
**DIGITAL FINANCIAL INCLUSION ON GRAMEEN BANKS IN INDIA:
STUDY OF SELECT BANK**

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ABSTRACT

The banking sector in regional areas is being transformed by the integration of digital systems. In this study, the operational efficiency and outreach of Telangana Grameen Banks are examined within the context of modern technological shifts. Through the deployment of mobile banking, online portals, and digital payment systems like Aadhaar and UPI, affordable financial services are now being provided to previously underserved populations. Banking accessibility is enhanced, operational costs are reduced, and customer engagement is significantly increased through these digital tools. However, several obstacles are still encountered, as challenges such as low digital literacy, inadequate internet infrastructure, and technological resistance are faced by Telangana Grameen Banks. In this research, bank performance is assessed via quantitative metrics, while customer awareness and satisfaction levels are systematically analysed. The findings suggest that customer acquisition is improved, and service delivery is bolstered through digital adoption. Nevertheless, the necessity for robust financial literacy programs and improved infrastructure is highlighted to ensure long-term efficacy. Ultimately, digital banking is regarded as a vital component for the sustainable growth of Telangana Grameen Banks. It is concluded that digital financial inclusion is positioned as the primary driver for local economic empowerment and institutional progress.

KEYWORDS: Digital Financial Inclusion, Telangana Grameen Banks, Mobile Banking, Financial Literacy, Customer Satisfaction.

INTRODUCTION

Financial inclusion plays a vital role in the economic development of a country, especially in rural areas where access to formal financial services is limited. In India, many people in villages and remote areas remain outside the banking system due to lack of awareness, poor infrastructure, and limited access to banking facilities. To address this issue, Regional Rural Banks (RRBs) were established with the objective of providing affordable banking services to the rural population and promoting inclusive growth. Among these institutions, Telangana Grameen Bank (TGB) plays an important role in strengthening financial inclusion across the rural regions of Telangana. With a wide network of branches spread across villages and small towns, the bank provides essential financial services such as savings accounts, credit facilities, loans for farmers, financial assistance for self-help groups, and support for small entrepreneurs and low-income families. By offering these services, the bank helps reduce the dependence of rural people on informal moneylenders and promotes secure financial practices. In recent years, the focus of financial inclusion has expanded beyond simply opening bank accounts to encouraging the effective use of digital financial services. Telangana Grameen Bank has taken several initiatives to promote digital banking among rural customers. These initiatives include the introduction of mobile banking, internet banking, and integration with digital payment systems such as UPI. Through these digital platforms, customers can perform financial transactions conveniently and securely without the need to visit a bank branch.

Additionally, the bank conducts financial literacy and digital awareness programs, often supported by the Financial Inclusion Fund of NABARD. These programs aim to educate rural customers about digital payment methods, safe banking practices, and the benefits of using formal financial systems. Such initiatives help bridge the gap caused by digital illiteracy and limited technological awareness in rural communities. However, despite these efforts, several challenges remain. Limited internet connectivity, lack of digital knowledge, and hesitation among rural populations to adopt new technologies continue to slow the progress of digital financial inclusion. Addressing these challenges requires continuous awareness programs, improved infrastructure, and stronger support from financial institutions. This case study focuses on examining the role of Telangana Grameen Bank in promoting digital financial inclusion in rural Telangana. It aims to understand how the bank's initiatives are helping rural communities access and use financial services more effectively, and how digital banking is transforming the traditional banking experience for rural customers.

REVIEW OF LITERATURE

1. S Ikhtlaq, T Yousuf, MI Islam, KU Nisa, Dr.AB Rashid Dar(2026):Financial inclusion toward marginalised communities leads both to equitable development and poverty break-up options for individuals. Current international programs have successfully expanded formal enrolment, but actual field experience shows that implementation is more complex than anticipated. The matter of insufficient infrastructure together with long travel distances to access financial services combines with demanding financial restrictions that impose strict requirements and elevated collateral requirements. These problems are exacerbated by socio-cultural obstacles that consist of poor financial skill levels alongside established gender-related practices alongside strong social ranking systems that prevent vulnerable groups from accessing support. Mobile payments and blockchain solutions together with AI-based credit evaluation systems show great potential to significantly decrease transaction expenses but their widespread adoption faces limited access in various geographic areas.
2. N Bhatt, S Goswami (2026):Inclusive economic development, particularly with the participation of rural women in the digital economy, is needed to attain the Sustainable Development Goals (SDGs) by 2030. This chapter presents the impact of the cashless economy on rural women entrepreneurs in India with respect to the digital gender divide and accompanying barriers. While modern organizations strive towards sustainable growth, the adoption of digital payment systems provides an innovative way towards enhancing economic participation, financial inclusion, and poverty reduction. Through a structured analysis of peer-reviewed literature, industry reports, and research studies between 2003 and 2024, this research discusses the global and Indian scenario of digital payment adoption. Common themes of technology preparedness of women entrepreneurs and digital financial inclusion are examined to provide an insight into how access to digital technologies can spur equitable and sustainable economic development.
3. J Mookerjee, MK Bhuriya, R Josphin, GV Radhakrishnan(2025):The rapid digitization of financial services has transformed banking systems worldwide, offering innovative solutions to address financial exclusion in rural economies. This review paper explores the critical role of digital banking in enhancing financial inclusion by providing underserved rural populations with accessible, affordable, and user-friendly financial services. It examines the integration of mobile banking, digital wallets, and internet-based platforms to overcome traditional barriers such as geographical isolation, limited banking infrastructure, and high transaction costs. The study highlights the potential of digital

banking technologies to empower rural communities by enabling secure transactions, microcredit access, savings mobilization, and insurance services.

SCOPE OF THE STUDY

The study focuses on the role of Telangana Grameen Bank in promoting digital financial inclusion in rural areas of Telangana. It examines the bank’s digital services such as mobile banking, internet banking, and digital payment systems. The study also highlights how these services help rural customers access and use formal financial services effectively.

OBJECTIVES OF THE STUDY

1. To explore the evolution of financial inclusion in India.
2. To assess the financial awareness, access, and usage of digital financial products of select bank.

DATA ANALYSIS AND INTERPRETATION

Digital financial services have transformed the banking sector by making financial transactions faster, safer, and more convenient. The use of services such as ATM facilities, mobile banking, internet banking, UPI payments, debit cards, SMS alerts, and AEPS has increased significantly in recent years. Telangana Grameen Bank plays an important role in promoting digital banking among its customers. The bank provides various digital financial products and services to encourage customers to adopt modern banking methods. However, the effectiveness of these services depends on factors such as customer awareness, usage, satisfaction, availability of services, and support provided by bank staff. To analyse these factors, a Chi-Square (X^2) test is used to examine the relationship between different variables related to digital financial inclusion. The following tables present the statistical results regarding awareness, usage, availability, and satisfaction with digital financial services provided by Telangana Grameen Bank.

1. “Availability, Usage and Awareness of Digital Financial Services at Telangana Grameen Bank”:

STATEMENTS	X2	SIGNIFICANTS
Digital financial services are available at my Telangana Grameen Bank branch.	3.4877	0.01
I use the following digital services provided by Telangana Grameen Bank.	36.0819	0.01
Source of awareness about digital financial services of Telangana Grameen Bank.	18.6518	0.01

Assistance is available at the Telangana Grameen Bank branch for using digital financial services.	7.7944	0.01
Availability of digital financial services at my Telangana Grameen Bank branch.	15.3017	0.01

SOURCE: Primary data collected through questionnaire from respondents.

EXPLANATION:

- Chi-Square value (7.1559) shows customers are aware of digital financial products of Telangana Grameen Bank.
- High Chi-Square value (25.6195) indicates strong awareness of services like ATM, mobile banking, UPI, etc.
- ATM awareness is high, supported by Chi-Square value of 25.5081.
- Mobile banking and UPI awareness is good, with value 13.0443.
- Overall awareness level is good, indicated by Chi-Square value of 20.3084.

Conclusion: The table presents data related to the availability and use of digital financial services at Telangana Grameen Bank branches. For all five statements listed, the Chi-squared (χ^2) values range from 3.4877 to 36.0819, and the significance level (p-value) is consistently 0.01

2.“Level of Awareness of Digital Financial Products Offered by Telangana Grameen Bank”:

STATEMENTS	X2	SIGNIFICANTS
Awareness of digital financial products offered by Telangana Grameen Bank.	7.1559	0.01
Awareness of digital financial services such as ATM, mobile banking, internet banking, UPI, debit card, SMS alerts, and AEPS.	25.6195	0.01
Level of awareness regarding ATM services provided by Telangana Grameen Bank.	25.5081	0.01
Level of awareness regarding mobile banking and UPI services offered by Telangana Grameen Bank.	13.0443	0.01
Overall level of awareness regarding digital financial products offered by Telangana Grameen Bank.	20.3084	0.01

SOURCE: Primary data collected through questionnaire from respondents.

EXPLANATION:

- All statements related to awareness of digital financial products at Telangana Grameen Bank are statistically significant at 0.01 level.

- General awareness of digital financial products ($X^2 = 7.1559$): Shows a moderate level of awareness among customers.
- Awareness of various digital services ($X^2 = 25.6195$): Highly significant, indicating strong awareness of services like ATM, mobile banking, UPI, etc.
- Awareness of ATM services ($X^2 = 25.5081$): Very high, showing customers are aware of ATM-related services.
- Awareness of mobile banking and UPI ($X^2 = 13.0443$): Significant, indicating good but comparatively lower awareness than ATM services.
- Overall awareness ($X^2 = 20.3084$): High significance, confirming that customers generally have good awareness of digital financial products.
- Conclusion: Customers have a strong and significant level of awareness, especially about ATM and general digital services, though awareness of mobile banking and UPI is slightly lower in comparison.

3. “Customer Satisfaction with Digital Financial Services Provided by Telangana Grameen Bank”:

STATEMENTS	X2	SIGNIFICANTS
Overall satisfaction with digital financial services provided by Telangana Grameen Bank.	6.0416	0.01
Satisfaction with the ease of using digital financial services such as mobile banking, UPI, and internet banking	20.899	0.01
Satisfaction with the reliability and performance of digital financial services, including transaction speed and success rate.	36.2062	0.01
Satisfaction with the support and guidance provided by bank staff for digital financial services	18.9409	0.01
Willingness to recommend Telangana Grameen Bank digital financial services to others	9.5384	0.01

SOURCE: Primary data collected through questionnaire from respondents.

- All statements related to customer satisfaction with digital financial services at Telangana Grameen Bank are statistically significant at 0.01 level.
- Overall satisfaction ($X^2 = 6.0416$): Shows a moderate level of satisfaction among customers.
- Ease of using digital services ($X^2 = 20.899$): Highly significant, indicating customers find services like mobile banking, UPI, and internet banking easy to use.
- Reliability and performance ($X^2 = 36.2062$): Very high significance, showing strong satisfaction with transaction speed and success rate.

- Support and guidance by staff ($X^2 = 18.9409$): Significant, indicating customers are satisfied with the help provided by bank staff.
- Willingness to recommend ($X^2 = 9.5384$): Moderately significant, showing customers are willing to suggest these services to others.
- Conclusion: Customers show high satisfaction, especially with reliability and ease of use, along with good support and a positive attitude towards recommending digital services.

SUGGESTIONS

1. Increase digital awareness programs in rural areas to educate customers about safe digital banking.
2. Conduct regular financial literacy camps to improve understanding of digital payment systems.
3. Improve internet connectivity and digital infrastructure in rural villages.
4. Encourage customers to use mobile banking and UPI for quick and secure transactions.
5. Provide training sessions for customers on how to use digital banking applications.
6. Strengthen customer support services to assist users facing difficulties in digital transactions.
7. Promote digital banking through awareness campaigns in villages and local communities.
8. Ensure strong security measures to protect customers from cyber fraud and online scams.
9. Collaborate with government initiatives to expand digital financial services in rural areas.
10. Continuously upgrade technology and digital platforms to provide better banking services to customers of Telangana Grameen Bank.

CONCLUSION

In conclusion, digital financial inclusion plays an important role in improving access to banking services in rural areas. Telangana Grameen Bank has contributed significantly by providing digital banking facilities such as mobile banking, internet banking, ATM services, and UPI payments to rural customers. These services help people perform financial transactions easily, safely, and conveniently without depending on traditional banking methods. Although there has been noticeable progress, challenges such as lack of digital awareness, limited internet connectivity, and hesitation to adopt new technology still exist in rural areas. Therefore, continuous efforts through financial literacy programs, better infrastructure, and customer support are necessary to strengthen digital financial inclusion and ensure that more people benefit from modern banking services.

REFERENCE

1. Ikhlq, S., Yousuf, T., Islam, M. I., Nisa, K. U., Dar, A. R., & Ansarullah, S. I. (2026). Overcoming Barriers: Strategies for Financial Inclusion in Marginalized Communities. In *Regulation and Inclusivity in Finance and Accounting: Navigating Regulatory Frameworks and Technological Advancements* (pp. 99-124). Cham: Springer Nature Switzerland.
2. Bhatt, N., & Goswami, S. (2026). Digital Financial Inclusion for Women Entrepreneurs: A driver of sustainable business growth. In *Strategies for Sustainable Growth in Modern Organizations* (pp. 35-49). Routledge.
3. Mookerjee, J., Bhuriya, M. K., Josphin, R., & Radhakrishnan, G. V. (2025). Digital banking and financial inclusion in rural economies. *South Eastern European Journal of Public Health*, 26, 954-963.
4. Matha, L., & Bairathi, P. Socio-Economic Benefits of Financial Inclusion and Its Role in NPA Reduction: Insights from Rajasthan RRBs. *Vaidakthya* (2025), 151.
5. Malhotra, N., & Baag, P. K. (2022). Evaluation of Financial Inclusion in the Villages of India: Qualitative Research–Grounded Theory Approach: Precursor to Digital Gaon. In *Handbook of Research on Innovative Management Using AI in Industry 5.0* (pp. 39-58). IGI Global Scientific Publishing.
6. Sarkar, K. K., & Thapa, R. (2021). From Social and Development Banking to Digital Financial Inclusion: The Journey of Banking in India. *Perspectives on Global Development and Technology*, 19(5-6), 650-675.
7. Jain, P., Upadhyay, D., & Purswani, G. (2021). Digital financial inclusion: Strategic issues and imperatives. In *Financial Inclusion in Emerging Markets: A Road Map for Sustainable Growth* (pp. 297-309). Singapore: Springer Singapore.
8. Parvez, V. (2022). Digital Financial Inclusion in India-An Overview. *Shodhsamhita*, 24(11), 4-11.
9. Bhatt, K. D., & Vin, M. P. (2021). An Advancement to the Grameen Bank Model. In *Rural Entrepreneurship and Innovation in the Digital Era* (pp. 235-251). IGI Global.
10. VasanthaGopal, R., & Damodaran, K. K. (2020). Financial Inclusion and Socio-economic Development: An Empirical Case Study with Reference to Kerala Gramin Bank. *Mudra: Journal of Finance & Accounting*, 7(2).