

Heifer International

Empowering a Network of Women Farmers





Change Social Norms & Cultural Perceptions



Create Economic Opportunities



Cultivate Women's Confidence



Design Creative Women-Centric Technology



Develop Community Support

Challenge

The majority of Nepal's agricultural workforce is female. Many young men have left rural Nepal for jobs elsewhere, leaving women responsible for livestock management, including forage collection, cleaning, and feeding of the animals, as well as the planting, tending, and harvesting of crops. Even so, the production and sale of agricultural products continues to be thought of as a man's responsibility in Nepal, and socio-cultural constraints prevent women from interacting with predominantly male public extension workers, who provide trainings on agriculture and other topics. These factors restrict women's access to agricultural training and information, even as they take on more agricultural responsibilities.

In addition to missing out on educational programs through the conventional extension system, women lag in accessing the benefits of digital technology for agriculture. Women have limited digital connectivity, which affects their access to market information to find better prices for their livestock, to extension information to improve livestock productivity, and to financial services to expand their enterprises. One survey of Nepali agricultural cooperative members found that only 30 percent of women had access to their own smartphones compared to 70 percent of men, and only 16 percent of women had access to the Internet compared to 84 percent of men.

To expand these women's access to digital technology, USAID's WomenConnect Challenge (WCC) awarded a grant to Heifer International in Nepal to expand the country's first digital agricultural extension program and make it more useful and accessible for women farmers.

Solution

Through the WCC grant, Heifer and a Nepali company, Pathway Technologies, are scaling up a digital platform called GeoKrishi, derived from the Greek word for "Earth" plus the Nepali word for "farmer." Each farm registered in the GeoKrishi platform is geotagged to enable location-specific recommendations related to climate, soil quality and composition, and best crop and livestock practices. The platform equips farmers with a suite of tools for 45 priority crops, vegetables, fruits, spices, and medicinal herbs and seven types of livestock, including a planning tool, farm management solutions, advisory services, market access and pricing, weather forecasts, and a farmer's diary to track expenses.

To support the deployment of the GeoKrishi platform and increase opportunities for farmers to access digital agriculture information services, Heifer designed E-Chautaris, which are innovative digital hubs based in government offices and agricultural cooperatives with access to the GeoKrishi app, and bi-weekly webinars led by Pathway Technologies on relevant agricultural topics. The concept is a play on the traditional Nepali "chautari" or meeting spot. They have also trained community-based digital champions, equipped with Internet connectivity, to conduct outreach to individual farmers and introduce them to the tools and services available through GeoKrishi and their local E-Chautari. Research has shown that introducing new tools or practices through trusted peer networks makes them more likely to be adopted and used in the long term.

The digital champions, known as Digital Agricultural Facilitators, are trained to mentor and counsel men and women to overcome social barriers and inspire women farmers to engage with this digital system. Heifer and Pathway are also coordinating with local governments and NGOs to determine the best locations for E-Chautaris, get buy-in from the chosen hosts, and ensure they are properly equipped to provide digital services.

Impact

As of December 2022, Heifer and Pathway have established more than 350 new E-Chautaris at municipal government offices and cooperatives across Nepal and have trained more than 1,280 new digital champions, 61 percent of whom are women. There are nearly 78,500 registered users of the GeoKrishi app, of which 55 percent are women. Even in households where women might not be the smartphone holders, they are often the catalyst for introducing GeoKrishi into the household.

Women who have learned about the mobile application through digital champion-led orientation sessions and E-Chautari events ask the smartphone holder in their household to download the application in their phone and actively seek their support in inquiring about the plant and livestock they farm. Farmers who use advice from the app to adjust their farming practices, whether using the weather forecast to judge when to plant and harvest or changing the density of seeds they plant, have seen up to four-fold increases in crop yields. In total, this project had reached nearly 950,000 farmers by December 2022—81 percent of whom were women.

Trusted local institutions are embedding GeoKrishi, through the E-Chautaris, into their services, and the app is designed to continue beyond the term of the WCC grant. In addition to digitizing agricultural information for farmers; once widely adopted, it will also help local governments create data-driven agriculture development plans and strategies. This will in turn help the municipalities to strategize in reaching underserved women farmers.

Strategies Employed

Through the WCC, USAID has identified five proven strategies to close the gender digital divide and increase women's economic empowerment. The Heifer International project tapped into three of these—changing social norms, developing community support, and cultivating women's confidence—as the basis for its work.



Changing Social Norms—Increasing the number of women agricultural extension agents normalizes the role of women as agricultural experts and provides role models for future farmers. Providing women farmers with market information empowers them to sell their agricultural products themselves rather than relying on male relatives.



Cultivating Women's Confidence—Teaching women farmers basic digital skills and providing them with sound and relevant agricultural information enables them to take a more active role in decisions regarding the family farm business.



Developing Community Support —

Involving municipal government, local NGOs, and women's agricultural cooperatives creates local community buy-in and demand for the services GeoKrishi offers. Local leaders are becoming advocates for GeoKrishi and its benefits in reaching previously underserved populations including women.



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.

