Journal of Information Systems Engineering and Management

2025, 10(32s) e-ISSN: 2468-4376

https://www.jisem-journal.com/ Research Article

The Impact of Refinance Scheme of Nabard on the Socio Economic Conditions of the Farmers

¹S. Selvaperumal, ²Dr. J. Prabhakaran, ³Dr. P. Ravi, ⁴Dr. Balasubramanian K

¹Research Scholar, Department of Commerce, ²Associate Professor, Department of Business Administration, ³Professor and Head, Department of Management Studies, ⁴Assistant Professor, ¹⁸²Kalasalingam Business School Kalasalingam Academy of Research and Education, Krishnan koil, Srivilliputtur, ³Manonmaniam Sundaranar University, ⁴CMS business school Jain.

¹selvasivam1996@gmail.com ²j.prabhakaran@klu.ac.in ³ravi@msuniv.ac.in ⁴balasubramanian.k@jainuniversity.ac.in

ARTICLE INFO

ABSTRACT

Received: 29 Dec 2024 Revised: 12 Feb 2025

Accepted: 27 Feb 2025

The purpose of "The Impact of the NABARD Refinance Scheme on the Socio-Economic Conditions of the Farmers" is to examine and assess how the socio-economic circumstances of Indian farmers are impacted by NABARD's refinance program. To assess the data, the study uses a quantitative research methodology. The majority of borrowers concurred that refinancing promotes economic growth. Policymakers can benefit from the study's conclusions regarding how well NABARD's refinance program improves the socioeconomic circumstances of farmers. Farmers who stated that the program assisted them in growing their businesses point to real prospects for company expansion and diversification. The refinance scheme's beneficial effects on farmers' socioeconomic circumstances may enhance communal well-being. Based on original data gathered from 80 borrowers, the study offers firsthand insights into the opinions and experiences of farmers who benefit from the refinance plan.

Keywords: Business growth, Socio economic conditions, NABARD refinance, experience of the farmers.

INTRODUCTION:

In India, where agriculture is the main industry, 75% of the population is employed in agriculture. In underdeveloped and developing nations, agriculture plays a major role in creating job opportunities for rural residents. It's a significant source of income. Social welfare, especially in rural regions, is generally improved by the growing agricultural surplus brought about by rising agricultural productivity and production. With its headquarters located in Mumbai and regional offices spread around the country, the National Bank for Agriculture and Rural Development (NABARD) is the premier development of financial institutions in India. NABARD is a member of the Alliance for Financial Inclusion and actively develops policies related to financial inclusion. (Muneendra, K., & Lakshmi, C. S. (2016).) It was founded on July 12th, 1982. NABARD approved a total of Rs 3,48,119 crore in credit flow for agricultural projects during 2016 and 2017. In order to construct a strong rural India, the people and government of that country aspired to establish a strong public policy institution in rural credit. As a result, NABARD identified capital information in the rural economy as its primary focus area. Under numerous schemes and through various financial institutions, NABARD has been financing agriculture and rural development economies under the guise of refinance support since its founding. It took the position of the Reserve Bank of India's Agriculture Credit Department (ACD), Rural Planning and Credit Cell (RPCC), and Agriculture Refinance and Development Corporation (ARDC). Fuster, A., Plosser, M., Schnabl, P., & Vickery, J. (2019). It is one of the leading organizations offering loans for rural development. India's dedicated bank for agriculture and rural development is called NABARD. Over the past three decades, NABARD has evolved into a singular organization. It would be difficult to locate a comparable banking institution anywhere else in the world. It combines the functions of the planning board, development agency, microfinance institution, central bank, and top policy makers. The vast majority of India's rural impoverished still rely on agriculture as their main source of income, and the bulk of them are marginal or small farmers, with the poorest being landless. Analysts predict that the GDP will expand by 8.4% overall. Going forward, the Indian economy is expected to grow at a faster rate overall. The growth of rural and agricultural areas in particular, as well as the overall development of India, is greatly dependent on NABARD. A notable program for the bank for rural development, the Rural Innovation Development Fund (RIDF), was established by NABARD with assistance from the SWISS agency for development and cooperation. Under the RIDF scheme, 2,44,651 projects pertaining to irrigation, rural roads and bridges, health and education, soil conservation, water schemes, etc. have been sanctioned for a total of Rs. 51,283 crores. The Umbrella Programme for Natural Resource Management (UPNRM) is a new direct lending program launched by NABARD in 2007–2008. This facility allows for the provision of loans with appropriate interest rates as financial support for natural resource management initiatives. For a total of around Rs 1000 crore, loans have already been approved for 35 projects. The program's primary goal is to fully utilize the Farmers concept by delivering banking services to the impoverished, particularly the ignored women.

LITERATURE REVIEW:

- ¹K. Muneendra and Swarajya Lakshmi (2016) investigated the role of refinance operations in eradicating rural poverty in their work titled "Impact of Refinance Operations on the Beneficiaries in Chitoor District of Andra Pradesh State, India." They discovered the effects of the NABARD refinance on a sample of Chitoor district central cooperative bank borrowers. They proposed that NABARD has been working with the banking industry to enhance credit support for production and investment purposes for the development of agriculture and rural areas through its refinance operations¹.
- ²Anil Kumar Soni1 and Dr. Harjinder Pal Singh Saluja (2012) "ROLE OF COOPERATIVE BANK IN AGRICULTURAL CREDIT: A STUDY BASED ON CHHATTISGARH" Cooperative banks in Chhattisgarh play a vital role in providing agricultural credit and rural development. The study examines the performance and structure of cooperative banking in agricultural credit. Despite limitations, cooperative credit structures have been serving Indian society since 1904. Data analysis reveals the effectiveness of short-term and long-term agricultural loans in Chhattisgarh. The study underscores the significance of cooperative banking in promoting agricultural development.²
- ³Andreas Fuster Swiss National Bank (2017) "The Role of Technology in Mortgage Lending" Fin Tech lenders in the mortgage market are growing rapidly, processing loans faster and reducing default rates by 35%. Their online platforms streamline the application process and increase refinancing propensity. Automation and technology advancements are reshaping the industry, but regulatory impacts remain uncertain. Overall, Fin Tech lenders are changing the mortgage lending landscape with efficient processes and lower default rates.³
- **4Arlene Wong (2019)** "Refinancing and The Transmission of Monetary Policy to Consumption" This article explores how re-financing decisions impact aggregate consumption responses. Young households are more likely to adjust loans after monetary policy shocks, relieving short-term constraints. The model highlights the importance of mortgage structure in influencing consumption behaviors. Heterogeneous responses by age show young homeowners play a significant role in adjusting loans post-shocks. The study emphasizes the correlation between loan adjustments and age-related liquidity constraints.
- **5Sumit Agarwal John C. Driscoll David Laibson (2007)** "Optimal Mortgage Refinancing: A Closed Form Solution" This article presents a closed-form solution for optimal mortgage refinancing. It offers a rule that is easy to implement and matches existing optimal refinancing differentials. The analysis includes tax considerations and discounted interest payments. Equations and calculations are provided for determining optimal interest rate differentials. Assumptions align with previous studies by Chen and Ling.⁵
- **6F.O. Oladipo and O.A. Adekunle (2010)** "Empirical Determination of Socio-economic Status and its Relationship with Selected Characteristics of Rural Male Farmers in Kwara State, Nigeria "The article explores the relationship between socio-economic status and personal characteristics of rural male farmers in Kwara State. Statistical analysis revealed that 96.2% of socio-economic status was explained by adoption behavior, leadership position, cosmopolitans, education level, and attitude to innovation. ANOVA results showed a significant correlation between socio-economic status and personal traits. The study highlights the impact of societal factors on socio-economic classes and living standards.
- **7Ruth M. A. Kouamé (2022)** "Education and Socio-economic status are key factors influencing use of insecticides and malaria knowledge in rural farmers in Southern Cote d'Ivoire" Federica Guglielmo3, Kouabenan Abo1, Allassane The study focused on insecticide use in agricultural households, revealing a correlation between ITN use and households with young children. Farmers used insecticides for mosquito control and pest management, with pyrethroids being common. Education level influenced farmers' ability to identify insecticides, and higher SES and

education were associated with increased insecticide use. Limitations included potential bias in questionnaire responses and variability in SES indicators, suggesting the need for future research on farmers' attitudes towards pesticide use and retailers' involvement.⁷

⁸Martin Dribe Michel Oris Lucia Pozzi (2014) "Socio economic status and fertility before, during, and after the demographic transition" An introduction to this article explores the impact of socioeconomic status on fertility before, during, and after the demographic transition. It highlights how fertility patterns changed, with elite groups not having higher fertility before the transition. The research focuses on regional variations, diffusion of new attitudes towards birth control, and the role of education in influencing fertility differentials. Challenges include obtaining detailed micro-level data for in-depth analysis, with specific papers in the collection examining areas like Alghero, Scania, Utah, Quebec, and the Netherlands.⁸

9Dr. P. Narayanasamy (2018) "Impact of NABARD'S Refinance operations on the beneficiaries in Sivagangai District- India" The article discusses the impact of NABARD'S refinance operations on beneficiaries in Sivagangai District, India. It highlights NABARD'S crucial role in rural development through various financial schemes. The study analyzes loan distribution and income among different borrower categories, emphasizing the significance of NABARD'S support in alleviating rural poverty.9

¹⁰**Dr. Asad Mirza Snehlata (2004)** "An Overview on Financial Initiatives taken by NABARD for Agriculture and Rural Development in India The paper discusses NABARD's initiatives for agriculture and rural development in India, focusing on financial infrastructure, refinance, and various schemes. It highlights NABARD's support through funds like Short Term Refinance, Rural Infrastructure Development, and Micro Finance to enhance rural livelihoods and agricultural development. The organization aims to promote capital formation, easy credit terms, and empowerment of women in rural areas.¹⁰

¹¹Shravan Boini, Dr. Rajkumar Guntuku Dr. Ravi Sankar Kummeta "A study on the performance of various categories of banks in providing refinance to the agriculture sector in India" The article discusses the performance of different categories of banks in providing refinance to the agriculture sector in India. Scheduled Commercial Banks (SCBs) are highlighted as performing well in this aspect. The study emphasizes the importance of the agriculture sector in economic growth and the role of financial institutions like NABARD in providing financial support. Research findings suggest that SCBs have a higher share in loan disbursement to the agriculture sector compared to other bank categories.¹¹

¹²Bhumit Shah, Rajkumari Soni (2022), "A Study on Role of NABARD and Financial Initiatives taken in Promoting Rural Finance in India". The article discusses the importance of agricultural finance in India's economy, highlighting challenges in rural credit access and the role of microfinance. It emphasizes the need for improved financial inclusion through SHGs and capacity building. NABARD plays a key role in promoting sustainable rural development through various credit initiatives and programs.¹²

¹³**Prof. Vaishaliben C. Patel M.Com.**, **B.Ed.**, **M.Phil.**, **APGDF (2017)** "A Study on Performance of Microfinance Institutions in Gujarat - with special reference to NABARD" The article discusses the importance of microfinance in empowering individuals out of poverty by providing financial services to low-income households and micro enterprises. It highlights NABARD's role in distributing microfinance in Gujarat and analyzes its activities and financial performance from 2006 to 2011. The study focuses on NABARD's efforts in promoting microfinance and scaling up programs to benefit the society.¹³

¹⁴Manjini.T (2019) "Role of Nabard in Refinancing Agricultural Credit in India" The article discusses the impact of the green revolution on Indian agriculture, emphasizing the need for intensive farming practices. It highlights the role of NABARD in providing refinance for agricultural development and the importance of strong financial institutions to support diversification in agricultural production. The compound growth rates for refinance by NABARD show positive trends, aiming to reduce reliance on local moneylenders for rural credit.¹⁴

¹⁵Nikolaos Pappas (2016), "Marketing strategies, perceived risks, and consumer trust in online buying behaviour" The article examines the impact of perceived risks on consumer trust in online shopping behavior, emphasizing the significance of understanding these factors for e-retailers. It highlights the influence of product and e-channel risks on consumer trust and purchasing intentions. The study provides managerial insights for enhancing e-tourism purchases and confirms hypotheses related to product marketing strategies and trust in online transactions. ¹⁵

STATEMENT OF THE PROBLEM:

The principal issues with the official lenders are as follows:

- The banks charge high transaction costs for financing a lot of small borrowers who require small amounts of credit on a regular basis.
- They operated with little flexibility and were focused on the rural area.
- They don't know enough about the traits, background, or present-day pursuits of their clientele.
- They are unable to accept collateral in the form of labor or a product in exchange for money.
- The agricultural community does not know how to apply for a loan or how to qualify for one.

METHODOLOGY

This study is both descriptive and analytical in nature. It covers both primary data and secondary data. The researcher has decided to collect the primary data from the farmers who have been benefitted under NABARD refinance scheme in Sivakasi Taluk. The secondary data were collected from various national and international journals, standard books, magazines, and so on. The research attempts to study the impact of NABARD Refinance scheme on the socio economic conditions of the farmers in Sivakasi Taluk. stratifies sampling method adopted for selecting samples in the study area. 80 farmers who have been benefitted under NABARD Refinance Scheme for the year 2020 - 2023 are selected for the present study. A structured interview schedule is administered for the collection of data from the sample respondents.

HYPOTHESIS OF THE STUDY:

The following hypothesis has been formulated based on the objectives

There is a positive effect between the Socio economic conditions of the farmers and in the impact of NABARD Refinance.

OBJECTIVES OF THE STUDY:

The followings are the objectives of the study,

• To understand impact of NABARD refinance scheme on the socio economic conditions of the farmers.

THEORITICAL CONTRIBUTION OF THE STUDY

1. Access to Credit Theory

This theory posits that access to credit is crucial for development, particularly in agriculture, as it enables farmers to invest in productivity-enhancing technologies and practices. Access to financing can lead to improved economic outcomes for farmers. Muneendra, K., & Lakshmi, C. S. (2016). "Impact of NABARD's Refinance Operations on the Beneficiaries in Chittoor District of Andhra Pradesh State, India." *Journal of Rural Development*.

2. Theory of Agricultural Production

This theory focuses on how changes in agricultural input (like credit) directly influence output levels. Increased investment through the NABARD refinance scheme can lead to improved crop yield and financial return. Manjini, T. (2019). "Role of NABARD in Refinancing Agricultural Credit in India." *International Journal of Management and Social Sciences Research*.

3. Socio-Economic Development Theory

This framework highlights the interdependence of economic and social factors in improving the welfare of individuals and communities. Increased access to financial resources enhances not just economic stability but also social status and community welfare. Chambers, R. (1983). "Rural Development: Putting the Last First." *Longman*.

4. Financial Inclusion Theory

Financial inclusion emphasizes the importance of providing financial services to underserved populations. The NABARD refinance scheme aims to diminish financial exclusion in rural areas, thereby improving socioeconomic conditions. Zins, A., & Weill, L. (2016). "The Determinants of Financial Inclusion in Africa." *World Development*.

5. Sustainability in Agricultural Finance

This theory addresses how financial mechanisms can support sustainable agricultural practices, ensuring long-term growth in rural economies without degrading resources. Ghosh, S., & Mahapatra, M. (2013). "Sustainable Agriculture and Credit Supply: An Analytical Study." *International Journal of Business Research and Development*.

CONCEPTUAL FRAME WORK:

Measures of Socio Economic conditions

- 1. Helps to expand the Economic.
- 2. Confidence to earn more.
- 3. Enhance the Social Status.
- 4. Economic conditions Improved.
- 5. Previous loans Repaid.



MEASURES:

- The impact of NABARD's refinance schemes on the socio-economic conditions of farmers has been analyzed in various scholarly studies. One such study, "Impact of NABARD's Refinance Operations on the Beneficiaries in Chittoor District of Andhra Pradesh State, India" by K. Muneendra (2016), examines how access to credit under NABARD's refinance programs has led to significant growth in income and improved financial positions among beneficiaries. Here the researcher should adopt the 5-point scale for the questions level at (5'4'3'2'1) here Cronbach's scores 0.82 and the actual test results scores 0.79 over the five days' interval.
- Sarker, T. (2024) developed the following variables that the 5 questions, schutte the self-report Impact of Growth and sustainability of NABARD towards the Rural India uses the items that they improve for his study so one's own refinancing capacity of the study. The scale range 5 items to 36 with increased numbers reflecting greater impact of the socio economic conditions. The Cronbach's alpha of 0.90 and test- retest reliability 0.76 within three-week time frame.

TABLE 1. IMPACT OF NABARD REFINANCE ON SOCIO ECONOMIC CONDITIONS

Sl. No	Impact of socio economic conditions	SA	A	N	DA	SDA	TOTAL
1.	Previous loans are repaid	25 (31.25%)	46 (57.5%)	9 (11.25%)	o (o%)	0 (0%)	80
2.	Helps to expand the economic activity	23 (28.75%)	47 (58.75%)	10 (12.5%)	o (o%)	o (o%)	80
3.	It increases the confidence to earn more	25 (31.25%)	37 (46.25%)	16 (20%)	2 (2.5%)	0 (0%)	80
4.	It enhances the social status	18 (22.5%)	27 (33.75%)	24 (30%)	11 (13.75%)	o (o%)	80
5.	Economy is improved due to such refinance scheme.	19 (23.75%)	24 (30%)	26 (32.5%)	8 (10%)	3 (3.75%)	80

Source: Primary data

It is cleared from Table 3.27 out of 80 borrowers 46 (57.5%) of the borrowers were agreed that refinance helps to repay their previous loans, 47 (58.5%) borrowers agreed refinance helps to expand the economic activity, 37 (46.25%)

borrowers agreed that it helps to increases the confidence level to earn more, 27 (33.75%) borrowers agreed the scheme helps to enhance the social status and the remaining 26 (32.5%) borrowers due to refinance economy is improved due to such refinance scheme.

Chi-square test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.077 ^a	1	.079
Continuity Correction ^b	2.282	1	.131
Likelihood Ratio	3.049	1	.081
Fisher's Exact Test			
Linear-by-Linear Association	3.038	1	.081
N of Valid Cases	80		

- a. o cells (0.0%) have expected count less than 5. The minimum expected count is 10.40.
- b. Computed only for a 2x2 table

impact of the NABARD refinance scheme.

With regard to the hypothesis 'P' value of chi-square 0.079 is more than theo.05.

Therefore, the null hypothesis accepted and it concluded that, there is significant no association between the economic socio conditions of the borrowers and the

Chi- Square result for Age factor and the Impact of Refinance scheme:

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.563ª	3	.056
Likelihood Ratio	7.554	3	.056
Linear-by-Linear Association	3.532	1	.060
N of Valid Cases	80		

- a. 2 cells (25.0%) have expected count less than 5.
- b. The minimum expected count is 1.60.

With regard to the hypothesis 'p' value of chi square 0.056 is more than the 0.05.

Therefore the null hypothesis is accepted and it is concluded that, there is no significant association between the age of the borrowers and the impact of the NABARD refinance scheme

FINDINGS:

The findings of the study indicate that the NABARD refinance scheme has had a noticeable impact on the socio-economic conditions of the farmers involved. A majority of respondents reported that the scheme facilitated the repayment of previous loans, with 57.5% agreeing that it helped them in this regard. Furthermore, 58.75% of the borrowers acknowledged that the refinancing led to the expansion of their economic activities, while 77.5% expressed that their confidence to earn more had increased due to the program. Additionally, about 56.25% of the participants believed that the scheme contributed positively to enhancing their social status. However, despite these positive perceptions, the statistical analysis revealed no significant correlation between the socioeconomic conditions of the borrowers and the impact of the NABARD refinance scheme, as demonstrated by the Chi-square tests. This suggests that while there are qualitative improvements in certain areas, such as loan repayment and

confidence, the overall socio-economic advancement remains unsubstantiated by robust statistical evidence. Moreover, the age factor of the borrowers did not exhibit a significant association with the effects of the refinance scheme, indicating that its impact may be more uniformly distributed

across different age groups among the farmers. Overall, the study highlights the need for continuous improvement and targeted approaches to enhance the benefits derived from such financial programs aimed at supporting rural agricultural development.

CONCLUSION:

The study concludes that while the NABARD refinance scheme has had some positive effects on the socio-economic conditions of farmers, particularly regarding loan repayment, confidence, and social status, these effects are not statistically significant in terms of overall socio-economic improvement. The findings suggest that further enhancements and targeted approaches might be necessary to maximize the benefits for farmers under such refinance schemes. Continued research and data collection may help understand the broader implications and efficacy of financial programs aimed at rural development and agricultural sustainability.

Reference:

- [1] Muneendra, K., & Lakshmi, C. S. (2016). Impact of NABARD's Refinance Operations on the Beneficiaries in Chittoor District of Andhra Pradesh State, India. IOSR Journal of Economics and Finance, 7(4), 49-57.
- [2] Soni, A. K., & Saluja, H. P. (2012). Role of Co-operative Bank in Agricultural Credit: A study based on Chhattisgarh. Abhinav Journal Article, 1(10), 2277-1166.
- [3] Fuster, A., Plosser, M., Schnabl, P., & Vickery, J. (2019). The role of technology in mortgage lending. The Review of Financial Studies, 32(5), 1854-1899.
- [4] Wong, A. (2019). Refinancing and the transmission of monetary policy to consumption. Unpublished manuscript, 20.
- [5] Agarwal, S., Driscoll, J. C., & Laibson, D. I. (2013). Optimal mortgage refinancing: a closed-form solution. Journal of Money, Credit and Banking, 45(4), 591-622.
- [6] Oladipo, F., & Adekunle, O. (2010). Empirical determination of socio-economic status and its relationship with selected characteristics of rural male farmers in Kwara State, Nigeria. A Research Journal of Agriculture and Biological Sciences, 6(1), 64-76.
- [7] Chen, Z., Li, X., & Xia, X. (2022). Socioeconomic status, ambidextrous learning, and farmers' adoption of biological control technology: evidence from 650 kiwifruit growers in China. Pest Management Science, 78(2), 475-487.
- [8] Kouamé, R. M., Guglielmo, F., Abo, K., Ouattara, A. F., Chabi, J., Sedda, L., ... & Edi, C. (2022). Education and Socio-economic status are key factors influencing use of insecticides and malaria knowledge in rural farmers in Southern Côte d'Ivoire. BMC Public Health, 22(1), 2443.
- [9] Dribe, M., Oris, M., & Pozzi, L. (2014). Socioeconomic status and fertility before, during, and after the demographic transition: An introduction. Demographic Research, 31, 161-182.
- [10] Mirza, A. An Overview on Financial Initiatives taken by NABARD for Agriculture and Rural Development in India.
- [11] Boini, S., Guntuku, R., & Kummeta, R. S. A study on the performance of various categories of banks in providing refinance to the agriculture sector in India.
- [12] Shah, B., & Soni, R. (2022). A study on role of NABARD and financial initiatives taken in promoting rural finance in India. Journal of Positive School Psychology, 6(2), 4542-4550.
- [13] Patel, V. C. A Study on Performance of Microfinance Institutions in Gujarat-with special reference to NABARD.
- [14] Selaiyur, C., & Nadu, T. Role of Nabard in Refinancing Agricultural Credit in India.
- [15] Pappas, N. (2016). Marketing strategies, perceived risks, and consumer trust in online buying behaviour. Journal of retailing and consumer services, 29, 92-103.
- [16] Sarker, T. (2024). Impact of Growth & Sustainability of NABARD towards Rural India. International Research Journal on Advanced Engineering and Management, 2(9), 3027–3033.