ORIGINAL RESEARCH PAPER

Agricultural Economics

PERCEPTION OF FARMERS IN TAMIL NADU FOR DEFAULT IN THEIR AGRICULTURE CREDIT REPAYMENT

KEY WORDS: Non-Repayment, Agriculture credit, Problems.

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ABSTRACT

The problem of loan overdue is a matter of serious concern, as it affects the recycling of funds and credit expansion on one hand and economic viability of the lending institutions, specially the co-operatives and the Regional Rural banks on the other hand. The main problem raised among farmers is non-repayment of loan mainly due to failure of crops. Farmers frequently borrow loans, but there are some reasons for default in repayment of loan amount such as low yield, crop failure, unreasonable price for the produce, delayed receipts of sale proceeds, absence of income from sources, Increase in the cost of production, Repayment of old debts, Increase in household expenditure and Failure of monsoon are same of the vital reasons behind it. The data collected were quantitatively analyzed by using factor analysis and Rank analysis. The result of the study shows that crop failure is the most important reason for non- repayment of loan by the farmers. The bankers can consider providing sufficient long term loan to dig up bore wells to avoid water scarcity which stands as the major reason behind crop failure.

1.1 Introduction:

Agriculture being the largest sector of Indian economy plays an important role in accelerating the pace of economic growth and development. It has a crucial role in improving the condition of Indian economy. Agriculture development implies increased production of crops, and generation of employment opportunities which in turn improve the standard of living of the farmers. India ranks second in the world in farm outputs. Besides providing sufficient agriculture credit to farmers, its proper utilization is prerequisite for development of national economy. With the rapid expansion of commercial banks' branch network in rural areas and subsequent increase in investment in agriculture sector through banks' advances, the problem of non recovery of loans is being aggravated. For any public sector credit institution, recovery of agricultural advances is of crucial importance as prompt and timely repayment not only ensures recycling of public fund for development but also builds-up confidence amongst the credit institution in their clientele. The effective performance of these institutions can be judged only when the farmer-borrowers repay their loans as and when they fall due to the farm credit agency.

1.2 Review of Literature:

Udayakumar and Umesh (2018) analyzed the repayment performance of agriculture credit by farm households. The required primary data were collected randomly from 50 farmers. The results revealed that the farmers availed more credit from formal sources compared to informal sources across all transacts. The findings revealed that repayment was more in urban areas than in rural areas. Moreover, 75 percent of the farmers properly repay the loan amount. Low price, crop loss and higher household expenditure occupy the major reasons for indebtedness of farm households.

Jattu et.al (2019) in their study highlighted the reasons causing loan default among farmers in kwara state. A total of 3100 agricultural loan defaulters were selected from the members of kwara state apex farmers' co-operative bank. The sampling frame was stratified into four, based on the existing four agricultural development projects of the zones in Kwara state. A proportionate sampling technique was used to select the 400 agricultural loan defaulters in the study area. The researcher concluded that the interest rate and delay in disbursement of the loan amount are the reasons for default in repayment of loan. To reduce the incidence of loan diversion, efforts should be made to monitor borrowers regularly.

Suresh Babu et.al (2020), stated the condition of agriculture loan and its repayment in the 32 districts of Tamil Nadu. Theni district was randomly selected for the study. There are eight blocks in Theni District, Out of eight blocks, Theni block and Bodinayakanur block were selected by lottery method. From the two blocks, four villages were selected. In these four villages, 80 sample respondents were selected; all the selected respondents were holding Kissan Credit Cards. The findings revealed that only 40 percent of the small farmers couldn't repay their loan amount due to various reasons such as crop failure, low yield and failure of monsoon and the remaining 60 percent of the farmers repaid the loan properly.

1.3 Objective of the Study:

The main objective of the study is to analyze the reasons for default in repayment of agricultural credit in Tamil Nadu.

1.4 Research Methodology:

Sampling frame refers to a complete enumeration of population elements from where a sample may be drawn. The present study used multi stage cluster sampling technique. The sample was selected through different stages. In the process of selecting the sample frame, the researcher at first stage chosen the following five districts such as Sivagangai, Vellore, Villupuram, Coimbatore and Tirunelveli which have provided more amount of agricultural credit from the 31 districts which were available at the time of data collection during 2013-2018. After confining the districts, moving to the second stage the researcher has chosen only 9 taluks from the 142 taluks from the 5 districts based on the higher number of bank branches available in those 142 taluks. At the final stage, the researcher sort out the number of Commercial banks, Co-operative banks and Regional Rural Banks in Tamil Nadu from which the data has been collected. The banks were selected based on the higher amount of credit provider for agricultural activities. Based on the above parameter the researcher have identified five commercial banks such as State Bank of India, Indian Overseas Bank, Canara Bank, Indian Bank and HDFC and both the regional rural banks namely Pandian Grama Bank and Pallavan Grama Bank (during 2018) and Primary Agricultural Co-operative bank in the co-operative sector. Table 1.1 depicts the total number of agricultural borrowers in the sample districts during 2013-2018.

Table 1.1 Total Number of Agricultural borrowers in the sample districts during 2013-2018

S.No	Taluk Name	Total Population
1	Sivagangai	27,06,192
2	Coimbatore	10,14,773
3	Villupuram	43,85,409
4	Vellore	2,53,1865
5	Tirunelveli	3,56,9555
Total	1,42,07,794	

Source: SLBC, Tamil Nadu Annual Credit plan from April 2013 to March 2018.

1.5 Data Analysis and Interpretation

1.5.1 Reasons for Non-Repayment of Agricultural credit – Factor Analysis:

The problem of loan overdue is a matter of serious concern, as it affects the recycling of funds and credit expansion on one hand and economic viability of the lending institutions, specially the co-operatives and the regional rural banks on the other hand. The main problem raised among farmers is non-repayment of loan mainly due to failure of crops. Farmers frequently borrow loans, but there are some reasons for default in repayment of loan amount such as low yield, crop failure, unreasonable price for the produce, delayed receipts of sale proceeds, absence of income from sources, Increase in the cost of production, Repayment of old debts, Increase in household expenditure and Failure of monsoon are same of the vital reasons behind it. The Kaiser-Meyer-Olkin measure of sampling adequacy is a statistical tool which indicates the proportion of variance in the variables which might be caused by new factors. If the value is less than 0.50, the results of the factor analysis probably will not be very useful.

Table 1.2 Reasons for Non-Repayment of Agricultural Credit – KMO and Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.871
Bartlett's Test of Sphericity	Approx. Chi-Square	7224.974
	Df	276
	Sig.	.000

Source: Primary Data

The Table 1.2 shows that the KMO Value is 0.871, which indicates that the degree of common variance among the variables is quite high. Hence it could be concluded that factor analysis can be conducted.

1.5.2 Reasons for Non-Repayment of Agricultural credit - Principal Component Analysis:

The principal component analysis was administered for grouping the factors for Non-repayment of loans by farmers in agricultural credit. It is a method of data reduction. The proportion of the variance of a particular item due to common factor is called communality. The initial value of the communality in a principal component analysis is '1'. The default in repayment of loans by the farmers is involved in the component column. The extraction communalities estimate the variance in each variable accounted for the factors in the factor solution. If the value is less than 0.5 it indicates that the variables do not fit well with the factor solution and it should possibly be dropped from the analysis. The Table 1.2 shows the extraction value of the farmers who are at default in repayment of agricultural credit.

Table 1.3 Reasons for Non-Repayment of Agriculture credit – Principal Component Analysis

Communalities		
Variables	Initial	Extraction
Low Yield	1.000	.682
Crop Failure	1.000	.919
Unreasonable price for the produce	1.000	.654
Delayed receipts of sale proceeds	1.000	.525
Absence of income from other sources	1.000	.753
Increase in the cost of production	1.000	.559
Repayment of old debts	1.000	.648
Increase in house hold expenditure	1.000	.634
Failure of monsoon	1.000	.880
Marriage expenses in the family	1.000	.719
Frequent repairs of farm motor/ engine	1.000	.820
Lack of marketing facilities	1.000	.865
Delay in sanction and disbursement of loans	1.000	.850
Frequent changes in the recovery policy of the Government	1.000	.660
Mis utilization of loans	1.000	.503
Scarcity of water for irrigation	1.000	.643
Expectation of loan waiver from the government	1.000	.519
Non- co-operation from the bank	1.000	.772
Higher dependency ratio of the family	1.000	.779
Lack of proper irrigation	1.000	.712
Unproductive use of loans	1.000	.665
Land degradation	1.000	.619
Slow pace of diversification	1.000	.655
Others if any	1.000	.662
Extraction Method: Principal Component Analysis.		

Source: Primary Data

The Table 1.3 shows the variance of the variables ranging from .500 to 0.919. It shows that the fifteen variables exhibit the considerable variance from 50 percent to 80 percent. Hence it is concluded that all these variables are capable of segmenting themselves with respect to the reasons for default in repayment of loans.

1.5.3 Reasons for Non-Repayment of Agricultural credit –Total Variance Explained

The total variance analysis is important to know the rotated sum of square value. The rotated seven factors are determined based on the total Eigen value and the Eigen value should be greater than one. The total cumulative variance is explained by the total percentage of variance by each retained four factors. The Table 1.4 gives the individual variance of the predominant factors which emerged out of 24 factors.

Table 1.4 Reasons for Non-Repayment of Agricultural Credit–Total Variance Explained

Total Variance Explained									
Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Cumulative %	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.605	31.689	31.689	31.689	31.689	31.689	6.711	27.964	27.964
2	2.685	11.188	42.877	42.877	11.188	42.877	3.127	13.031	40.995
3	1.496	6.233	49.111	49.111	6.233	49.111	1.595	6.647	47.642

4	1.406	5.859	54.970	54.970	5.859	54.970	1.421	5.919	53.561
5	1.400	5.834	60.804	60.804	5.834	60.804	1.391	5.797	59.359
6	1.090	4.542	65.346	65.346	4.542	65.346	1.294	5.392	64.751
7	1.015	4.230	69.576	69.576	4.230	69.576	1.158	4.826	69.576
8	.877	3.652	73.229						
9	.852	3.551	76.780						
10	.714	2.976	79.755						
11	.707	2.947	82.702						
12	.627	2.614	85.316						
13	.570	2.377	87.693						
14	.497	2.072	89.765						
15	.478	1.991	91.756						
16	.435	1.811	93.567						
17	.349	1.452	95.019						
18	.291	1.212	96.231						
19	.226	.941	97.172						
20	.203	.845	98.017						
21	.179	.747	98.764						
22	.130	.543	99.306						
23	.115	.478	99.784						
24	.052	.216	100.000						
Extraction Method: Principal Component Analysis.									

Source: Primary Data

The Table 1.4, shows that the twenty four variables are reduced into seven predominant factors with the individual variances of 27.964, 40.995, 47.642, 53.561, 59.359, 64.751 and 69.576 respectively. Cumulative variable of the twenty four variables is 69.576 percent. The value of the cumulative variable is more than the benchmark of the variant which is 50 percent. Hence, it confirms that the factor segment is meaningful.

1.5.4 Reasons for Non-Repayment of Agricultural credit –Rotated Component Matrix

The rotated sum of square value indicates that the cumulative percentage of variances is 69.576. So the factorization is much suitable for the reasons for non- repayment of agriculture credit. The Table 1.5 explains the value of rotated component matrix for the farmer's opinion on agricultural credit.

Table 1.5 Reasons for Non-Repayment of Agricultural Credit –Rotated Component Matrix

Rotated Component Matrix							
Reasons	Component						
	1	2	3	4	5	6	7
Low yield	.934						
Failure of monsoon	.906						
Crop failure	.898						
Scarcity of water irrigation	.752						
Unreasonable price for the produce		.751					
Delayed receipts of sale proceeds		.842					
Absence of income from other sources		.652					
Increase in the cost of production		.762					
Lack of marketing facilities		.821					
Delay in sanction and disbursement of loans			.752				
Non- co-operation from the bank			.845				
Higher dependency ratio of the family				.781			
Increase in house hold expenditure				.893			
Lack of proper irrigation				.851			
Unproductive use of loans				.671			
Land degradation				.821			
Marriage in the family				.759			
Absence of income from other sources				.852			
Slow pace of diversification					.751		
Mis utilization of loans					.658		
Lack of proper irrigation						.821	
Frequent repairs of farm motor/ engine						.758	
Expectation of loan waiver from the government							.761
Frequent changes in the recovery policy of the Government							.652
Others							.647
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.							

Source: Primary Data

[1]Climatic Conditions:

The Table 1.5 represents the factor classification. Out of Seven factors the first factor consists of four variables namely Low Yield (.934), Failure of Monsoon (.906), Crop Failure (.898) and Scarcity of water Irrigation (.752) all these factors are termed as Climatic Conditions.

[2] Marketing Problems:

The Second factor consists of five variables namely unreasonable price for the produce (.751), Delayed receipts of sale proceeds(.842), Absence of income from other sources(.652), Increase in the cost of production (.762) and Lack of marketing facilities (.821) all these factors are termed as Marketing problems.

[3] Operational Problems:

Factor three consists of two variables namely Delay in sanction and disbursement of loans (.752) and Non- co-operation from the bank (.845). All these factors are termed as Operational problems.

[4] Personal Problems:

Factor four consists of seven variables namely higher dependency ratio of the family (.781), Increase in household expenditure (.893), Lack of proper irrigation(.851), Unproductive use of loans (.671), land degradation (.821), marriage in the family (.759) and Absence of Income from other sources (.852) all these seven factors are termed as Personal problems.

[5] Diversification:

Factor five consists of two variables namely slow pace for diversification (.751) and Mis utilization of loan (.658) all the above two factors are termed as Diversification.

[6] Technological Problems:

Factor six consists of two variables namely Lack of proper irrigation(.821) and frequent repairs of farm motor/ engine (.758). Both of these factors are termed as Technological Problems.

[7] Lack of Policy changes:

Factor seven consists of three variables namely, expectation of loan waiver from the government (.761), Frequent changes in the recovery policy of the Govt (.652) and others (.647) all these factors are termed as Lack of policy changes.

1.6 Reasons for Default in Repayment of Agricultural credit – Rank Analysis

Rank analysis was performed to know the top reason most for default in repayment of agriculture credit.

Table 1.6 Reasons for Non-Repayment of Agricultural credit – Rank Analysis

S.No	Factors	Mean	Rank
1	Low yield	4.4511	5
2	Crop Failure	4.8692	1
3	Unreasonable price for the produce	4.7971	2
4	Delayed receipts of sale proceeds	3.1163	18

5	Absence of income from other sources	4.7639	3
6	Increase in the cost of production	2.3191	19
7	Repayment of old debts	3.0755	20
8	Increase in house hold expenditure	4.2533	6
9	Failure of Monsoon	4.1078	8
10	Marriage expenses in the family	4.1131	9
11	Frequent repairs of farm motor/ engine	2.8658	22
12	Lack of marketing facilities	2.5220	21
13	Delay in sanction and disbursement of loans	3.9851	10
14	Frequent changes in the recovery policy of the government	2.3581	23
15	Misutilization of loans	3.1820	17
16	Scarcity of water for irrigation	4.5635	4
17	Expectation of loan waiver from the government	3.2704	15
18	Non- Co-operation from the bank	3.1866	16
19	Higher dependency ratio of the family	3.7277	12
20	Lack of proper irrigation	3.8178	11
21	Unproductive use of loans	3.5641	13
22	Land degradation	3.4191	14
23	Slow pace of diversification	4.2153	7
24	Others if any	2.2684	24

Source: Primary Data

From the rank analysis performed using the overall mean score on factors, the following points are found to be the reasons for non-repayment of agricultural credit; it is inferred from the above Table that out of 24 Variables thehigh mean score values are for crop failure (4.8692), Unreasonable price for the produce (4.7971), Absence of income from other sources (4.7639), Scarcity of water for irrigation (4.5635), Low Yield (4.4511), Increase in house hold expenditure (4.2533), Slow pace of diversification (4.2153), Failure of Monsoon (4.1078) and Marriage in the family (4.1131). The mean value for the above variables are above 4.10. So thereasons mentioned are considered above the main reasons for non-repayment of loan by the farmers.

From the inference, it is concluded that crop failure is the most important reason for non- repayment of loan by the farmers. The bankers can consider to provide sufficient long term loan to dig up bore wells to avoid water scarcity which stands as the major reason behind crop failure.

1.7 CONCLUSION:

The researcher concluded that the main problem raised among farmers is non-repayment of loan mainly due to failure of crops. Farmers frequently borrow loans, but there are some reasons for default in repayment of loan amount such as low yield, crop failure, unreasonable price for the produce, delayed receipts of sale proceeds, absence of income from sources, Increase in the cost of production, Repayment of old debts, Increase in household expenditure and Failure of monsoon are same of the vital reasons behind it. The result of the study shows that crop failure is the most important reason for non- repayment of loan by the farmers. The bankers can consider providing sufficient long term loan to dig up bore wells to avoid water scarcity which stands as the major reason behind crop failure.

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