



Global Digital Inclusion
Partnership

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CONNECTED RESILIENCE:

Gendered Experiences of Meaningful
Connectivity through a Global Pandemic



Executive Summary

The COVID-19 pandemic changed the world. The past years have made it clear that meaningful connectivity is now a basic requirement for all.

Yet, too many women, too many of the world's impoverished, and too many people living in rural communities remain unconnected, underconnected, and left behind. The stubbornness of the digital divide remains a constant undercurrent. Just as policymakers continue to anticipate fourth industrial revolutions and digital transformations from these technologies, millions of people have yet to benefit.

From our latest research on meaningful connectivity through the pandemic, we see hope — in the resilience of people living in marginalized communities and in the potential for policy actions that leverage opportunities to support people's everyday lives. The frontier of digital inclusion policy lies in people-centered solutions

that can empower everyone. This requires conscious efforts that put community consultation and community leadership front and center in the decision-making process, moving away from siloed interventions that are often top-down and driven by external motivations.

Our research set out to reflect on what we might learn from recent history to understand more about what the future of inclusive ICT policy should be. We carried out focus group discussions in India, Mozambique, Nigeria, and the Philippines and surveyed over 6,000 women from Bangladesh, Cambodia, Ghana, Mozambique, South Africa, and Uganda. We interviewed policymakers in the digital sector from across Africa and Asia regions and updated the **Cost of Exclusion model.**

Our insights highlight that — without substantial policy interventions to close the digital divide — **countries are on track to lose over USD \$500 billion in the next five years, essentially repeating economic losses.**

While internet **access during lockdowns** became a lifeline for billions of people around the world, internet access is not universal nor evenly distributed.

Looking at patterns between those with meaningful connectivity — defined as having daily internet use with 4G-like speeds, owning a smartphone, and an unlimited access point at home, work, or a place of study — and those with just basic or no internet access at all, we saw key distinctions between women based on geography and education in our study sample which impacted their experiences of the internet.

Barriers to internet access created new divides during the lockdown along the lines of gender, geography, education, and class.



Across our six survey countries, **women with a tertiary education were nearly twice as likely to be meaningfully connected** compared to their peers with less education.



Women living in rural areas were three times more likely to lack internet access than their urban-dwelling peers, while **women living in cities were over 50% more likely to have meaningful connectivity.**

Meaningful connectivity enabled women around the world to learn, earn, access government and financial services, and connect with family and communities, thereby also saving essential time and money in transport costs.

Women’s educational level and having meaningful connectivity are the strongest predictors of finding information online or participating in the digital economy.

Women interviewed in underserved localities — such as remote villages in India and impoverished urban settlements in Nigeria — reported restricted digital access due to:



lack of infrastructure (such as mobile towers)



income-generating activities and unpaid care work leave little to no time available to access connectivity or digital skills educational initiatives.



high cost of devices and data services



dependency on men in their family to use devices

Despite women standing up to formidable challenges to access online content for education, employment, entertainment, and family purposes, systemic barriers such as poverty, early marriage, and education level create thick boundaries to women’s digital inclusion around the world.

Clearly, policies and **targeted investments in meaningful connectivity will open new trajectories and possibilities** for societies and women in the digital economy.

As millions more use the Internet, responding to **new online harms** with data protection, **online safety**, and **consumer protection laws and standards** is also an urgent concern for policymakers.

We propose four tiers of achievable solutions
— and call attention to policymakers, investors,
and the ICT sector at large to fast-track meaningful
connectivity and inclusive digital development for all.



Deep investments

that use substantial resourcing to make profound changes in a specific policy area or for a specific community.

Universal Service and Access Funds (USAFs) represent a key mechanism across the majority world for deep investment strategies. When well executed, they provide clear interventions with measurable changes in the lives of affected communities.

1



Grand visions

that combine years of effort with substantial funding resources to revolutionize the status quo.

National broadband plans and other key strategy documents — when appropriately supported and resourced through implementation stages — represent a core example of grand visions within this space.

2

There are a range of strategies and policies that policymakers can adopt. No single combination of solutions will be universally correct: policymakers should engage with stakeholders and communities to design and implement the appropriate strategy within their context. This study offers illustrative examples of good practices from around the world.

Moving beyond mere infrastructure, the advancement of meaningful connectivity now hinges not only on technological development but also on fostering a supportive social environment for users and ensuring affordable costs for everyone.

This report provides a comprehensive overview of the challenges and opportunities in achieving gender and digital inclusion, particularly in the wake of the COVID-19 pandemic. We emphasize the need for targeted investments, policy interventions, and inclusive strategies to bridge the digital divide and support the digital empowerment of women and marginalized communities.



Easy wins

that are comparatively discreet and specific changes that can still create tangible value at their scale.

Gender data — collecting it, creating it, analyzing it, and using it — is a critical component to several easy wins that have been implemented in recent years. Policymakers can start from this level of research and measurement to make clear steps in the right direction.

3



Scalable systems

that represent large, programmatic change in the pre-existing ways of working.

Multistakeholder approaches and gender targets can provide the foundation for long-term, ongoing processes that scale progress towards closing the gender digital divide. By using policy and regulation to create mechanisms and procedures that consider digital inclusion, policymakers can build habits and routines that gradually and consistently change the course of history.

4



In one remote indigenous village in India,

the only spot where there is intermittent mobile network is at the village head's house, where there is a pole with a basic number pad mobile phone tied to it, covered with a towel to keep it cool. A solar panel is next to it.

In one interview, a woman reported that there are no recharge shops in her village, with the closest place to access the internet located one hour away. She relies on her father, who travels to the town for work purposes and downloads online content for her to access. Another woman who works as a teacher relied on her husband to look for jobs for her at a cyber cafe.

Indigenous women in remote villages of India who were interviewed reported extremely limited access to technology, with only 10-15 women in a village population of 2,000 having their own phones. The focus group discussion revealed that women without personal phones allegedly use their husbands' phones and learn to use them nonetheless.

In this village, women's mobility and digital access are restricted by geography, lack of infrastructure such as mobile towers or bridges, and dependence on men who control devices and mediate access. Women travel long distances to access intermittent mobile signals and internet weekly when visiting markets, but still rely on husbands to download information. Despite some women who reported learning to use phones independently, systemic barriers such as poverty, early marriage, and limited education perpetuate women's digital exclusion.

As a result, women from indigenous tribal villages interviewed for this study face immense challenges participating in town halls and public events due to reliance on costly boat and bus transport and scarce mobile connectivity.

Traveling to the nearest town, where internet access is available, requires an arduous journey. Attendance at community forums often depends on boatmen's availability, availability of limited bus routes, and mobile signals for travel coordination. The frequency of this trip is higher for men because men in the village have motorbikes or can hitch a ride from another man, which makes the transportation cost considerably less and more reliable. Motorbikes are usually carried in the boat itself while crossing the river.

With few personal phones and limited money, women depend on husbands to control devices and mobility, limiting access to information and public participation. The far distances, travel time and costs of transport required to access internet services also have differential trade-offs and impacts on women in terms of the disproportionate time spent on unpaid care responsibilities.

Highlights of the report

Persistent Digital Divide and Economic Impact:

The research underscores the persistent digital divide, particularly affecting women, the world's impoverished, and those in rural communities. Countries face a potential loss of over USD \$500 billion in the next five years due to the digital divide. There is an urgent need for substantial policy interventions to mitigate these economic losses.



Importance of Meaningful Connectivity:

We define “meaningful connectivity” as an evolving concept that starts with the basis of having daily internet use with 4G-like speeds, owning a smartphone, and having unlimited access at home, work, or a place of study, as aligned with agreed global ITU targets. Meaningful connectivity is crucial for women to learn, earn, access government and financial services, and connect with family and communities, thereby also saving essential time and money in transport costs. However, the barriers to internet access create new divides along the lines of gender, geography, education, and class. It is, therefore, crucial that measuring meaningful connectivity includes addressing gender by default.



Systemic Barriers to Digital Inclusion:

Women in underserved localities face restricted digital access due to a lack of infrastructure, high costs of devices and data services, dependency on men for device usage, and limited time due to income-generating activities and unpaid care work. These systemic barriers, along with socio-economic factors like poverty, early marriage, and education level, create significant obstacles to women's digital inclusion.



Disparities in Internet Access:

There are significant disparities in internet access and meaningful connectivity based on geography, education, and gender. Women with tertiary education are nearly twice as likely to have meaningful connectivity compared to those with less education. Rural women are three times more likely to lack internet access than urban dwellers.



Strategies for Enhancing Digital Inclusion:

The report proposes four tiers of achievable solutions to enhance digital inclusion: deep investments (e.g., through Universal Service and Access Funds), grand visions (e.g., national broadband plans), easy wins (e.g., data collection and analysis), and scalable systems (e.g., multistakeholder approaches and gender targets). These strategies aim to foster meaningful connectivity and inclusive digital development for all, moving beyond infrastructure to address the social environment and affordability.

This report calls upon policymakers to close the gender digital divide by adopting policies of digital possibilities — direct applications of ICTs into other sectors that empower marginalized communities — and guides a new trajectory for digital inclusion policy

In Makoko [an impoverished area in Lagos], they're training the girls there on how to code. The struggle is getting the young girls they are training into jobs because those girls do not have a formal education. Those girls are losing interest; they would rather be selling fish and generating income for their parents immediately than spending time learning to code where there will eventually be no jobs.

We particularly see how young people are being marginalized in these slum communities. They're unable to access quality education. They cannot afford it as well. And because of this, their earning potential is greatly capped, and so they cannot get quality work, decent work that pays well...

So the girls sell fish with their moms in the markets, for example, while the boys in the morning go out to fish. By 6 a.m., they're back home. So they have the rest of the day to do a lot more productive work. The girls are cut out from even getting to enjoy these opportunities. So that was the first thing.

And then second thing as well is cultural and social norms as well. Many of them are either forced into early marriages or perhaps teenage pregnancy as well.

And there's also a mindset that many of the ladies have, that education is not for women, and it's more prestigious to be married at a young age like 14, 15, 16. So they actually don't value education, essentially.

Whereas the men on the other end, because they are married to one, two, three wives, they are constantly looking for ways of making money. And I mean, in the older generation, that's usually through fishing or trade here and there, but then the younger ones actually get digital training. They go to learn how to use Microsoft Word, Microsoft Excel and all of that. So instantly, they have a lot more opportunities. They can apply for secretarial jobs. You'd find some of them working.

So the boys, basically, because they have a lot more time throughout the day, they're able to engage in more productive work while the girls are working for their moms."

- (Research participant in Nigeria)





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