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A Review Study on The Agricultural Credit and Its Effect on Farmers' Socio-Economic Situation with Special Reference to Paschim Bardhaman District, West Bengal

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ABSTRACT

The socio-economic impact of agricultural financing in Paschim Bardhaman, West Bengal, is anticipated to be positive due to the fact that it is anticipated to enhance farmers' income and productivity. Conversely, many of the region's small and marginal farmers either don't know how to handle money or don't have the necessary knowledge to get loans from official financial institutions. Research indicates that government-supported programs, like Kisan Credit Cards, can enhance access to credit, even though there are still challenges to overcome in terms of lending procedures and outreach. Farmer producer organizations (FPOs), increased agricultural output and diversity, and improved post-harvest infrastructure are crucial to improving farmers' socioeconomic conditions and the local economy. On April 7, 2017, the original Bardhaman district was divided into two parts: Paschim Bardhaman and Purba Bardhaman. This split created Paschim Bardhaman. The new district is centered around the city of Asansol and Durgapur, and it is renowned for its mining and industrial districts. Among other natural resources, the region is rich in water and farmable land. Agricultural finance in Paschim Bardhaman can be obtained from a variety of institutional sources, such as cooperative credit societies, rural banks, and commercial banks. Through the Kisan Credit Card (KCC) program, farmers can get loans for cultivation and post-harvest expenses for both short and medium terms. Government programs to help the district out include the Financial Support Scheme for Farm Mechanization and the assessment of the region's credit capacity by the National Bank for Agriculture and Rural Development (NABARD).

Keyboards: *Farmable, Agricultural, Socioeconomic, Paschim Bardhaman, West Bengal.*

INTRODUCTION

A review study conducted in Paschim Bardhaman that examined the effects of agricultural credit on farmers revealed that, in spite of challenges such as limited access and a lack of financial expertise, the provision of formal credit was essential to the improvement of farmers' economic well-being and productivity. While programs like the Kisan Credit Card scheme and NABARD's backing try to improve the flow of credit, bridging infrastructure gaps and boosting rural prosperity would require a concerted effort from all parties involved. The agricultural potential of the region is impacted by its industrial history and rocky topography. To overcome these unique constraints, a tailored strategy is needed to improve loan flow and empower farmers.

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The agricultural sector has a significant role in the economy of West Bengal. Not only does it help feed a huge and growing population, but it also provides vital inputs to many different types of agro-based enterprises. The agricultural sector employs almost 70% of the labor force in some capacity. The focus of farming has changed from providing food for sustenance to making a profit in the past 30 years. The soils of West Bengal are among the richest in all of India. There is a lot of space for improvement in agricultural output and productivity per hectare and per agricultural worker, particularly on small and marginal farms, to raise incomes and improve the quality of life for rural communities. A large number of scholars have used a variety of methods to evaluate agricultural productivity on a worldwide scale. Thomson (1926) compared "British and Danish Farming" for relative productivity based on gross crop and livestock output.

REVIEW OF LITERATURE

Wang, Yinan, et al. (2023) explored that the increase of farmers' income, and increasing credit availability and maximizing fiscal policy support are essential to achieving this goal. This research proposes a PVAR model based on the panel data of 30 Chinese provinces from 2003 to 2020 to investigate, taking regional heterogeneity into account, the relationship between farmers' income, agricultural credit, and government assistance for agriculture from a dynamic perspective. The results show what factors contributed to the increase in farmers' income. According to the GMM estimate, the positive connection between agricultural credit and fiscal subsidies is stronger. As per the impulse-response function, the positive agricultural credit shock in the eastern region is positively correlated in the short term, but it will have a negative correlation with the long-term fiscal support for agriculture; in the central region, the positive agricultural credit shocks and the fiscal support for agriculture are persistently positively correlated; conversely, there is a consistent negative correlation between fiscal support for agriculture and positive agricultural credit shocks in the western region. According to the variance decomposition, fiscal support for agriculture has a longer-term impact on farmers' income growth than agricultural loans do in the short term. Implementing regionally distinct agricultural credit development strategies, judiciously boosting fiscal support for agriculture, and reforming the system of government subsidies for farmers are among the policy implications for fostering farmers' income growth.

Iqbal Javed et al. (2022) explored that agricultural financing significantly affects agricultural productivity. Credit restrictions should be lowered as much as possible to make loans more accessible to small farmers. This study looks into the factors that influence small farm owners in southern Punjab, Pakistan, to use agricultural loans. For the purpose of gathering data, a sample of 200 small farmers was chosen. Data were gathered using a suitable pretested questionnaire. Convenient sampling techniques were used to do direct interviews in order to obtain data. The district of Multan was chosen from Pakistan's southern Punjab. The impact of different factors on small farm holder’s uptake and utilization of agricultural credit was investigated using a binary logit model. The findings of the binary logit model demonstrated that the variables tenant/owner, family

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size, revenue from agriculture, and farmers' qualifications all positively and greatly affected the utilization of loans for agricultural purposes. Aggregate loans for farmers are significantly and negatively impacted by agricultural land. Based on the study's findings, the government ought to inform small farmers about the advantages of using loans to increase their yield.

Mandal S et al. (2022) stated that the smallholder farmers—those who farm less than two hectares of land—are thought to operate five out of every six farms worldwide and produce more than one-third of the world's food. Research on cropping system intensification and farmer-field interventions could be one approach to enhancing the current cropping systems. Gaining a better understanding of socioeconomic concerns is crucial for implementing new or improved farming systems and raising farmer incomes in the Ganges delta's coastal zone. To determine how feasible the suggested cropping options were for smallholder farmers in the coastal zone, to quantify the benefits resulting from the adoption of new cropping systems, to determine the extent to which those options were socioeconomically suitable for the targeted smallholder farmers, and to pinpoint the critical elements that may be influencing the expanded adoption of the evolved options by a larger group of farmers, a socio-economic evaluation study was conducted. Ninety farmers participated in baseline and end-line surveys, which were carried out both before and after different cropping methods were demonstrated on their farms. By calculating adoption advantages and identifying various adoption barriers, the techno-economic appropriateness of new crops and management methods was assessed. To determine the variables influencing the widespread acceptance of the newly developed or enhanced cropping methods, a behavioral study was conducted. The socioeconomic survey measured the decrease in the rabi (winter/dry) season fallow land by 30–35% and the increase in cropping intensity beyond the baseline level (123–142%). Low-cost drip irrigation and mulching, zero-tillage (ZT) potato with straw mulching, enhancing soil quality with lime and green manuring, and vegetable-based cropping systems interventions were found to be farmers' preferred interventions. Despite the advantageous economics of the developed cropping systems, the primary reasons influencing the widespread adoption of new systems were the accessibility of freshwater stored in ponds and canals, as well as the revenue generated by the farm.

Vinod Kumar (2021) stated that agricultural credit is not an input in and of itself, but it does aid in fostering an atmosphere that supports the adoption of cutting-edge production technologies and encourages private investments on farms. Making loans available to agriculture involves a vast number of institutional bodies. A number of policy initiatives have been launched by the Indian government, Reserve Bank of India, and National Bank for Agricultural and Rural Development (NABARD) to increase farmers' access to institutional loan sources. Agribusiness loan disbursement nationwide increased from Rs. 46268 crores in 1999–2000 to Rs. 1392729 crores in 2019–20 at a compound annual growth rate (CAGR) of 19.81 percent, and in West Bengal, it increased from Rs. 29056 crores in 2008–09 to Rs. 117444 crores in 2019–20 at a CAGR of 15.96 percent, thanks to the proactive policies. According to the per hectare loan flow, West Bengal experienced a remarkable rise, rising from Rs. 15431 in 2011–12 to Rs. 43718 in 2019–20. The range of Rs. 13862 per hectare

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in Banda district to Rs. 186787 per hectare in Meerut district, however, shows that there are significant inter-district differences. Out of the 75 districts, only 34 had credit flow per acre that was higher than the state average. Consequently, the ways in which rural banks give loans to farmers vary greatly within the state's regions. Moreover, policymakers should give it consideration in order to reduce regional and inter-district inequities. The Gross District Domestic Product (GDDP) to Agricultural Credit Ratio (Agriculture) ranged from 4.14 percent in Sant Ravidas Nagar to 125.53 percent in Gautam Budh Nagar district. The state's ratio is 14.20 percent, while the national average is 46.73 percent. 46 districts have lower agricultural loan-to-GDDP ratios than the state average, despite 29 districts having higher ratios than the state average. The credit-to-deposit (C-D) ratio ranged from 20.11 percent in the district of Azamgarh to 88 percent in the district of Sambhal. The state-wide ratio is 51.60 percent. 37 districts had a C-D ratio that was lower than the state average. To achieve sustained agricultural growth and make a greater contribution to the state's goal of becoming an Aatma Nirbhar Bharat, more agricultural credit flow is required in the credit-starved districts and areas of the state (Bundelkhand and the Eastern Region). The study comes to the conclusion that better-off agricultural households are favored within the same region and have greater access to and distribution of agricultural loans.

Chandio, A.A. et al. (2021), formal credit is crucial for the growth of the agriculture industry in emerging nations. It raises the purchasing power of farmers so they can invest in higher-quality farm inputs and agricultural technologies to produce more crops. This study's primary goal is to investigate how smallholder farmers' socioeconomic variables affect the demand for credit in Sindh, Pakistan. Examined is a cross-sectional data collection that was chosen at random from 90 smallholder farmers in Pakistan's Sindh district of Thatta. Correlation, the OLS regression approach, and descriptive statistics were employed to illustrate the key elements influencing the demand for formal credit. The desire for formal credit was positively and significantly influenced by landholding size, road access, formal education, agricultural experience, and extension contacts, according to the findings. This study is the first of its kind to examine the relationship between smallholder farmers' varying socioeconomic characteristics and the frequency with which they require formal loans in Sindh, Pakistan, according to the authors. It also serves as an example of a vital contribution to the literature on the need for increased agricultural output and the availability of financing.

Amit Kundu and Sangita Das (2021), Landless and nearly landless agricultural labor households continue to encounter obstacles when attempting to obtain official credit services, even after significant structural reforms to the Indian credit sector. This research looks at potential elements that may affect agricultural labor households' ability to obtain institutional credit and how important it is to their means of subsistence. The study, which is based on a field investigation conducted at the village level in the East Medinipur district of West Bengal, reveals that the possession of operational land, SHG membership, these households have a lot better probability of getting institutional credit if they have a higher financial literacy index, a diverse income from farms and other sources, and a varied source of income overall. Using a two-stage least squares technique, the study also

demonstrates that agricultural labour households can increase their monthly per capita income by utilizing loans from both institutional and non-institutional sources for income-generating activities. Researchers found that agricultural labour households were more likely to have an improvement in living conditions when the head of home was younger and when they relied less on informal financing.

Maria Shabir et al. (2020), Pakistan's economy heavily depends on agriculture, which generates jobs, GDP, and export revenue, among other things. Over the last several decades, due to restructuring in the agriculture sector, the financial demands of farmers have increased dramatically. It is believed that credit has a major influence in boosting farmers' production and revenue. In the Sargodha District, this research aims to find out what effect credit has on grain output. Borrowers in this study are farmers from the Sargodha district, and the research also delves into their primary credit providers and their lending objectives. The source data used in this study came from eight villages in Pakistan's Sargodha district in the Punjab province in 2018. Two villages were selected from each of the four zones that made up the area. Each hamlet had the same number of beneficiaries chosen—ten in total. Consequently, 160 farmers were included in the sample size. We ran a CDPF (Cobb Douglas Production Function) on the numbers. Lending money increases wheat yields, according to the findings. Seventy percent of borrowers use their loans on things like weddings, tractors, and acreage, while just thirty percent use them to purchase crops and fertilizer. Similarly, Zarai Tarqiati Bank Limited (ZTBL) lends money to 80% of the people that need it. It is advised that the financial institution increase the amount of credit available only to farmers who operate agricultural businesses. Reducing credit limits is also a reasonable way to make loans more accessible to smallholders.

Goswami R. et al, (2014) explored that identifying and characterizing farming systems in order to intervene with technology accurately and well-informed policy assistance since it simplifies the vast range of farm types found in complex agro-ecosystems. There are many different scenarios where multivariate statistical methods, such as principal component analysis (PCA) and cluster analysis (CA), can be applied in relation to agricultural typology delineation. The current study, which was carried out in India's salty coastal regions, clearly demonstrated the value of this methodology in identifying and characterizing the most common types of farms. A questionnaire study of 144 farm households yielded data that allowed for the identification of four main farm types, each with a particular resource base and revenue source. The study's methodological perspective could be useful for decision assistance in the field of extension. Contrarily, a differentiated, holistic, and broadly applicable extension intervention is necessary to address the needs of these identified farm types. This would result in lower transaction costs for the systems of agricultural research and extension in India's varied ecosystems and in many other developing nations with comparable circumstances.

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Muhammad Nouman et al, (2013) discovered that the goal of this study is to ascertain whether and to what extent the socioeconomic characteristics of Pakistani farmers impact their access to agricultural loans. A structured questionnaire was utilized to gather data from a sample of eighty official agricultural credit beneficiaries in the district Swabi in Khyber Pahktunkhwa province. Different socio-economic characteristics of the agricultural credit borrowers, such as age, marital status, education, number of dependents, other occupations, farm size, farm status, tenancy status, farming experience, income from farming, and income from other occupations, are used as independent variables, while the amount of credit borrowed by the farmers is used as the dependent variable. The data was analyzed using the Ordered Logit Model due to the categorical nature of the dependent variable. According to the findings, farmers' educational attainment, farm size, farm status, and marital status have a significant impact on the amount of agricultural credit they can borrow.

Kolade Kamilu Bolarinwa and E. O. Fakoya (2011), This study is necessary since farmers' productivity is falling because they do not have enough money to increase their produce. A total of 250 randomly chosen farmers from Ogun State, Nigeria, provided information. Farmers were divided into credit beneficiaries and non-beneficiaries based on a stratified system. About 40% of recipients obtain loans from formal credit institutions, while the remaining 80% obtain loans from informal credit institutions, indicating a deficiency in formal credit institution lending. Beneficiaries reported producing 80,000 tons more cocoa than non-credit beneficiaries, who produced 21,000 tons less. In contrast to 10.4% of on-beneficiaries, 28% of beneficiaries recoded higher mean incomes of between N 21,000 and $50,000. Compared to 10.4% of on-beneficiaries in the same category, 54.1% of beneficiaries had a higher socioeconomic standing. The performance of farm production activities was positively and significantly correlated with getting credit for the level of crop output ($r = 0.382$), adopting new technologies ($r = 0.490$), and processing, storing, and using crops properly ($r = 0.224$). Loans to farmers may raise their socioeconomic standing, according to the study's authors, who also called for further farm-level research to help farmers reap the benefits.

Anjani Kumar et al. (2011), In India, credit has shown to be an effective tool for rural development and a crucial element in agriculture. The first formal institutions to provide loans to citizens were cooperative credit societies, which were formed in 1904 system for agriculture; however, these societies' capacity to provide farmers with the finance they needed was constrained. Consequently, the farming community's full credit needs had to be met through unofficial money-lending sources. The All-India Rural Credit Survey Committee's recommendations really laid the groundwork for the institutional framework that will support the nation's sound credit delivery system, which will finance agriculture and related industries. Together, these numerous organizations—which include self-help groups, commercial banks, cooperative banks, RRBs (regional rural banks), non-banking financial institutions, and micro financial institutions—make up the Indian institutional rural credit delivery system.

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Amit Kundu and Suranjana Mitra (2010) Determining the efficacy of the Primary Agricultural Credit Society's group lending-based microfinance program in enhancing the economic status of rural participants in two blocks of the Hooghly district in West Bengal is the primary objective of the study, which is being investigated. Using longitudinal data, we have examined the difference-in-difference and first-difference methods for this impact study. This approach is used to reduce the potential for selection bias in the sample selection process. A field survey revealed that very few marginal farmers have used their groups' credit for agricultural purposes. The findings show that, despite low loan interest rates, high group payback rates, and small self-help group sizes, the microfinance program has not significantly improved the outcome variables among the member households. The lack of skill-based training programs and insufficient marketing resources are the reasons for the failure of self-help groups to sell and promote their members' handmade items. The members' ability to safeguard themselves against professional money lenders who impose excessive interest rates is the only benefit.

The provision of agricultural financing is an essential component in the process of rural development and the improvement of the living conditions of farmers. When farmers have access to sufficient and timely finance, they have the ability to increase their yields by utilizing cutting-edge irrigation systems, seeds, fertilizers, and equipment of the highest possible quality. Not only does credit influence the output of farmers' farms, but it also influences the farmers' general socioeconomic condition. Some of these components include personal agency, access to healthcare, educational attainment, financial security, and a level of living that is satisfactory to the individual.

CONCLUSION

Agricultural finance is an essential development tool in Paschim Bardhaman, not just a financial input. When used wisely and fairly, it may empower farmers, lessen reliance on exploitative sources, and encourage inclusive rural development. The district's farming community will be most affected socioeconomically if institutional processes are strengthened and access hurdles are removed.

Therefore, even if agricultural financing has improved farmers' livelihoods in Paschim Bardhaman, its effects are still not uniform. Policies must concentrate on expanding the availability of institutional credit, streamlining loan processes, coordinating credit delivery with crop cycles, and bolstering the function of microfinance institutions, cooperatives, and self-help groups if credit is to be a genuine tool of socioeconomic transformation. Furthermore, combining lending with market assistance, crop insurance, and extension services would guarantee that loans are used effectively and risks are kept to a minimum.

REFERENCES

1. Amit Kundu, Suranjana Mitra (2010). Group Lending Scheme Operating Through Primary Agricultural Credit Society: A Critical Assessment, Munich Personal RePEc Archive, pp. 1.
2. Anjani Kumar et al. (2011). Financial Innovation in Indian Agricultural Credit Market: Progress and Performance of Kisan Credit Card, Ind. Jn. of Agri. Econ., 66 (3): 418-428.

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3. Chandio, A.A., Jiang, Y., Rehman, A., Twumasi, M.A., Pathan, A.G. and Mohsin, M. (2021), "Determinants of demand for credit by smallholder farmers': a farm level analysis based on survey in Sindh, Pakistan", Journal of Asian Business and Economic Studies, Vol. 28 No. 3, pp. 225-240.
4. Goswami, R., Chatterjee, S. & Prasad, B (2014). Farm types and their economic characterization in complex agro-ecosystems for informed extension intervention: study from coastal West Bengal, India. Agric Econ 2, 5.
5. Iqbal Javed, Mudassar Yasin, Muhammad M. Hayat, Manzoor Raza, Shahbaz Ahmad, Durdana Q. Gilani (2022). J. S. Asian Stud. 10 (03): 307-315.
6. Kolade Kamilu Bolarinwa & E. O. Fakoya (2011). Impact of Farm Credit on Farmers Socio-economic Status in Ogun State Nigeria, Journal of Social Sciences, 26:1, 67-71,
7. Mandal S, Sarangi SK, Mainuddin M, Mahanta KK, Mandal UK, Burman D, Digar S, Sharma PC and Maji B (2022) Cropping system intensification for smallholder farmers in coastal zone of West Bengal, India: A socio-economic evaluation. Front. Sustain. Food Syst. 6:1001367.
8. Maria Shabir, Kashif Amin, Awis Muhammad, Junaid Ahmad (2020). Impact of Agricultural Credit on Cereal Productivity: Case Study of District Sargodha, Punjab Pakistan, Theoretical Economics Letters, 10(3): 481-487.
9. Muhammad Nouman, Muhammad Fahad Siddiqi, Syed Mohammad Asim, Zahid Hussain (2013). Impact of Socio-Economic Characteristics of Farmers on Access to Agricultural Credit, Sarhad J. Agric., 29 (3): 469-476.
10. Vinod Kumar (2021). Trends and Patterns in Agriculture Credit in India: A District Level Analysis of Uttar Pradesh, National Bank for Agriculture and Rural Development, I: 3-28.
11. Wang, Yinan, Yujie Xu, and Wenhui Chen. (2023). Study on the Relationship between Agricultural Credit, Fiscal Support, and Farmers' Income—Empirical Analysis Based on the PVAR Model, Sustainability 15(4): 3173. https://doi.org/10.3390/su15043173.