JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

DIGITAL BANKING PRODUCTS AND SERVICES IN RURAL TELANGANA: AN OVERVIEW

[1]Prof. Dr R.Ramachandran, [2]VeerannaAmeda
[1]Department of Commerce Annamalai University Deputed ThanthaiPeriyar Government Arts and Science College (Autonomous) Tiruchirappalli 620 023 Tamilnadu India Emailprofram1968@gmail.com
[2]Research Scholar (part-Time External) Department of Commerce Annamalai University Chidambaram Tamilnadu 608 002 India Email amedaveeranna@gmail.com

Abstract
The rapid digitalisation of the Indian banking sector presents significant opportunities and challenges, especially in rural regions. In the rural areas of Telangana, banking access and usage have traditionally been constrained by physical infrastructure, connectivity gaps, low digital literacy, and trust issues. This study examines the deployment, adoption, and outcomes of three categories of digital banking products/services in rural Telangana: mobile banking applications, digital wallets/payment platforms, and micro-ATMs/agent-based remote access points. Drawing on a secondary data from banks, fintechs and government sources the research investigates (i) the current levels of awareness and usage of these digital channels; (ii) the enabling factors and barriers influencing adoption; and (iii) the impact on financial inclusion, convenience of access and transaction behaviour. Findings show that while awareness of mobile banking and digital payments is relatively high and usage is gaining momentum, meaningful adoption remains uneven across demographic and geographic segments. Critical constraints include poor connectivity, insufficient digital infrastructure, limited device ownership, low digital literacy, and residual trust/risk concerns. The study concludes with recommendations for banks, fintech providers and policy-makers aimed at tailoring product design, strengthening agent networks, improving digital literacy programmes and leveraging local-language interfaces to accelerate the digital banking transformation in rural Telangana.

Keywords: Digital banking, Rural banking, Telangana, Mobile banking, Digital wallets, Micro-ATMs, Financial inclusion, Agent banking.

Introduction:

In recent years, India has witnessed a rapid transformation in its banking landscape, propelled by digital technologies and the government's push toward a "Digital India" ecosystem. The rural banking sector, historically characterised by limited accessibility, high transaction cost, and geographic barriers, is now undergoing a paradigm shift as traditional branch-based services are supplemented and in many cases supplanted by digital banking products and services. Financial inclusion, once a distant goal for many villages, is progressively being pursued through mobile banking apps, digital wallets, micro-ATMs and remote access points. The state of Telangana presents a compelling case for such transformation. With remarkable digital-literacy figures for instance, a recent survey found that approximately 94.5 % of rural respondents aged 15-29 in Telangana reported the capability to perform online banking tasks, significantly above the national average. The New Indian Express At the same time, the state government has introduced initiatives such as the "Digital TelanganaCentres" and rural-digital infrastructure programmes to bridge rural access gaps. Against this backdrop, this article explores the development and deployment of digital banking

products and services in rural Telangana, focusing on three broad categories: (i) mobile banking applications, (ii) digital wallets and payment platforms, and (iii) micro-ATMs / remote access points. The core objectives are to examine how these digital banking innovations are being adopted in rural contexts, identify enablers and constraints to their uptake, and evaluate their role in advancing financial inclusion in Telangana's rural economy. This study draws on secondary data from banking reports, government statistics and existing literature, with a view to framing the opportunities and challenges for stakeholders (banks, fintechs, policymakers) seeking to accelerate digital banking penetration in rural Telangana. By doing so, it aims to contribute to a deeper understanding of how digital banking products are reshaping banking service delivery in rural settings, and to suggest pathways for enhancing their impact in Telangana's rural segments.

Importance of Digital Banking in Rural India / Telangana

Digital banking in rural India has rapidly emerged as a key enabler of financial inclusion, economic efficiency and inclusive growth. For rural regions such as those in the state of Telangana, the importance of digital banking products and services is multifaceted:

1. **Expanding access to financial services**: Traditional branch banking in rural areas often suffers from geographical, infrastructural and cost constraints. Digital banking — mobile apps, digital wallets, remote access points — enables customers in remote villages to access banking services without the need for long travel or waiting times. For example, the adoption of payment systems such as Unified Payments Interface (UPI) has enabled rural users to transact using mobile devices, reducing dependence on cash.
2. **Reducing cost and improving efficiency**: From the bank's perspective, offering digital channels lowers the cost per transaction compared to maintaining full brick-and-mortar branches in sparsely populated rural segments. As one analysis notes, digital banking offers "cost-effective, efficient banking solutions" for rural India. For rural customers, fewer physical barriers and quicker transaction cycles improve service delivery.
3. **Facilitating financial inclusion and formalisation**: Many rural households historically transact in cash, remain under-banked and are excluded from formal financial services. Digital banking helps bridge that gap by enabling savings accounts, payments, fund transfers, benefit disbursements (for example government transfers) and linking these to digital channels. This helps integrate rural populations into the formal economy and opens opportunities for credit, insurance and other financial products.
4. **Enabling convenience, accessibility & customer empowerment**: Rural customers gain convenience (transactions from home or nearby access point), accessibility (via mobile/agent) and empowerment (managing finances, payments, subsidies) through digital banking. A study highlights improved customer service as a major benefit: "Villagers no longer need to embark on long and painful journeys to access banking services."
5. **Supporting rural enterprise, merchants and value chains**: Digital banking is not only for consumers but also for small merchants, farmers and micro-entrepreneurs in rural areas. With digital payments and banking, rural businesses can accept payments, obtain loans, track finances more easily, thus improving their productivity and integration into wider markets. For example, UPI adoption enables small merchants to accept payments, expand customer base and reduce cash handling.
6. **Strengthening government delivery and transparency**: Digital banking channels assist in direct benefit transfers, subsidies, pensions and welfare payments reaching rural beneficiaries with lower leakage, faster turnaround and transparency. Thus digital banking becomes a key pillar for implementing social programmes in rural Telangana and beyond.
7. **Enabling resilience and innovation**: In rural settings where infrastructure is uneven, digital banking fosters innovative delivery models (agent banking, micro-ATMs, USSD services for feature phones) that adapt to local realities. These innovations are particularly relevant for states like Telangana, which have mixed terrain of well-connected and less-connected rural pockets.

Specific Considerations for Telangana:

- Telangana's rural areas can benefit from digital banking by coupling high mobile/internet penetration in many areas with banking services delivered via remote access and agent networks.
- Banks in Telangana can leverage local-language interfaces, targeted digital literacy campaigns, and agent networks for remote access (micro-ATMs, BC outlets) to maximise rural adoption.
- Given the increasing importance of agriculture, micro-enterprises and rural commerce in Telangana, digital banking can enable rural producers and vendors to access digital payments, credit and formal banking services more easily.

- Addressing infrastructure gaps (connectivity, power), digital literacy and trust remain critical for Telangana's rural segments just as in other parts of India.

Overview of the products: mobile banking, wallets, micro-ATMs:

Mobile Banking Apps:

- Mobile banking apps allow customers to access their bank accounts, check balances, transfer funds, pay bills, apply for loans etc via a smartphone (or in some cases feature phone / USSD versions).
- For example, ICICI Bank launched a rural-customer-focused mobile banking app enabling 135 services including crop-price information, farm loans and SHG (self-help group) services. They may be multilingual, designed for lower-spec devices, incorporate offline or low-data modes in rural settings.

Relevance in rural India / Telangana

- Enables banking access without travelling long distances to branches, which is important in villages and remote mandals.
- Helps integrate banking with agricultural/entrepreneurial services (in Telangana many rural households are agriculture-based).
- Could increase usage of banking channels, reduce cost of operations for banks serving low-density rural markets.

Digital Wallets / Payment Platforms:

- Digital wallets (also called e-wallets or mobile wallets) let users store money (or link bank accounts/cards) in a digital account and use it for peer-to-peer transfers, merchant payments, bill payments, etc.
- A government report indicated that more than 70 % of rural citizens had adopted e-wallets (as of a certain date) in India.
- For rural merchants and small shops, accepting wallet/QR payments allows them to receive digital payments rather than cash.

Relevance in rural India / Telangana

- Helps reduce reliance on cash in rural transactions; more convenient and traceable.
- Can facilitate small payments (for goods, services, agriculture produce) where branch or ATM access is distant.
- Enables inclusion of rural customers in digital payments ecosystem, which may link with banking products, credit offers, savings, etc.

Micro-ATMs / Remote Access Points (Agent Banking):

- A micro-ATM is a portable or small device used by a banking agent (business correspondent) in a rural location, enabling basic banking services such as cash withdrawal, balance enquiry, mini-statement, fund transfers, often via Aadhaar authentication/biometric.
- The device connects via mobile/GPRS, supports vernacular language, low-power, cheaper infrastructure than full ATM. Example: The fintech firm Spice Money deployed over 100,000 micro-ATMs covering 95% of rural pin codes.

Relevance in rural India / Telangana

- Addresses the lack of bank branches/ATMs in remote villages. Enables "banking outreach" without full branch infrastructure.
- Serves as a physical touch-point for rural customers who may still prefer or require assisted transactions (e.g., cash withdrawal).
- Helps banks lower cost of rural deployment; helps rural customers gain access near their locality rather than travelling far.

Research Objectives:

1. To **identify and categorise** the digital banking products and services (such as mobile banking apps, digital wallets, micro-ATMs/agent access points) being offered by banks and financial institutions in rural areas of Telangana.
2. To **assess the adoption levels** and usage patterns of these digital banking products/services among rural customers in Telangana—examining factors like frequency of use, preferred channels, device/technology access.
3. To **examine the enabling factors and constraints** influencing the uptake and effective utilisation of these digital banking products in rural Telangana, including infrastructure (connectivity, device access), digital literacy, trust & security, local language/vernacular usage.

4. To **evaluate the impact** of digital banking products/services on financial inclusion, convenience, cost of access, and the banking behaviour of rural customers in Telangana.
5. To **propose recommendations** for banks, fintechs and policymakers to enhance the penetration, usability and sustainability of digital banking products/services in rural Telangana.

Literature Review:

1. Adoption of Digital Banking in Rural India

A number of recent studies have examined the uptake of digital banking (mobile banking, internet banking, e-wallets) in rural parts of India. For example, A study on digital banking behaviour of rural customers in India

Chawla and Joshi (2017) investigated the factors which influence mobile banking adoption. They found that 'technology adoption leasers', 'technology adoption followers', and 'technology adoption laggards' have significant influence on attitude and intention towards mobile banking services.

Chaurasia*et al.* (2019) employed motivational model to study the user's attitude towards M-payments and empirically determined that the extrinsic motivation and awareness about demonetisation policy have significant influence on behavioral intention to use M-payment.

(Shaw & Riyat, 2025) surveyed rural customers in Jharkhand and found that key determinants of adoption were digital literacy and perceived ease of use; on the other hand poor internet connectivity and fear of fraud remained major barriers. Journal of Marketing & Social Research

Similarly, Digital Wallet and Mobile Banking Adoption Among Rural Bank Customer.

(Parakh et al., Maharashtra) studied 300 rural customers and identified factors like trust, security/privacy, familiarity and ease of use as significant for mobile-banking/wallet adoption.

These studies indicate that while digital channels have the potential for rural inclusion, actual usage remains uneven and constrained by infrastructural, behavioural and socio-demographic factors.

2. Digital Banking, Financial Inclusion and Rural Outcomes

The literature also addresses how digital banking services can drive financial inclusion and enhance rural economic outcomes. For instance, Financial inclusion in the digital banking age: Lessons from rural India

(Cambridge Core) explored villages across several Indian states and found that mere declaration of "cashless villages" did not automatically translate into meaningful digital banking usage; instead, factors such as financial and digital literacy, and reliable online access were critical. Cambridge University Press & Assessment

Another study, Rural Microfinance and Digital Inclusion: A Case Study on Mobile Banking and Financial Inclusion

(Prakash& Salman, 2024) in Chhattisgarh showed that mobile banking supported microfinance and helped rural customers better integrate into formal banking systems. globalresearch network us. These findings highlight that digital banking services do contribute to inclusion but the service delivery, user enablement, and trust frameworks are key.

3. Product/Channel-Specific Constraints: Mobile Banking, Wallets & Remote Access

In addition to adoption and inclusion, many studies focus on specific channels or products and the constraints around them. For mobile banking, A Critical Review: Mobile Banking Services and its Significant Impact on Rural Customer Behaviour Patterns

(Suresh & Namdeo) details how low electricity supply, weak internet connectivity, low technical literacy and smartphone usage hamper mobile banking in rural areas. Res.ijsrst.com

For digital wallets and mobile banking in rural customers, the study in Maharashtra found trust/security and familiarity were major adoption drivers, emphasizing that beyond infrastructure the behavioral aspects matter.

Regarding remote access points and broader digital banking services, the chapter Digital Banking Services in Rural India

(Ashoka M.L. et al., 2019) provides a broader view of how digital service models (internet banking, mobile banking, utility-payments) are being implemented in rural India and argues that these can reduce the urban–rural service gap. OUCI Another study, Challenges in implementing Digital Banking Services in Rural Areas: A study in Indian Context (Shaw & Riyat, 2025) lists connectivity, language barriers, digital literacy, distrust of platforms as key obstacles. economic-sciences.com

Research Gap:

Few studies are specific to state-level contexts (e.g., Telangana); most research is generic or focuses on states such as Maharashtra, Jharkhand, Chhattisgarh. Many studies treat digital banking in general (mobile banking, e-wallets) but fewer examine remote access points (micro-ATMs/agent networks) in rural contexts.Behavioural, cultural, local-language and infrastructure conditions specific to Telangana's rural mandals are under-explored.The inter-relation between different digital banking products (mobile app + wallet + micro-ATM) in rural settings is less studied.Few longitudinal studies track whether digital banking usage actually improves financial outcomes (savings, credit access, cost of banking) in rural areas of Telangana.

Context of Telangana in the Study of Digital Banking Products/Services in Rural Areas

- Telangana has emerged as a **top performer** in digital adoption: According to a recent survey by the Ministry of Statistics and Programme Implementation (MoSPI), 94.5 % of rural-respondents aged 15-29 in Telangana reported that they could perform online banking transactions via mobile or computer — which is significantly above the national average of 68.7 %. The state also leads in digital payments intensity—A recent bulletin (via a proxy such as Reserve Bank of India data) reports that Telangana is among states with highest per-capita UPI transaction intensity. The state has roll-outs of state-managed digital wallet infrastructure: For example, the state-wallet T-Wallet (launched June 2017) has 16 lakh+ registered users and has processed over 4 crore transactions, with reach into rural centres via integration with 4,500+ service-centres and 11,000+ fair-price shops.
- The rural hinterland of Telangana—comprising many villages and mandals with agricultural economy, self-help groups (SHGs), micro/small enterprises—makes the case for digital banking innovation compelling: enabling access, reducing travel/time-costs, and reaching underserved segments.Telangana's government and fintech ecosystem are implementing targeted rural digital payment and banking access schemes: For example, the launch of GraamPay (by a fintech in Telangana) specifically aims to empower rural entrepreneurs, merchants and farmers using a Village-Level Entrepreneur (VLE) model to onboard local users, merchants to digital payments and banking.
- Efforts to enable last-mile banking access: For instance, a local startup in partnership with banks has deployed digital banking access points in 2,000 villages in Telangana using Aadhaar Enabled Payment System (AEPS) devices, thereby reducing branch travel for rural users. Connectivity and digital literacy: Telangana's relatively high digital literacy levels and mobile/internet penetration in rural areas form a favourable backdrop. For example, younger rural respondents show strong ability to use online banking. Institutional support & policy orientation: The state's initiatives (e.g., digital payment wallet, rural fintech pilots) reflect policy support for digital banking in rural areas.
- Constraints remain: Although digital readiness is high among youth, rural-areas may still face challenges such as device availability (smartphone access), digital-literacy among older/an economically weaker segments, gender gaps in tech access (won't be detailed here but relevant).For banking product deployment (mobile apps, wallets, micro-ATMs) in rural Telangana, the local context (language/vernacular, agent networks, offline or low-connectivity modes) will be important.

Methodology

This study adopts a **descriptive-exploratory research design** to examine the deployment, adoption and impact of digital banking products/services (mobile banking apps, digital wallets, micro-ATMs/agent access points) in rural areas of Telangana. The descriptive aspect helps to characterise the current state of adoption, usage patterns and challenges; the exploratory aspect allows identifying underlying enablers, constraints and behavioural factors.

This approach is consistent with prior studies in rural digital banking. This data collected by **Secondary data** collected from banks (in Telangana), fintech platforms, industry reports, RBI/State bank statistics, government portals (such as DBT data, agent network statistics) and published research (for example, a study of rural digital banking by State Bank of India in Telangana used secondary data of bank reports and government statistics).

Limitations of the Study:

- **T**he study will be limited to selected districts/mandals in Telangana and therefore generalisation to all rural Telangana should be made cautiously.
- Self-reported data may be subject to response bias (e.g., social desirability, recall bias).
- Connectivity and logistical challenges in remote villages may affect data collection.
- The cross-sectional nature of the study captures current adoption; longitudinal changes over time are beyond scope.

Findings of the Study:

- A recent survey by Ministry of Statistics &Programme Implementation (MoSPI) found that in rural areas of Telangana, **94.5 %** of respondents aged 15-29 reported they were capable of performing online banking transactions via mobile or computer — significantly above the national average of 68.7 %. This suggests a favourable base of digital skill and readiness for digital banking products in rural Telangana.
- A report shows Telangana processed about **₹1.42 lakh crore** through 820 million UPI transactions in August 2025, placing it 4th in total volume nationally but **#1** in per-capita UPI usage. This high intensity of digital payments indicates that digital wallets/UPI-based services are already being used widely in the Telangana context—an important enabler for mobile banking and wallet products.
- Telangana achieved "100 % coverage" under the PradhanMantri Jan DhanYojana (PMJDY), meaning all unbanked adults have access to a bank account. With the basic banking access in place, the opportunity is greater to move towards digital banking products such as mobile apps, digital wallets and agent-access/remote access points.
- A study of rural customers in India (though not specific to Telangana) found that mobile banking was the most adopted digital service, whereas e-wallets and internet banking were less popular in rural settings due to both infrastructure and behavioural constraints. For rural Telangana, this suggests a likely pattern: mobile banking might be leading, with digital wallets and micro-ATM/agent channels having scope for greater growth.
- While statewide statistics are strong, there are indications of variation within rural Telangana (e.g., among different districts or connectivity levels) in the uptake of digital services. For instance, early data in a paper suggest that micro-ATM transactions increased 50% in certain rural areas of Telangana over a period. This points to the finding that connectivity, agent-presence, local infrastructure matter significantly for product uptake.

  The paper specific to Telangana reported that in rural areas of the state, the most common digital transactions were utility-bill payments, mobile recharge, direct benefit transfer (DBT) withdrawals.

- The high digital readiness in rural Telangana provides a supportive environment for introducing/analysing digital banking products (mobile apps, wallets, micro-ATMs).High UPI/digital payments usage signals that the payment component of wallets/apps is more likely to be accepted; this may reduce one barrier (payment habit) and shift the focus to other barriers (trust, device/infrastructure, agent reliability).
- While overall coverage is good, your research should pay attention to heterogeneity within rural Telangana: different mandals/villages may show very different levels of uptake depending on connectivity, agent networks, literacy etc.
- The common transaction types (utilities, recharges, DBT) suggest that many rural customers may use digital banking for limited purposes; uptake of full-featured mobile banking apps or agent services may need more enablement.Special attention should be given to disadvantaged segments (women, older, less educated) where uptake may lag—your questionnaire and analysis should capture these.

Recommendations:

Based on the findings, the following recommendations are proposed for banks, financial institutions, fintech partners and state/regional policymakers operating in Telangana's rural areas:

- Enhance digital infrastructure and connectivity
- Strengthen digital and financial literacy programmes
- Increase local-agent/agent-banking channel effectiveness
- Design and customise product features for the rural user-segment
- Build trust, security and reliability to encourage deeper usage
- Enable monitoring, data-analytics and differential-interventions across mandals
- Policy & ecosystem support

Conclusion:

The study on digital banking products and services in rural Telangana focusing on mobile banking apps, digital wallets, and micro-ATMs/agent banking access points reveals a landscape of both promise and challenge. On the positive side, rural Telangana demonstrates relatively strong digital readiness (for example the rural population's high self-reported ability to perform online banking tasks) and active uptake of digital payments such as UPI, suggesting that the foundation for digital banking is robust. The availability of agent-based access (micro-ATMs) is helping bridge the physical accessibility gap for banking services in remote mandals.However, the findings also reveal significant impediments: infrastructure constraints (connectivity, power interruptions), digital-literacy gaps (especially among older age groups, women or less-educated rural residents), trust and security concerns, and variability in adoption across districts within Telangana (with some remote areas lagging). While mobile banking apps and wallets are increasingly used for basic transactions (bill payments, recharges, DBT withdrawals), deeper usage (e.g., full-service banking, credit/loan applications, investments) remains limited in many rural segments.

In sum, digital banking products in rural Telangana are making meaningful inroads but have not yet achieved full maturity across all rural segments. For banks, fintechs and policymakers to realise the full potential of digital banking in rural Telangana in terms of financial inclusion, cost-efficient service delivery, and empowerment of rural customers a multipronged set of interventions and enhancements will be necessary. Finally implementing a coordinated approach involving infrastructure improvement, customised product design, rural agent-networks, trust-building and data-driven monitoring, the digital banking ecosystem in rural Telangana can move from initial adoption to sustained, meaningful usage.

References:

1. Bagla, R. K. &Sancheti, V. (2018).Gaps in customer satisfaction with digital wallets: challenge for sustainability", Journal of Management Development, 37 (6),442-451.
2. Bapat, D. (2021). Exploring the relationship between lifestyle, digital financial element and digital financial services experience. International Journal of Bank Marketing.
3. Chaurasia, S. S., Verma, S., & Singh, V. (2019). Exploring the Intention to Use M-payment in India: Role of Extrinsic Motivation, Intrinsic Motivation and Perceived Demonetization Regulation.Transforming Government,13(3-4), 276-305.
4. Chawla, D. & Joshi, H. (2020).Consumer attitude and intention to adopt mobile wallet in India–An empirical study.International Journal of Bank Marketing, 37 (7), 1590-1618.
5. Chawla, D., & Joshi, H. (2020).Consumer attitude and intention to adopt mobile wallet in India–An empirical study.International Journal of Bank Marketing, 22 (4), 483-504.
6. Singh, S., Sahni, M. M. &Kovid, R. K. (2020).What drives FinTech adoption? A multi-method evaluation using an adapted technology acceptance model.Management Decision, 58 (8), 1675-1697.
7. Sivathanu, B. (2019). Adoption of digital payment systems in the era of demonetization in India.Journal of Science and Technology Policy Management, 10 (1),143-171.
8. Sobti, N. (2019). Impact of demonetization on diffusion of mobile payment service in India: Antecedents of behavioral intention and adoption using extended UTAUT model. Journal of Advances in Management Research, 16(4), 472-497.
9. Addela, Shirisha; Sivakoti Reddy, M. "Impact of E-Banking on Traditional Banking Services in the State of Telangana Rural Areas." *International Journal for Research in Engineering Application & Management (IJREAM)*, Vol. 04, Issue 10, Jan 2019. IJREAM
10. Chiluka, Karunaker. "Emerging Trends in Digital Banking Services in Rural Markets: The Case of SBI in Telangana."*International Journal of Progressive Research in Engineering, Management & Science (IJPREMS)*, Vol. 05, Issue 05, May 2025, pp. 368-371. DOI: 10.58257/IJPREMS41048. IJPREMS+1
11. Divi, Sriram; Minampati, Venkatram Reddy; Sahoo, Manoj Kumar; Shah, Kartikeya. "Penetration of Digital Transactions in Rural India and Financial Inclusion; An Analysis of Progress and Problems." *Asian Journal of Human Services*, Vol. 29, 2025, pp. 542-550. DOI: 10.14391/ajhs.29.542. J-STAGE
12. Kalita, Himangshu. "Financial Inclusion ThroughFinTech: Assessing the Role of Digital Payment Platforms in Empowering Rural Communities." *JMA Journal of Business & Societal Transformations*, Vol. 1, No. 1.

13. Singh, Shailendra; Agarwal, Megah. "Progress of Digital Banking in Rural India."*Prastuti: Journal of Management & Research*, Vol. 9, Issue 1, Jan-June 2020, pp. 31-36. DOI: 10.51976/gla.prastuti.v9i1.912004. Journal Press India
14. YettiVinay; Laxmi, Dr. Vinaya. "Customer Experience in Digital Banking Services with Special Reference to Rural Areas in Ranga Reddy Region."*EPRA International Journal of Multidisciplinary Research (IJMR)*, Vol. 10, Issue 1, Jan 2024. DOI: 10.36713/epra15684. EPRA Journals