

An Empirical Investigation on Agriculture Credit System in India with Emphasis on Telangana

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Abstract

Agriculture is the backbone of the Indian economy, and Telangana state is no exception. This study aims to investigate the current state of agriculture in Telangana, exploring the influence on Agricultural Credit on agricultural productivity and sustainability of agricultural practices. Using a mixed-methods approach, combining both qualitative and quantitative data collection and analysis methods, this study examines the perception of farmers towards agriculture loans and impact of literacy on availing agricultural loans in Telangana State. The findings highlight the significant challenges faced by farmers in Telangana, including limited access to credit. This research contributes to the existing literature on Indian agriculture, providing valuable insights into the complexities of agricultural development in Telangana. The study's recommendations offer practical suggestions for policymakers, agricultural officials, and other stakeholders seeking to promote sustainable agricultural development and improve the livelihoods of farmers in Telangana.

Keywords: Agriculture credit, literacy, perception, small and marginal farmers, Telangana state, Agriculture productivity

Introduction

Agriculture plays a crucial role in the Indian economy, significantly contributing to the country's GDP and employing a considerable portion of its labour force. The agricultural sector heavily relies on credit for its sustainability and growth. For most people whose primary source of income is farming, this shows how important it is to have access to credit on time and in sufficient amounts. Telangana, a state in southern India, is renowned for its strong agricultural traditions and expertise in cultivating crops such as rice, cotton, and various horticultural produce. Agricultural credit has significant contribution in the agricultural GDP of the country and also on the agricultural exports from India (Nithin Kn, 2021). The agricultural credit system in India has experienced notable changes throughout its history, as the government has introduced diverse policies and initiatives to enhance farmers' access to credit. Nevertheless, despite the endeavours above, several obstacles continue to endure. These obstacles encompass the scarcity of institutional credit accessibility, a heavy reliance on informal sources, and insufficient financial inclusion in rural regions (Kumar & Kumar, 2018).

Review of Literature

According to Sundaram (2016), India's agricultural credit system has roots in the time before independence. The colonial government introduced cooperative credit societies during this period to offer financial assistance to farmers. Following independence, the government acknowledged the significant importance of credit in advancing agriculture. This recognition resulted in the creation of dedicated organisations like the Agricultural Refinance and Development Corporation (ARDC) in 1963. The primary objective of ARDC was to offer extended-term credit specifically for agricultural endeavours (Chakravarty, 2015).

According to Bhalla (2018), the 1980s saw significant changes in policy, such as implementing the lead bank scheme and creating Regional Rural Banks (RRBs). These initiatives aimed to improve access to credit for rural and agricultural sectors. During the 1990s, a period known as the liberalisation era, significant changes occurred. One notable development was the establishment of the National Bank for Agriculture and Rural Development (NABARD) in 1982. This institution played a vital role in the oversight and financial support of agricultural credit organisations (NABARD, 2020).

Following this, the government introduced initiatives like the Kisan Credit Card (KCC) and the Interest Subvention Scheme to improve farmers' access to credit and ensure that credit is available to them in a timely and affordable manner (Kumar et al., 2019). Nevertheless, despite the endeavours above, the agricultural credit system encounters obstacles, including discrepancies between regions, insufficient institutional backing, and the enduring presence of informal credit sources (Reddy, 2018).

Gaining knowledge about the historical development of the agricultural credit system is crucial for comprehending the present structure and identifying possible avenues for policy improvement. Encouraging sustainable agricultural growth in India will address the ongoing issues in the credit delivery mechanism.

Agricultural Credit Policies and Regulatory Framework in India:

The government's focused endeavours influence the agricultural credit policies in India to encourage comprehensive and sustainable development in the agricultural industry. According to the RBI (2020), the Reserve Bank of India (RBI) and the National Bank for Agriculture and Rural Development (NABARD) have essential responsibilities in developing and executing policies that oversee the allocation of credit to the agricultural industry.

The Priority Sector Lending (PSL) framework, which the RBI introduced, requires commercial banks to dedicate a specific portion of their overall lending to priority sectors such as agriculture. Farmers can access credit at lower interest rates (RBI, 2021). In addition, NABARD offers different refinance schemes and extends financial support to cooperative banks and regional rural banks, promoting the provision of agricultural credit at the local level (NABARD, 2021).

According to the Government of India (GoI, 2018), various initiatives have been implemented to address the issue of agricultural debt among small and marginalised farmers. One such measure is the Agricultural Debt Waiver and Debt Relief Scheme. Its objective is to reduce the financial burden faced by these farmers. The government's dedication to minimising risks and improving agricultural productivity is evident through implementing the Pradhan Mantri Fasal Bima Yojana (PMFBY) and the Soil Health Card Scheme (MoA &FW, 2016).

According to Mishra (2019), ongoing challenges remain despite the efforts made to address them. These challenges include the continued reliance on informal credit sources, limited financial knowledge among farmers, and unequal access to credit across different regions. The need for effective implementation strategies and the importance of ongoing policy reforms are made clear by this.

It is crucial to have a comprehensive understanding of the agricultural credit policies and regulatory framework to evaluate the efficiency of current measures and pinpoint possible areas for policy improvement. In India, this will help make the system for giving loans to farmers more fair and long-lasting.

Specific Agricultural Financial Support schemes in Telangana State:

Telangana, known for its primarily agricultural economy, poses distinct circumstances and challenges in agricultural credit. According to Reddy et al. (2020), agriculture in the state relies heavily on rainfall, which makes it vulnerable to the unpredictable nature of the monsoon. As a

result, it is essential to implement specific strategies to reduce risks and promote sustainable development. Furthermore, the unique challenges presented by the prevalence of small and marginal farmers, along with the dominance of tenant farming, necessitate specific policy interventions (Srinivasulu, 2017).

According to the Government of Telangana (2021), the state government has introduced several programmes to assist farmers, including the Rythu Bandhu Scheme, which offers direct income support, and the Rythu Bhima Scheme, which provides insurance coverage for crop loss and damage. Implementing these programmes has played a significant role in enhancing the economic stability and ability to withstand challenges among agricultural workers in the region.

The Telangana State Cooperative Apex Bank has also provided credit and support services to farmers at the grassroots level. The formation of Farmers' Coordination Committees has also played a significant role in ensuring the efficient delivery of these services (TSCAB, 2021). Nevertheless, the state continues to face obstacles such as limited institutional credit reach, insufficient infrastructure, and the necessity for improved financial literacy among farmers (Kumar & Reddy, 2018).

Gaining a comprehensive understanding of the distinct dynamics and obstacles encountered in Telangana's agricultural industry is essential to creating tailored interventions and policies that promote sustainable agricultural growth and improve the welfare of farmers in the region.

Analysis of Agricultural Credit Accessibility and Utilization in India:

It is crucial to conduct a thorough examination of the accessibility and utilisation of agricultural credit in order to assess the efficiency of the credit delivery system and its influence on the agricultural industry. According to a study by Kumar et al. (2020), small and marginal farmers continue to face difficulties in obtaining formal credit despite the efforts made by the government to improve credit accessibility. As a result, informal sources of credit force these farmers to rely on them, often imposing high interest rates. This reliance on informal credit perpetuates a cycle of debt for these farmers.

In addition, the unequal allocation of recognition among various geographical areas and crop classifications worsens inequalities in agricultural efficiency and financial status (Reddy & Rao, 2016). When considering the influence of credit on agricultural output, it is essential to consider the importance of using credit for productive purposes. According to Mittal and Bhati (2018), studies have shown that adequately using credit to invest in better seeds, fertilisers, and modern agricultural methods can significantly improve agricultural productivity and income.

According to Kumar and Kumar (2019), several obstacles impede the effective utilisation of credit in the agricultural sector. These include the misuse of credit for non-agricultural purposes, limited financial knowledge among farmers, and insufficient mechanisms for monitoring loan repayment. These challenges prevent the agricultural sector from fully benefiting from the potential advantages of credit.

Examining the accessibility and utilisation patterns of agricultural credit in a detailed manner will offer valuable insights into the current gaps and inefficiencies in the credit delivery system. This analysis will help develop specific interventions and policy measures to ensure fair and effective distribution of credit among farmers in India.

Impact of Agricultural Credit on Rural Development:

Sharma and Reddy (2019) stated that agricultural credit is crucial for promoting rural development. It allows farmers to invest in modern inputs, embrace advanced farming methods, and expand their agricultural pursuits. As a result, this leads to improved productivity and higher income levels. Bhattacharya and Narayanan (2018) link the availability of affordable credit provided promptly to

enhancements in farm productivity, more effective management of resources, and an overall improvement in the quality of life in rural areas.

Researchers Rao and Reddy (2018) suggest that agricultural credit positively impacts the rural economy. The reason for this is that it increases the demand for goods and services, creates job opportunities, and contributes to the overall socio-economic development of rural areas. According to Chand et al. (2019), providing credit in the agricultural industry helps advance rural infrastructure, such as irrigation facilities, storage capacities, and market connections. These elements are vital in establishing a sustainable and resilient agricultural system.

The extent to which agricultural credit contributes to rural development hinges on efficiently utilising the credit for productive endeavours. It is also essential to provide additional support services to farmers, such as extension education, market information, and technical assistance (Kumar et al., 2021). Additionally, promoting fair rural development and decreasing income inequalities in rural communities requires ensuring the inclusive distribution of credit to marginalise and smallholder farmers (Reddy & Reddy, 2019).

A comprehensive examination of the effects of agricultural credit on rural development will offer valuable insights into the connections between credit availability, agricultural productivity, and the broader socio-economic transformation of rural regions. The aim is to create targeted policies and interventions that will support the overall growth of rural areas in India.

Research Gap: Very few Studies have been conducted on agriculture credit system in India emphasizing on Telangana State. No study has been emphasized on the problems faced by farmers in accessing agricultural credit in India. Hence, an in-depth study on Perceptions of farmers towards agricultural loans in selected districts of Telangana state is being undertaken.

Importance of the study:

This study an empirical investigation on agricultural Credit System in India, with Emphasis on Telangana State is conducted for investigating the agriculture credit system, Challenges and Constraints in Telangana State. This study suggests some Policy Recommendations and Way Forward in Agricultural credit system in Telangana State.

Objectives:

1. To examine the agricultural credit system in India, specifically emphasis on Telangana.
2. To provide insights into the effectiveness of existing schemes in Telangana State.
3. To know the farmers perception towards Agriculture Loans in the study area.
4. To explore potential areas for improvement in agriculture credit by analysing the Historical evolution, current policies, and challenges associated with the credit system.

Scope of the study:

This research is limited to the Khammam and Bhadradri Kothagudem districts of Telangana state in India.

Data and methodologies: This research study is an empirical research and data have been collected from primary and secondary sources. The primary data has been collected from 200 respondents by using survey method and the data was analyzed using the SPSS .25 version and the data has been analyzed using the chi-square technique. The questions included in the questionnaire are multiple choice and respondents must tick on the proper response. Some responses were collected in terms of likert 5 point scale.

Empirical results

Hypothesis

1. H_0 : There is no significant difference in satisfaction levels concerning Agriculture Loans perceived by farmers in Telangana State.

H_1 : There is a significant difference in satisfaction levels concerning Agriculture Loans perceived by farmers in Telangana state.

Age and Satisfaction Cross tabulation

AGE (Years)	SATISFACTON					Total
	Very much Dissatisfied	Dissatisfied	Neutral	Satisfied	Very much Satisfied	
below 20	7	12	6	5	4	34
20-30	5	7	7	13	12	44
31-40	3	3	11	17	15	49
41-50	9	9	10	13	3	44
above 50	2	9	5	8	5	29
Total	26	40	39	56	39	200

Source: - Compiled from primary Data.

From the above mentioned table there are nearly 200 farmers from different age groups have given their responses on their satisfaction on agriculture credit system in the survey area. It is clearly shows that most of the farmers have satisfaction on agricultural credit.

Chi-Square Tests			
Value		df	Asymptotic Significance (2-sided)
Pearson Chi-Square	30.026 ^a	16	0.018
Likelihood Ratio	32.124	16	0.010
Linear-by-Linear Association	0.172	1	0.678
N of Valid Cases	200		

Compiled from primary Data

The value of chi square statistic is 30.026 in the above table. The p value is 0.018. As it is less than 0.05 hence, it can be concluded that the proposed null hypothesis was rejected and alternative hypothesis is accepted. It is inferred that majority of the younger farmers are satisfied with the present agriculture credit system in Telangana state of India.

Hypothesis 2:

2. H_0 : There is no significant impact of literacy on Obtaining Agriculture credit from Banks

H_1 : There is a significant impact of literacy on Obtaining Agriculture credit from Banks.

Literacy	Agricultural credit					Total
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Illiterate	19	22	10	7	5	63
Primary Education	7	13	8	10	6	44
Secondary Education	3	3	6	17	20	49
Higher Education	6	6	3	17	12	44
Total	35	44	27	51	43	200

Source: - Compiled from primary Data.

From the above Table based on farmers' literacy level, it is strongly agreed by 35 farmers, disagreed by 44 farmers, agreed by 51 farmers and strongly agreed by 43 farmers in obtaining the agriculture credit. We can interpret that mostly educated farmers have an ease in obtaining the agriculture credit from banks.

Chi-Square Tests			
Value		df	Asymptotic Significance (2-sided)
Pearson Chi-Square	50.946 ^a	12	0.000
Likelihood Ratio	53.951	12	0.000
Linear-by-Linear Association	31.176	1	0.000
No of Valid Cases	200		

Compiled from primary Data

The value of chi square statistic is 50.946 in the above table. The p value is 0.00. As it is less than 0.05 hence, it can be concluded that the proposed null hypothesis was rejected and alternative hypothesis is accepted. We can interpret that there is a significant impact of literacy on Obtaining Agriculture Credit from banks.

Challenges and Constraints in the Agricultural Credit System:

Despite numerous initiatives and policies designed to enhance the agricultural credit system in India, several obstacles and limitations continue to hinder the adequate and fair provision of credit to the farming community. According to Mishra (2017), a significant obstacle is the restricted reach of official financial institutions in rural regions. As a result, individuals in these areas heavily depend on informal credit sources, known for their exorbitant interest rates and exploitative lending methods. Moreover, the limited availability of sufficient collateral and the absence of a substantial credit history among small and marginalised farmers serve as additional obstacles that impede their ability to obtain formal credit (Chand et al., 2019).

According to Kumar and Sharma (2020), the convoluted administrative processes and burdensome documentation required to acquire agricultural credit hinder farmers from utilising formal credit services. Furthermore, farmers could enhance the repayment of loans in the agricultural sector by leveraging the seasonal and cyclical nature of farming activities. Financial institutions face a significant challenge, leading to increased delinquency rates and non-performing assets in their agricultural credit portfolio (Singh & Verma, 2018).

Moreover, the insufficient knowledge of financial matters among agricultural workers, along with the absence of familiarity with different credit programmes provided by the government, restricts their capacity to make well-informed choices regarding the use and repayment of credit, intensifying the issue of excessive debt (Sahu & Babu, 2016).

It is essential to comprehend these difficulties and limitations when formulating specific policy interventions and implementing actions that tackle fundamental structural and systemic problems. There will be efficient and fair lending of agricultural credit to all parts of the farming community.

Policy Recommendations and Way Forward:

In India's agricultural credit system, it is essential to change policies, make technological progress, and improve institutions simultaneously to get past the problems and promote fair growth. The analysis of the current agricultural credit landscape forms the basis for the proposed policy recommendations and strategies for the future.

1. **Strengthening Financial Inclusion:** To increase the accessibility of credit for small and marginalized farmers in rural areas, it is recommended to implement strategies that aim to broaden the reach of formal financial institutions. These strategies include the establishment of additional rural branches and the utilization of technology-driven financial services. As suggested by Kumar et al. (2022), this approach seeks to enhance the availability of financial resources for farmers in remote areas.

2. **Enhancing Financial Literacy:** These initiatives aim to empower farmers with the knowledge and skills to make informed decisions regarding credit uptake and repayment (Chand et al., 2020).

3. **Simplifying Credit Procedures:** To enhance accessibility to credit for farmers, particularly during crucial farming seasons, Kumar and Singh (2021) propose simplifying the loan application and approval procedures, thereby minimizing bureaucratic obstacles and paperwork demands.

4. **Diversification of Credit Products:** Singh and Mishra (2019) propose introducing novel credit products designed to cater to the various requirements of farmers. These credit products include crop-specific credit, livestock and farm equipment loans, and climate-resilient agriculture financing options. The aim is to promote sustainable and diversified agricultural practices.

5. **Strengthening Credit Monitoring Mechanisms:** Establish reliable credit monitoring and risk management systems to promote the sustainability of the agricultural credit system and alleviate the impact of non-performing assets on financial institutions. These systems will facilitate prompt loan repayment and minimize the risk of delinquency (Jha et al., 2020).

Our policy suggestions and strategies can help improve India's agricultural credit system. The overall growth of the agricultural sector will be encouraged by fair access to credit for all types of farmers, which will also promote sustainable agricultural practices.

7. Concluding remarks:

The significance of the agricultural credit system in India, particularly in Telangana, cannot be overstated, as it plays a vital role in promoting the sustainable growth of the agricultural sector and the rural economy. Despite the implementation of different initiatives and policy measures aimed at enhancing credit accessibility and improving the well-being of farmers, there are still several obstacles that hinder the efficient provision and utilisation of credit.

The examination of history emphasises the progression of the agricultural credit system, emphasising the noteworthy changes in policies and institutions that aimed to enhance farmers' access to credit. Despite the attempts made, obstacles still hinder the smooth operation of the credit system. These challenges include a need for more extensive institutional outreach, complicated procedures, and insufficient financial literacy.

The agricultural credit landscape in Telangana presents distinct factors that emphasise the necessity for interventions and policies tailored to the local context. These factors include the state's heavy

dependence on rain-fed agriculture and the significant presence of small and marginalised farmers. The state government's efforts, such as the implementation of the Rythu Bandhu Scheme and the establishment of cooperative institutions, have had a significant impact on enhancing farmers' financial security and resilience.

An analysis of accessibility and utilisation has revealed disparities in the distribution of agricultural credit across different regions and crop categories. Targeted interventions are needed to promote fair credit access and maximise its use to boost agricultural productivity.

The agricultural credit sector faces ongoing challenges, such as limited financial inclusion, insufficient collateral, and repayment issues tied to seasons. These obstacles highlight the need for comprehensive policy recommendations and strategies.

By acknowledging these difficulties and implementing the suggested policy suggestions, the agricultural credit system in India, particularly in Telangana, has the potential to serve as a powerful driver for promoting comprehensive and sustainable rural development. Contributing to the overall economic prosperity and welfare of the farming community and rural population will have a positive impact.

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