



E Transaction And Its Ultimate Impact On The Rural Sector In India

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Abstract

Internet banking means providing technological banking services to its customers 24/7. The changing global scenario compels the banking sector to adopt this latest technology. Banks are also interested in providing value-based services using advanced electronic and telecommunication technology. Our country has an extensive network of bank branches in rural areas. Many of them are commercial banks and financial inclusion is the main slogan behind the huge growth of bank branches in rural India. We cannot ignore rural India because regional inequality is also one of the disadvantages of the Indian economy. Demonetization will also help change the issue of people's minds quickly and they will examine and use the E-payment method. There are clearly more poor families in the rural banking system than the ones offered by commercial banks. Even today, rural banks are nascent in the Indian banking system. This article clearly discusses the concept and growth of e-banking in rural areas. The study's main objective is to analyze e-banking's role in rural areas. The data of the whole article is collected from different research articles and the analyses of the data reveal many interesting features related to the problems of internet banking in rural areas.

Keywords: Digital Payments, Rural Area, E-Transactions, UPI

Introduction

With technological advancements, digitalization and e-transactions have become prevalent worldwide. India has been striving to become a cashless society for the past two decades, and the Reserve Bank of India's technological developments and the Payment and Settlement Systems Act, passed by the Indian parliament, have helped

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electronic payments gain wider acceptance and deeper penetration in India.³ In the financial year 2012, cash payments accounted for around 86.6 percent of all payments in India, and more than 7,600 crore of float was seen in the economy during 2012-2013.⁴ However, a report by Phone Pe predicts that India's digital payment market will grow to over \$10 trillion by 2026, with 40 percent of all transactions already being digital and \$3 trillion in digital payments being processed in 2021.⁵ According to the latest report by IAMAI, internet adoption in rural India has been increasing rapidly, with more internet users in rural areas than in cities. In FY 2019-20, India recorded digital transactions worth around Rs 4141 crore, and the COVID-19 pandemic and subsequent lockdowns have further accelerated the digitization of the economy.⁶ The Digital India campaign, initiated by Narendra Modi, aims to link over 12,000 rural post offices with payment banking through digitalization, recognizing that rural areas are crucial to addressing regional imbalance in the Indian economy, particularly for low-income families who are better served by the rural banking system than commercial banks.⁷

Objective

The concept of Digital India has been adopted by the Indian government, which includes the digitalization of the entire banking system as a key objective. The aim is to promote digital transactions over traditional methods such as cheques and withdrawals. However, this initiative is facing significant challenges. The primary issue is the outdated rural infrastructure in India, where basic internet access is not available in many areas, making it difficult to implement digital banking. The second challenge is that a large proportion of mobile phone users in India (around 65 percent) own smartphones, but many rural users lack the necessary skills to operate smartphones or even ATMs. As a result, they continue to rely on traditional banking methods such as cheques and withdrawals.⁸ The research will help us to know the usage of digital payment among rural people. It will also showcase various types of challenges and obstacles that come in front of a villager while using various types of e-transactions. The study also includes the benefits which are gained by the rural people in terms of e-transactions. The electronic payment product is a recent phenomenon in India, so it is important to gauge the status of awareness and usage of e banking products.⁹ And all the products should reach every citizen of India especially to the rural backward classes as they are the grassroot of every economy.

³ Ms. Devi S Suran, A Study On Effectiveness Of Digital Payments In Rural Areas During Covid 19 Pandemic With Special Reference To Karthikappally Village, International Journal of Multidisciplinary Educational Research, ISSN:2277-7881, Vol 10, issue 8(2)

⁴ Renu Singh & Garima Malik, Impact of Digitalization on Indian Rural Banking Customer: With Reference to Payment Systems, Amity college of Commerce and Finance, Amity University, Noida

⁵ [Digital payments in India to reach saturation point by FY27: CLSA \(moneycontrol.com\)](https://www.moneycontrol.com/news/business/digital-payments-in-india-to-reach-saturation-point-by-fy27-clsa-1117187.html)

⁶ Ms. Devi S Suran, A Study On Effectiveness Of Digital Payments In Rural Areas During Covid 19 Pandemic With Special Reference To Karthikappally Village, International Journal of Multidisciplinary Educational Research, ISSN:2277-7881, Vol 10, issue 8(2)

⁷ Puttaswamy Gowda. M, Impact of E-Banking on Rural India-A Bird's Eyeview, Asian Journal of Management, Vol. 09, Issue-03, July-September 2018

⁸ Renu Singh & Garima Malik, Impact of Digitalization on Indian Rural Banking Customer: With Reference to Payment Systems, Amity college of Commerce and Finance, Amity University, Noida

⁹ Bapat Dhananjay (2012), "Customer Relationship for Electronic Payment Products: An Empirical Investigation in India", Global Business Review, 13 (1), pp. 137-151.

Literature Review

There is a vast literature available on the impact of e-transactions on various sectors of the economy, including rural areas. According to the World Bank report, India has made significant progress in financial inclusion in recent years, with the introduction of various digital payment platforms (World Bank, 2018). E-transactions have the potential to promote financial inclusion by providing access to financial services to people living in remote areas. The government of India has launched various schemes to promote digital payments, such as the Digital India initiative and the Pradhan Mantri Jan-Dhan Yojana (PMJDY).

Studies have shown that e-transactions can help in reducing corruption by promoting transparency in financial transactions (Aiyar, 2017).¹⁰ The use of digital payment platforms reduces the need for cash transactions, which can be a major source of corruption. Moreover, digital payment platforms provide a record of financial transactions, which can be easily audited by the government and other regulatory authorities.

E-transactions can also help in enhancing economic growth in rural areas by promoting entrepreneurship and job creation (Saini & Singh, 2020). Digital payment platforms provide easy access to credit and financial services, which can help in promoting small and medium enterprises (SMEs) in rural areas. The promotion of SMEs can help in creating employment opportunities in rural areas and enhancing economic growth.

However, the effective implementation of e-transactions in rural areas is hindered by various challenges. The lack of digital literacy, inadequate infrastructure, and limited access to digital devices are some of the major challenges faced in promoting e-transactions in rural areas (Chen, 2017). Moreover, the lack of trust in digital payment platforms is another major challenge that needs to be addressed.

Research Methodology

The study mostly uses secondary data for its literature review. The secondary data sources include the separate banks' RBI reports, as well as related material published on the banks' websites, in journals, and on other websites online. They also contain various sorts of research papers pertaining to the evolution of e-transactions in various periodicals. The study finds that using electronic banking methods not only benefits the banking industry but also enables banks to run their operations more cheaply in rural areas.

Challenges in Rural India

- I. Having financial literacy, not just literacy alone, is essential for participating in the formal financial system. Even literate individuals may struggle with basic financial tasks such as filling out bank forms or writing cheques, particularly in rural areas where such transactions come at a cost.
- II. Rural populations lack awareness and knowledge of digital technologies like computers and smartphones. Poor internet connectivity exacerbates the issue.
- III. Many rural individuals are mistrustful of digital transactions due to fears of fraud or being unable to withdraw their money. Such incidents have worsened the situation.

¹⁰ S.A. Aiyar, Universal Basic Income: A Doleful, Wasteful Idea, Vol 11, Issue 2

- IV. Limited options for digital payment entities in rural areas mean that non-acceptance by any of them can lead to a lack of digital payment options, even if people are willing to use them.
- V. Many Consumers in low-income areas either do not trust or do not have access to the necessary infrastructure to be able to process e payments.¹¹
- VI. Despite service providers' efforts to provide various schemes and discounts, adoption of merchant sales via PoS is slow.
- VII. Basic infrastructure such as smartphone penetration, internet connectivity, electricity, and banking services are inadequate in rural areas. Although the Jan Dhan Yojana scheme increased financial inclusion, many accounts remain dormant with little or no transactions.
- VIII. Rural economies are predominantly informal or unorganized, making it challenging to introduce digital payment methods. Cash transactions are often preferred.
- IX. The rural population in India is relatively poor, with lower per capita income than the national average, making basic necessities unaffordable.¹²
- X. Cash transactions are the most convenient form of payment for those living in rural locations. According to a survey by Credit Suisse, cash still accounts for 72% of all consumer transactions in India. In rural areas, cash transactions remain the main form of exchange. For both the donor and the recipient, it is transparent. There are no additional fees related to these payments. The rural population, on the other hand, choose to use hand-drawn cash because it is a less expensive means of transaction than using internet services, which charge a minimum amount for each transaction.¹³

Digital Payment Procedure In Rural India

New targets were achieved by the Rural Schemes in India through the integration of around 500,000 new volunteers known as Banking Correspondents, who trained shopkeepers and merchants in rural areas on the usage of cashless transactions. As a result, around 2.5 million people in rural areas and approximately 55,000 merchants have enrolled themselves in cashless transactions. Technology advancements, such as **ATMs, internet banking, mobile banking, NEFT, RTGS, and UPI**, along with branch enhancement in rural areas, are key determinants of the improvement of productivity in cashless e-transactions in rural India. The absence of banking services in villages has led to informal financial markets flourishing, which suffer from several imperfections such as high costs of credit at exploitative terms, loss of precious savings due to fly-by-night operators, and inordinate delays in fund transfer and account settlement. This has widened the "Rich-Poor divide" and led to "Social Exclusion". To address this issue, the banking sector should focus on developing **Micro ATMs, Bio Metric ATMs, and smart cards for rural customers**. With the onset of financial sector liberalisation (1991 onwards), the Indian market saw an upsurge in credit cards. The foreign banks in India like HSBC, Citibank, Standard Chartered Bank and others were instrumental in popularising the concept of credit cards in India. However, many of the major public sector

¹¹ Rupa Rege Nitsure, E-Banking: Challenges and Opportunities, Economic and Political Weekly, Dec. 27, 2003 - Jan. 2, 2004, Vol. 38, No. 51/52 (Dec. 27, 2003 - Jan. 2, 2004), pp. 5377-5381

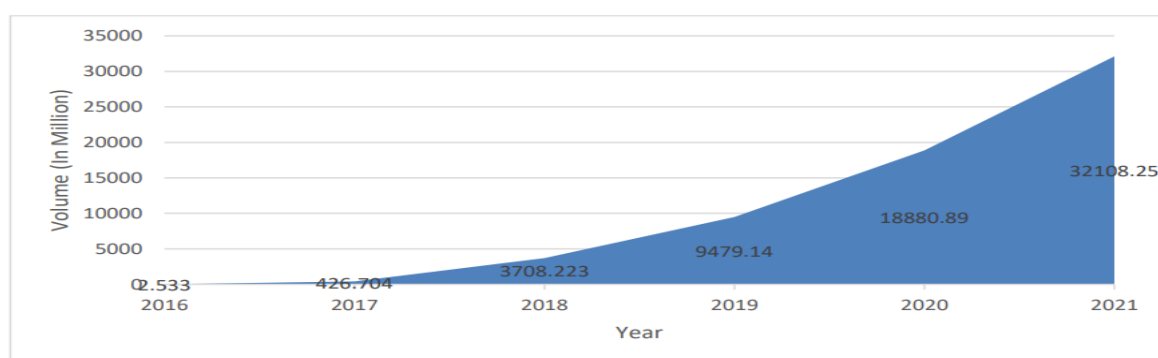
¹² Renu Singh & Garima Malik, Impact of Digitalization on Indian Rural Banking Customer: With Reference to Payment Systems, Amity college of Commerce and Finance, Amity University, Noida

¹³ <https://www.cnbctv18.com/views/the-complexity-of-payments-in-rural-india-10742161.html>

banks like SBI are, now, taking a lead position in this industry. Incidentally, SBI launched its credit cards in exclusive arrangement with Visa and has a tie-up with GE Capital to process the back-end transactions. SBI now leads in card issuance thanks to its strong network of existing branches and customers. Among the private sector banks, ICICI Bank Ltd. tops the list in card issuance with 35 million cards. Many of the public sector and private sector banks have taken a keen interest in card business in India.¹⁴ ***The Mobile Wallet, which is a further extension of Mobile Banking***, can be used for small transactions and remittances. Mobile-based transactions cost approximately 2% of branch banking, 10% of ATM, and 50% of internet banking. While there are critiques that state only 34% of active workers have an Aadhaar linked bank account under the center's rural job scheme, Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA), and only 35% of ration shops had hand machines out of the 160,000 to analyze biometrics of MGNREGA workers, it has been found that rural youth are much more inclined to adopt cashless transactions. This is a significant development in the current scenario. (Pritchard, Rammohan, Parasuraman, Sekher, & Choithani, 2013).¹⁵

Development of UPI

Over the past years, the mobile payment system has been established as a strong foundation, and it is expected to continue growing and contribute to the digitalization of India. The accessibility and convenience of payment are the driving factors behind the exponential growth of UPI adoption, which is projected to surpass other cashless payment methods in a few years. UPI has recorded more than 32 billion transactions in 2021, and the number of banks offering UPI services has increased significantly from 21 banks in 2016 to over 282 in 2021. Transaction values have also increased from Rs. 31 million to over Rs. 5 trillion by March 2021, and the transaction volume has grown by over 120%, with a transaction value growth of approximately 144%. This growth can be attributed to the ease of use, consumer-facing fintech activities, and GOI's aggressive push. Key players in the growth of P2P UPI payments are Google Pay, Phone Pe, Paytm, Amazon Pay, and WhatsApp. Based on research by NPCI, RBI, and IBA, it is predicted that the annual number of UPI transactions may reach 60 billion by 2023.¹⁶



Growth of UPI; Transactions up to November 2021

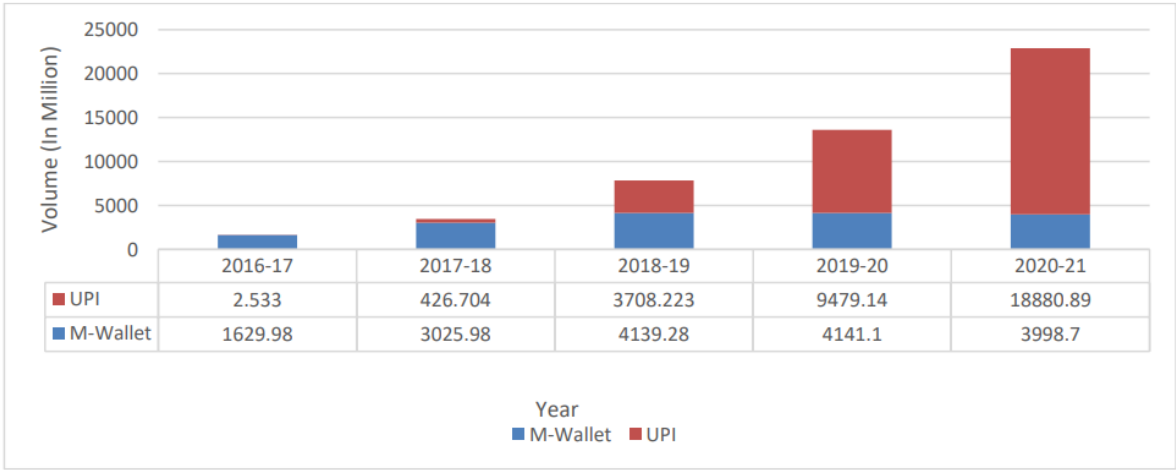
Source NPCI

¹⁴ Know Your Banking II- Credit Cards, Indian Institute of Banking and Finance, Feb 2006

¹⁵ Puttaswamy Gowda. M, Impact of E-Banking on Rural India-A Bird's Eyeview, Asian Journal of Management, Vol. 09, Issue-03, July-September 2018

¹⁶ Abhishek Kumar et al., The Growth Trajectory of UPI based Mobile Payments In India: Enablers and Inhibitors.

The advancement of UPI somehow crashed the use of M-Wallet. After Demonetization by the Indian Government, which's prime focus was to reduce cash transactions and also to control black money. UPI came as a perfect alternative for cashless transactions because of its ease of usability. UPI scanners can be installed in any shop, transport vehicle, and everywhere where we can think of. After the launch of Bharat Pe the merchants are not liable to pay any sort of commission for the transactions made by the UPI. Very recent data for FY 2020-21 shows that UPI has continued its momentum, whereas, despite an improved performance, m-wallet is way lesser than UPI. The study has been shown in the figure below.¹⁷



Comparative Analysis of UPI & M-Wallet, Source- NPCL, RBI

UPI in Rural India

A recent study made by the researchers at Kannur district of Kerala shows the various influential factors which have made the people to opt for UPI as a medium of payment in general. An simple and fast transaction followed by convenience was discovered to be the highly influential variables which move the people's choice towards UPI irrespective of rural and urban location. It was 43.75 percent strongly approve towards easy and rapid transactions through UPI in rural region followed by 37.5 percent in urban area. Around 37.5 percent people in rural area strongly agree about convenience as a factor to choose UPI while it was 41.6 percent in urban area. There are various non-preferential factors of UPI payments in general among rural and urban area. Considering the factors, 50% of rural people strongly agree that they are lacking in technical knowledge with regard to making payments using UPI. While poor internet connectivity accounts to 43.75% strongly agree by the rural people.12.5% in urban area strongly agree about their concern in security issues while depending on UPI apps. After observing the research we can see that only 18.75% of male respondents in rural area preferred UPI mode of payment while it was only12.5% among female respondent. In urban area 37.5% of male respondent prefer UPI while it was 25% among female respondents. Which indicates a wide gender gap still exist between the rural and urban people towards UPI.¹⁸

¹⁷ Abhishek Kumar et al., The Growth Trajectory of UPI based Mobile Payments In India: Enablers and Inhibitors.

¹⁸ Rasana T.P.P, S Susila, A Comparative Study on the Usage Pattern of UPI Payments among Rural and Urban at Kannur District of Kerala, World Wide Journal of Multidisciplinary Research and Development, August 2021

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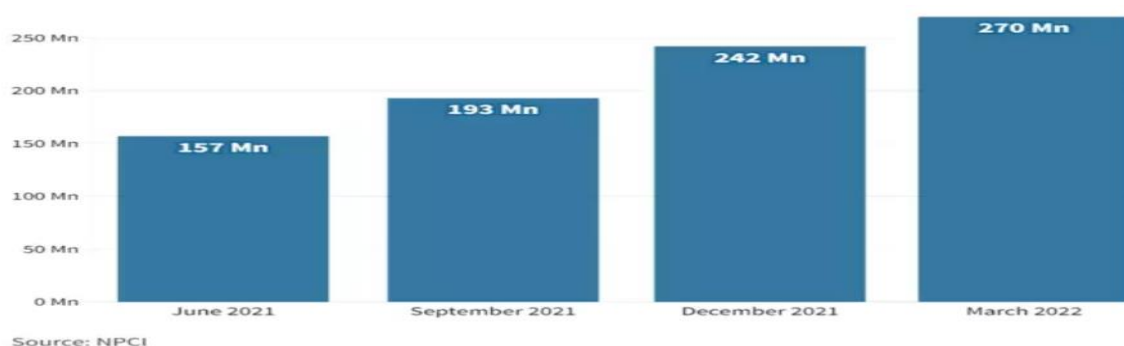
Cashless Economy through ‘Aadhaar Pay’ in Rural India

The Indian government has launched Aadhaar Pay, a new payment system designed to enable poor and illiterate people in rural areas to carry out digital transactions using just their fingerprints. The merchant version of the system, known as AEPS, is already in use and is being touted as a great alternative to other forms of digital payment, including UPI, credit cards, debit cards and M banking. One of the main advantages of Aadhaar Pay is that it doesn't require a PIN or password to be entered. Instead, buyers need only provide their Aadhaar number, the name of their bank and their fingerprint to complete a transaction.

The Aadhaar Pay system can be installed on any mobile phone equipped with a fingerprint sensor, making it a highly versatile and accessible option. Moreover, it offers cardless, PINless transactions, meaning there is no need for customers to possess a smartphone. In order to encourage the use of Aadhaar Pay among rural merchants, the government has requested that banks enrol 30-40 merchants per branch to take cashless payments from customers. Five banks, including Andhra Bank, IDFC Bank, IndusInd Bank, State Bank of India, and Syndicate, have already implemented the service.

While the biometric device currently costs INR 2000, the government is working to reduce the price so that it can be installed in every store in rural India. This will help to ensure that people in even the remotest areas have access to digital payment options. Transactions carried out using Aadhaar Pay are also highly secure, as fingerprints are encrypted and cannot be copied. This provides greater peace of mind for buyers and sellers alike, and helps to build trust in the system.¹⁹

In summary, Aadhaar Pay is a highly innovative and accessible digital payment system that has the potential to revolutionize the way in which rural communities in India carry out transactions. Its ease of use and high levels of security make it an attractive option for both buyers and merchants, and it is clear that the government is committed to promoting its use across the country. By reducing the cost of the biometric device and working to expand the reach of the system, Aadhaar Pay has the potential to drive financial inclusion and empower millions of people in rural India.²⁰



Four charts to show how India's digital payments ecosystem has evolved in the last one year – Source NPCL

¹⁹ [Four charts to show how India's digital payments ecosystem has evolved in the last one year | BusinessInsider India](#)

²⁰ Dr. Ravi CS, Digital payments system and rural India: A review of transaction to cashless economy, International Journal of commerce and management Research

Advancements after Covid 19 pandemic

The COVID-19 pandemic has caused people around the world to become more comfortable with digital solutions, and India is no exception. The inclination towards digital payments in India was already present, but it gained momentum during the pandemic. This is evident in the significant increase in the number of monthly UPI transactions, which crossed the 5 billion mark in 16 months, up from 2 billion in October 2020. According to the Ministry of Electronics and Information Technology (MeitY), a total of 7,422 crore digital payment transactions were recorded in the fiscal year 2022 (between April 2021 and March 2022). This trend is expected to continue, with a Credit Lyonnais Securities Asia (CLSA) report estimating that the value of digital payments in India will triple to \$1 trillion over the next four years.

In fiscal year 2022, the Unified Payments Interface (UPI) remained the most popular digital payment method in India. The UPI enables payments to be made in a matter of seconds and has recorded over 45 billion transactions, almost double the 22 billion transactions recorded in the previous financial year. The value of these transactions has also more than doubled, from ₹41,03,653 crore to ₹84,17,572.48 crore.

The Reserve Bank of India (RBI) is now focusing on making UPI more inclusive by enabling it for feature phone users and in offline mode. This move aims to ensure that even those who do not have smartphones or access to the internet can make digital payments. The central bank recently launched UPI123Pay for this purpose.

In conclusion, India's digital payment ecosystem has experienced significant growth in the past year, with UPI leading the way. As digital adoption and online purchases continue to rise, the value of digital payments in India is expected to triple in the next four years. The RBI's efforts to make UPI more inclusive will further boost the use of digital payments in the country.²¹

Illiteracy: The major drawback of the Rural Economy

The advancement of technological infrastructure in India faces various challenges, including illiteracy and superstition. Reports have shown that certain local religious bodies and panchayats have banned mobile phone usage in specific areas and restrict internet access to children and women. GSMA's 2016 report revealed that over 70% of Indian women lack access to the internet, with less than 38% of urban women and a little over 10% of rural women having internet access.

To drive financial inclusion and innovation in digital payment, India must take critical steps. One recommendation is to make digital payment regulation independent of central banking by creating a sovereign law. The objective of digitalizing rural banking should focus on customer protection in the payment market, where the customer should not be held accountable for losses caused by illegal transactions or system malfunctions.

Additionally, Self-Help Groups (SHGs) could support the propagation of digital banking systems in rural areas, serving as Bank Mitras to post offices and banks. Other rural social infrastructures such as Mahila Mandals, Youth Clubs, and Panchayati Raj Institutions could also be utilized to spread the digital rural economy. Line department

²¹ [Four charts to show how India's digital payments ecosystem has evolved in the last one year | BusinessInsider India](#)

representatives such as school teachers, village development officers, and health workers can educate locals on the digital economy and financial inclusion.

In conclusion, addressing illiteracy, superstition, and limited access to technology and the internet are crucial to enhance India's technological infrastructure. The government must make digital payment regulation independent of central banking, while SHGs, social infrastructures, and line department representatives should play vital roles in spreading the digital wave to rural areas.²²

Conclusion

Banks recognize the important role that rural communities play in building India's economy, and are thus providing more banking facilities to these areas. Rural areas account for 61.35% of the country's population, making their involvement in the economy crucial. With a strong banking system in rural areas, not only will the Indian economy be uplifted from its grassroots level, but the rural population will also have the opportunity to participate and contribute to the country's economic growth.

Banks are shifting their focus from well-structured cities to rural areas as they have become technologically enabled. Banking committees have made it compulsory for all Indian banks to open at least one-fourth of their new branches in rural areas. However, public sector banks face significant operational expenses, making it challenging for them to open and run branches in rural areas profitably.

To address this issue, the Indian government has implemented several measures to encourage the growth of rural banking. For example, the government has set up regional rural banks that cater exclusively to rural areas. Additionally, self-help groups (SHGs) have been created to encourage financial inclusion and entrepreneurship in rural communities.

Moreover, the government has recognized that financial inclusion is crucial for rural development, and has taken several steps to achieve this goal. For instance, the government has launched the Pradhan Mantri Jan Dhan Yojana, a financial inclusion program that aims to provide banking services to every household in India, including those in rural areas.

In conclusion, the development of a strong banking system in rural areas is essential for India's economic growth. Banks are recognizing the importance of rural communities and are expanding their services to these areas. While there are challenges, the government has implemented several measures to encourage the growth of rural banking and financial inclusion.

²² Renu Singh & Garima Malik, Impact of Digitalization on Indian Rural Banking Customer: With Reference to Payment Systems, Amity college of Commerce and Finance, Amity University, Noida

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