19.2% have fair financial inclusion, and only 8.1% have sound financial inclusion. The farmers had not sufficient financial literacy. Further analysis shows that gender is not associated with degree of financial inclusion while other demographic variables i.e. education qualification, family income, age group and size of landholding is closely associated with degree of financial inclusion.

Keywords: Banking Services, Farmers, Financial Inclusion, Financial Institution,

Financial inclusion is emerging as a new model of economic growth, which acts significantly to decrease poverty from the country [3]. Demonetisation helped build the cashless economy which encouraged financial inclusion [4].

Concept of financial inclusion:

Financial inclusion means delivering the lower cost of financial services to making available to those people who have not yet received such services because their income is very low, they cannot take advantage of such services or such a service is not available to them. Financial inclusion is the process of guaranteeing passage to financial products, which provides financial services at affordable cost to weaker sections and low income groups [5].

Financial services:

Financial services refer to all types of services it involving financial products and services likes:

- Savings Accounts facility
- Overdraft facility
- Payment and remittance services
- Saving Accounts
- Affordable credits facility
- Cheque facility
- Electronic fund transfer (IMPS, RTGS, NEFT, SWIFT)
- Credit and Debit Cards
- Access to financial markets
- Financial advice
- Insurance (Crop insurance)
- Micro credit during emergency
- Entrepreneurial credit
- Internet banking facility
- Mobile banking facility
- Unified Payments Interface (UPI)
- Broking services
- ATM services

I. INTRODUCTION

The agriculture sector is playing a vital role in the Indian economy. In India, it is known as the backbone of the economy. Majority of people in India depend on agriculture or related activities, but unfortunately, it supports only 15.4 per cent of the total GDP. The Indian farmer is the life of our country. They work hard day and night, grow crops, and provide a variety of raw materials for the industry but despite their hard work, maximum farmer is marginal and small, and they are living their life with poverty. Even today, farmers do not have enough resources to borrow [1]. Most farmers are dependent on indigenous moneylender, government is providing many facilities to the farmers for credit but NSSO Survey found 54.1% household's farmers are excluded from financial services from formally and informally sources, only 27% (including 1/3 of this group also use informal sources of credits) of the household farmers are taking advantage of the financial services from formal sources that means 73% of household farmers do not use formal sources of credits [2].

Financial inclusion lifecycle:

To achieve financial inclusion, first of all, we have to reach that section of society that are deprived of financial services or low-income groups to educate them about financial services, when they get enough information about it then they may open their accounts and then providing them financial services.

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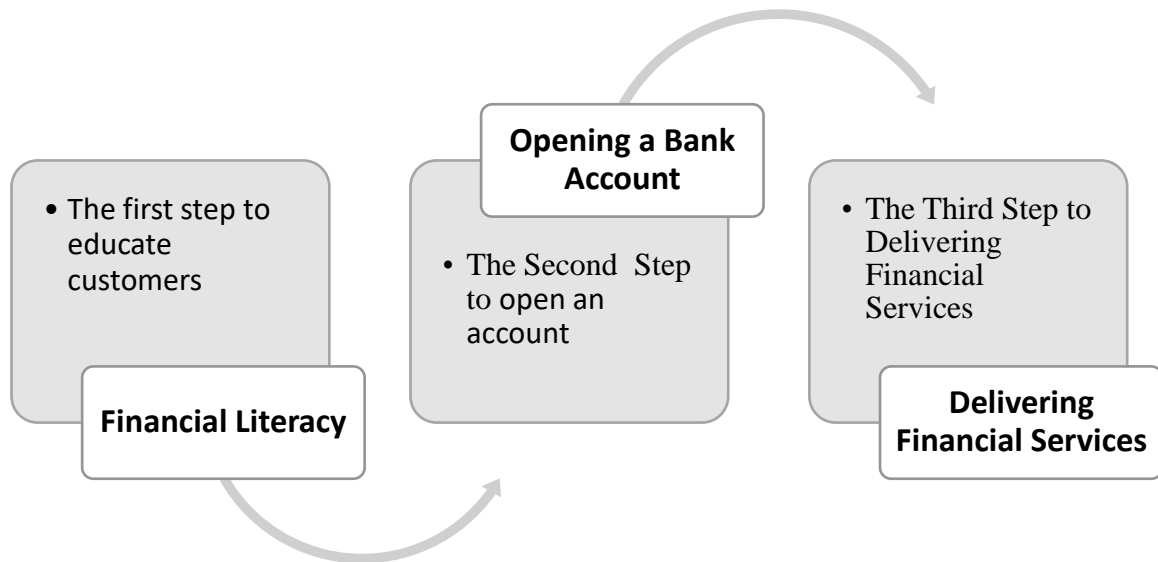


Fig: Financial Inclusion Lifecycle

Building educational level indicates increased financial inclusion [6], the RBI has taken many steps to providing banking facilities in the unbanked villages in India. The application of information technology (IT) and intermediaries has created its potential to improve outreach, scale and depth of banking services at an affordable cost [7]. Financial literacy is an essential for financial inclusion, a high degree of financial literacy also has an apparent advantageous effect on a high degree of financial inclusion [8].

II. REVIEW OF LITERATURE

- **Christabell, (2012)**[9] In his article stated that microfinance is a very effective tool to achieve financial inclusion. Their study is based on secondary data. In his study, it also mentioned that what are the challenges facing microfinance in India and what is the limit of progress made by microfinance in rural India.
- **Garg & Agarwal, (2014)**[10] mention that in their study, the significance of financial inclusion in the national economy and the role of the overall development of society. They also analyzed the performance and achievements of the past year towards reaching out to the unbanked areas under financial inclusion.
- **Kalunda, (2014)**[11] In his study have tried to cover the gap of the empirical literature on the impact of formal financial services on small scale tea farmers of Nyeri County, Kenya. The study has analyzed the relationship between gender and age on the use and demand of financial products with the help of Pearson Chi-square method. The study recommends that to increase financial inclusion, farmers should be educated about financial services.
- **Lalrinmawia & Gupta, (2015)**[12] studied to examine the financial literacy of farmers of Lunglei district, They surveyed 320 farmers of all Lunglei district. They found

in his study that the majority of farmers are financially illiterate as 86.56% have poor financial literacy, 9.38% have fair financial literacy and only 4.06% have sound financial literacy.

- **Sreelakshmi, (2016)**[13] conducted a study in Thanniyam Panchayath to examine the level of financial inclusion of farmers the study is based on primary data the data is collected by structured interview schedule He found in his study that use of loan facility by farmers, i.e. Crop insurance, agricultural gold loans and KCC were not enough, and use and awareness can be increased with the help of financial literacy programs, he suggested that the bank should take any necessary steps for providing crop loan.
- **Jha, (2018)**[14] in his article stated that the role and importance of RRBs in Financial Inclusion. The study found that RRBs is an essential instrument for achieving financial inclusion in India. He also stated the various issues and challenges faced by RRBs.
- **Maity & Sahu, (2018)**[15] in their study asserted that schedule commercial banks in India are using 94.87% of resources to deliver wanted products concerning financial inclusion and they found that though there is a significant disparity within public sectors bank and private sector bank, they both have performed an enormous task in financial inclusion in India.

III. OBJECTIVE OF THE STUDY

- To examine the status of financial inclusion among farmers in the Prayagraj districts of Uttar Pradesh.
- To study the association between various demographical variables and financial inclusion among farmers.

IV. SCOPE OF THE STUDY:

The study is limited to Prayagraj district, one of the largest and the most populous district of Uttar Pradesh. Distance from Allahabad to Lucknow (the capital of Uttar Pradesh) is 200km. According to Census of India, 2011, Uttar Pradesh, the population has 59,59,798 and the literacy rate is 74.41% percent and sex ratio has a 901, the district has reported the highest literacy rate (74.41 %) in the region [17]. The district area is 5,482 km², the district is divided into 20 blocks within 8 tehsils and total 3178 villages [18]. In the district, there are 337,502 Main Worker – Cultivator, 234,806 Main Worker - Agricultural Labourers and 107,231 Main Worker - Household Industries. In the whole district 2742 villages are deprived of Co-operative Bank and 2724 of Commercial Bank. The proportion of rural population followed by the bankability is available to 420430 (9.38%), and 473415 (10.56 %) have been provided with the ability of agricultural credit [16]. The study focused on farmers of Prayagraj district. As the number of farmers was effectively limitless for the study in hand selected representatives of villages of each rural development block were taken.

V. SAMPLING

Prayagraj District is divided into twenty rural development blocks, namely, Kaurihar, Holagarh, Mauaima, Soraon, Bahariya, Phulpur, Bahadurpur, Pratappur, Saidabad, Dhanupur, Handia, Jasra, Shankargarh, Chaka, Karchhana, Kaundhiyara, Uruwa, Meja, Koraon, and Manda. Those household respondents were taken, whose main occupation was farming. For the selection of sample units multistage stratified random sampling procedure was done. Prayagraj have 20 blocks and all these 20 blocks have there are 3178 villages. The researchers have selected 1 village from each block and further 18 respondents have been randomly chosen from each village, total number of respondent has been reach 360. The necessary information was obtained from them individually with the help of a structured Schedule.

VI. RESEARCH METHODOLOGY

Data collection:

The questionnaire of financial inclusion developed by Lalrinmawia & Gupta [19] was employed. The initial questionnaire was modified to adapt to the circumstances predominating in the district. This paper is based on primary data which has been collected by the help of schedule, which is filled by direct personal interview from farmers, before filling the schedule, they have provided the necessary information about the financial inclusion and financial products or services. In this study, the measurements scale (developed by OECD, 2009 and further it has been adopted by [12]) has been used. In this study the measurement which has been used classified into three parts, in the first part measure status of financial inclusion with questions about having a bank account, agriculture insurance policy, any insurance policy, Kisan Credit Card (KCC) and taken a loan from the banks. In a second part measure, the uses of banking services with question used a bank account in past three months, and third part measure the financial literacy with

questions about Simple rate of interest, compound rate of interest, the value of rupees and practice crop diversification.

The questionnaire:

The questionnaire had been divided into four parts, in which the total number of questions was twenty, nine questions were related to the demographics profile of the respondent such as gender, age, education level, income level etc. Five questions were related to the status of financial inclusion, i.e. have a bank account, had taken a loan from the Banks, have an agriculture insurance policy, have any insurance policy, have a Kisan Credit Cardholder. One question related to uses of banking services and four questions related to financial literacy, i.e. simple rate of interest, compound rate of interest, the value of rupees and crop diversification. The questions statement divided into two response category i.e. response with YES or No and Correct answer or Wrong answer.

Hypothesis of the study:

Based on the objectives of the research, the following hypothesis has been formulated:

H₀1. There is no significant association between gender and financial inclusion among farmers.

H_A1. There is significant association between gender and financial inclusion among farmers.

H₀2. There is no significant association between education qualification and financial inclusion among farmers.

H_A2. There is significant association between education qualification and financial inclusion among farmers.

H₀3. There is no significant association between age group and financial inclusion among farmers.

H_A3. There is significant association between age group and financial inclusion among farmers.

H₀4. There is no significant association between family income level and financial inclusion among farmers.

H_A4. There is significant association between family income level and financial inclusion among farmers.

H₀5. There is no significant association between size of land holding and financial inclusion among farmers.

H_A5. There is significant association between size of land holding and financial inclusion among farmers.

VII. DATA ANALYSIS

For the analysis of data, the measurement model developed by Lalrinmawia & Gupta [12] has been used. This model was given scores as follows:

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1. For response categories with 'YES' and 'NO'
 - a. YES - 2
 - b. NO - 1
2. For other response categories
 - a. Correct answer - 2
 - b. Wrong answer - 1

In this scoring scheme, respondent farmers could obtain a minimum score of 10 and a maximum of 20, respondent who obtained 17 and above marks (85% or more) were considered to have a sound financial inclusion: respondent who obtained ranges from 13-17 marks (65%-85%) were considered to have fair financial inclusion and respondent who obtained below 13 marks were considered to have poor financial inclusion.

Before applied Pearson chi square test researcher had been ensured that expected frequency must be equal or more than 5. First researcher found expected frequency using the formula $\text{expected frequency} = \frac{\text{row total} \times \text{column total}}{\text{grid total}}$. Pearson chi square test only show the association between variable, to know the symmetric measures Phi or Cramer's V had been used by the researcher. Phi was used for 2*2 table and Cramer's V was used when table 2*3, 4*3 and 3*3. value of Phi or Cramer's is between -1 to 1, researcher defined 0 to .5 is weak relationship and .51 to 1 is strong relationship

VIII. ANALYSIS

Table1: Demographic profile of respondents

Demographic Variables	Category	Number of respondents	Percentage
Gender	Male	295	81.94
	Female	65	18.06
	Total	360	100.00
Educational Qualification	Up to Primary	138	38.33
	6th-10th Grade	73	20.28
	Senior Secondary	70	19.44
	Diploma / Graduate & Above	79	21.95
	Total	360	100.00
Age	Up to 25 year	65	18.06
	26-45 year	122	33.89
	46-65 year	104	28.88
	Above 65 year	69	19.17
	Total	360	100.00
Family Income (In Rupees)	Up to 10,000	87	24.17
	10,000-50000	143	39.72
	50,000-1 lakh	67	18.61
	Above 1 Lakh	63	17.50
	Total	300	100.00
	Less than	256	71.11

Size of Land Holding	1 acre		
	1 acre – 2 acre	63	17.50
	Above 2 acre	41	11.39
	Total	360	100.00

Table 1

Source: Authors' Computation.

Table 1 shows the demographic profile of the respondent, in which 247 (82.33%) respondents were male and 53(17.67%) female. In educational qualification only 16 (5.33%) respondents were illiterate, 44 (14.67%) respondents were studied up to primary standard, 88 (29.33%) respondents were 6th-10th grade, 80 (26.67%) had Senior Secondary qualification and 72 (24.00%) had higher qualification, i.e. Diploma / Graduate & Above. 24 (8.00%) respondents were up to 25-year age group, 123 (41.00%) respondents belong the age group of 26-45 year, 138 (46.00%) respondents were 46-65-year age group and only 15 (5.00%) respondents were more than 65 years. In respect of total annual family income, 18 (6.00%) respondents had income less than 10,000 rupees, 220 (73.33%) had earn 10,000-50,000 rupees and only 6 (2.00%) had income 50,000-1 lakh and 56 (18.67%) respondents earn above 1 Lakh rupees. In respect to having a size of land, majority of respondents belongs to Less than 1 acre, i.e. 187 (62.33%) respondents, 92 (30.67%) had 1 acre – 2-acre land and only 21 (7.00%) had more than 2-acre land.

Responses from farmers

Table 2

For Financial Inclusion (Status)	Yes	No
Have a Bank Account	71.4 %	28.6 %
Taken a Loan from the Banks	10.6%	89.4%
Have any Insurance Policy	28.6%	71.4%
Have a Kisan Credit Card Holder	11.4%	88.6%
Have Agriculture Insurance Policy	6.7%	93.3%
For Measuring the Uses of Banking Services	Yes	No
Used account in the past 3 months	23.6%	76.4%
For Measuring the Financial Literacy	Correct	Incorrect
Simple Interest	22.5%	77.5%
Compound Interest	5.3%	94.7%
Value of Rupees	9.7%	90.3%
Crop Diversification	1.9%	98.1%

Source: Authors' Computation.

Table 2 shows that responses of the farmers where 71.4% of farmers were his own bank accounts, only 10.6% of farmers were taken by the loan from banks or any formal financial institutions, 28.6% of farmers had any kind of insurance policy while only 6.7% of farmers had any agriculture insurance policy and the KCC facility were availed by 11.4% of farmers. 23.6% of farmers had used his bank accounts in the past 3 months. The farmers had the knowledge of simple interest, compound interest, the value of Rupees and crop diversifications were 22.5%, 5.3%, 9.7% and 1.9% respectively. Looking at the data, it appears that famers have only opened bank accounts, they are not availing proper banking services and they have not sufficient financial literacy.

Overall financial inclusion

Table 3

Poor financial Inclusion	Fair financial Inclusion	Sound financial Inclusion
262 (72.8%)	69 (19.2%)	29 (8.1%)

Source: Authors' Computation.

Table 3 shows the level of financial inclusion among the surveyed farmers 262 (72.8% of total respondents) of farmers had been found poor financial inclusion among farmers, 69 (19.2% of total respondents) had fair financial inclusion among farmers and only 29 (8.1% of total respondents) had sound financial inclusion among farmers.

Association between financial inclusion among farmers and demographic variables

Table 4

Socio economic category	Category	Financial Inclusion			Pearson's Chi-square	Null Hypothesis
		Poor	Fair	Sound		
Gender	Male	214	55	26	1.411	Accepted
	Female	48	14	3		
Educational Qualification	Upto Primary	13	5	0	197.343	Rejected
	6th-10th Grade	65	8	0		
	Senior Secondary	53	14	3		
	Diplo ma / Graduate & Above	11	42	26		
Age	Up to 25 year	33	25	60	82.838	Rejected
	26 – 45 year	67	33	22		
	46-65 year	14	10	0		
	Above 65 year	68	1	0		
Family Income (In Rupees)	Up to 10,000	86	1	0	191.391	Rejected
	10,000 -50000	12	20	0		
	50,000 -1 lakh	41	24	2		
	Above 1 Lakh	12	24	27		
Size of Land Holding	Less than 1acre	22	31	5	108.358	Rejected
	1 acre – 2 acre	31	24	8		
	Above	11	14	16		

2 acre					
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Source: Authors' Computation.

Table 4 shows that gender is not associated with financial inclusion among farmers while other demographic variable i.e. education qualification, family income, age group and size of land holding is closely associated with financial inclusion among farmers.

Association between gender and financial inclusion among farmers

Cross tabulation between Gender and Financial Inclusion among farmers

Table 4

		Financial Inclusion			Total
		Poor	Fair	Sound	
Gender Male	Count	214	55	26	295
	% within Gender	72.5%	18.6%	8.8%	100.0%
Female	Count	48	14	3	65
	% within Gender	73.8%	21.5%	4.6%	100.0%
Total	Count	262	69	29	360
	% within Gender	72.8%	19.2%	8.1%	100.0%

Source: Authors' Computation.

Table 4 Shows that total number of male farmers were 295 (81.94% of total respondent) and female farmers were 65 (18.06% of total respondent). 262 (72.8%) farmers had been found poor financial inclusion, in which male and female farmers were 214 (72.5%) and 48 (73.8%) respectively, this figures did not seem significance difference of degree of poor financial inclusion among farmers between the male and females but 29 (8.1%) farmers have been found sound financial inclusion, in which male and female farmers were 26 (8.8%) and 3 (4.6%) respectively which seem significance difference of degree of sound financial inclusion among farmers between the gender.

Chi-Square Tests

Table 4.1

	Value	Degree of freedom	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.411	2	.494
Likelihood Ratio	1.573	2	.456
Linear-by-Linear Association	.413	1	.521
Number of Valid Cases	360		

Source: Authors' Computation.

Financial Inclusion and Farmers: Association Between Status and Emographic Variables

Table 5 shows that Pearson Chi-Square value was 1.411 and Significance value was 0.294 (Significance value > 0.05) that indicated there is no significant association between gender and financial inclusion among farmers i.e. null hypothesis has been accepted and alternative hypothesis has been rejected.

Association between education level and financial inclusion among farmers
Crosstabulation between Education Status and Financial Inclusion among farmers

Table 5

			Financial Inclusion			Total
			Poor	Fair	Sound	
Education Status	Up to Primary	Count	133	5	0	138
		% within Education Status	96.4%	3.6%	0.0%	100.0%
	6th-10th Grade	Count	65	8	0	73
		% within Education Status	89.0%	11.0%	0.0%	100.0%
	Senior Secondary	Count	53	14	3	70
		% within Education Status	75.7%	20.0%	4.3%	100.0%
	Diploma / Graduate & Above	Count	11	42	26	79
		% within Education Status	13.9%	53.2%	32.9%	100.0%
Total		Count	262	69	29	360
		% within Education Status	72.8%	19.2%	8.1%	100.0%

Source: Authors' Computation.

In table 5 shows that higher education level indicates higher financial inclusion. In sound financial inclusion, no one farmer has been found which slight educated (studied up to primary or 6th-10th Grade). Majority of farmers have poor financial inclusion i.e. 133 out of 138 (96.4% of up to primary standard farmers) have been found who had very slight educated. in 73 farmers who studied 6th-10th Grade, 65 farmers (89.0%) have been found poor financial inclusion and in 79 farmers who had highly educated (Diploma / Graduate & Above), only 11(13.9%) farmers have been found in poor financial inclusion. Overall 29 farmers found who were sound financial inclusion in which 26 (89.65%) farmers highly educated (Diploma / Graduate & Above)

Chi-Square Tests

Table 5.1

	Value	Degree of freedom	Asymptotic Significance (2-sided)
Pearson Chi-Square	197.343	6	.000
Likelihood Ratio	199.425	6	.000
Linear-by-Linear Association	149.743	1	.000
Number of Valid Cases	360		

Table 5.1

Source: Authors' Computation

Table 5.1 shows that Pearson Chi-Square value was 197.343 and Significance value was 0.00 (Significance value < 0.05) that was indicated there is significant association between education level and financial inclusion among farmers i.e. null hypothesis has been rejected.

Symmetric Measures

Table 5.2

		Value	Approximate Significance
Nominal by Nominal	Phi	.740	.000
	Cramer's V	.524	.000
Number of Valid Cases		360	

Table 5.2

Source: Authors' Computation.

Table 5.2 shows that value of Cramer's V was .524 that indicate strong relationship between age group and financial inclusion among farmers.

Association between age group and financial inclusion among farmers
Crosstabulation between Age group and Financial Inclusion among farmers

Table 6

			Financial Inclusion			Total
			Poor	Fair	Sound	
Age	Below 25	Count	33	25	7	65
		% within Age	50.8%	38.5%	10.8%	100.0%
	26-45	Count	67	33	22	122
		% within Age	54.9%	27.0%	18.0%	100.0%
	46-65	Count	94	10	0	104
		% within Age	90.4%	9.6%	0.0%	100.0%
	Above 65	Count	68	1	0	69
		% within Age	98.6%	1.4%	0.0%	100.0%
Total		Count	262	69	29	360
		% within Age	72.8%	19.2%	8.1%	100.0%

Source: Authors' Computation.

Table 6 present degree of financial inclusion in different age groups, in the poor financial inclusion 33 farmers were 'below 25', 67 were '26-45', 94 were '46-65' and 68 were above 65 age group. In fair financial inclusion 25 farmers were below 25, 33 were '26-45', 10 were '46-65' and 1 was above 65 age group. In Sound financial inclusion 7 farmers were below 25, 22 were '26-45' and no one 'above 45'.

in poor financial inclusion, it seems that there was no significance difference between below of 25 age group and 26-45 age group which 33 (50.8%) and 67 (54.9%) respectively and also same the between the age group of 46-65 and above 65 which 94 (90.4%) and 68 (98.6%) respectively but if compare between the age group of 'up to 45' and 'above 45', it seems that there was significance difference, which clearly indicate that young generation much financial inclusion compare than old generation. When compare sound financial inclusion among the age group researcher have been found there was no one farmers who belong 'above 45' age group, majority of sound financial inclusion belong 26-45 age group.

Chi-Square Tests
Table 6.1

	Value	Degree of freedom	Asymptotic Significance (2-sided)
Pearson Chi-Square	82.838	6	.000
Likelihood Ratio	98.585	6	.000
Linear-by-Linear Association	57.225	1	.000
Number of Valid Cases	360		

Table 6.1

Source: Authors' Computation

Table 6.1 shows calculated Pearson Chi-Square value was 82.838 and Significance value was 0.00 (Significance value < 0.05) that was indicated There is significant association between age group and financial inclusion among farmers i.e. null hypothesis has been rejected and alternative hypothesis has been accepted.

Symmetric Measures
Table 6.2

	Value	Approximate Significance
Nominal by Nominal	Phi	.480
	Cramer's V	.339
Number of Valid Cases	360	

Table 6.2

Source: Authors' Computation.

Table 6.2 shows that the value of Cramer's V was .373 that indicate weak relationship between age group and financial inclusion among farmers.

Association between family income level and financial inclusion among farmers

Crosstabulation between Family Income and Financial Inclusion among farmers

Table 7

			Financial Inclusion			Total
			Poor	Fair	Sound	
Family Income	Blow 10000	Count	86	1	0	87
		% within Family Income	98.9%	1.1%	0.0%	100.0%
	10,000-50,000	Count	123	20	0	143
		% within Family Income	86.0%	14.0%	0.0%	100.0%
Lakh	50,000-1	Count	41	24	2	67
		% within Family Income	61.2%	35.8%	3.0%	100.0%
	Above 1 Lakh	Count	12	24	27	63
		% within Family Income	19.0%	38.1%	42.9%	100.0%
Total		Count	262	69	29	360
		% within Family Income	72.8%	19.2%	8.1%	100.0%

Table 7

Source: Authors' Computation.

From Table 7 it seems that high income groups were more financial inclusion among farmers compare to low income groups, among those who earn less than 10 thousand annually, 98.9% of farmers were found Poor financial inclusion, no one farmers found Sound financial inclusion only 1.1% of farmers found fair financial inclusion, while those who earn more than 1 lakh annually, 42.9% of farmers were found sound financial inclusion, 38.1% of farmers found fair financial inclusion and only 19% of farmers found poor financial inclusion, which clearly shows that the financial inclusion also increases by increasing income and its seems that there is association between financial inclusion among farmers and family income.

Chi-Square Tests
Table 7.1

	Value	Degree of freedom	Asymptotic Significance (2-sided)
Pearson Chi-Square	191.391	6	.000
Likelihood Ratio	178.433	6	.000
Linear-by-Linear Association	144.852	1	.000
Number of Valid Cases	360		

Source: Authors' Computation

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Table 7.1 shows that Pearson Chi-Square value was 178.433 and Significance value was 0.00 (Significance value < 0.05) that was indicated There is significant association between Family Income and financial inclusion among farmers i.e. null hypothesis has been rejected.

Symmetric Measures
Table 7.2

		Value	Approximate Significance
Nominal by	Phi	.729	.000
Nominal	Cramer's V	.516	.000
Number of Valid Cases		360	

Table 7.2

Source: Authors' Computation.

Table 7.2 shows that the value of Cramer's V was .517 that indicate strong relationship between family income and financial inclusion among farmers.

Association between Size of Land Holding and financial inclusion among farmers

Crosstabulation between Size of Land Holding and Financial Inclusion among farmers

Table 8

			Financial Inclusion			Total
			Poor	Fair	Sound	
Size of Land Holding	< 1 acre	Count	220	31	5	256
		% within Size of Land Holding	85.9%	12.1%	2.0%	100.0%
1 acre – 2 acre	Count	Count	31	24	8	63
		% within Size of Land Holding	49.2%	38.1%	12.7%	100.0%
Above 2 acre	Count	Count	11	14	16	41
		% within Size of Land Holding	26.8%	34.1%	39.0%	100.0%
Total	Count	Count	262	69	29	360
		% within Size of Land Holding	72.8%	19.2%	8.1%	100.0%

Table 8

Source: Authors' Computation.

Table 8 shows that who had less land less degree of financial inclusion and who have more land high degree of financial inclusion. The Farmers who had less than 1-acre land were 256 (71.11% of total farmers), in this group majority of farmers have been found poor financial inclusion i.e. 220 (85.9%) and only 5 (2 %) farmers have been found sound financial inclusion.

Farmers who had 1 acre – 2-acre land were 63 (17.5% of total farmers), in this group have been found more degree of financial inclusion compare to previous group (having less than 1 acre of land) and less degree of financial inclusion compare to next group (having Above 2-acre land)

Farmers who had more than 2-acre land were only 41 (11.39% of total farmers), in this group 16 (39%) farmers have been found sound financial inclusion, 14 (34.1%) fair and only 11 (26.8%) poor financial inclusion.

Chi-Square Tests
Table 8.1

	Value	Degree of freedom	Asymptotic Significance (2-sided)
Pearson Chi-Square	108.358	4	.000
Likelihood Ratio	91.186	4	.000
Linear-by-Linear Association	99.274	1	.000
Number of Valid Cases	360		

Table 8.1

Source: Authors' Computation.

Table 8.1 shows that Pearson Chi-Square value was 197.343 and Significance value was 0.00 (Significance value < 0.05) that was indicated There is significant association between Size of Land Holding and financial inclusion among farmers i.e. null hypothesis has been rejected and alternative hypothesis has been accepted.

Symmetric Measures
Table 8.2

		Value	Approximate Significance
Nominal by	Phi	.549	.000
Nominal	Cramer's V	.388	.000
Number of Valid Cases		360	

Table 8.2

Source: Authors' Computation.

Table 8.2 shows that the value of Cramer's V was .373 that indicate weak relationship between Size of Land Holding and financial inclusion among farmers.

IX. CONCLUSION

Financial inclusion is an essential priority for the nation in terms of economic progress and the advancement of society It helps in eliminating the gap between rich and poor[3]. Like other countries in India, several schemes are being made for financial inclusion thus 100% financial inclusion can be achieved.

RBI as well as the government are constantly taking initiatives to achieve financial inclusion within the country. Banks and other financial institutions are constantly being encouraged by the government to increase their presence and operations in rural areas. In the last decades, the emphasis is on the need to build an inclusive financial system for economic development [12]. A survey of 360 farmers across Prayagraj district was conducted, this survey found that 71.4% farmers had his own bank accounts while 23.6% farmers were active use their bank accounts in past 3 months and only 10.6 % farmers were taken loan from bank or other formal financial institutions. The farmers had not sufficient financial literacy. 72.8% farmers have poor financial inclusion, 19.2% farmers have fair financial inclusion and only 8.1% farmers have sound financial inclusion, which is an undeservedly results. Analyzing at the data, it appears that famers have only opened bank accounts, they are not availing proper banking services and they have not sufficient financial literacy. Further analysis shows that gender is not associated with degree offinancial inclusionamong farmerswhile other demographic variable i.e. education qualification, family income, age group and size of land holding is closely associated with degree of financial inclusionamong farmers.

X. SCOPE FOR FURTHER STUDIES

The study is limited to Prayagraj district of Uttar Pradesh, here its analysis only the region of Prayagraj with selected variables. Its will be interesting to choice the various variables and regionfor investigate the related field of research with the various Statistical tools.

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