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A STUDY ON IMPACT OF AGRICULTURAL LOANS AND ADVANCES ON BANKS PROFITABILITY KOTAK BANK

[1] RANGINENI NIKITHA, [2] K. SRUJITHA

[1]Student, [2]Assistant Professor, Department of MBA, TEEGALA KRISHNA REDDY ENGINEERING COLLEGE, MEDBOWLI, MEERPET, BALAPUR, HYDERABAD, TELANGANA-500097

ABSTRACT

Agricultural finance plays a crucial role in promoting rural development, enhancing agricultural productivity, and ensuring economic sustainability. Commercial banks contribute significantly to the agricultural sector by providing various forms of credit and financial assistance to farmers and agribusiness enterprises. This study examines the impact of agricultural loans and advances on the profitability of Kotak Mahindra Bank, with a focus on understanding how agricultural lending influences financial performance. Agricultural loans are provided for crop cultivation, irrigation facilities, farm mechanization, dairy farming, horticulture, and infrastructure development. While these loans support agricultural growth and financial inclusion, they also expose banks to risks such as loan defaults, climatic uncertainties, market fluctuations, and non-performing assets (NPAs). The study evaluates the relationship between agricultural credit disbursement and profitability indicators such as Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), and overall revenue generation. A mixed-method research approach has been adopted by utilizing both primary and secondary data sources. Secondary data were collected from annual reports, banking publications, and financial statements, while primary data were gathered through structured questionnaires and discussions with banking personnel and customers. The findings reveal that agricultural loans contribute positively to the bank's interest income and customer base expansion while supporting rural economic development. However, profitability is influenced by effective risk management practices, loan recovery mechanisms, and government support policies. The study concludes that a balanced agricultural lending strategy, supported by technological innovations and robust credit assessment mechanisms, can enhance both financial performance and social responsibility. The research provides valuable insights for policymakers, banking professionals, and financial institutions seeking to improve agricultural financing while maintaining sustainable profitability.

Keywords: Agricultural Loans, Bank Profitability, Kotak Mahindra Bank, Agricultural Finance, Rural Development, Credit Risk, Non-Performing Assets, Financial Performance.

I. INTRODUCTION

Agriculture remains one of the most significant sectors of the Indian economy, contributing substantially to employment generation, food security, and rural development. Agricultural finance has emerged as a critical instrument for supporting farmers by providing access to capital required for cultivation, mechanization, irrigation, infrastructure development, and adoption of advanced farming technologies [1]. The availability of institutional credit has improved agricultural productivity and strengthened rural livelihoods [2]. Commercial banks play a vital role in extending financial support to the agricultural sector through crop loans, farm equipment

financing, and allied agricultural activities [3]. Agricultural lending contributes to financial inclusion by integrating rural populations into the formal banking system [4]. Government initiatives and priority sector lending norms have further encouraged banks to expand agricultural credit portfolios [5]. The growth of agricultural finance has enhanced farmers' capacity to invest in productive assets and mitigate operational risks [6]. Access to timely credit improves farm efficiency and income generation [7]. Agricultural loans also facilitate technology adoption and infrastructure development [8]. The expansion of institutional lending has reduced dependence on informal credit sources [9]. Furthermore, agricultural finance supports sustainable farming practices and rural entrepreneurship [10]. The relationship between agricultural credit and economic development has been widely acknowledged in banking and finance literature [11]. Agricultural financing contributes to employment generation and poverty reduction [12]. It strengthens supply chains and enhances agricultural value creation [13]. The increasing emphasis on digital banking has further improved accessibility to agricultural loans [14]. Financial institutions continuously develop innovative products to cater to evolving agricultural needs [15].

Kotak Mahindra Bank has emerged as one of India's leading private sector banks, offering diversified financial products and services, including agricultural loans and advances [16]. The bank provides specialized agricultural credit facilities such as crop loans, Kisan Credit Cards, irrigation loans, and agricultural infrastructure financing [17]. These financial products are designed to support farmers while contributing to the bank's revenue generation [18]. Agricultural loans create opportunities for interest income and customer acquisition [19]. However, they also expose banks to risks associated with climatic uncertainties, repayment delays, and market volatility [20]. Effective credit assessment and monitoring systems are therefore essential for maintaining profitability [21]. Profitability indicators such as Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM) are commonly used to evaluate banking performance [22]. Agricultural lending can positively influence these indicators when managed efficiently [23]. Loan diversification strategies help reduce concentration risks [24]. Government subsidies and interest concessions further support agricultural financing activities [25]. The performance of agricultural loan portfolios significantly affects overall banking stability [26]. Sound risk management practices contribute to improved loan recovery rates [27]. Digital banking solutions have strengthened customer engagement and service delivery in rural areas [28]. Agricultural financing also supports broader socio-economic objectives such as financial inclusion and rural development [29]. Therefore, understanding the impact of agricultural loans on bank profitability is essential for developing sustainable banking strategies and enhancing long-term financial performance [30].

II. LITERATURE REVIEW

Several researchers have examined the relationship between agricultural credit and banking performance. Agricultural finance has been identified as a major catalyst for improving agricultural productivity and rural economic development [1]. Studies indicate that institutional credit enables farmers to invest in modern farming technologies and improve operational efficiency [2]. Researchers have reported a positive association between agricultural lending and farm income growth [3]. Agricultural loans facilitate access to quality inputs, thereby enhancing productivity levels [4]. The role of commercial banks in promoting rural development through agricultural financing has been extensively highlighted [5]. Studies reveal that agricultural credit contributes

significantly to financial inclusion and economic empowerment [6]. Research findings indicate that effective credit allocation enhances agricultural output and rural employment generation [7]. Agricultural financing also supports risk mitigation through crop diversification and insurance mechanisms [8]. Several scholars have emphasized the importance of government-backed agricultural lending programs [9]. Financial institutions have increasingly adopted technology-driven lending practices to improve accessibility and efficiency [10]. Researchers have identified loan recovery performance as a critical determinant of banking profitability [11]. Agricultural credit portfolios require effective monitoring and evaluation mechanisms [12]. Studies have found that prudent lending policies reduce default risks and improve financial sustainability [13]. The relationship between agricultural lending and customer retention has also been widely recognized [14]. Agricultural finance contributes to strengthening rural banking networks and market integration [15].

Recent studies have focused on evaluating the impact of agricultural loans on the profitability of commercial banks. Empirical investigations suggest that agricultural lending positively affects interest income and revenue diversification [16]. Researchers have reported improvements in Return on Assets and Return on Equity resulting from effective agricultural credit management [17]. Several studies indicate that agricultural loans contribute to long-term customer relationships and business growth [18]. However, agricultural financing is often associated with higher credit risks due to weather uncertainties and market fluctuations [19]. Non-performing assets remain a significant challenge in agricultural loan portfolios [20]. Researchers have emphasized the importance of robust risk management frameworks in minimizing loan defaults [21]. Studies reveal that technological innovations improve credit appraisal and monitoring processes [22]. Digital banking platforms have enhanced accessibility to agricultural finance services [23]. Government subsidies and interest support schemes play a crucial role in maintaining loan affordability [24]. Scholars have highlighted the need for balanced lending strategies to ensure both profitability and social responsibility [25]. Comparative studies among Indian banks indicate variations in agricultural loan performance based on institutional policies [26]. Effective portfolio diversification has been found to enhance financial resilience [27]. Sustainable agricultural lending practices contribute to economic stability and rural prosperity [28]. Recent research supports the integration of data analytics and artificial intelligence in agricultural credit assessment [29]. Overall, the literature confirms that agricultural loans can significantly contribute to bank profitability when supported by sound credit management practices and effective regulatory frameworks [30].

III. RESEARCH METHODOLOGY

The present study adopts a descriptive and analytical research design to examine the impact of agricultural loans and advances on the profitability of Kotak Mahindra Bank. A mixed-method approach has been employed to collect and analyze both quantitative and qualitative data. Primary data were collected through structured questionnaires, interviews, and discussions with bank officials, agricultural loan beneficiaries, and customers. Secondary data were gathered from annual reports of Kotak Mahindra Bank, Reserve Bank of India publications, research journals, government reports, books, and banking websites. The study focuses on agricultural loan products such as crop loans, Kisan Credit Card loans, irrigation loans, dairy and animal husbandry loans,

equipment loans, and agricultural infrastructure loans. The study period covers five years from 2019 to 2024 to ensure comprehensive evaluation of agricultural lending trends and profitability indicators.

The collected data were classified, tabulated, and analyzed using descriptive statistical techniques such as percentages, averages, trend analysis, and comparative analysis. Financial performance indicators including Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), loan recovery rate, and Non-Performing Assets (NPAs) were considered to assess profitability. Graphical representations and tables were used to facilitate interpretation of findings. Qualitative information obtained from respondents was analyzed to understand challenges, opportunities, and perceptions related to agricultural lending. The methodology provides a comprehensive framework for evaluating the contribution of agricultural loans to profitability while identifying factors affecting loan performance and risk management effectiveness.

IV. RESULTS & DISCUSSION

The analysis indicates that agricultural loans and advances contribute significantly to the profitability of Kotak Mahindra Bank. Crop loans, Kisan Credit Card loans, irrigation loans, equipment loans, and dairy farming loans have expanded the bank's rural customer base and generated substantial interest income. The study reveals that marginal and small farmers constitute the largest share of agricultural loan beneficiaries, demonstrating the bank's commitment to financial inclusion and rural development. Women farmers also benefit from concessional interest rates and subsidy support, promoting inclusive growth. The agricultural loan portfolio has positively influenced revenue generation through increased loan disbursements and customer engagement. Loan diversification across various agricultural activities has helped the bank spread risk while maintaining a stable income stream. Government subsidies and support schemes have further improved credit accessibility and repayment capacity among borrowers.

CATEGORY O FARMER	UMBER OF FARMERS	LOAN AMOUNT (IN	INTEREST RATE (%)	SUBSIDY AMOUNT (IN
Small Farmers	1,500	10,00,000	4.5%	1,00,000
Marginal Farmers	3,000	15,00,000	4.0%	2,00,000
Large Farmers	500	20,00,000	6.0%	1,50,000
Women Farmers	1,200	12,00,000	3.5%	1,20,000

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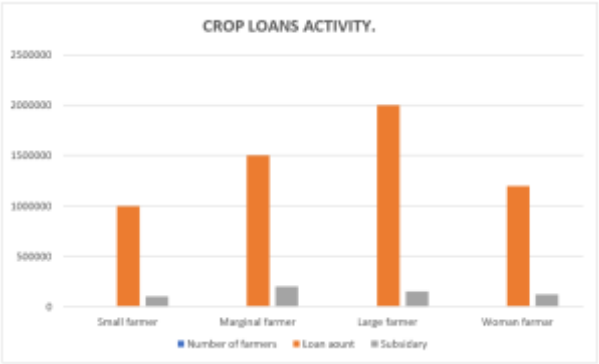

ATEGORY OF FARMER	UMBER OF FARMERS	N AMOUNT (INR)	REST RATE (%)	IDY AMOUNT (INR)
Small Farmers	1,500	15,00,00,000	4.5%	1,50,000
Marginal Farmers	3,000	15,00,00,000	4.0%	2,00,000
Large Farmers	500	6,00,00,000	6.0%	1,50,000
Women Farmer	1,200	10,80,00,000	3.5%	1,20,000

However, agricultural lending is associated with several operational and financial challenges. Climatic uncertainties, fluctuating market prices, and crop failures contribute to repayment delays and non-performing assets. The findings suggest that effective credit appraisal, continuous monitoring, and timely recovery mechanisms are essential for maintaining profitability. Technological innovations, including digital banking services and data-driven credit assessment tools, have enhanced operational efficiency and customer satisfaction. The study also highlights the importance of balancing profitability objectives with social responsibility. Banks that adopt robust risk management practices and customer-centric lending strategies achieve better financial performance and portfolio quality. Overall, the results confirm that agricultural loans positively affect bank profitability when supported by sound lending policies, government assistance, and effective risk mitigation measures.

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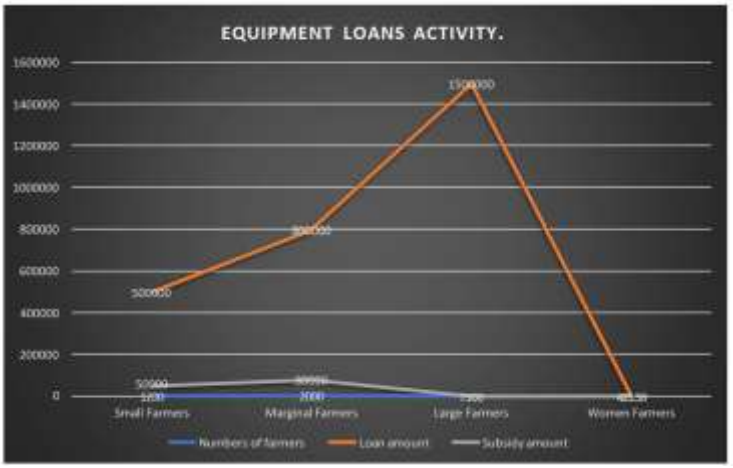
ATEGORY OF FARMER	UMBER OF FARMERS	N AMOUNT (INR)	INTEREST RATE (%)	IDY AMOUNT (INR)
Small Farmers	1,200	7,00,000	4.5%	70,000
Marginal Farmers	2,500	10,00,000	4.0%	1,00,000
Large Farmers	600	15,00,000	5.5%	1,20,000
Women Farmer	1,000	8,00,000	3.5%	80,000

CATEGORY OF FARMER	NUMBER OF FARMERS	LOAN AMOUN (INR)	INTEREST RATE (%)	SUBSIDY AMOUNT (INR)
Small Farmers	1,200	5,00,000	5.5%	50,000
Marginal Farmers	2,000	8,00,000	5.0%	80,000
Large Farmers	700	15,00,000	6.5%	1,20,000
Women Farmers	1,000	6,00,000	4.5%	60,000



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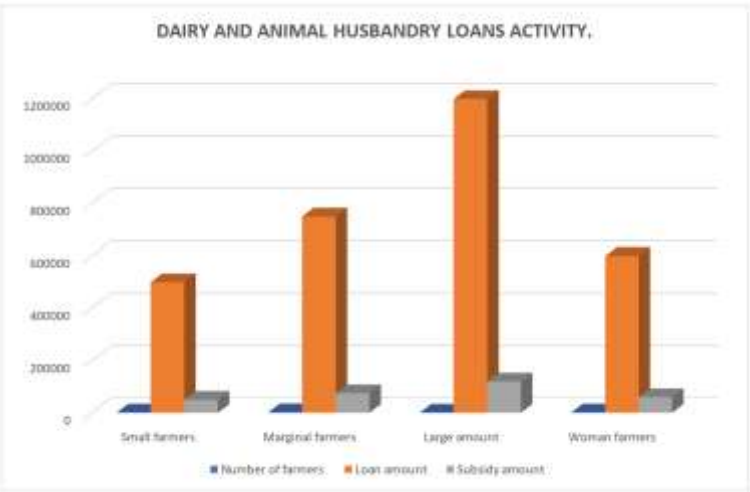
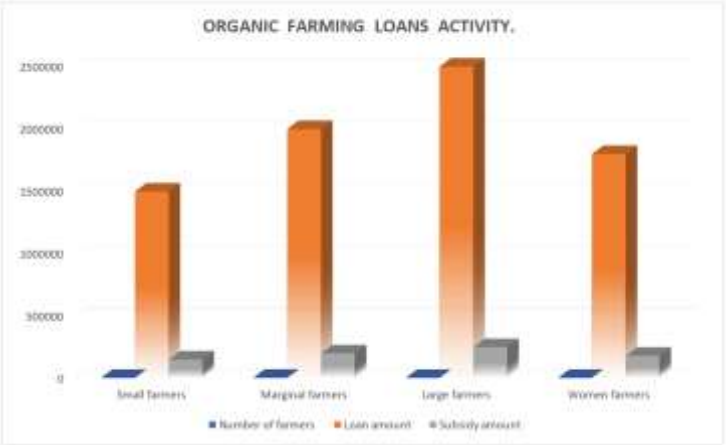


TEGORY OF FARMER	UMBER OF FARMERS	N AMOUNT (IN	REST RATE (%)	SUBSIDY AMOUNT (INR)
Small Farmers	1,200	15,00,000	4.5%	1,50,0
Marginal Farmers	2,500	20,00,000	4.0%	2,00,0
Large Farmers	600	25,00,000	5.0%	2,50,000

CHART SHOWING ORGANIC FARMING LOANS ACTIVITY.



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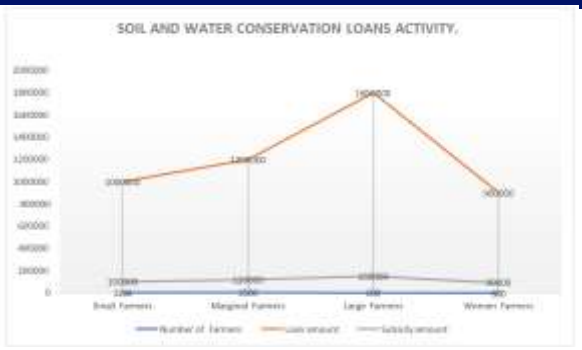

V. CONCLUSION

The study concludes that agricultural loans and advances play a significant role in enhancing the profitability and sustainability of Kotak Mahindra Bank while simultaneously contributing to rural development and financial inclusion. Agricultural financing supports farmers by providing timely access to credit for crop cultivation, irrigation, farm mechanization, livestock development, and infrastructure creation. The findings demonstrate that agricultural lending generates substantial interest income, strengthens customer relationships, and expands the bank's presence in rural markets. At the same time, agricultural loans involve inherent risks arising from weather conditions, market volatility, and repayment uncertainties. Therefore, maintaining profitability requires effective credit assessment, monitoring systems, and recovery strategies. Government support through subsidies, interest concessions, and priority sector lending policies further enhances the effectiveness of agricultural finance. The adoption of digital banking technologies and advanced risk management practices has improved operational efficiency and customer service delivery. The study emphasizes that a balanced approach combining profitability objectives with social responsibility is essential for long-term success. Sustainable agricultural lending practices not only improve financial performance but also contribute to economic development, employment generation, and food security. Therefore, Kotak Mahindra Bank should continue strengthening its agricultural loan portfolio through innovative financial products, technology-driven solutions, and customer-focused services. Such initiatives will enable the bank to achieve sustainable growth while supporting the broader objectives of agricultural and rural development.

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