The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

OPEN ACCESS

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

2. Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India

Manimugdha Medhi,[1] *Dr. Tiluttoma Baruah[2]

Research Scholar, Faculty of Humanities and Social Sciences, Assam down town University, Guwahati, Assam, India

Professor, Faculty of Humanities and Social Sciences, Assam down town University, Guwahati, Assam, India

**email: tiluttoma.baruah@rediffmail.com*

Abstract

The study mainly focuses on the patterns of digital awareness in Ghoramarajan Pam, a peri-urban village in Assam, India, to understand how geographical proximity to metropolitan centres influences digital inclusion. The study used 327 participants and assessed awareness across ten domains, including entertainment, education, digital payments, agriculture, healthcare, and cyber safety. Statistical analysis employed Wilson confidence intervals and one-sample proportion z-tests against a 50% benchmark representing minimal community familiarity. The findings indicate that digital awareness is unevenly distributed across domains. Consumption-oriented domains such as digital entertainment (33.6%), online education (32.1%), and digital payments (29.2%) demonstrated comparatively higher levels of awareness, whereas livelihood-related and safety-oriented domains—including small-scale industries (10.9%), agricultural technologies (15.0%), and cybercrime awareness (13.0%)—remained substantially limited. These patterns highlight the persistence of digital inequalities despite spatial proximity to urban infrastructure. In theory, the study explores the idea of a peri-urban paradox, proposing that proximity to metropolitan areas does not always equate to significant digital awareness. Drawing on Diffusion of Innovation theory and the Capability Approach, the study demonstrates how visibility, peer interaction, and capability-related constraints influence uneven awareness across domains. The findings underscore the importance of targeted, context-sensitive interventions that extend beyond infrastructure to strengthen livelihood-oriented and safety-related digital awareness. Overall, the study contributes to ongoing discussions on digital inclusion in the Global South by providing empirical evidence on domain-specific awareness patterns within peri-urban rural communities.

Keywords: *Digital Awareness; Digital Inclusion; Peri-Urban Communities; Rural Digitalization; Diffusion of Innovation; Capability Approach; Digital Divide; Global South*

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

Introduction

People's access to services, communication, education, and economic participation are all being shaped by digitalization, which has grown to be an important aspect of modern development. To reach larger segments of the population, especially those residing in rural areas, government initiatives in nations like India have centered on developing digital infrastructure and supporting technology-driven services. Despite these initiatives, meaningful usage of digital infrastructure does not often follow from its clear availability. People may have access to devices or connectivity in multiple situations, but they may not know how to use digital technologies to meet their daily requirements.

This gap becomes particularly visible in rural and peri-urban regions. While urban centers have experienced rapid digital expansion and integration into daily routines, rural communities often encounter uneven patterns of engagement. Additionally, pricing and connectivity are not the only factors contributing to this gap. It is also closely related to awareness—the degree to which people are aware of the digital services that are accessible, grasp their function, and see how important they are to their life. Without adequate awareness, the broader goals of digitalization, such as improved access to services and enhanced livelihood opportunities, remain difficult to achieve.

Digital awareness, therefore, extends beyond basic operational knowledge. It involves an understanding of digital platforms across various domains of everyday life, including education, financial transactions, healthcare, agriculture, and online safety. At the same time, new risks like cyber fraud, false information, and data misuse are brought about by the increasing integration of digital technologies into everyday life. Awareness, thus, assumes a dual significance: it enables individuals to take advantage of digital opportunities while also helping them navigate potential threats responsibly.

A growing body of research has examined digitalization in rural India, particularly focusing on infrastructural limitations, affordability issues, and digital literacy challenges. This researches have shed light on challenges that influence the adoption of new technologies. Understanding how awareness really differs in various aspects of life, however, has received somewhat limited research attention. Furthermore, there hasn't been much scholarly attention paid to peri-urban areas, which are places where rural and urban environments converge. Although these areas frequently gain by being physically close to cities, they could nonetheless face difficulties like to those encountered in rural areas.

Against this backdrop, the present study is situated in Ghoramarajan Pam village, a peri-urban settlement located near a metropolitan center in Assam. The setting provides an opportunity to

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

examine how geographical closeness to urban resources interacts with local socio-economic and cultural conditions. These situations offer significant issues regarding whether meaningful digital engagement may be fostered by physical proximity alone or if other structural and capability-related variables still have an impact on awareness patterns.

By focusing on domain-specific digital awareness in a peri-urban rural context, this study seeks to contribute to ongoing discussions on digital inclusion in the Global South. It aims to deepen understanding of how awareness shapes engagement with digital technologies and to highlight the importance of context-sensitive approaches in bridging existing digital gaps. By doing so, the study highlights that initiatives to advance digital inclusion must take into account how people view, interpret, and interact with digital technologies in their day-to-day lives rather than just infrastructure and access.

Literature Review

Over the past ten years, the conversations on digitalization in rural areas has evolved significantly, with issues pertaining to adoption, access, and digital proficiency receiving increasing attention. The structural and socioeconomic elements that affect digital inclusion have been extensively studied in the literature, especially in India. Together, these studies demonstrate how larger social and institutional factors, in addition to technological accessibility, influence digital engagement.

Structural and Infrastructural Barriers to Digital Inclusion

Infrastructure constraints are one of the biggest obstacles to digital inclusion, according to various studies. For example, in rural service delivery systems like Common Service Centers (CSCs), Dwivedi et al. (2016) drew attention to problems like insufficient connectivity, intermittent power supply, a lack of institutional support, and a lack of adequately trained staff. Similarly, reports by Deloitte (2019) and McKinsey Global Institute (2019) note that although digital infrastructure and mobile connectivity have expanded rapidly in India, disparities in access and service availability continue to persist, especially in rural and isolated areas. Such gaps in infrastructure frequently function as fundamental obstacles that limit access to the productive usage of digital technologies.

Gómez-Carmona et al. (2023) highlighted that rural digital transformation is often constrained by infrastructural limitations and socio-economic barriers, which restrict the development of technology-driven services. Their study proposed the AURORAL digital ecosystem as a framework to enhance connectivity, service delivery, and socio-economic resilience in rural settings. The results highlight the

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

need for digital transformation initiatives to go beyond infrastructure and incorporate integrated digital services that cater to the unique requirements of rural communities.

Socio-Economic and Literacy Constraints

Beyond infrastructure, socio-economic factors such as income levels, educational attainment, and digital literacy significantly influence patterns of technology adoption. Khanna and Chavan (2017) and emphasize that affordability challenges, limited educational exposure, and lack of technical skills continue to hinder the uptake of digital technologies in rural India. Supporting this, the Google and KPMG (2017) report indicates that only a small proportion of Indian language internet users possess adequate digital literacy skills. The outcomes indicate that access by itself does not ensure involvement; people also need to have the skills and self-assurance needed to interact with digital platforms in an appropriate manner.

Digital Divide: Beyond Access to Usage

The notion of the "digital divide" has changed over time, moving from a minimal attention to access to a more comprehensive understanding that takes usage patterns and results into account. In their thorough evaluation of rural ICT adoption, Salemink, Strijker, and Bosworth (2017) showed that differences exist in both availability and how technologies are incorporated into daily life. Similarly, Bawden and Robinson (2019) claimed that critical engagement with information, as opposed to merely utilitarian use, is a necessary component of digital literacy. These viewpoints supported the notion that digital inclusion needs to be seen as a multifaceted trend that includes skills, access, and meaningful use.

Doloi (2025) investigated internet adoption across multiple rural villages in Assam and reported a significant disparity between mobile device ownership and effective internet usage. The survey determined that while mobile access was common, dependable internet connectivity was still scarce, and the majority of digital usage was focused on social networking, education, and entertainment rather than activities related to livelihood. The findings identified infrastructural deficiencies, affordability challenges, and limited digital literacy as major barriers to digital inclusion, highlighting persistent structural inequalities in rural digital ecosystems.

Digital Awareness as a Critical but Underexplored Dimension

While digital literacy and access have been widely discussed, the specific role of digital awareness remains comparatively underexplored. In many studies, awareness is treated as a component of literacy, without examining how it varies across different areas of application. However, in the early phases of technology adoption, awareness was especially crucial. For instance, Corradini and Nardelli (2018) associated digital awareness with appropriate technology use and sound decision-making. Even in cases where basic skills and infrastructure are accessible, people may still be shut out of digital opportunities due to low awareness. Wu and Peng (2024) looked at the variables affecting rural people' adoption of financial technology and emphasised how important innovation and financial literacy were in influencing behavioural intentions. The study, which used a technological acceptance paradigm, discovered that awareness-related capacities served as important enabling factors for digital engagement, while perceived utility and simplicity of use greatly increased user adoption. These findings reinforce the view that meaningful digital inclusion depends not only on technological access but also on users' knowledge and confidence in engaging with digital systems.

In addition, emerging observations suggest that digital engagement in rural communities is often uneven. Participation tends to be higher in easily accessible and socially visible domains such as entertainment and communication, while more complex or less familiar domains remain less utilized. This trend suggests that social interaction, perceived utility, and geographical relevance all influence awareness directly.

Gaps in Peri-Urban and Regional Contexts

Although research on rural digitalization is expanding, peri-urban areas have received comparatively less attention. These areas occupy an intermediate space between rural and urban environments and often experience a mix of advantages and constraints. Many existing studies treat rural and urban areas as clearly distinct categories, overlooking the complexities of peri-urban settings that are geographically close to cities but socio-economically constrained. Rajendran et al. (2024) emphasized the increasing significance of peri-urban spaces as transitional zones characterized by continuous interaction between rural and urban systems. Their study argued that peri-urbanisation should be reconceptualized as a distinct socio-spatial framework capable of capturing the complex dynamics of development in the Global South. The authors highlighted that these hybrid spaces often experience overlapping opportunities and constraints, making them critical sites for understanding uneven development patterns and designing context-sensitive interventions.

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

OPEN ACCESS

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

Furthermore, there remains a noticeable gap in region-specific research from the North-Eastern part of India, particularly Assam. The patterns of digital awareness and adoption may be different from those seen in other regions of the nation due to the distinct sociocultural, linguistic, and infrastructure factors in this area.

Research Gap

Three significant gaps emerged from the body of available literature. First, not much research has been done on domain-specific digital awareness, especially in relation to livelihood, services, and digital safety. Second, not much research has been done on how peri-urban setting affects digital awareness patterns. Third, studies on rural and peri-urban communities in Northeast India are comparatively scarce, indicating a geographical deficit.

Theoretical Framework

Sen's Capability Approach (CA) and Rogers' Diffusion of Innovation (DOI) theory are two complementary theories that this study uses to analyses the dynamics of digital awareness in peri-urban rural situations. The integration of these frameworks allows for an understanding of both the processes through which awareness spreads and the conditions that influence individuals' ability to translate awareness into meaningful use.

The Diffusion of Innovation idea states that the acceptance of new technology happens in stages, starting with awareness and understanding and moving on to persuasion, decision-making, implementation, and confirmation. Since people cannot accept technologies they are not aware of, awareness is the first and most important step in this process. The spread of digital technology is not consistent across domains in rural and peri-urban settings. Peer networks tend to spread more quickly for services that are publicly visible, socially shared, or thought to be immediately helpful, like communication or entertainment platforms. In contrast, domains that require specialized knowledge or institutional support, like agriculture technologies, small-scale industries, or cyber security awareness, often diffuse more slowly. Thus, the DOI framework offers a helpful perspectives for comprehending how awareness diffuses unevenly across various digital engagement domains.

The Capability Approach offers a complementary perspective by shifting attention from mere access to the actual abilities individuals possess to make effective use of available resources. According to this theory, awareness itself can be seen as a fundamental skill that help people identify opportunities and make decisions wisely. Factors such as education, income, language accessibility, social trust, and

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

exposure to digital environments influence whether individuals develop the capability to understand and engage with digital technologies. In peri-urban rural settings, limitations in these enabling factors can restrict individuals from translating technological availability into meaningful awareness and use.
By combining DOI and CA, this study develops a framework that captures both the process of awareness diffusion and the capability conditions necessary for meaningful engagement. While DOI explains how information about digital technologies spreads across social systems, the Capability Approach highlights why certain individuals or communities remain excluded despite the presence of infrastructure. Together, these perspectives help explain why peri-urban communities may continue to experience uneven digital awareness despite geographical proximity to urban centers.

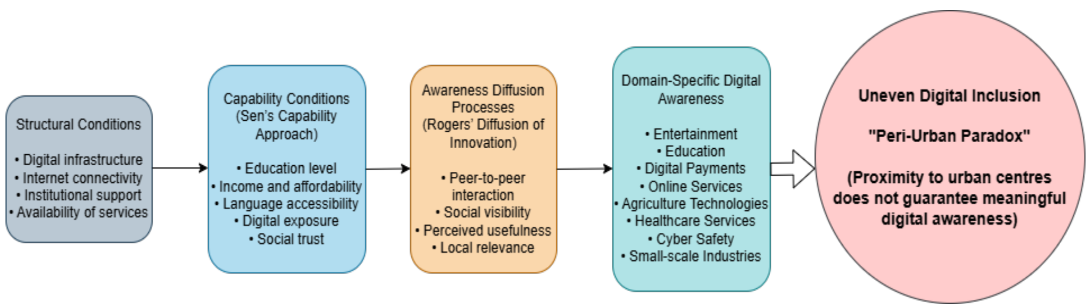

Figure 1

The conceptual framework guiding the study is presented in Figure 1. It illustrates how structural and capability conditions influence the diffusion of digital awareness across different domains, ultimately shaping patterns of digital inclusion in peri-urban contexts.

Methodology

Research Design

The present study adopted a descriptive research design using a quantitative approach to examine patterns of digital awareness among rural residents. A descriptive design was considered appropriate as the study aimed to measure the level of awareness across multiple domains without manipulating any variables. The quantitative approach enabled the systematic collection of measurable responses from a relatively large number of participants, facilitating statistical comparison across different domains of digital awareness.

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

OPEN ACCESS

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

Study Area and Population

The study took place out in the village of Ghoramarajan Pam, which is situated in the Kamrup Metropolitan District of Assam's Chandrapur Circle. The village represents a peri-urban setting characterized by geographical proximity to a metropolitan centre while retaining rural socio-economic characteristics. The total population of Ghoramarajan Pam village was recorded as 1,834 individuals, according to the District Census Handbook: Kamrup, Assam (Directorate of Census Operations, Assam, 2011).

Sampling Procedure

A sample of 327 participants was selected from the total population using Slovin's formula, which is commonly employed to determine an appropriate sample size when the population size is known and variability is uncertain. A simple random sampling method was adopted to ensure that each eligible resident had an equal probability of selection. The sampling process involved preparing a list of eligible households and selecting respondents randomly to minimize selection bias and enhance representativeness.

Data Collection Instrument

Primary data were collected using a structured survey questionnaire designed to assess awareness across multiple domains of digital engagement. The questionnaire included items related to digital payments, online education, entertainment platforms, online shopping, service delivery, agriculture-related technologies, healthcare services, small-scale industries, and cyber safety awareness. Most items were structured as binary response questions (Yes/No) to capture awareness status clearly and enable proportion-based statistical analysis. The instrument was developed based on existing literature on digital literacy and awareness and was reviewed to ensure relevance to the local context.

Data Analysis Techniques

The collected data were analysed using both descriptive and inferential statistical methods. Descriptive statistics were used to summarize awareness levels across different domains.

To assess whether awareness levels were significantly below a minimum community familiarity threshold, inferential procedures were applied. Wilson confidence intervals (95%) were calculated for the proportion of affirmative responses in each domain. The Wilson method was selected because it provides more accurate interval estimates for binomial data compared to traditional normal

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

approximation methods (Brown, Cai, & Dasgupta, 2001).

In addition, one-sample proportion z-tests were conducted using a one-sided hypothesis framework to evaluate whether awareness levels were significantly lower than a 50% benchmark, representing minimal community familiarity.

Limitations of the Study

The study is limited by its focus on a single village, which may restrict the generalizability of findings to other contexts. Additionally, reliance on self-reported responses may introduce response bias. Time constraints during fieldwork also limited opportunities for longitudinal observation.

Results Analysis

Table 1. Domain-Specific Awareness Levels and Rankings in Ghoramarajan Pam Village (N = 327)

Rank	Domain of Awareness	Yes (n)	No (n)	% Aware	95% CI Lower	95% CI Upper
1	Digital entertainment	110	217	33.6	28.7	39.3
2	Online education	105	222	32.1	27.2	37.7
3	Digital payments	96	231	29.2	24.4	34.6
4	Online shopping	96	231	29.2	24.4	34.6
5	Online booking	81	246	24.8	20.2	30.0
6	Healthcare	72	255	22.0	17.6	27.1
7	Food delivery	69	258	21.2	16.9	26.2
8	Agri equipment	49	278	15.0	11.5	19.4
9	Cybercrime	43	284	13.0	9.8	17.1
10	Small industries	36	291	10.9	7.9	15.0

(Source: Compiled by authors from field survey, 2025)

Table 1 presents the distribution and ranking of awareness across ten digital domains in Ghoramarajan Pam village (N = 327). The findings indicate variation in awareness across domains. The highest levels of awareness were observed in digital entertainment (33.6%), followed by online education (32.1%), and digital payments (29.2%). Similar levels were observed for online shopping (29.2%), while online booking services (24.8%), digital healthcare (22.0%), and online food delivery (21.2%) demonstrated moderate levels of awareness.

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

Lower levels of awareness were recorded in domains related to productive and security-oriented applications. Awareness of digital agricultural equipment (15.0%), cybercrime awareness (13.0%), and platforms for small-scale industries (10.9%) remained comparatively limited.

Across all domains, the overall mean awareness level was 23.8%, indicating that awareness remains below majority levels within the community.

Table 2 : Domain-specific awareness rates with 95% confidence intervals.

Domain of Digital Awareness	Yes (n)	No (n)	% Yes	95% CI (Wilson)	z (vs 50%)	p-value
Digital payments/transactions	96	231	29.20%	[24.4, 34.6]	-9.65	<.001
Online education services	105	222	32.10%	[27.2, 37.7]	-8.51	<.001
Online food/service delivery	69	258	21.20%	[16.9, 26.2]	-12.3	<.001
Online booking services	81	246	24.80%	[20.2, 30.0]	-11.1	<.001
Online shopping	96	231	29.20%	[24.4, 34.6]	-9.65	<.001
Digital entertainment	110	217	33.60%	[28.7, 39.3]	-8.02	<.001
Platforms for small industries	36	291	10.90%	[7.9, 15.0]	-15.7	<.001
Digital agricultural equipment	49	278	15.00%	[11.5, 19.4]	-14.2	<.001
Digital healthcare services	72	255	22.00%	[17.6, 27.1]	-12.1	<.001
Cybercrime awareness	43	284	13.00%	[9.8, 17.1]	-15	<.001

(Source: Compiled by authors from field survey, 2025)

Table 2 showed the results of the inferential analysis, which included 95% Wilson confidence intervals and one-sample proportion z-tests conducted against a 50% benchmark representing minimal community familiarity. Across all ten domains, awareness levels were found to be significantly below the 50% threshold ($p < .001$). The highest awareness was observed in digital entertainment (33.6%,

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

95% CI [28.7, 39.3]), followed by online education (32.1%, 95% CI [27.2, 37.7]) and digital payments (29.2%, 95% CI [24.4, 34.6]).

In contrast, awareness levels remained notably low in domains associated with livelihood and safety functions, including platforms for small industries (10.9%, 95% CI [7.9, 15.0]), cybercrime awareness (13.0%, 95% CI [9.8, 17.1]), and digital agricultural equipment (15.0%, 95% CI [11.5, 19.4]). The findings verify that awareness levels in every category continue to be well below the established cutoff point for minimum community-wide familiarity.

When taken as a whole, these results show that awareness levels continually fall short of majority thresholds in every domain that was investigated.

Discussion

Despite Ghoramarajan Pam village's close access to a metropolitan center, the current investigation reveals ongoing shortcomings in digital understanding. The results showed that awareness levels in all 10 of the digital domains under investigation are still significantly below the minimal level of community-wide knowledge. This pattern implies that even in peri-urban environments where physical access to urban infrastructure could be thought to promote digital participation, digital exclusion still exists. Therefore, the findings support the claim that meaningful engagement in digital ecosystems cannot be ensured by proximity alone.

Interpretation of Findings

In areas like digital entertainment, online education, and digital payments that are easier to see and incorporate into daily life, awareness was somewhat higher. These domains can spread throughout communities because they are usually linked to regular exposure, peer contact, and quick perceived benefits. On the other hand, platforms for small-scale companies, cybercrime awareness, and agricultural technology were among the areas where awareness remained noticeably low in relation to livelihood enhancement and digital safety. This pattern suggests that community digital participation is more focused on consumption and convenience than on protective or productive applications.

Rogers' Diffusion of Innovation (DOI) theory, which highlighted that awareness is the initial step in the adoption process, could possibly be used to analyse these results. The unequal distribution of awareness across domains indicates that social interaction, perceived utility, and visibility all have an impact on diffusion processes. Technologies that are widely shared through peer networks or daily

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

interactions tend to spread more rapidly, whereas those requiring institutional support or specialized knowledge diffuse at a slower pace.

In a similar vein, Sen's Capability Approach offered an additional explanation by highlighting how enabling circumstances influence people's capacity to make use of available resources. According to this viewpoint, awareness itself can be seen as a fundamental skill that helps people spot opportunities and make wise decisions. People's capacity to convert technical availability into meaningful awareness and utilization may be hampered by constraints pertaining to education, income, digital literacy, and language accessibility. The observed gaps therefore suggest the presence of capability constraints that limit the effective functioning of digital initiatives at the community level.

Comparison with Existing Literature

The results of this study contribute to our current understanding of peri-urban dynamics and are consistent with previous studies on rural inclusion in the digital age. Salemink, Strijker, and Bosworth (2017) demonstrated that rural communities in the European Union continue to experience disparities in ICT adoption due to infrastructural and socio-economic limitations. Similarly, studies conducted in the Indian context by Khanna and Chavan (2017) and Tanwar et al. (2021) identified affordability challenges, educational limitations, and infrastructural deficits as major barriers to digital adoption.

However, the present study contributes an important contextual insight by demonstrating that even in areas located near metropolitan centres, digital awareness may remain limited. This finding gives credibility to the growing idea of a peri-urban paradox, which holds that being physically close to an urban region does not always result in better digital engagement. The results contribute to the continuing discussions about the uneven nature of digital dissemination in the Global South by indicating that structural, social, and cultural elements may have a greater impact than close proximity alone.

Policy and Practice Implications

The study's findings point to a number of consequences for the execution of programs and policies. First, the necessity for focused awareness campaigns that highlight the productive potential of digital technology is shown by the comparatively low awareness in livelihood-oriented fields like small-scale manufacturing and agriculture. Digitalization initiatives run the risk of perpetuating consumption patterns rather than promoting sustainable economic growth in the absence of such measures.

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

OPEN ACCESS

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

Second, given the rise in digital transactions and online activity, the lack of understanding about cybercrime is a serious problem. Building trust and lowering susceptibility to scams and false information may be achieved by incorporating digital safety education into current awareness campaigns.

Third, domains that currently demonstrate relatively higher levels of awareness—such as online education and entertainment—may serve as strategic entry points for expanding digital knowledge into more complex areas. Leveraging familiar platforms to introduce additional digital services may support gradual and sustained engagement.

More broadly, interventions should extend beyond infrastructural expansion to include culturally relevant, language-sensitive, and community-based strategies. Participatory methods of digital learning can be fostered by cooperation between government agencies, educational institutions, and community organizations—such as projects carried out under programs like Unnat Bharat Abhiyan. Training local youth as digital facilitators and integrating digital education into school curricula may also contribute to strengthening long-term community-level capabilities.

Limitations and Future Research

This study is limited by its focus on a single peri-urban village, which may restrict the generalizability of findings to other contexts. The cross-sectional nature of the research also limits the ability to examine changes in awareness over time. Additionally, the reliance on quantitative survey responses limits the exploration of individual experiences, perceptions, and motivations related to digital engagement. Mixed-methods approaches, which combine quantitative analysis with qualitative insights like focus groups or interviews, could be beneficial for future research. Increasing the scope to encompass several villages in various geographical areas would facilitate comparative analysis and improve the findings' generalisability. Additionally, longitudinal research could provide important insights into how policy activities and technical advancements affect the evolution of digital awareness over time.

Conclusion

This study highlighted the uneven distribution of digital awareness in Ghoramarajan Pam village, revealing that engagement with digital technologies remains concentrated in domains associated with convenience and entertainment, while awareness related to livelihood and safety-oriented applications remains limited. The results showed that being close to urban areas does not guarantee significant

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

digital inclusion since socioeconomic, educational, and contextual obstacles still influenced awareness and engagement patterns.

The study supports the applicability of the Capability Approach and Diffusion of Innovation theory in explaining differences in digital awareness from a theoretical standpoint. The observed trends indicate that while fields requiring institutional support or specialized expertise continue to be less accessible, technologies that are socially prominent and easily disseminated tend to spread more quickly. The results also highlighted the significance of capability-related characteristics, such as education, language accessibility, and digital exposure, in determining an individual's capacity to interact effectively with digital opportunities.

By revealing that digital awareness does not develop consistently across domains, the study empirically adds to the expanding collection of research on digital inclusion in peri-urban situations. The persistence of low awareness in livelihood and security-related areas suggests that current digitalization efforts risk reinforcing patterns of passive consumption rather than enabling productive and protective uses of technology. This underlines the need for more focused and context-sensitive approaches to fill in domain-specific knowledge gaps.

These results led to a number of useful suggestions. Applications associated with livelihood and safety should be given priority in digital policy initiatives, especially in fields of cyber security, small-scale industries, and agriculture. Awareness programmes should incorporate regionally relevant content delivered in local languages and supported by community-based facilitators. In addition, familiar platforms such as digital entertainment and online education may be leveraged as entry points to introduce more complex and productive digital services. Developing systematic tools, such as a Digital Awareness Index, may also assist policymakers in identifying gaps and monitoring progress in peri-urban communities.

Overall, the study stresses that increasing knowledge in ways that support livelihood development, improve digital safety, and foster long-term community engagement is more important for meaningful digital inclusion than expanding infrastructure. Therefore, access as well as the breadth and significance of digital awareness across different aspects of daily life should be given top priority in future initiatives aimed at digital transformation.

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

References

1. Bawden, D., & Robinson, L. (2019). Information and digital literacies: A review of concepts. *Journal of Documentation, 75*(5), 1016–1034. https://doi.org/10.1108/JD-03-2019-0040

2. Corradini, E., & Nardelli, E. (2018). Digital awareness: A computational thinking perspective. In *Proceedings of the 10th International Conference on Computer Supported Education* (pp. 196–203). SCITEPRESS. https://doi.org/10.5220/0006688701960203

3. Deloitte. (2019). *Digital India: Unlocking the trillion-dollar opportunity*. Deloitte India. Retrieved from https://www2.deloitte.com/in/en/pages/technology-media-and-telecommunications/articles/digital-india.html

4. Directorate of Census Operations, Assam. (2011). *District census handbook: Kamrup, Assam (Village and town directory) (Series 19, Part XII-A).* Office of the Registrar General & Census Commissioner, India. Retrieved from https://kamrup.assam.gov.in/sites/default/files/public_utility/Census-2011-District%20Census%20Handbook-Part%20XII-A.pdf

5. Doloi, H. K. (2025). Digital Inclusion for Rural Growth: Internet Usage and Smart Villages Development. *Asia-Pacific Journal of Rural Development*, *35*(1), 40-57. https://doi.org/10.1177/10185291251343357

6. Dwivedi, Y. K., Sahu, G. P., Rana, N. P., Singh, M., & Chandwani, R. K. (2016). Common services centres (CSCs) as an approach to bridge the digital divide: Reflecting on challenges and obstacles. *Transforming Government: People, Process and Policy, 10*(4), 511–525. https://doi.org/10.1108/TG-01-2016-0006

7. Gómez-Carmona, O., Buján-Carballal, D., Casado-Mansilla, D., López-de-Ipiña, D., Cano-Benito, J., Cimmino, A., Poveda-Villalón, M., García-Castro, R., Almela-Miralles, J., Apostolidis, D., Drosou, A., Tzovaras, D., Wagner, M., Guadalupe-Rodriguez, M., Salinas, D., Esteller, D., Riera-Rovira, M., González, A., Clavijo-Ágreda, J., Díez-Frias, A., Bujalkova, N. (2023). Mind the gap: The AURORAL ecosystem for the digital transformation of smart communities and rural areas. *Technology in Society, 74*, 102304. https://doi.org/10.1016/j.techsoc.2023.102304

8. Google & KPMG. (2017). *Indian languages: Defining India's internet*. Google India & KPMG. Retrieved from https://assets.kpmg.com/content/dam/kpmg/in/pdf/2017/04/Indian-languages-Defining-Indias-Internet.pdf

9. Khanna, S., & Chavan, P. (2017). Digital divide: A roadblock for digitalization in rural India. *International Journal of Research in Commerce & Management, 8*(3), 51–56.

10. McKinsey Global Institute. (2019, February). *Digital India: Technology to transform a connected nation*. McKinsey & Company. Retrieved from https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/India/Digital%20India%20Technology%20to%20transform%20a%20connected%20nation/Digital-India-full-report.ashx

Citation : Manimugdha Medhi, Dr. Tiluttoma Baruah (2026). Local Realities of Digital Awareness in the Global South: The Case of Ghoramarajan Pam Village, Assam, India, **The Researchers** – June 2026, 12(2): 09-24. doi - 10.21276/tr.2026.12.2.AN2

The Researchers' - Volume XII, Issue II, June 2026
International Research Journal (Double-blind peer-reviewed)
ISSN:2455-1503 (E) | ISSN:2455-4405 (P) |
Impact Factor-5.882

OPEN ACCESS

Date of Acceptance : 02 March 2026 DOI- 10.21276/tr.2026.12.2.AN2

11. Rajendran, L. P., Raúl, L., Chen, M., Guerrero Andrade, J. C., Akhtar, R., Mngumi, L. E., Chander, S., Srinivas, S., & Roy, M. R. (2024). The 'peri-urban turn': A systems thinking approach for a paradigm shift in reconceptualising urban–rural futures in the Global South. *Habitat International, 146*, 103041. https://doi.org/10.1016/j.habitatint.2024.103041

12. Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

13. Salemink, K., Strijker, D., & Bosworth, G. (2017). Rural development in the digital age: A systematic literature review on unequal ICT availability, adoption and use in rural areas. *Journal of Rural Studies, 54*, 360–371. https://doi.org/10.1016/j.jrurstud.2015.09.001

14. Wu, G., & Peng, Q. (2024). Bridging the Digital Divide: Unraveling the Determinants of FinTech Adoption in Rural Communities. *Sage Open*, *14*(1). https://doi.org/10.1177/21582440241227