

AFCHIX

Expanding Women's Access to the Internet Through Female-Led Community Networks



Photo: Mosa'ab Elshamy

Challenge

Businesses, economies, and even personal relationships rely on Internet connectivity. Yet, this is only true for around half of the world's population. Developing countries in Africa, low-income, and remote areas are disproportionately affected by a connectivity gap that leaves them cut off from the information economy and its benefits, and this is particularly true for women in these settings. AFCHIX, a network of African women in technology who believe that gender diversity is crucial to building a thriving and innovative ICT sector on the continent, was awarded two grants through USAID's WomenConnect Challenge (WCC) —the first in WCC's Round 1 and the second in Round 3 to scale up the first round's efforts—to 1) expand women's access to the Internet, and the benefits it offers, through female-led community networks in Kenya, Morocco, and Namibia, and 2) promote digital training specifically for women.

Solution

"Populations in those rural areas are still suffering from digital illiteracy and access. Economical access is still a struggle for those populations, so my vision is to help break the isolation." - Houda Chakiri, AFCHIX Morocco Project Director.

The AFCHIX approach helps women to overcome their lack of confidence in using technology as well as the cultural barriers in their communities—by showing women how to actually bring the Internet to their communities.

With USAID support, AFCHIX has installed the equipment needed to expand Internet access in rural areas in Namibia, Kenya, and Morocco. AFCHIX then trains local women to maintain the infrastructure and to develop sustainable business plans to manage the way their communities access the Internet by establishing 'community networks.' Community networks use new, low-cost electronic networking equipment to provide small-scale community-based network services and affordable Internet access at a fraction of standard commercial prices.

AFCHIX combines this work by providing dedicated safe spaces for women to engage with technology through digital literacy training. With greater digital literacy knowledge and skills—like how to use apps and navigate a mobile phone—women can establish their own businesses, more easily access important services such as education and health care, and position themselves as role models within their communities. AFCHIX's digital training program also teaches technical skills to install and maintain the hardware necessary to run a community network, including towers and modems, which opens up entrepreneurial opportunities for rural women to run local Internet service providers and work as network engineers.

What's more: because these networks are locally owned and managed, they present an opportunity for communities to collectively determine how they can get on the "Internet bus," especially as traditional Internet service providers often think of them last.

Sustainability is built into the community network model. Network steering committee members receive training on business plan development as well as network management and maintenance. Subscribers pay for Internet service using mobile money apps, and the funds received pay for the Internet bandwidth. The surplus is used to remunerate network technical staff, maintain the network, and save toward extending the network.



Change Social Norms & Cultural Perceptions



Create Economic Opportunities



Cultivate Women's Confidence



Design Creative Women-Centric Technology



Develop Community Support

Impact

“It’s a great opportunity to see the interior parts of our community connected. This will give equal opportunity to the community members and students who are not able to access Internet services since we’re far away from towns where Internet and other developments are.” -- Mr. Kimani, a teacher in a community with a base station.

In Kenya, AFCHIX collaborates with the local leadership of Lanet Umoja, a town of 30,000 in Nakuru North District, where the community network has mobilized local female leaders to implement a wireless community network for public utility. These networks have brought the Internet to four base stations and have the capacity to serve over 3,800 fixed wireless and WiFi clients.

In Morocco, AFCHIX works with the community network in Ait Izdeg, Midelt Province, to facilitate communication between female workers and farmers. Digital training in this town of 8,500 focuses on female farmers, and also includes expanding the digital literacy of school-aged girls in the community. Participants have felt comfortable enough in training sessions to bring their young daughters and male family members along, introducing them to computers and the Internet as well. “The workshops enabled me to enter the world of computers to understand how they work and to know the different software and applications such as text editing, spreadsheets, and web browsers,” says Aziza, a trainee in Morocco. The community networks in Ait Izdeg extend Internet access to four schools and their surrounding areas, with a network capacity that can serve over 1,500 WiFi clients.

Finally, in Namibia, AFCHIX is expanding the Groot-Aub community network located outside the capital. In this town of 6,000, most women are involved in small businesses (sewing, baking, and store management) and livestock keeping. AFCHIX’s community networks serve five base stations in Groot-Aub, providing both public Wi-Fi and fixed wireless Internet access to over 900 clients.

Strategies Employed

Through the WomenConnect Challenge, USAID has identified five proven strategies to close the gender digital divide and increase women’s economic empowerment. The AFCHIX project tapped into four of these—changing social norms, creating economic opportunities, developing community support, and cultivating women’s confidence—as the basis for its work.



Changing Social Norms—Building the technical, policy, and leadership capacities of women in establishing and managing local Internet service providers and creating a safe space for women and girls to interact with technology can contribute to closing the immense gender digital divide still present in Africa and build acceptance of the importance of women’s use of technology.



Creating Economic Opportunities—Online access can help women gain additional income and more time and information. As women become more familiar with the business potential of the digital space, they will be able to take advantage of these opportunities. Women trained in network design and maintenance have marketable job skills.



Cultivating Women's Confidence—Women learn new skills that are in high demand. By providing women with the opportunities to learn and engage with technology, AFCHIX empowers them to overcome barriers and become confident users of digital tools.



Developing Community Support—Community Internet networks provide tangible benefits for everyone in the community, by expanding access to remote teaching and health care, and building community buy-in.



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Advancing women’s digital connectivity and meaningful use of technology are key components to ensuring women’s socio-economic empowerment. The WomenConnect Challenge is a global call for solutions to improve women’s participation in everyday life by significantly changing the ways women access and use technology.