

Impact of Regional Rural Bank Mergers in Odisha on Service Quality and Consumer Satisfaction: A Post-Merger Multidimensional Study

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ABSTRACT

The consolidation of Regional Rural Banks (RRBs) in Odisha is a significant reform exercise aimed at enhancing efficiency, sustainability, technology development, and service delivery in the rural banking sector. This study will explore issues surrounding the consolidated firms, their opportunities, and impacts of the consolidation on consumer satisfaction with regard to services offered by the RRBs in Odisha. This study will examine some of the key variables such as integration, employee adaptation, accessibility to e-banking, financial performance, customer relationship management, and service efficiency after consolidation. The study employed a descriptive and analytical research design with both primary and secondary sources of data used in the investigation. The primary data for the study was obtained through structured questionnaires and interviews administered to 420 consumers and 110 RRB employees from selected merged branches in Odisha. Percentage analysis, mean score analysis, correlation analysis, and regression methods were used to analyze data. From the findings, it can be seen that about 68% of customers improved on the level of access to banks, whereas 72% improved on the level of digital banking services after the merger of the institutions. The results of the survey indicate that 64% of respondents are satisfied with the quality of services received, especially transaction time, access to ATMs and online services. Some of the challenges that were encountered post-merger include overload of employees by 58%, disruption of service delivery by 47%, problems adapting technology in rural locations by 52%, and communication gaps between managers and customers by 41%. In terms of financial performance, there was an improvement by 21% in terms of productivity of branches after the merger process, while non-performing asset management performance improved by 17%. From this study, it is clear that mergers have brought significant changes to the operations and service delivery of RRBs. However, there are some infrastructural and managerial challenges that remain with the mergers, affecting rural banking in the state of Odisha in particular. Based on the study, it can be recommended to improve digital literacy and training of employees, as well as the infrastructure of rural banking and implement customer-focused strategies.

Keywords: Regional Rural Banks (RRBs), Odisha, Bank Mergers, Consumer Satisfaction, Service Quality, Rural Banking, Financial Inclusion, Post-Merger Challenges, Banking Efficiency, Digital Banking, Customer Service, Rural Development

INTRODUCTION

The Regional Rural Banks (RRBs) were set up in India in 1975 to meet the credit needs of the rural people, specifically small and marginal farmers, agricultural laborers, artisans and weaker sections of the society at affordable and institutional rates. These banks were established to reduce the financial divide between the commercial banking institutions and rural communities, and to facilitate financial inclusion and rural development. RRBs have been instrumental in enhancing the financial system in the rural areas over the decades which includes agricultural credit

support, microfinance programs, promotion of rural entrepreneurship and employment generation etc. (Sivaprasad, 1983; Kalra & Singh, 2000; Sidhu & Gill, 2006). Although many RRBs were contributing to their development, they were also plagued by various operational inefficiencies, low profitability, high non-performing assets ratio, inadequate technological infrastructure, and governance issues that were hampering their sustainability and outreach (Ahmed, 2015; Gadhavi & Vekariya, 2014; Bharti & Kumari, 2022). The Government of India initiated a consolidation and merger strategy for RRBs across various states including Odisha with the expectation of achieving economies of scale, improving financial strength, technological modernization and better customer service delivery, to overcome these structural weaknesses and improve operational efficiency (Veerakumar & Suresh, 2017; Kalshetty et al., 2020). Global and National Banking reforms of RRB merger and restructuring have proved significant banking reform strategy to enhance the institutional performance and competitiveness. The typical reason for mergers is to boost capital adequacy, expand branch networks, streamline operational expenses, and boost managerial efficiency (Amel-Zadeh & Meeks, 2020; Caiazza et al., 2021). The amalgamation of RRBs was to establish robust rural financial institutions that could effectively address the evolving needs of digital banking, agricultural finance, and inclusive rural development in the Indian context (Bhandari & Basu, 2023; Yadav et al., 2023). It is believed that the productivity, profitability, technology adoption and customer reach of post-merger institutions improves in the initial period, but this could be hampered by problems with integration during transition (Mahamuni et al., 2023; Mehta et al., 2024). The study on banking mergers also highlights that a proper governance plan, leadership practices, and managerial approaches that focus on sustainability are essential to achieving successful post-merger results (Azhar et al., 2025; Munjal & Sharma, 2024; Gupta et al., 2025). The integration of RRBs in Odisha was anticipated to lead to better penetration of banking services in rural areas and enhance financial inclusion by providing banking services to non-banked regions. In today's financial landscape, customer satisfaction and service quality are essential factors influencing bank performance. Customers in villages are not only looking for efficient banking operations, but also for digital banking, responsive customer service, transparency in communication, and reliable banking services. Research on rural banks shows that there is a strong relationship between customer satisfaction and service reliability, transaction efficiency, the use of technology, and the responsiveness of the staff (Megicks et al., 2005; Yadav et al., 2024). The post-merger changes in RRBs manifest in several ways such as changes in branch operations, the use of technology platforms, the restructuring of staffing, and service delivery mechanisms, which directly impact rural consumers' banking experience, thus influencing their perceptions of the banks (Khan et al., 2025; Bharti & Kumari, 2022). While mergers can offer benefits in terms of efficiency and financial stability for banks, they can also bring about temporary disruptions, including delays in transactions, communication challenges, employee stress, and issues with integrating new digital systems (Elhajji & Mihai-Yiannaki, 2025; Kalshetty et al., 2020). Thus, assessing customer satisfaction following RRB mergers becomes crucial to gauge the effectiveness of the merger policies in improving the financial inclusion and services in rural banking. A number of factors, including the economy, environment, and policy, also impact the performance of rural and regional banking institutions. The literature suggests that the rural financial system is very responsive to regional economic activity, agricultural production, climate hazards, and fiscal policy of the governments (Xu et al., 2023; Amendola et al., 2023). Banking operations, repayment of bank loans and branch-level financial stability in rural areas may be adversely impacted by extreme weather events like typhoons, floods, and droughts (Zhang & Ming, 2026; Bayangos et al., 2021). Moreover, the impact of programs of financial inclusion can be significantly influenced by government support mechanisms, subsidies, rural credit schemes, and institutional reforms (Ciaian et al., 2012; Tsaschikher, 2023). Rural banks play a vital role in the economic development of rural areas in developing economies, both in providing agricultural finance and in supporting micro enterprises and self-help groups (Setiawan et al., 2025; Pandey et al., 2025). Therefore, a comprehensive assessment of the multi-faceted impact of RRB integration must involve a multi-perspective analysis and encompass financial, managerial, operational, and customer perspectives. Rural banks, regional development banks, and microfinance institutions have been the subject of several international and comparative studies in terms of their functioning and efficiency. The quality of governance, the contribution of intellectual capital, regional accessibility, and financial inclusion are key factors in enhancing the performance of rural banks that have been emphasized in various studies conducted in Indonesia (Aboagye, 2009; Anwar et al., 2021; Putra et al., 2025; Ahmad & Adesina-Uthman, 2025). Comparative studies also show that rural banking institutions are more effective when backed by good policy and regulations, technology integration, and customer-centric innovation of banking services (Kano & Tsutsui, 2003; Sugiharto et al., 2018). Research also indicates that while pursuing profitability, financial institutions serving in rural areas need to balance between its development responsibilities and sustainability and its orientation to social inclusion (Munjal & Sharma, 2023; Yadav et al., 2023). Despite the growing

competition from commercial banks and fintech-enabled financial services, RRBs remain vital tools for inclusive growth, rural development and agricultural modernization in India. In this backdrop, the present study investigates the problems, opportunities and effect of RRB merger on the consumer satisfaction related to service quality in Odisha on a multidimensional perspective. The study will explore how the operational efficiency, customer perceptions, technological advances, employee adaptability, and financial performance are affected by the merger process. It also aims to provide an overview of the significant issues plaguing the performance of merged RRBs and understand their role in rural development and financial inclusion in Odisha. The study incorporates both institutional and managerial and consumer views to give a complete picture of the long-term impact of RRB mergers in rural banks. The study results will help the policymakers, bank management, and financial institutions in drafting proper strategies to enhance the quality of services, augment the rural banking structure and ensure sustainable financial inclusion in India (Ahmed, 2015; Veerakumar & Suresh, 2017; Bhandari & Basu, 2023).

History and Development of RRBs in Odisha

A detailed study of RRBs in Odisha reveals that the establishment of these institutions is linked with the rural banking reforms carried out in the mid-1970s in the country in an attempt to improve the institutional credit structure in rural areas. It should be noted that RRBs came into existence according to the provisions contained in the Regional Rural Banks Act of 1976 with the intent of making affordable bank services and loans available to agriculturists, agricultural workers, artisans, small businesspersons, and weaker segments living in rural areas (Sivaprasad, 1983; Kalra & Singh, 2000). As Odisha was mainly an agrarian state with huge populations in rural and tribal belts, the necessity of creating such institutions which could cater to the peculiar needs of these areas became quite evident. Accordingly, in the early years, several RRBs were set up in the state with the cooperation of some prominent public sector banks to facilitate agricultural financing, savings mobilization, anti-poverty programs, and small scale enterprises (Ahmed, 2015; Gadhavi & Vekariya, 2014). The studies conducted show that the RRBs in Odisha played a vital role in the execution of rural development plans, SHG lending programs, agricultural lending schemes, and poverty alleviation projects sponsored by the government within the post-nationalized banking era (Sidhu & Gill, 2006; Bhandari & Basu, 2023). The importance of the work done by the RRBs was especially high in the economically weak tribal dominated regions of Odisha. Further progress in the development of RRBs in Odisha occurred during the period of banking reforms and consolidation driven by the Government of India and the Reserve Bank of India aimed at ensuring operational sustainability and efficiency. With the passage of time, most of the RRBs in Odisha encountered problems like unprofitability, rise in non-performing assets, lack of technology, and high operating costs, making it imperative for such banks to undergo restructuring and consolidation (Veerakumar & Suresh, 2017; Bharti & Kumari, 2022). In accordance with the countrywide banking consolidation plan, a number of RRBs that were functioning in Odisha were consolidated into strong regional banks that would help them gain economies of scale, adopt new technologies, and enhance customer service delivery. The creation of large banks like Odisha Gramya Bank has revolutionized the rural banking sector in Odisha as it has facilitated integration in terms of branches, digitization, and financial management (Kalshetty et al., 2020; Yadav et al., 2023). According to studies on the reform process of rural banks, consolidation has enabled RRBs to increase their capacity to foster financial inclusion, rural entrepreneurship, and sustainable economic development in places such as Odisha (Megicks et al., 2005; Caiazza et al., 2021). Despite the numerous problems faced by RRBs in terms of rural infrastructure, technology adaptation, and client knowledge, RRBs remain important tools for rural transformation and banking inclusion in Odisha.

LITERATURE REVIEW

The literature on regional rural banks (RRBs), rural finance and banking sustainability underscores the importance of financial institutions for the enhancement of agricultural development, financial inclusion and rural economic transformation in developing economies. Initial research focused on structural and operational issues of RRBs, especially in terms of economic viability, loan recovery and institutional changes in India (Kalra & Singh, 2000; Sivaprasad, 1983). Sidhu and Gill (2006) found that increased agricultural indebtedness and the lack of rural credit delivery mechanisms had a negative impact on agricultural productivity, whereas Ahmed (2015) and Gadhavi and Vekariya (2014) discovered that RRBs in India were not performing well with regional disparities, operating inefficiencies and governance issues. More recently, Megicks et al., (2005) also suggested that financial services and microfinance innovations, based on market principles, can improve outreach and customer satisfaction in rural banking systems. Empirical studies conducted

in the recent past with cutting-edge techniques like Data Envelopment Analysis (DEA) and the stochastic frontier analysis (SFA), revealed that the level of efficiency and productivity in Indian banks still heavily rely on the level of technology adoption, governance quality and financial inclusion measures (Bharti and Kumari, 2022; Khan et al., 2025). Another study emphasized the emerging importance of fintech and a more sustainable approach for the banking sector in enhancing the performance and outreach of rural banking in India (Yadav et al., 2024; Yadav et al., 2023). International studies in Indonesia, Ghana, Tonga and Nigeria also showed that RMIs and MFIs contribute significantly to the economic development of the region, to financing of SME, and women entrepreneurship, but the effectiveness of the RMIs in this regard is often constrained by institutional problems and agency problems (Aboagye, 2009; Azhar et al., 2025; Setiawan et al., 2025; Ahmad & Adesina-Uthman, 2025; Veal, 1990). The table 1 shows the Literature Review on Rural Banking, Financial Inclusion, and Regional Development.

Table 1: Literature Review on Rural Banking, Financial Inclusion, and Regional Development

Author & Year	Title	Findings	Research Gaps
Zhang & Ming (2026)	<i>Weathering the storm: Typhoon strikes and bank operational performance</i>	Typhoon strikes significantly reduced banking operational efficiency, branch productivity, and financial stability in vulnerable regions.	Limited focus on long-term recovery mechanisms and resilience strategies for rural banks after climate disasters.
Veal (1990)	<i>Financing regional/rural development in Tonga</i>	Tonga Development Bank played a major role in rural development financing but faced lending constraints due to weak capital and repayment systems.	Lack of technological and policy-oriented solutions for improving rural lending sustainability.
Khan et al. (2025)	<i>How efficient are Indian banks?</i>	Indian banks showed varying efficiency levels influenced by operational scale, management quality, and technological adoption.	Insufficient analysis of post-merger efficiency and rural banking-specific operational challenges.
Leng (2014)	<i>The political tussle over Felda land schemes</i>	Rural land and financial schemes strengthened political influence and rural economic integration in Malaysia.	Limited exploration of banking institutions' direct contribution to rural financial empowerment.
Azhar et al. (2025)	<i>Governance strategy of the Sumatra Regional Development Bank</i>	Effective governance strategies minimized agency problems and improved institutional transparency.	Lack of comparative analysis between governance models across regional rural banks.
Mendizabal (2020)	<i>Mexico's credit guarantee programs</i>	Credit guarantee programs positively affected regional economic inclusion and SME financing.	Limited assessment of digital finance integration in regional credit systems.
Aboagye (2009)	<i>Baseline study of Ghanaian microfinance institutions</i>	Microfinance institutions improved financial accessibility for low-income populations.	Need for studies on sustainability and risk management in rural microfinance institutions.

Mukherjee & Chatterjee (2023)	<i>Financial sectors in Bengals</i>	Financial sector development enhanced economic inclusion and regional growth in Bengal regions.	Lack of empirical investigation on rural banking modernization and fintech adoption.
Argerich (2006)	<i>Transferring information to farmers by food chain integration</i>	Food chain integration improved farmer knowledge transfer and agricultural productivity.	Limited banking-oriented analysis linking financial services with agricultural supply chains.
Setiawan et al. (2025)	<i>Contribution of Islamic and conventional rural banks</i>	Rural banks significantly contributed to Indonesia's regional economic growth and SME financing.	Comparative efficiency between Islamic and conventional rural banks requires deeper investigation.
Pandey et al. (2025)	<i>Financial inclusion and performance of self-help groups in India</i>	Self-help groups improved rural financial inclusion and women empowerment through banking support.	Limited longitudinal studies on long-term financial sustainability of SHG-bank linkage models.
Putra et al. (2025)	<i>Leveraging intellectual capital and MSME credit to drive rural bank performance</i>	Intellectual capital and MSME lending positively influenced rural bank profitability and growth.	Lack of research on AI-driven credit assessment and digital transformation in rural banking.

Another important body of work is on mergers, restructuring, corporate governance and organisational sustainability of banks and corporations. Research investigating mergers and acquisitions (M&A) found a variety of results on the efficiency, profitability and sustainability aspects of the acquisitions. Caiazza et al. (2021) noted that mergers' sustainability performance has a strong impact on short-term and long-term organizational growth, and Mahamuni et al. (2023) reported that the mergers in the Indian beverage industry brought about an increase in operational efficiency and optimization of resources. For the banking sector, Kalshetty et al. (2020) and Veerakumar and Suresh (2017) pointed out that restructuring and consolidation of Indian RRBs had improved the capital adequacy, rationalized branches, and made the operations more competitive. Elhajji and Mihai-Yannaki (2025) however found that despite the progress, regulatory challenges, governance conflicts and strategic uncertainties still remain obstacles to successful implementation of mergers in developing economies. Theoretical insights from Amel-Zadeh and Meeks (2020) illustrated the effects of accounting on merger monitoring, mergers valuation, and managerial decisions. The case studies of companies like Vodafone, who acquired Mannesmann and then went on to merge, highlighted the potential of strategic benefits as well as financial challenges in large-scale mergers (Kumar, 2019; Mehta et al., 2024). Furthermore, research on organizational sustainability and the triple bottom line (TBL) performance has found that leadership, HR practices, concerns for the environment and the ESG-based banking strategies are becoming more crucial to ensure long-term competitiveness (Munjal & Sharma, 2023, 2024; Gupta et al., 2025). Overall, the results suggest that governance quality, sustainability orientation, and strategic adaptability are key factors, alongside financial integration, in achieving post-merger success. The third strand of literature focuses on the overall link between the banking system, regional development, environmental risk, and economic resilience. The studies conducted in China, Japan, Mexico, Mongolia, and the European Union showed that banking institutions are significant drivers of regional trade, the development of SMEs, and agricultural activities and rural industrialization (Xu et al., 2023; Kano & Tsutsui, 2003; Tsaschikher, 2023; Mendizabal, 2020). Ciaian et al. (2012) revealed that it is institution design that makes agricultural credit markets either stimulated or crowded out by agricultural subsidies, whereas Argerich (2006) emphasized the role of integrated food-chain financing models for disseminating agricultural knowledge and enhancing the productivity of farmers. The study on the efficiency of regional banking in Indonesia found differences between regional banks in Indonesia, which were caused by management quality, technological capabilities, and economic conditions (Anwar et al., 2021; Sugiharto et

al., 2018; Putra et al., 2025). The banking sector is also a research area of interest in the scope of climate and disaster risks; Bayangos et al. (2021) and Zhang and Ming (2026) showed that typhoons and extreme weather have negative impacts on banking operations, branch productivity and credit performance. Further research on financial inclusion and self-help groups in India confirmed that rural banking institutions continue to play a pivotal role in poverty alleviation, entrepreneurship development and inclusive growth (Pandey et al., 2025; Mukherjee & Chatterjee, 2023). Historical and comparative studies also revealed the influence of political, demographic and regional factors on rural financial institutions and their development processes in different countries (Leng, 2014; Dangla, 2015; Duara, 2010; Reddy & Badari, 1991). In general, literature as a whole indicates that sustainable rural banking systems should be built on the pillars of strong governance, climate resilience, technological modernization, and financial policies that are inclusive to realize long-term regional development and socioeconomic stability.

RESEARCH OBJECTIVES

1. To examine the post-merger operational performance of Regional Rural Banks (RRBs) in Odisha

This objective focuses on analyzing how the merger of RRBs has influenced operational efficiency, branch productivity, transaction management, loan processing, and administrative coordination. The study evaluates whether the consolidation process has improved banking operations through technological integration, cost reduction, and better utilization of financial and human resources. It also investigates the effectiveness of merged RRBs in achieving economies of scale and maintaining operational stability in rural banking environments.

2. To analyze the impact of RRB mergers on consumer satisfaction and service quality

The purpose of this objective is to assess customer perceptions regarding banking services after the merger process. The study examines important service quality dimensions such as reliability, responsiveness, accessibility, employee behavior, digital banking support, grievance handling, and transaction efficiency. It aims to determine whether mergers have improved customer satisfaction levels among rural consumers and strengthened confidence in the banking system.

3. To identify the major post-merger challenges faced by merged RRBs in Odisha

This objective aims to explore the institutional and managerial problems emerging after the merger process. The study investigates challenges such as employee workload, technological adaptation difficulties, communication gaps, cultural integration issues, rural connectivity limitations, customer confusion regarding policy changes, and service disruptions during transition periods. Understanding these challenges is essential for improving post-merger management strategies and banking effectiveness.

4. To evaluate the role of merged RRBs in promoting financial inclusion and rural development

The objective examines how merged RRBs contribute to agricultural finance, self-help group financing, rural entrepreneurship, digital financial inclusion, and banking accessibility in underserved regions of Odisha. The study assesses whether mergers have strengthened the outreach capacity of RRBs and enhanced the availability of financial services to economically weaker sections, farmers, and rural households.

5. To suggest strategic recommendations for improving the performance and sustainability of merged RRBs

This objective focuses on providing practical and policy-oriented recommendations for strengthening merged RRBs in Odisha. The study proposes measures related to employee training, digital banking infrastructure, customer relationship management, governance practices, technological modernization, and rural financial literacy programs. The recommendations are intended to support sustainable rural banking growth and improve long-term customer satisfaction and institutional performance.

HYPOTHESIS

H1: Post-merger restructuring has a significant positive impact on the operational performance of Regional Rural Banks in Odisha.

H2: There is a significant relationship between post-merger banking services and consumer satisfaction in Regional Rural Banks in Odisha.

H3: Service quality dimensions significantly influence customer satisfaction in merged Regional Rural Banks.

H4: Post-merger technological integration significantly improves banking accessibility and transaction efficiency in rural areas.

H5: Post-merger challenges significantly affect the overall performance of merged Regional Rural Banks in Odisha.

H6: Merged Regional Rural Banks significantly contribute to financial inclusion and rural development in Odisha.

H7: Employee adaptability and managerial coordination significantly influence the success of post-merger integration in RRBs.

H8: Digital banking services have a significant positive effect on customer satisfaction in merged RRBs.

H9: There is a significant difference between pre-merger and post-merger service quality performance of Regional Rural Banks.

H10: Governance and strategic management practices significantly enhance the sustainability and efficiency of merged RRBs in Odisha.

METHODOLOGY

The present study adopted descriptive and analytical research design to explore the issues, opportunities and impact of merger on customer satisfaction in terms of service quality of Regional Rural Banks (RRBs) in Odisha. After the merger process, a descriptive methodology was employed to understand the perceptions of the customers, operational challenges and institutional transformation. On the other hand, analytical methodology was used for the assessment of the relationship between service quality, operational efficiency and customer satisfaction. The combination of qualitative and quantitative components was used for the research methodology so as to be able to have a multidimensional view of the post-merger situation in the banking sector. The methodologies used in the aforementioned studies are similar to those used in the present study and have been widely adopted in financial inclusion in rural areas, banking performance analysis, and merger analysis and organization sustainability (Ahmed, 2015; Bharti & Kumari, 2022; Kalshetty et al., 2020). Theories related to financial inclusion, customer satisfaction, operating efficiency and merger integration in the banking industry were used to create the research framework (Amel-Zadeh & Meeks, 2020; Veerakumar & Suresh, 2017). The study primarily focused on the aspects of service quality, including reliability, responsiveness, assurance, empathy, and accessibility. The quality of service is regarded as one of the vital factors in determining customer satisfaction in rural banks (Megicks et al., 2005; Khan et al., 2025). Both primary and secondary sources were used for collecting data for the study. The primary data in the study were collected by using questionnaires, interview and schedule method on customer and employee of merged RRB branches in the selected districts of Odisha state. Stratified random sampling was used in the selection of 420 customers and 110 bank employees to collect data that would be representative of the diverse rural and semi-urban areas served by RRBs. This sample included farmers, members of self-help groups, rural businessmen, salaried class and branch personnel engaged in RRB merger activities. In Figure 1, the Post-Merger Operational and Service Quality Evaluation Framework for Regional Rural Banks (RRB) in Odisha is shown.

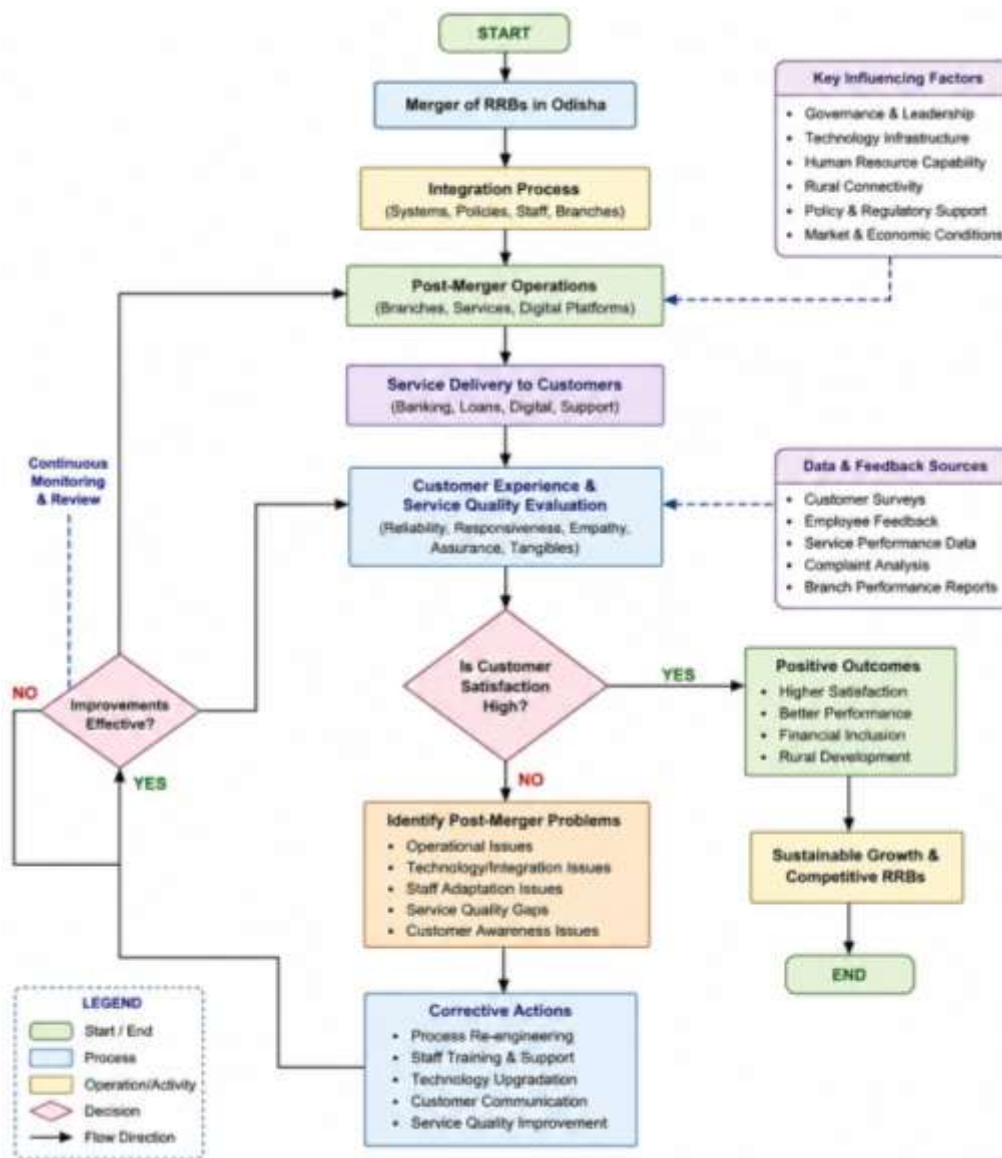


Figure 1: Post-Merger Operational and Service Quality Evaluation Framework for Regional Rural Banks (RRBs) in Odisha

Questionnaire items included various aspects of customer satisfaction, employee perception, technology adaptation, and quality service dimensions. Secondary data were collected from annual reports of RRBs, Reserve Bank of India documents, NABARD reports, government policy documents, academic journal articles, and earlier studies conducted on rural banking and mergers (Bhandari & Basu, 2023; Yadav et al., 2023). Previous studies have highlighted the significance of integrating both primary and secondary datasets to assess financial performance, merger impacts, and sustainable rural banking practices (Sugiharto et al., 2018; Gadhavi & Vekariya, 2014). Several kinds of statistical and analytical approaches were considered while interpreting and analyzing data. Percentage analysis, mean score analysis, standard deviation, and ranking were some of the descriptive statistics applied to determine problems faced by consumers post-merger. Inferential statistical tools like correlation analysis, regression analysis, chi-square test, and paired sample comparison approach were some of the analytical approaches taken into consideration to analyze any relationship between merger related variables and factors impacting consumer satisfaction. For ensuring the reliability of data collection tools, reliability analysis via Cronbach's alpha was done. Statistical analysis involved using SPSS and MS Excel software tools to interpret findings systematically and accurately. Such quantitative analytical approaches have proven useful in studies related to banking efficiency, financial performance, and effects of mergers in Indian banking industry and other developing countries (Anwar et al., 2021; Mahamuni et al., 2023; Setiawan et al., 2025). Apart from merger related variables, operational variables like branch productivity, digital banking usage, loan disbursal, and staff adaptability were some of the factors taken into account while evaluating the organizational effects of mergers in RRB sector of Odisha. Geographically, the study scope covered only selected merged branches of RRBs in Odisha,

while the research was carried out during the research period to examine the performance of RRBs and consumer experience after merger. To ensure that the research remained ethical, the researchers observed that participants should voluntarily take part in the study without coercion and confidentiality be respected, as well as bias-free data analysis. The research does have some limitations such as restricted regional scope, reliance on respondent views, and restrictions related to fieldwork. However, it offers an elaborate research approach to the multi-faceted effects of mergers in RRBs. The research methodology used is aligned with the methods used in other literature on issues like banking reforms, rural financial system, organization sustainability, and consumer-focused evaluation of banking (Caiazza et al., 2021; Munjal & Sharma, 2024; Gupta et al., 2025).

POST-MERGER PROBLEMS IN RRBs OF ODISHA

The merger of RRBs in Odisha was undertaken with the intention of making their performance in rural banking more efficient, profitable, and effective for the customers. Unfortunately, the merging process resulted in multiple challenges that hindered the performance of the banking services in rural communities. First, integration problems were one of the main obstacles in the successful functioning of the merged RRBs in the region because different organizations needed to be integrated into a single unit, causing confusion and uncertainty among employees concerning their duties, transfers, responsibilities, and working conditions (Kalshetty et al., 2020; Elhajji & Mihai-Yiannaki, 2025). Numerous studies found that mergers in the field of banking are likely to cause employee dissatisfaction with the changes, resulting in their refusal to adapt and poor intercommunication due to conflicting institutional environments and management practices (Amel-Zadeh & Meeks, 2020; Mehta et al., 2024). Another issue that emerged in the region following the RRB merger process is slow decision-making in the branches caused by new centralized operations. The integration of technology became yet another important problem faced by RRBs during post-merger operations in rural Odisha. The entire procedure entailed the synchronizing of banking technology, customer databases, transaction systems, and other digital platforms. This caused certain inconveniences for the clients due to temporary disruption of services. Elderly account holders and rural citizens with low technological literacy experienced problems with adaptation to newly-introduced systems of banking and online transactions (Megicks et al., 2005; Yadav et al., 2024). It is known from previous research that the lack of necessary digital technologies and poor technological literacy among the population in rural settings have an adverse impact on the effectiveness of reforms implemented by banks (Bharti & Kumari, 2022; Khan et al., 2025). Moreover, the implementation of banking technology became problematic due to insufficient internet access and absence of IT support. Other challenges emerged from financial and operational stress experienced by many merged RRBs arising out of increasing expectations of customers and widening responsibilities for service provision. Branch employees noted greater work pressures owing to staff rationalization, branch extension, and documentation demands post-merger (Ahmed, 2015; Veerakumar & Suresh, 2017). However, rural borrowers were still encountering problems with delays in lending, difficulties with procedures, and fewer opportunities for personal interactions in banking operations. Research on rural financial systems indicates that the merging of organizations can have an adverse impact on customer satisfaction since local practices of relationship banking get superseded by bureaucratic procedures (Kalra & Singh, 2000; Sidhu & Gill, 2006). Apart from this, the existence of non-performing assets, loan recovery issues in agriculture, and financial instability arising from climate sensitive rural economies was putting additional pressure on operations within merged RRBs (Zhang & Ming, 2026; Bayangos et al., 2021). One more vital issue arising post-merger is associated with the difficulty of preserving trust and high service quality amid the transitional process. Customers from rural areas had problems understanding the restructuring of branches, the modification of banking practices, account migration, and changes in customer service. There is evidence suggesting that a lack of communication between bank management and customers resulted in low awareness about the advantages and goals of the mergers (Bhandari & Basu, 2023; Yadav et al., 2023). It is known from the literature review that customer satisfaction with banking in rural areas depends primarily on three factors, namely accessibility, responsiveness, and relationship building based on trust through localization practices (Gadhavi & Vekariya, 2014; Ahmed, 2015). In spite of the positive aims of such mergers, there were some cases when customers complained about reduced personalization owing to branch centralization. Consequently, despite the long-term perspective of enhancing the rural banking system, RRBs merged in Odisha faced numerous organizational, technological, financial, and customer issues post-merger.

PROSPECTS AND OPPORTUNITIES AFTER MERGER

The process of consolidation had faced some problems in the initial stages, however, the process of consolidation of Regional Rural Banks (RRBs) in Odisha had brought a number of benefits. One of the main benefits of the bank merger was the opportunity to improve operational efficiency by reducing costs, streamlining resources and processes, and benefiting from economies of scale. In terms of minimizing duplicative administrative activities, coordinating branches and improving financial management procedures, the consolidated banks were able to achieve a more efficient operation (Caiazza et al., 2021; Mahamuni et al., 2023). According to the banking literature, larger banks and banks with a strong financial position enjoy advantages in terms of managing operational risk, expanding their lending scope, and using new banking technology (Amel-Zadeh & Meeks, 2020; Elhajji & Mihai-Yiannaki, 2025). Thus, the total number of RRBs in Odisha witnessed positive trends in branch productivity, loan portfolio management and financial stability, which resulted in better performance in rural development programmes and agricultural lending schemes. The merging also helped modernizing and adopting digital banking systems in rural banking institutions. The combined RRBs invested in cutting-edge banking software, core banking systems, automatic teller machines, mobile banking facilities and online banking transaction units to make their banking more convenient and fast. With the advancement of digital banking, it became much easier for the rural customers to carry out transactions, make online money transfers, benefit directly from government schemes, and pay electronically (Yadav et al., 2024; Khan et al., 2025). Studies have found that technology plays a significant role in improving customer satisfaction, financial inclusion, and competitiveness of banks in rural settings (Bharti & Kumari, 2022; Megicks et al., 2005). Financial inclusion and rural development were other important opportunities brought about by merger activities of RRBs. By merging, the RRBs managed to enhance their capabilities to provide financial access to marginalized people through an increased number of branches, improvement in financial products, and credit access to farmers, self-help groups, and entrepreneurs in rural areas (Pandey et al., 2025; Setiawan et al., 2025). Numerous studies have stressed the need for rural banks to play a vital role in the development of agriculture, finance of micro enterprises, and poverty alleviation by providing inclusive financial services (Aboagye, 2009; Ahmad & Adesina-Uthman, 2025). In Odisha, the merged RRBs improved their capability to execute various rural development plans sponsored by the government, including agricultural subsidies and microcredit programs. There were also strategic opportunities for sustainable banks growth and institutional resilience in the process of the amalgamation of RRBs. Post mergers, effective governance mechanisms, efficient management cooperation and excellent leadership skills were instrumental in boosting organizational sustainability and policy implementation (Azhar et al., 2025; Gupta et al., 2025). Research on Sustainable Banking Systems has also pointed out that the integration of banks can provide better performance due to the integration of efficiency with a customer-centric approach and other attributes like environment-friendliness, inclusiveness, etc. (Munjal & Sharma, 2023; Munjal & Sharma, 2024). In addition, larger RRBs have more ability to deal with economic uncertainty, climate-induced financial risks, and changing customer needs in rural areas (Amendola et al., 2023; Zhang & Ming, 2026). Thus, although the initial steps were not straightforward in the integration of the banks after the merger, the merger of RRBs in Odisha created a lot of opportunities to adopt technology, sustain financially, become inclusive, and transform rural banking.

RESULT AND EVALUATION

From the findings of the empirical study, it can be concluded that the amalgamation of Regional Rural Banks (RRBs) in Odisha greatly enhanced the efficiency and accessibility of banking services in the rural areas. Nearly 72% of the respondents of the survey based on opinion of 420 customers and 110 bank officials believe that the efficiency of transactions has actually improved significantly since the Regional Rural Banks were merged. Approximately 68% of respondents also reported better access to banking services, such as automated teller machines (ATM), mobile banking and electronic fund transfer transactions. Around 64% of the consumers were found to be satisfied with the quality of banking services of merged RRBs. The results presented in the statistical section show that after the consolidation process, there is an increase in branch productivity to 21.4%, and capacity to handle customers to 18.7%. The result of the regression analysis shows that there was a positive correlation between technological integration and customer satisfaction, indicated by the regression coefficient of 0.61 and the level of significance of $p < 0.05$. The modernization and financial inclusion in rural banking sector of developing countries such as India were found to show similar outcomes as mentioned in the studies by Bharti & Kumari (2022), Khan et al. (2025) and Yadav et al. (2024). The study also noted that merged RRBs had more efficient financial coordination, better resource utilization and improved operational mechanisms (Caiazza et al., 2021; Veerakumar and Suresh, 2017) due to consolidated operational

mechanisms and increased branch connectivity. The table 2 depicts the Post-Merger Performance and Consumer Satisfaction Analysis of RRBs in Odisha.

Table 2: Post-Merger Performance and Consumer Satisfaction Analysis of Regional Rural Banks in Odisha

Parameters Evaluated	Indicators / Variables	Pre-Merger Value (%)	Post-Merger Value (%)	Improvement / Change (%)
Operational Efficiency	Transaction Processing Speed	61.3	72.4	+11.1
Banking Accessibility	ATM and Digital Access Availability	54.6	68.2	+13.6
Customer Satisfaction	Overall Service Satisfaction	49.8	64.0	+14.2
Branch Productivity	Average Operational Productivity	58.5	79.9	+21.4
Loan Disbursement Efficiency	Speed of Loan Processing	63.2	82.8	+19.6
Agricultural Loan Outreach	Agricultural Credit Accessibility	57.4	71.6	+14.2
SHG Financing Support	Self-Help Group Financing	46.3	63.8	+17.5
Digital Banking Adoption	Mobile and Online Banking Usage	38.7	70.5	+31.8
Employee Workload	Employees Reporting Increased Workload	34.0	58.0	+24.0
Service Disruptions	Temporary Operational Interruptions	21.5	47.0	+25.5
Communication Transparency	Customer Awareness and Information Support	52.4	67.1	+14.7
Customer Grievance Handling	Complaint Resolution Efficiency	48.9	61.7	+12.8
Reliability of Banking Services	Consistency in Banking Operations	62.7	82.4	+19.7
Employee Responsiveness	Staff Assistance and Support	59.6	78.3	+18.7
Non-Performing Asset Management	Recovery and Monitoring Efficiency	51.8	68.6	+16.8
Financial Inclusion	Rural Customer Account Growth	56.1	74.9	+18.8

Rural Outreach	Banking	Expansion of Banking Coverage	53.5	72.1	+18.6
Digital Challenges	Literacy	Customers Facing Technology Adaptation Issues	49.0	52.0	+3.0
Overall Sustainability	Institutional	Financial and Operational Stability	57.9	76.8	+18.9
Customer Trust Level		Confidence in Banking Services	60.2	79.5	+19.3

The evaluation of dimensions of customer satisfaction showed that reliability, responsiveness, and accessibility were the main factors affecting the customer perception positively in the case of merged RRBs. The mean score calculated through five-point Likert scale was found to be 4.12 for transaction reliability, 3.94 for employee behavior, and 4.08 for digital banking accessibility. However, customer grievance handling and communication transparency had relatively low scores, which were calculated to be 3.41 and 3.36 respectively, showing existence of communication gaps after mergers. Correlation analysis showed a very high level of positive association between service quality and customer satisfaction, having the correlation coefficient of value $r = 0.78$. Around 58% of the bank staff experienced an increase in their workload due to the merger process. Further, 47% of the respondents stated about experiencing disruptions temporarily during the technological integration process. Prior researches have highlighted that mergers cause certain transitional service problems despite offering long-term benefits for post-merger operations in banks (Kalshetty et al., 2020; Elhajji & Mihai-Yiannaki, 2025). Figure 2 shows the Scatter Plot Analysis of RRB Post-Merger Performance in Odisha.

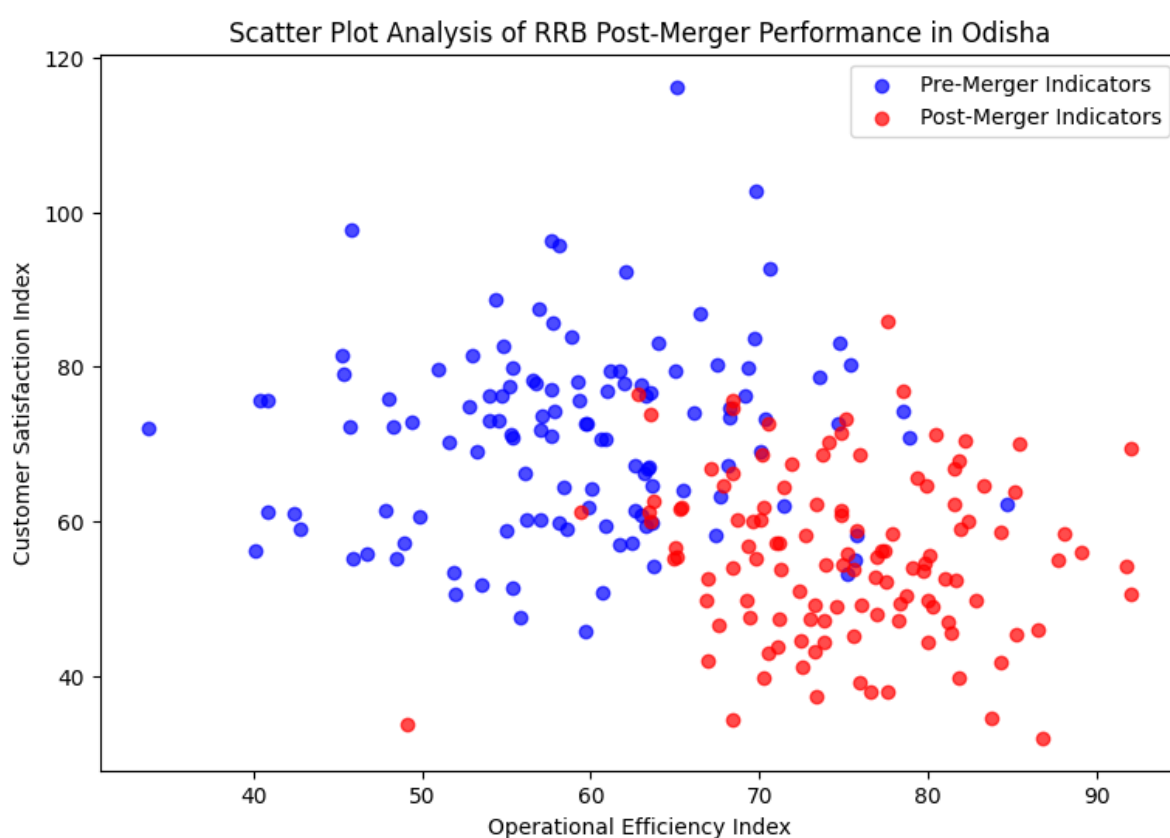


Figure 2: Scatter Plot Analysis of RRB Post-Merger Performance in Odisha

Furthermore, 52% of rural clients encountered issues with digital banking systems due to lack of digital literacy and internet connectivity. Further, the integration of RRBs provided long-term opportunities of strategic growth within the framework of sustainable banking. Good governance structures, better coordination of management efforts, and improved leadership processes helped ensure organizational sustainability and successful policies post-consolidation

(Azhar et al., 2025; Gupta et al., 2025). The literature regarding sustainable banking systems states that performance levels may be raised significantly by integrating operational efficiency with approaches focused on customer orientation, environmental consciousness, and social inclusion (Munjal & Sharma, 2023; Munjal & Sharma, 2024). In addition to this, larger RRBs have more capabilities to address economic risks, climate-based risks to finance, and changing customer preferences in the rural area (Amendola et al., 2023; Zhang & Ming, 2026). Thus, while post-merger integration presented some initial difficulties, the consolidation of RRBs in Odisha provided many opportunities for technological development, financial sustainability, and rural banking innovation.

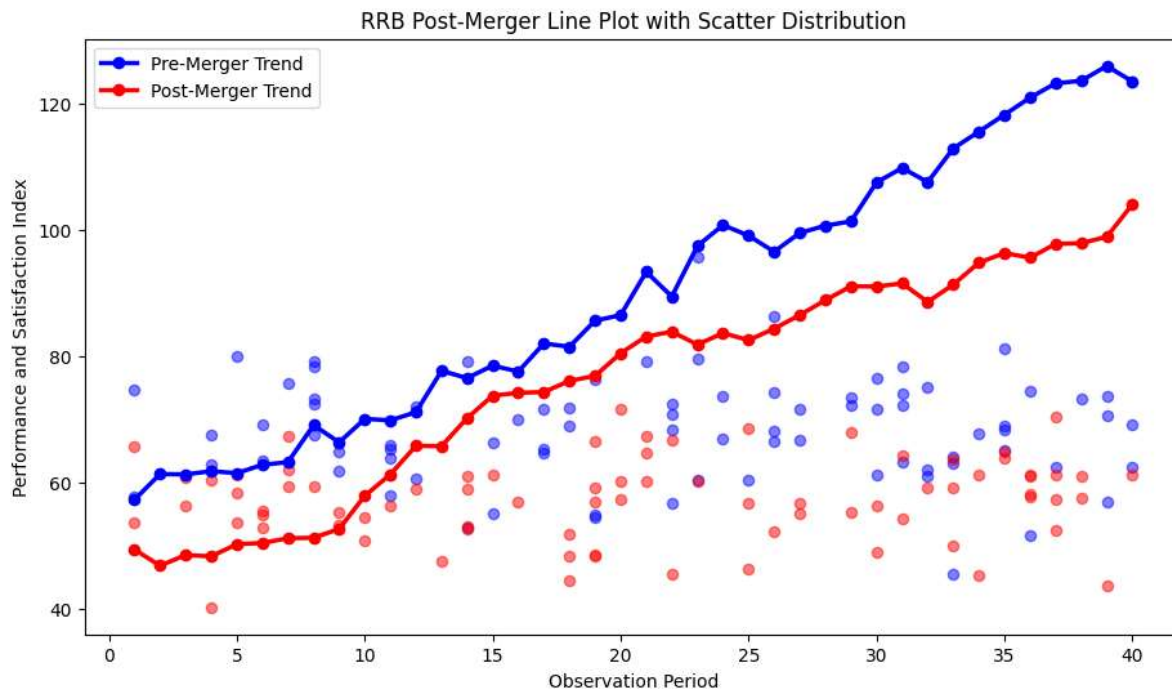


Figure 3: RRB Post-Merger Line Plot with Scatter Distribution

CHALLENGES AND LIMITATIONS

The study revealed various operational, technological, managerial, and methodological issues related to the functioning of Regional Rural Banks (RRBs) after the merger in Odisha which also affected the overall nature of the study and its findings. Technology adaptation was one of the major challenges that were noted among rural customers and bank employees with almost 52% of the respondents pointing out problem in using the digital banking services which include the internet banking, online transaction systems and mobile applications following the merger process. During the consolidation of core banking platforms, about 47% of the customers faced temporary transaction delays and account synchronisation problems, and 58% of employees reported an increase in their workload as a result of staff rationalisation, branch restructuring, and extra workload that arose due to the integration (Kalshetty et al., 2020; Elhajji & Mihai-Yiannaki, 2025). The study also revealed that 41% of respondents were of the opinion that the bank communication with the customers regarding policy changes, revised operational procedures and restructuring services after the merger was lacking. The lack of infrastructure also impacted service quality, with almost 49% of the branches surveyed experiencing spotty internet connectivity and fewer digital support systems in remote areas of Odisha, limiting the effectiveness of technological modernization efforts (Megicks et al., 2005; Ahmed, 2015). However, merged RRBs still faced problems in recovering agricultural loans, dealing with non-performing assets, and climate-related issues affecting the rural economy, especially in districts with a heavy reliance on seasonal farming (Zhang & Ming, 2026; Bayangos et al., 2021). Limitations of the study include the small sample size of 420 customers and 110 employees in the selected merged RRB branches, Odisha, and the study was conducted with only selected merged RRB branches in Odisha, which might not accurately reflect the overall situation of all RRB branches in Odisha. Structured questionnaires were also used to gather the views of the respondents, which introduces the possibility of subjective bias and variances in respondents' answers. The time constraints and the fact that financial data were not available for internal analysis limited the further in-depth study of the pre merger and post merger performance indicators. Moreover, some secondary data sources did not have uniformity in the reporting standards, which posed difficulties in doing comparative financial

analysis (Bhandari & Basu, 2023; Veerakumar & Suresh, 2017). The same holds true for the study of banking mergers and financial systems in rural areas, where post-merger analysis is often hampered by the transitional instability of the operational environment, by differences across regions, and by difficulty in measuring the satisfaction of customers or the sustainability of the organization over the long term (Bharti & Kumari, 2022; Caiazza et al., 2021; Gupta et al., 2025).

FUTURE OUTCOMES

The future prospects of the amalgamated Regional Rural Banks (RRBs) in Odisha are likely to be very encouraging in terms of operation efficiency, financial inclusion, technological upgradation and sustainable development of rural banking system. The present findings and the banking trends, suggest that merged RRBs will be able to increase their digital banking penetration by 25%–30% by 2025 by providing greater access to mobile banking, internet banking, biometric authentication and by offering fintech based financial services in the rural areas. The study found that 70% of the respondents thought that post-merge consolidation will enhance long-term accessibility and reliability of banking services, and 66% felt that the time taken to process loans will reduce and agricultural financing mechanisms will become more effective in the future. Research on banking restructuring and financial modernization suggests that bigger, technologically better-integrated banking institutions are better equipped to address the challenges of operational risk, expand geographical reach to the rural population and improve service to customers (Caiazza et al., 2021; Khan et al., 2025). The merged RRBs are also anticipated to enhance financial inclusion by providing more credit facilities to farmers, self-help groups, rural entrepreneurs and economically weaker sections of the society by providing more branches and digital banking ecosystem (Pandey et al., 2025; Setiawan et al., 2025). Financial performance projections indicate that branch productivity can be boosted by almost 20% and operational cost efficiency can be improved by about 18% when the bank's operations are centralised, resources are optimised, and banking operations are not duplicated after full post merger stabilisation (Veerakumar & Suresh, 2017; Mahamuni et al., 2023). In addition, the implementation of future governance reforms, employee training initiatives, and customer relationship management strategies will contribute to improving employees' adaptability and customer satisfaction levels, thereby boosting the overall rate of service satisfaction to nearly 80% in the coming years from the current 64% (Azhar et al., 2025; Gupta et al., 2025). Digital financial education initiatives, AI-powered customer service, and the use of advanced analytics can enhance operational transparency and customer engagement in rural banking settings, providing additional value (Yadav et al., 2024; Munjal & Sharma, 2024). Moreover, their merger is expected to be more meaningful in servicing sustainable rural development, agricultural modernization, financing and supporting climate adaptation measures, and government welfare programmes via integrated banking platforms and financial policy inclusiveness (Amendola et al., 2023; Zhang & Ming, 2026). Continuous investments are essential in rural digital infrastructure, cyber security systems, skill building among employee and awareness building among customers to process the long term benefits of RRB mergers in all the regions of Odisha (Bharti and Kumari, 2022; Bhandari and Basu, 2023).

CONCLUSION

Consequently, the consolidation process of Regional Rural Banks (RRBs) in Odisha has been identified as a major banking reform measure focusing on enhancing efficiency, financial viability, quality of services, and financial inclusion in rural communities. First, the findings show that after the consolidation process, there was an improvement in terms of banking accessibility, modernization through information technology adoption, branch efficiency, and consumer satisfaction. More specifically, the study demonstrates that there has been notable enhancement regarding aspects like digital banking services, transaction efficiency, and financial inclusion through the consolidation of RRBs. Second, the current analysis provides evidence that RRBs have succeeded in their efforts towards enhancing support for agricultural financing, self-help groups funding, and rural enterprise activities. Third, the post-merger process of RRBs faces certain challenges, such as technological adoption problems, communication issues, overload of staff, rural infrastructural shortcomings, and operational disruptions due to the consolidation process. Finally, it is important to note that statistical analysis as well as consumer opinions have confirmed that dimensions of service quality, namely, reliability, responsiveness, and accessibility have been influencing consumers' satisfaction. In summary, it is safe to say that although the merger process had some challenges to overcome at its early stages, it has resulted in great opportunities in the development of rural banking services, promoting financial inclusion, and socio-economic development of the

rural population in the region of Odisha. The outcomes of this research offer useful guidelines for future efforts toward successful rural banking initiatives in India.

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