



AGRICULTURAL LOAN UTILIZATION AND REPAYMENT BEHAVIOUR AMONG FARMERS IN THANJAVUR

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Abstract: This study investigates the utilization patterns and repayment behavior of agricultural loans among farmers in Thanjavur, a prominent agricultural region in Tamil Nadu, India. The research examines the relationship between loan utilization, borrower characteristics, and repayment outcomes to provide insights into factors influencing farmers' financial practices. Data was collected through surveys and analyzed using statistical methods to assess the extent to which loan utilization impacts repayment behavior. The findings reveal relationships between loan utilization, borrower demographics, and repayment performance, highlighting the importance of tailored lending approaches. The study underscores the need for financial literacy initiatives, support services, and flexible loan structures to enhance borrowers' financial management skills and mitigate default risks. By understanding the complex dynamics of agricultural lending in Thanjavur, policymakers and financial institutions can develop targeted interventions to promote sustainable agricultural finance and rural development.

Keywords : Agriculture loan, Utilization & Repayment.

I. INTRODUCTION

Agriculture is a vital sector that plays a crucial role in the economic development and food security of nations, especially in developing countries like India. The agricultural sector not only provides food and raw materials but also generates employment opportunities for a significant portion of the population. However, farmers, particularly smallholders and marginal farmers, often face numerous challenges, including limited access to credit, inadequate resources, and vulnerability to various risks such as natural calamities, market fluctuations and climate change. Access to credit is a critical factor that can significantly impact the productivity and profitability of agricultural activities.

Agricultural loans serve as a means for farmers to obtain the necessary funds to invest in inputs such as seeds, fertilizers, pesticides, irrigation systems, and farm machinery. Those loans can also provide financial support during times of distress, enabling farmers to cope with emergencies or unforeseen circumstances. However, the effective utilization of agricultural loans and ability of farmers to repay these loans are crucial determinants of the success and sustainability of agricultural credit programs. Improper utilization of loans or diversion of funds for non-agricultural purposes can lead to financial difficulties and hinder the intended benefits of these credit facilities. Similarly, non-repayment or delayed repayment of loans can adversely affect the financial health of lending institutions, potentially limiting their capacity to provide credit in the future.

Understanding the factors that influence loan utilization patterns and repayment behaviour is essential for designing effective agricultural credit policies and programs. By identifying the reasons behind full, partial and non-repayment of loans, as well as the factors that contribute to responsible borrowing and timely repayment, policymakers and financial institutions can implement targeted interventions and support systems to ensure the efficient use of agricultural credit and promote the overall well-being of the farming community.

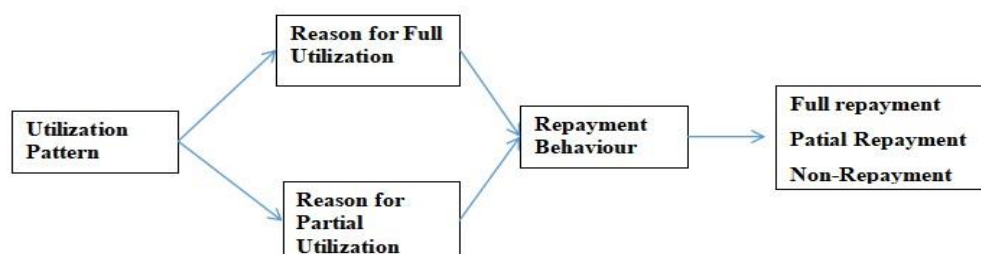
II. OBJECTIVES OF THE STUDY

- To identify the factors influencing the Utilization pattern of agricultural loan among farmers in the study area.
- To analyze the reasons for full,partial and non-repayment of agricultural loan by the farmers.
- To assess the impact of various factors on the loan repayment behavior of farmers.

III. LITERATURE REVIEW

(Babloo jakhar,Rohats Kait,Vijay Kumar 2023) has evaluated that the Non-Productive usage of loans is the cause of indebtedness by the farmers.(Alexpandi, S.Rameshkumar 2014) - This paper shows that the majority of farmers have fully utilized the loan for agricultural purposes. Delay in getting loan is the main reason for mis-utilization of loans. Low income from agriculture is the primary reason for partial repayment. The various factors influenced for non-repayment. (Ganesan 2016) - In this study majority of the farmers utilize the agriculture credit for agriculture purpose and repay the loan in due date,changing their cropping pattern,Extent their Land. (Rohin John, Dinesh kumar, Setu Ratnam 2017) - This study indicates the Utilisation of Loan by the large group of farmers. Tubewell\Pumping set loan wash fully utilised by medium and small group pf farmers. Large group of farmer ,misutilised the credit was higher compared to medium and small group of farmers.(K.Sasrada Siva Reddy, K.ravi Shankar 2022) - This study reavels that the Utilisation of agricultue loan depends upon the weather condition and majority of the farmers often Utilise the loan completely for Agriculture. (Parvez Alam Khan,Shahana,Irshad Nazeer 2019) - In this study Crop failure and Changes in monsoon is the main reason for unable to pay the loan and Socio-economi factors also affect to repayment of loan. (Senapathy, Merihun Nadew2023) - The model results indicate that loan diversion significantly impacts the repayment performance of agricultural credit borrowers, with diverted funds leading to increased defaulter likelihood.Borrowers diverting credit for consumption or unintended purposes may struggle to repay loans timely. Interestingly,both defaulters and non-defaulters exhibit similar attitude towards repaying loans,suggesting that default issues stem more from flawed lending practices than from inherently bad clients.(Sayani Dasgupta , Gunadhar Dey (2015) - Utilise the borrowed funds for productive purpose and Non-Productive purpose for building house. Household income is not related use the borrowed funds in productive purpose. (M. N.Khatun, M.R.U.Mian, M.A.Khatun 2014) - The purpose of the study was how the farmers utilised their loan and repayment.This study examines loan amount effectively used for farming and business.Getting loan in future is major factor to repay the loan among farmers. (Sanjay Kumar 2005) - This study examines socio-economic factors contributing to non-repayment behavior among borrower farmers in Ranchi district. The analysis revealed factors such as literacy , income sources, expenses patterns, utilisation, irrigation, crop intensity between defaulters and non-defaulters categories.

IV. CONCEPTUAL FRAMWORK



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V. RESEARCH METHODOLOGY

In this research, the primary data was collected through structured questionnaire.The study used a purposive sampling method. The population of the study is from a selected area of Thanjavur district, Tamilnadu. 353 data were collected in this area. The collected were analyzed with the help of statistical tools processed by SPSS 20.

VI. DATA ANALYSIS

Characteristics	Values	Frequency	Percentage (%)
Age	Below 30	20	14.8
	31-40	32	23.7
	41-50	5	40
	Above 50	29	21.5
Gender	Male	116	85.9
	Female	19	14.1
Educational Qualification	Illiterate	30	22.2
	Primary Level	36	26.7
	HSC	35	25.7
	Diploma	9	6.7
	Graduate	25	18.5
Family Type	Nuclear Family	69	51.5
	Joint Family	66	48.9
Years of Experience	1 to 10 Years	33	24.4
	11 to 20 Years	36	26.7
	21 to 30 Years	46	34.1
	More than 30 Years	20	14.8
Area of Cultivation	Less tha 1 Acre	12	8.9
	1 to 5 Acre	53	39.3
	6 to 10 Acre	46	34.1
	11 to 15 Acre	13	9.6
	More than 15	11	8.1

From the above table out of 135 respondents, most of the respondents are between the age 31-40 with a frequency of 32 (23.7). 116 respondents of male respondents (85.9).26.7% with the frequency of 36 respondents are primary level.The 69 respondents are Nuclear family. Frequency of46 respondents (34.1) have 21 to 30 Years of Experience. The 39.3% of respondents with 53 frequency lies between the area of cultivation 1 to 5 Acre.

Correlation Analysis

		Full Utilization	Full Repayment	Partial Repayment	Non-Repayment
Full Utilization	Pearson Correlation	1	.634**	.466**	.404**
Full Repayment	Pearson Correlation	.634**	1	.571**	.556**
Partial Repayment	Pearson Correlation	.466**	.571**	1	.658**
Non-Repayment	Pearson Correlation	.404**	.556**	.658**	1
** Correlation is significant at the 0.01 level (2-tailed).					
Source : Primary data: Processed by :SPSS 20					

The correlation coefficients indicate positive associations between full utilization and various epayment behaviours.The strongest correlations is between full utilization and full repayment (0.634), suggesting that higher utilization is moderately associated with higher rates of full repayment. The full utilization has

moderate positive correlations with partial repayment (0.466) and non repayment (0.4.4), implying that higher utilization is related to higher rates of both partial and non- repayment.All correlations are statistically significant at the 0.01 level. These findings suggest that while higher utilization may linked to increased full repayment, it is also associated with higher rates of partial and non-repayment, potentially indicating a complex relationship between utilization and repayment behaviour.

		Partial Utilization	Full Repayment	Partial Repayment	Non-Repayment
Partial Utilization	Pearson Correlation	1	.659**	.616**	.471**
Full Repayment	Pearson Correlation	.659**	1	.571**	.556**
Partial Repayment	Pearson Correlation	.616**	.571**	1	.658**
Non-Repayment	Pearson Correlation	.471**	.556**	.658**	1
** Correlation is significant at the 0.01 level (2-tailed).					
Source : Primary data: Processed by :SPSS 20					

The correlation table shows positive and statistically significant associations between partial utilization and various repayment behaviors.The strongest correlation in between partial utilization and full repayment (0.659), suggesting a moderately strong positive relationship where higher partial utilization is associated with higher rates of full repayment. Partial Utilization also has a moderately strong positive correlations with partial repayment (0.616), implying that higher partial utilization corresponds to higher rates of partial repayment.Additionally, there is a moderate positive correlation (0.471) between partial utilization and non-repayment,indicating that higher partial utilization is related to higher non-repayment rates as well. Overall these findings suggest that while partial utilization may be linked to increased full and partial repayment, it is also associated with higher non-repayment rates, highlighting a complex interplay between utilization and repayment behavior.

Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.416	0.091		15.511	0.00
	Full Utilization	0.016	0.051	0.02	0.313	0.754
	Partial Utilization	0.606	0.047	0.815	12.95	0.00
a. Dependent Variable: Full Repayment R = 0.832 R Square = 0.693						
Source: Primary data. Processed by: SPSS 20.0						

The regerssion model shows that partial utilization is significant predictor of full repayment ($t=12.95$, $p<0.01$), with a standardized coefficient of 0.815. This indicates that higher partial Utilization is strongly associated with higher rates of full repayment. However, full utilization is not a significant predictor of full repayment ($t=0.313$, $p>0.05$). The model has a R-squared value of 0.693, suggesting that approximately 69.3% of the variations in full repayment can be explained by the combination of full utilization and partial utilization. Overall, the model highlights the importance of partial utilization in predicting full repayment behavior.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.159	0.066		32.822	0.00
	Full Utilization	0.039	0.037	0.063	1.064	0.288
	Partial Utilization	0.454	0.034	0.797	13.453	0.00
a. Dependent Variable: Partial Repayment R = 0.853 R Square = 0.728						
Source: Primary data. Processed by: SPSS 20.0						

The regression model reveals that partial utilization is a significant predictor of partial repayment ($t=13.543$), $P<0.01$), with a standardized coefficient of 0.797. This strong positive relationship suggests that higher partial utilization is associated with higher rates of partial repayment. However, full utilization is not a significant predictor of partial repayment ($t=1.064$, $p>0.05$). The model's R-squared value of 0.728 indicates that approximately 72.8% of the variation in partial repayment can be explained by the combined effects of full utilization and partial utilization.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.089	0.086		24.23	0.00
	Full Utilization	0.171	0.048	0.283	3.559	0.00
	Partial Utilization	0.251	0.044	0.452	5.686	0.00
a. Dependent Variable: Partial Repayment R = 0.714 R Square = 0.51						
Source: Primary data. Processed by: SPSS 20.0						

The regression model shows that both full utilization ($t=3.559$, $p<0.01$) and partial utilization ($t=5.686$, $p<0.01$) are significant predictors of non-repayment. The standardized coefficients indicates that full utilization (0.283) and partial utilization (0.452) have positive associations with non-repayment, suggesting that higher levels of full and partial utilization are related to higher rates of non-repayment. The model's R-squared value of 0.51 indicates that approximately 51% of the variation in non-repayment can be explained by the combined effects of full utilization and partial utilization. Overall, the model highlights the importance of considering both full and partial utilization in predicting non-repayment behavior, as both variables contribute significantly to the model's predictive power.

VII. Findings:

1. There are positive correlations between full Utilization, Partial Utilization and different repayment behaviors (full repayment, partial repayment and non-repayment).
2. The regression models show that partial utilization is a significant predictor of full repayment and partial repayment, with higher partial utilization associated with higher rate of both.

3. Both full utilization and partial utilization are significant predictors of non-repayment, with higher levels of utilization associated with higher rate of non-repayment.

VIII. Conclusion:

The findings suggest a complex relationship between utilization and repayment behavior. While higher partial Utilization is linked to increased full and partial repayment, it is also associated with higher non-repayment rates. Similarly, higher full utilization is related to higher non-repayment rates. These results highlight the importance of considering both full and partial utilization when predicting repayment behavior, as they can have different impacts on different repayment outcomes.

IX. Suggestions:

1. Develop targeted strategies to encourage responsible utilization pattern as excessive utilization (both Full and partial) may lead to increased non-repayment risks.
2. Implement measure to monitor and manage partial Utilization levels, as this appears to be a significant factor influencing repayment behavior.
3. Consider incorporating utilization metrics, along with other relevant factors, into risk assessment models to improve the prediction of repayment outcomes.
4. Tailor financial education and counseling programs to promote responsible utilization practices and improve overall repayment behavior among borrowers.

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