



## DIGITAL INCLUSION AND GENDER DEVELOPMENT: CLOSING THE ICT GENDER DIVIDE IN RURAL COMMUNITIES

Unigwe, Rosemary Ifeyinwa, PhD & Omoruyi Josephine, Ph.D

Ibinedion University, Okada, Edo State

[ifeyinwa.rosemary@iuokada.edu.ng](mailto:ifeyinwa.rosemary@iuokada.edu.ng), [Omoruyi.obiajulu@iuokad.edu.ng](mailto:Omoruyi.obiajulu@iuokad.edu.ng)

### Abstract

*Digital inclusion has become a fundamental driver of social and economic development in the 21st century, yet a significant gender divide persists, especially in rural communities of developing nations. This article explores the intersection of digital inclusion and gender development, focusing on the pressing need to close the Information and Communication Technology (ICT) gender gap in underserved rural areas. The digital gender divide disproportionately affects women and girls, limiting their access to vital digital resources, skills training, educational opportunities, and economic empowerment. This exclusion undermines broader gender development goals and reinforces existing inequalities in education, healthcare, employment, and civic participation. Drawing on global and regional data, the article identifies key factors contributing to the divide, including infrastructural limitations, socio-cultural norms, digital illiteracy, and policy gaps. It emphasizes that bridging the divide requires a multi-dimensional strategy that combines infrastructure investment, inclusive policy-making, community engagement, and culturally sensitive digital literacy programs. Particular attention is given to empowering rural women through relevant and localized content, support for female entrepreneurship, and targeted ICT education. By closing the ICT gender gap, rural women can gain meaningful access to digital tools that enable them to participate more fully in the economy, improve their quality of life, and contribute to community development. The article concludes that digital inclusion is not merely a technological issue but a gender justice imperative. Without deliberate and sustained interventions, the digital divide will continue to hinder gender development and social transformation in rural communities.*

**Keywords:** Information, Communication, Technology, Digital Inclusion, Gender Development

### Introduction

In today's knowledge-driven and globalized world, digital technology serves as a cornerstone for development. It underpins economic growth, facilitates the delivery of essential services, enhances educational outcomes, fosters innovation, and empowers individuals to participate meaningfully in civic and public life (World Bank, 2016). ICTs ranging from internet access and mobile phones to digital platforms and applications have transformed nearly every sector, from agriculture and healthcare to governance and commerce. For example, digital tools enable farmers to access market prices, students to pursue online education, and citizens to engage with government services remotely. However, the benefits of this digital revolution are not equitably shared. A significant digital gender divide continues to marginalize women and girls, particularly in rural



and low-income communities where technological infrastructure is weak and socio-cultural norms remain restrictive (GSMA, 2022).

The ICT gender gap is both a symptom and a cause of gender inequality. Women in rural areas often lack access to mobile devices, internet connectivity, and digital literacy training, making it difficult for them to fully participate in the information society (UNESCO, 2019). Moreover, gendered expectations, lower income levels, and mobility restrictions further compound these challenges. According to the International Telecommunication Union (ITU, 2023), women globally are 19% less likely to use mobile internet than men, with the gap even wider in sub-Saharan Africa. Bridging this divide is therefore not only a matter of digital equity but a prerequisite for sustainable gender development. Without intentional efforts to address the systemic barriers women face in the digital space, broader development goals including those outlined in Sustainable Development Goal 5 (Gender Equality) and SDG 9 (Industry, Innovation, and Infrastructure) will remain out of reach.

### Understanding Digital Inclusion

Digital inclusion refers to targeted efforts that ensure all individuals and communities—including the most disadvantaged have equitable access to digital technologies and the skills required to use them effectively and meaningfully. In the Nigerian context, digital inclusion has become increasingly urgent as the nation continues to digitize its economy, education, healthcare, and governance systems. However, a significant proportion of Nigeria's population, especially those in rural areas and among vulnerable groups like women and girls, remain digitally excluded (National Digital Economy Policy and Strategy, 2020).

Digital inclusion in Nigeria rests on three essential pillars:

1. Access to affordable and reliable internet and digital devices

While Nigeria has made significant strides in expanding mobile connectivity, access to affordable and high-speed internet remains a major challenge in rural areas. According to the *Nigeria Communications Commission (NCC, 2023)*, broadband penetration reached about 45% in urban areas, but many rural communities still lack infrastructure, including mobile towers and power supply. The gender gap is especially pronounced *GSMA (2022)* reports that Nigerian women are 29% less likely than men to use mobile internet, largely due to affordability and device access.

2. Digital literacy and skills training

Low digital literacy is a critical barrier for many rural Nigerians, particularly for women and girls, who often have lower educational attainment and limited exposure to ICT training. In many northern and rural southern states, cultural norms and early marriages restrict girls' access to education. A report by *UNICEF (2022)* found that only 1 in 4 girls in rural northern Nigeria attends secondary school, reducing their chances of developing



digital skills. As a result, women are less represented in the digital workforce and entrepreneurial ecosystem.

### 3. Meaningful content and services relevant to users' needs

Even when connectivity and skills are addressed, the digital landscape in Nigeria often lacks local-language content and context-specific applications that serve rural women's interests. Issues like maternal health, access to agricultural inputs, market prices, or women's rights are underrepresented in many digital platforms. *UN Women Nigeria (2021)* emphasizes the need to develop gender-responsive technologies that reflect the lived experiences of rural women and amplify their voices in civic and economic life.

In Nigeria's rural communities, all three components of digital inclusion are often weak or entirely absent. Structural barriers such as poverty, illiteracy, cultural resistance to female technology use, and patriarchal household roles severely limit women's ability to participate in the digital space. For example, rural women frequently bear the bulk of domestic and caregiving responsibilities, leaving them with little time or flexibility to learn new technologies. In some communities, social norms actively discourage women from using mobile phones or the internet due to fears of exposure to "immoral" content or male-dominated online spaces (Eze, 2020). These barriers not only restrict access but also reinforce a cycle of exclusion, deepening gender inequality.

Addressing this divide in Nigeria requires gender-sensitive policies, grassroots digital literacy programs, culturally respectful community engagement, and a commitment to affordable access. Bridging this gap is essential if Nigeria is to achieve inclusive national development and meet its obligations under SDG 5 (Gender Equality) and SDG 9 (Industry, Innovation, and Infrastructure).

## Methodology

This study adopts a qualitative desk review methodology. It synthesizes data from international development reports, peer-reviewed journal articles, Nigerian government policies, and reports from non-governmental organizations. The aim is to provide an evidence-based understanding of the digital gender divide in rural communities and propose practical, context-specific interventions.

## Conceptual Clarification

Digital inclusion refers to efforts aimed at ensuring that all individuals and communities, especially the most disadvantaged, have access to and the ability to use digital technologies effectively. It involves three core components: (1) access to affordable and reliable internet and digital devices; (2) digital literacy and skills training; and (3) meaningful content and services that respond to users' specific needs.

In rural Nigeria, these components are often inadequate or altogether absent. Women and girls face additional hurdles due to poverty, lower literacy levels, gendered expectations, cultural norms, and infrastructural barriers. These constraints not only limit their ability to benefit from ICTs but also exacerbate pre-existing inequalities in education, employment, and health.



## The Gender Dimension of the ICT Divide

Globally, women are 17% less likely to use mobile internet than men, with the disparity widening significantly in low-income and rural settings (GSMA, 2022). This digital gender divide reflects not only unequal access to technology but also systemic inequality in education, income, and societal roles. In sub-Saharan Africa, where digital infrastructure is still developing and socio-cultural constraints are deeply entrenched, the gender gap in mobile internet usage is even more pronounced. Women in rural areas are significantly less likely to own mobile phones, have limited or no internet access, and are often excluded from digital education, financial technology, and entrepreneurship opportunities (ITU, 2023; World Bank, 2021).

Several **interrelated factors** contribute to this persistent divide:

**Affordability of devices and data services:** Many rural women cannot afford smartphones or consistent data plans. According to the *Alliance for Affordable Internet (A4AI, 2021)*, cost remains a major barrier, with women disproportionately affected due to lower income levels and financial autonomy.

**Limited digital skills and confidence:** A lack of formal education, exposure to ICT tools, and digital literacy programs means many women lack the confidence or knowledge to use digital platforms effectively. In some studies, rural women express fear of "spoiling" a device or being shamed for not knowing how to use it (UNESCO, 2019).

**Cultural norms discouraging female technology use:** In many rural African communities, traditional gender roles discourage women from engaging with technology. There are often social stigmas attached to women using mobile phones, sometimes associated with promiscuity or disobedience. These perceptions are particularly strong in patriarchal societies where female mobility and autonomy are restricted (Eze, 2020; GSMA, 2020).

**Infrastructural barriers:** Many rural areas still lack reliable electricity, stable mobile networks, or accessible ICT centers. The absence of physical infrastructure reinforces the digital exclusion of rural populations, especially women who are less likely to travel long distances for access due to household responsibilities or safety concerns (NCC, 2023).

The digital gender divide is not only about access to technology it is fundamentally about access to power, opportunity, and agency. When women are excluded from the digital ecosystem, they are deprived of tools that could enhance their education, improve maternal and child healthcare, expand economic participation, and amplify their voices in civic and political decision-making processes. For example, digital tools can allow women to access agricultural information, apply for microloans, sell products online, participate in virtual learning, and advocate for their rights. Without intentional interventions, these missed opportunities perpetuate cycles of poverty and gender-based marginalization (UN Women, 2022).



Addressing this divide requires multi-sectoral collaboration among governments, civil society, the private sector, and communities to implement gender-responsive ICT policies, promote digital literacy for women and girls, and ensure that connectivity is affordable, safe, and relevant for all.

### **Implications for Gender Development**

Information and Communication Technologies (ICTs) have transformative potential for promoting gender development, especially when access, affordability, and digital literacy are addressed. Digital inclusion equips women and girls not only with tools for communication but with pathways to education, health, income generation, and civic empowerment. In contexts like Nigeria where rural women have historically been excluded from many spheres of public and economic life ICTs can serve as a catalyst for structural change.

When women are digitally included, they gain access to several life-changing opportunities:

**Online Education and Vocational Training:** Digital platforms allow women and girls to participate in distance learning, acquire marketable skills, and pursue higher education even in rural or restrictive environments. This is particularly valuable for women whose movement is limited by household responsibilities or socio-cultural expectations. According to *UNESCO (2021)*, digital learning has helped bridge the education gap for women in sub-Saharan Africa by providing flexible, scalable access to knowledge and skills.

In Nigeria, platforms like the Digital Youth Nigeria program and Google Digital Skills for Africa have begun offering free online courses on business, tech, and entrepreneurship to underserved populations, including women.

**Information on Healthcare, Reproductive Rights, and Financial Services:** ICTs provide women with vital health-related information, especially in rural areas where healthcare infrastructure is lacking. Mobile health (mHealth) applications can help women track pregnancy, access maternal health services, and receive reminders for child immunizations. The *World Health Organization (WHO, 2022)* has emphasized the role of ICTs in improving reproductive health outcomes by reducing the information gap.

Similarly, access to mobile financial services allows women to open bank accounts, save, borrow, and participate in the formal economy. In Nigeria, platforms like Paga and Kuda are helping women manage finances and access loans without needing to visit a physical bank.

**Opportunities for Remote Work, E-Commerce, and Entrepreneurship:** Digital inclusion expands women's access to remote work opportunities, including freelance writing, virtual assistance, online tutoring, and e-commerce. These options are particularly relevant for rural women who face mobility restrictions or who care for children and elderly family members. The *International Finance Corporation (IFC, 2021)* notes that digital platforms have enabled thousands of African women to start micro-enterprises from home, particularly in fashion, crafts, catering, and cosmetics.





Moreover, e-commerce platforms like Jumia Nigeria, Instagram, and WhatsApp Business have empowered rural women to market products beyond their local communities, accessing a wider customer base and increasing their income.

**Platforms for Civic Participation and Advocacy:** ICTs provide women with tools for civic engagement, allowing them to join online advocacy campaigns, participate in virtual town halls, and express their views on governance and social issues. Social media platforms have become vital spaces where women raise awareness about gender-based violence, push for legal reforms, and support each other across geographic boundaries.

During Nigeria's #EndSARS protests, for instance, many female activists used social media to mobilize support, call out police abuse, and demand justice demonstrating how ICTs can amplify marginalized voices (Amnesty International, 2021).

**Broader Gender Development Outcomes:** Closing the digital gender divide leads to increased agency and autonomy for women. It enables them to make informed decisions about their lives, participate in income-generating activities, and contribute to national development. ICT inclusion also promotes:

Greater economic participation: Women can start businesses, find employment, and build financial independence.

Improved family and community well-being: Educated and empowered women often reinvest in their children's education and health.

More gender-equitable societies: As more women enter public spaces and economic activities, gender norms begin to shift, fostering more inclusive and democratic communities (World Bank, 2022).

In sum, ICTs are not just tools they are enablers of social mobility, gender equality, and development justice. But without deliberate efforts to close the gender gap in digital access, the transformative potential of technology will remain unrealized for millions of women.

### **Theoretical Framework**

This study is grounded in the Capability Approach developed by Amartya Sen (1999) and expanded by Martha Nussbaum (2000), which frames development as the expansion of individuals' freedoms to achieve the lives they have reason to value. Rather than measuring progress solely through economic indicators or material assets, the capability approach emphasizes the real opportunities and agency that people have to function and flourish. In the context of digital inclusion, this framework recognizes that access to information and communication technologies (ICTs) is not an end in itself, but a means through which individuals especially women in marginalized settings can exercise voice, participate in economic activities, access education and health services, and engage fully in civic life.



Applying the capability lens to rural women in Nigeria, digital exclusion becomes more than a technological gap it reflects a capability deprivation that limits their freedom to pursue education, work, and self-determination. It highlights how intersecting factors such as poverty, illiteracy, gender norms, and infrastructural deficits constrain women's ability to convert ICT access into meaningful use and empowerment.

Furthermore, the study is informed by elements of Feminist Political Economy Theory, which examines how gendered power relations and institutional arrangements perpetuate inequality. This perspective helps to explain why digital transformation policies in Nigeria often neglect rural women, and why market-driven ICT initiatives may reinforce, rather than resolve, existing disparities. Together, these frameworks guide the analysis of digital inclusion not merely as a technical challenge, but as a question of justice, rights, and structural reform.

### **Strategies to Close the ICT Gender Divide in Rural Areas**

Bridging the gender digital divide in rural regions, particularly in Nigeria and sub-Saharan Africa, requires multi-pronged, inclusive, and sustainable strategies. These approaches must address the root causes of digital exclusion—ranging from structural poverty and infrastructural deficits to cultural norms and systemic gender bias. The following strategies present a comprehensive framework to guide government action, private sector involvement, and civil society engagement:

**1. Infrastructure Expansion:** Expanding digital infrastructure is foundational to achieving digital equity. Many rural areas in Nigeria still lack basic internet connectivity, stable electricity supply, and telecommunications infrastructure. According to the Nigerian Communications Commission (NCC, 2023), broadband penetration is still unevenly distributed, with rural communities significantly underserved.

- To close the digital gap, governments must collaborate with telecom operators to:
- Expand last-mile broadband connectivity;
- Invest in solar-powered ICT infrastructure for off-grid communities;
- Support innovation in low-cost, durable devices.

The *World Bank (2021)* highlights that infrastructure-led policies not only increase access but also reduce costs, particularly for women who are more likely to rely on shared or public digital resources.

Example: The Nigerian National Broadband Plan (2020–2025) recommends prioritizing rural connectivity and promoting affordable broadband to underserved populations.

**2. Gender-Responsive ICT Policies:** ICT policies and digital economy frameworks must be explicitly gender-responsive. This means setting measurable goals to increase women's digital access, skills, and leadership in ICT sectors. Policies should be inclusive of rural contexts, with affirmative actions, such as quotas or funding incentives for women-led tech initiatives.



The *African Union Digital Transformation Strategy (2020–2030)* advocates for integrating gender equity targets in national digital roadmaps, while *UN Women (2022)* urges countries like Nigeria to adopt gender audits of ICT projects to ensure inclusiveness.

Recommendation: Nigeria's National Digital Economy Policy should incorporate gender impact assessments and allocate a dedicated budget line for rural women's digital empowerment.

**3. Digital Literacy and Skills Training:** Digital literacy remains a significant barrier for rural women, many of whom have low levels of formal education and limited exposure to technology. Community-based, gender-sensitive training programs are essential to help them develop functional digital skills such as using mobile phones, navigating online platforms, and protecting online privacy.

- Training should be:
- Conducted in local languages;
- Delivered by female facilitators to boost confidence and trust;
- Adapted to women's daily schedules and caregiving roles.

*UNESCO (2019)* emphasizes that such inclusive digital education improves women's ability to participate in markets, access health and education services, and assert their civic rights.

Example: The Digital Skills Nigeria initiative implemented in partnership with Microsoft is one example that can be scaled up in rural areas with targeted gender programming.

**4. Cultural Sensitization and Community Engagement:** In many Nigerian communities, patriarchal norms, religious traditions, and fear of moral decay discourage women from using digital tools. It is essential to involve community gatekeepers, including traditional rulers, religious leaders, and male family members, in conversations about the benefits of women's digital participation.

- Culturally tailored campaigns should:
- Debunk myths around women and technology;
- Highlight success stories of rural women benefiting from ICT;
- Promote family and community gains from women's digital empowerment.
- *GSMA (2020)* recommends “whole-of-community” approaches, which reduce resistance and create a supportive ecosystem for rural women to thrive digitally.
- Suggested Strategy: Collaborate with faith-based organizations and women's cooperatives to deliver digital sensitization sessions **and promote social acceptance.**





**5. Content Localization and Relevance:** Even when access and skills are addressed, many rural women remain disengaged due to the irrelevance or inaccessibility of digital content. Platforms and applications must be developed or adapted to reflect rural women's real-life needs, priorities, and languages.

- Relevant content areas include:
- Agricultural training and weather forecasts;
- Maternal and reproductive health information;
- Market prices, loan opportunities, and financial literacy.

The *International Telecommunication Union (ITU, 2023)* stresses that contextualized digital content increases engagement and usage among marginalized populations.

Example: The use of WhatsApp groups in Nigeria's farming communities where extension workers share voice notes in local languages has proven effective in improving agricultural output among women farmers.

**6. Support for Women Entrepreneurs:** Women's digital inclusion is incomplete without access to economic empowerment opportunities. Establishing ICT hubs, e-commerce platforms, and digital cooperatives for rural women can transform local economies and enhance female-led enterprises.

- Support mechanisms should include:
- Mentorship for women in tech and e-commerce;
- Access to micro-loans or start-up grants;
- Integration into digital marketplaces (e.g., Facebook Marketplace, Jumia).

According to the *International Finance Corporation (IFC, 2021)*, women in sub-Saharan Africa are more likely to start micro-businesses but are underrepresented in digital trade due to lack of training and digital tools.

Policy Recommendation: SMEDAN and NITDA should fund and support Digital Women Entrepreneurship Centres in each senatorial district, prioritizing rural communities.

To close the ICT gender divide in rural Nigeria, strategies must go beyond infrastructure to address social norms, education gaps, content relevance, and economic barriers. A holistic, gender-sensitive digital inclusion policy not only uplifts individual women but strengthens entire communities by promoting equitable development, resilience, and innovation.

### **Critique of Current Policy Gaps in Nigeria**



Despite Nigeria's public commitment to promoting digital inclusion through frameworks such as the National Digital Economy Policy and Strategy (NDEPS) 2020–2030, glaring gaps persist in both policy design and implementation when it comes to addressing the specific needs of women and girls in rural communities. While the policy outlines broad goals such as improving broadband penetration, digital literacy, and job creation, it fails to mainstream gender as a cross-cutting concern, particularly in rural development programming.

Key institutions like the National Information Technology Development Agency (NITDA) and the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) have launched initiatives intended to support digital skills acquisition and entrepreneurship. However, these programs often lack gender-disaggregated data, making it difficult to assess how many rural women benefit from such interventions. According to a 2022 report by UN Women Nigeria, the absence of gender-focused indicators in national ICT and economic empowerment programs is a major barrier to inclusive growth and accountability.

Furthermore, Nigeria's digital economy policies remain heavily urban-centric. Most government and private sector digital literacy programs are concentrated in state capitals and urban centers, with limited infrastructure or personnel allocated to rural areas where over 60% of women live (National Bureau of Statistics, 2023). The rural-urban divide is exacerbated by challenges such as unreliable electricity, poor internet coverage, and cultural norms that discourage female participation in technology none of which are directly addressed in a systematic way in the current policy landscape.

Another critical issue is the lack of sustainable funding and gender-responsive budgeting. While the Digital Economy Policy mentions the need for partnerships and private investment, there is no dedicated budget line or affirmative action targeting rural women's digital empowerment. Without financial incentives or mandatory inclusion targets, implementation remains ad hoc and dependent on the discretion of individual agencies or state-level actors.

The absence of monitoring and evaluation mechanisms that track gender-specific progress also means that even well-intentioned policies cannot measure their impact or identify areas needing improvement. Additionally, there is a lack of coordination between ICT-focused agencies and those working in gender affairs, such as the Ministry of Women Affairs, which could otherwise serve as a conduit for integrating women's voices into policy-making.

In essence, gender equity remains a peripheral concern in Nigeria's digital development framework. The failure to embed gender as a core element of digital transformation strategy risks reproducing existing social inequalities. Rural women—who already experience compounded disadvantages may continue to be excluded unless policies become intentionally inclusive, data-driven, and locally rooted.

### **Policy Recommendations for Closing the Gender Digital Divide in Rural Nigeria**



Bridging the gender digital divide in rural Nigeria requires **coordinated, multi-sectoral action** that addresses the socio-economic, cultural, and infrastructural barriers limiting women's digital inclusion. The following policy recommendations are proposed to ensure that women and girls in rural areas are not left behind in Nigeria's digital transformation:

### **1. Invest in Gender-Responsive Digital Infrastructure**

The federal and state governments, in partnership with the private sector, should prioritize the expansion of broadband connectivity and mobile networks in rural and underserved areas. However, beyond mere infrastructure, there must be intentional investment in facilities that cater to women's realities such as safe community ICT hubs that consider mobility restrictions and cultural expectations.

**Example:** The Nigerian Communications Commission (NCC) could expand the Universal Service Provision Fund (USPF) to target ICT deployment in rural women's cooperatives and vocational centers.

### **2. Promote Affordable Access to Devices and Data**

Subsidizing the cost of smartphones and data plans for women in rural areas through targeted government initiatives or public-private partnerships can significantly improve access. Consideration should be given to voucher schemes, community ownership models, and low-interest digital microloans for female entrepreneurs.

**Policy Integration:** Align with the National Broadband Plan (2020–2025) and the Digital Economy Policy and Strategy framework to prioritize affordability for women and marginalized groups.

### **4. Implement Nationwide Digital Literacy Programs for Women and Girls**

Tailored digital literacy training integrated with basic education and vocational skills should be rolled out through existing educational institutions, women's centers, religious organizations, and local NGOs. Content should be available in local languages and delivered by female facilitators where possible to enhance participation and relatability.

**Recommendation:** Federal and State Ministries of Women Affairs and Education should collaborate with NITDA and NGOs to develop gender-sensitive ICT curricula for rural deployment.

### **4. Address Cultural and Social Barriers Through Community Engagement**



To overcome socio-cultural resistance to women's use of technology, awareness campaigns must engage men, community leaders, religious authorities, and traditional institutions. Programs should demonstrate the social and economic benefits of women's digital inclusion, using storytelling, media, and peer influencers to shift perceptions.

Approach: Leverage local radio programs, community theatre, and school outreach programs to normalize female digital empowerment.

### **5. Encourage Women's Participation in Tech Innovation and Entrepreneurship**

Government agencies such as the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) and Bank of Industry should incentivize women-led digital enterprises and provide training on e-commerce, mobile banking, digital marketing, and fintech tools. This will ensure that rural women not only consume digital tools but also become creators and innovators within the digital economy.

**Support:** Establish "Digital Women Innovation Grants" for rural tech start-ups and cooperatives.

### **6. Strengthen Monitoring and Gender Data Collection**

A major gap in addressing digital inequality is the lack of **sex-disaggregated data** on digital access, literacy, and usage. The National Bureau of Statistics (NBS) should collaborate with telecom operators and research institutions to generate reliable data to inform policies and measure progress.

**Policy Priority:** Include gender-disaggregated ICT indicators in national surveys such as MICS and NDHS.

### **7. Ensure Online Safety and Digital Rights for Women**

Fear of online harassment, cyberbullying, and privacy violations discourages many women from engaging in digital spaces. The government should enforce digital safety regulations, provide cybersecurity awareness training, and ensure that rural women are informed about their digital rights and access to redress mechanisms.

**Legal Framework:** Update the Cybercrimes (Prohibition, Prevention, etc.) Act of 2015 to include gender-sensitive provisions and work with security agencies to enforce them in rural settings. Closing the gender digital divide in rural Nigeria is both a moral obligation and a strategic necessity for national development. By implementing these policies, Nigeria can empower millions of rural women to become active participants in the digital economy, thereby advancing gender equality, reducing poverty, and accelerating progress toward Sustainable Development Goals (SDGs) particularly SDG 5 (Gender Equality), SDG 4 (Quality Education), SDG 8 (Decent Work), and SDG 9 (Industry, Innovation, and Infrastructure).



## Conclusion

Digital inclusion is no longer a luxury it is a fundamental necessity for equitable and sustainable development in the 21st century. As digital technologies become deeply embedded in every sector from education and healthcare to agriculture, commerce, and governance exclusion from the digital space increasingly translates into exclusion from opportunity. For millions of women and girls in rural Nigeria and across sub-Saharan Africa, the digital divide is not just a technological issue; it is a developmental injustice that perpetuates poverty, reinforces gender inequality, and hampers national progress. If we are truly committed to achieving gender equality (SDG 5) and inclusive rural development (SDG 9 and SDG 10), then closing the ICT gender gap must be a strategic priority. Empowering rural women through affordable access to digital tools, gender-sensitive ICT education, and localized content equips them to improve their livelihoods, make informed decisions, and participate fully in society. Research shows that when women are digitally empowered, their families benefit through better health and education outcomes, their communities become more resilient, and their local economies are stimulated through increased productivity and innovation (World Bank, 2021; UN Women, 2022).

Moreover, bridging the digital divide enables women to raise their voices, advocate for their rights, and shape the policies that affect their lives. This is not just about access to technology it is about access to power, agency, and opportunity. The future of gender development, particularly in rural settings, will be determined by the actions we take now to ensure that digital transformation is inclusive, equitable, and just. Let us begin by prioritizing rural women not as afterthoughts in ICT policy, but as key stakeholders and agents of change. The digital future must not be built on inequality. It must be built with the full participation of everyone, starting today.

## References

- Alliance for Affordable Internet (A4AI). (2021). *Affordability Report*. Retrieved from <https://a4ai.org>
- Amnesty International. (2021). *Nigeria: 'They Don't Care if It Kills Us': How the Government Is Failing Women Human Rights Defenders in the Context of #EndSARS Protests*.
- Eze, C. (2020). *Gender and Mobile Technology Use in Rural Nigeria*. *Journal of African Media Studies*, 12(3), 301–315.
- Fraser, N. (2009). *Scales of Justice: Reimagining Political Space in a Globalizing World*. Columbia University Press.
- Gill, R., & Scharff, C. (Eds.). (2011). *New Femininities: Postfeminism, Neoliberalism and Subjectivity*. Palgrave Macmillan.
- GSMA (2022). *The Mobile Gender Gap Report 2022*. Retrieved from [www.gsma.com](http://www.gsma.com)
- GSMA. (2020). *Connected Women: The Mobile Gender Gap Report*. Retrieved from <https://www.gsma.com>
- GSMA. (2022). *The Mobile Gender Gap Report 2022*. Retrieved from <https://www.gsma.com>
- IFC. (2021). *Women and E-commerce in Africa: The Impact of COVID-19 on Women-Led Businesses*. Retrieved from <https://www.ifc.org>





- International Finance Corporation (IFC). (2021). *Women and E-commerce in Africa: The Impact of COVID-19 on Women-Led Businesses*.
- ITU (2023). *Measuring Digital Development: Facts and Figures*. International Telecommunication Union. Retrieved from [www.itu.int](http://www.itu.int)
- Ministry of Communications and Digital Economy. (2020). *National Digital Economy Policy and Strategy (2020–2030)*.
- National Broadband Plan (2020–2025). Federal Ministry of Communications and Digital Economy, Nigeria.
- National Bureau of Statistics. (2023). *Demographic and Health Survey Report*.
- National Digital Economy Policy and Strategy (NDEPS) 2020–2030. Federal Ministry of Communications and Digital Economy, Nigeria.
- NCC. (2023). *Industry Statistics Report*. Nigerian Communications Commission. Retrieved from <https://www.ncc.gov.ng>
- NITDA. (2023). *Annual ICT Skills Development Report*.
- Nussbaum, M. C. (2000). *Women and Human Development: The Capabilities Approach*. Cambridge University Press.
- Sen, A. (1999). *Development as Freedom*. New York: Alfred A. Knopf.
- True, J. (2012). *The Political Economy of Violence Against Women*. Oxford University Press.
- UN Women Nigeria. (2021). *Gender and ICT in Nigeria: Policy Brief*. Retrieved from <https://nigeria.unwomen.org>
- UN Women Nigeria. (2022). *Policy Brief on Gender and Digital Access*.
- UN Women. (2022). *Gender Equality and Digital Inclusion*. Retrieved from <https://www.unwomen.org>
- UNESCO. (2019). *I'd Blush If I Could: Closing Gender Divides in Digital Skills Through Education*. Retrieved from <https://unesdoc.unesco.org>
- UNESCO. (2021). *Leveraging ICT to Achieve Gender Equality in Education*. Retrieved from <https://www.unesco.org>
- UNICEF. (2022). *Girls' Education in Nigeria: Data and Challenges*. Retrieved from <https://www.unicef.org/nigeria>
- WHO. (2022). *Digital Health and Innovation: Empowering Women through mHealth in Africa*. Retrieved from <https://www.who.int>
- World Bank (2016). *World Development Report 2016: Digital Dividends*. Washington, DC: World Bank. Retrieved from [www.worldbank.org](http://www.worldbank.org)
- World Bank. (2021). *Digital Economy for Africa Initiative (DE4A)*. Retrieved from
- World Bank. (2022). *Digital Economy for Women in Africa: Policy Brief*. Retrieved from <https://www.worldbank.org>