



ENGENDERING AGRICULTURE

Improving women farmer's access to agricultural information

Context

In India, nearly one of every two self-employed farmers is a woman¹. Yet, they own only 13 percent of all cultivated land². Women-headed household plots are 23 percent less productive than male household-headed plots³. Besides having smaller and less fertile land holdings than men, they also lack secure access to credit, irrigation and drinking water. Smallholder women farmers are often deprived of access to agriculture extension, agronomic information, markets, key assets, and inputs, and are frequently excluded from decision-making. As a result, appropriate technology that can make crops more climate resilient, nutritious and high yielding does not reach the women farmers. Reflecting on the challenges of smallholder women farmers, Pritam Kumar Nanda, State Head (Andhra Pradesh and Telangana), Digital Green says, “When we began our project of providing farm level agronomic advisories to cashew producers in north coastal Andhra Pradesh, we held several rounds of consultations with smallholder farmers. We found that nearly 52

percent of over 10,000 cashew cultivators there are women. Much like their male counterparts, they lacked knowledge resources, communication and linkages with agencies to provide them guidance on crop production. Worse still, agriculture extension services often bypass women smallholder farmers.” As the growing migration of men from rural to urban areas brings more and more women into the mainstream agricultural roles as cultivators, entrepreneurs and laborers, there is an increasing need for mainstreaming gender in the agriculture extension.

Making agriculture extension women friendly

Engaging women's collective for agricultural extension is not a new approach to Digital Green, as it is an integral part of the organization's mission to empower smallholder farmers to lift themselves out of poverty by harnessing the collective power of

¹ Oxfam India. Move over 'Sons of the soil': Why you need to know the female farmers that are revolutionizing agriculture in India. Published on 15 Nov 2018. Accessed on 20 March 2021.

² Center for Land Governance. State of Land Report. 2020. Accessed on 22 March 2021

³ Food and Agriculture Organization of the United Nations. The State of Food and Agriculture. 2010-11.

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We were never considered farmers, even when we would work long days in our orchards. The men farmers of our community never involved us in agriculture related decision making. When they (Digital Green) came to our village, they called us and gathered us to watch the videos on farming. We found a space to discuss our farming practices and learn more. I got more women from my neighborhood to watch the cashew videos. I also tried some of the practices they showed in the videos. After a long time now, I feel motivated and purposeful when I go to my cashew orchard.

- B Kumari, a woman cashew farmer in East Godavari district

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technology and grassroots-level partnerships. Under its project in the four north coastal, cashew producing districts of Andhra Pradesh, i.e., Visakhapatnam, Vizianagaram, East Godavari and Srikakulam, to provide farm level agronomic advisories enriched with local weather data, soil nutrition information and farm-level data, Digital Green's extension services are gender intentional.

From the initial stage of the Walmart Foundation supported project, Digital Green established data collecting protocols that gathers gender disaggregated data on content uptake and adoption of recommendations, ease of access to unified content, the number of farmers reached with targeted, localized extension services and the number of extension agents trained. K Archana, Deputy State Head (Andhra Pradesh and Telangana State), Digital Green says, "Breaking down project outreach and data by gender helps us assess the situation, develop appropriate, evidence-based responses and track changes. For example, our village level meetings where we used community-based video approach gradually shifted towards those times of day when more women farmers could participate after finishing not only their farm work but also their household chores. We observed women farmers' participation increase in our meetings, and an increase in their knowledge and adoption of community natural farming methods."

Digital Green creates spaces that welcome women farmers by ensuring that both men and women extension agents are trained in understanding gender dynamics, encouraging women's participation in groups, or creating women-only spaces. Nearly 42 percent of the 21,000 extension agents Digital Green has trained globally are women. In India, Digital Green works through women's Self-Help Groups (SHGs), making women nearly 90 percent of the smallholder farmers it reaches. In Andhra Pradesh's cashew-producing belt, it collaborated with two community-based organizations (CBOs) that have a history of working with women's SHGs as well as farmer producer organizations (FPOs), the Kovel Foundation and the Velugu Association. Most of its extension agents are young, educated women from the same community as cashew farmers. "We observe that engaging women from the community as extension agents has improved access of women farmers to extension services when compared to women farmers who work with men extension agents. Women farmers, who have women for extension agents, participate more regularly in extension activities, are more engaged in the discussions and have better adoption



Women cashew farmers in north coastal Andhra Pradesh preparing *Dravajeevamrutham*, a community natural farming (CNF) practice to protect their crop from pests and diseases

of recommended practices. Women extension agents also meet the women farmers when they are home, engaged in household chores, and have more interpersonal communication," observes K Archana as she shares the gains the project had on recruiting women for extension work.

The agronomic and weather advisories are produced by Digital Green as videos and audio files in the

regional language, tailored to be locally relevant and easy to comprehend, while still maintaining scientific accuracy. The content is made gender responsive by incorporating the particular interests of women and men, including women as role models and decision-makers, and demonstrating dialogue within households and the decision-making process between spouses. T Surender, Program Manager, Digital Green, shares, “People have a tendency to learn and bond with things that they share mutually. We use this element of deep similarity to allow better learning and engagement with women farmers. In other words, the women farmers are better able to relate to the actors in the video or the voice message sent through the interactive voice response (IVR) system because they are also women, who come from the same community, and perhaps even the same village. In our experience, this has been more effective in engaging women farmers rather than having a video of a subject matter expert advising them on agronomic practices.”

COVID-19 changed the engagement dynamics

Disasters and pandemics like COVID-19 further marginalize the communities who are already at the margins of the society. As a countrywide lockdown was imposed from March 2020 due to growing cases of COVID-19, Digital Green had to stall its village level meetings. As Digital Green increased the frequency of its advisories through interactive voice response (IVR) and short messaging services (SMS), the gender divide in access to communication technology became starker. Pritam says, “The mobile network penetration in north coastal Andhra Pradesh, which is hilly, largely tribal and poorly connected, is, in general, bad. As less than 10 percent of all smallholder cashew farmers have smart phones, we knew that video messages over mobile would have limited reach. As many women smallholder farmers did not own mobile phones, their access depended on when their husband and children, who had the phones, would be home. Therefore, we improvised! We converted our advisories into IVR messages and broadcasted them during different times of the day, so that the women farmers get an opportunity to listen to the agronomic advisories. The extension agents also interacted with those family members who owned mobile phones to encourage them to get the woman farmer to listen to the advisories.”

Seeding change: mainstreaming gender in agronomic advisories

Global evidence shows that women have lesser access to actionable information due to poorer accesses to resources than men. When provided equal access, as with Digital Green’s interventions with cashew cultivators in north coastal Andhra Pradesh, there are indications that the use of multiple channel, like videos and IVRs, was more effective for women, as it shows higher effects compared to men farmers for knowledge, adoption, and production gains. While one may attribute it to lower baselines among women farmers than for men, an independent evaluation by IDinsight also shows that women farmers who received advisories through videos as well as IVRs in this project had 38 percent higher production when compared to women who received advisories only through videos.

“While these results are definitely very encouraging and demonstrate the value of bringing more gendered content and making the delivery mechanism more gender sensitive we would like to interpret them with caution. We will be interested in testing this approach with a larger group of women farmers and with more diverse use case to build a robust framework and toolkit for enhancing gender quotient in agriculture extension!” says Sanjeev Kumar, Head, Monitoring and Evaluation - Asia, Digital Green. Digital Green is adopting Gender Transformative Approaches (GTAs) in its interventions to enable smallholder farmers. Digital Green’s alternative approach to agriculture extension will further strengthen its collaboration with community-based organizations (CBOs) working with women’s collectives and address structural divide between men and women in agriculture by addressing the underlying causes of gender inequality.

The Way Forward: gender transformative agriculture extension

Digital Green is collaborating with various stakeholders that are working to transform the social relations of gender to be more equitable in decision-making, access to resources and how women and men are relatively valued in agriculture. To achieve this, Digital Green will be implementing the Women’s



Female cashew farmers in north coastal Andhra Pradesh preparing *Girijana Panchagavya* for use to promote nutrient absorption, fast fruit production and deter tea mosquitos

Empowerment in Agriculture Index, which has been developed and promoted by International Food Policy Research Institute (IFPRI), Oxford Poverty and Human Development Initiative (OPHI), and USAID's Feed the Future initiative.

COVID-19 has shown that pandemics and any large-scale humanitarian crisis can break decades of advances made in making societal structure more gender equitable. Digital Green is initiating efforts to secure its interventions that engender agriculture

extension. These efforts include updating gender policies, staff training, and help-aids with special attention to the new COVID-19 conditions.

among others, the agricultural productivity could increase by 20-30 percent. Digital Green's efforts to engender agriculture extension is an evidence to this. It is important that increasing adoption of technology and agronomic advisories among women farmers could result in improving food security and bring social and economic benefits to the family, community and to the country. This is not just a challenge, but also a huge opportunity to bring in the next revolution in Indian agriculture.

Conclusion

According to FAO, if smallholder women farmers have access to land, technology, and financial services,



Digital Green creates spaces that welcome women farmers by encouraging women's participation in groups, or creating women-only spaces. A women-only group of cashew farmers at a village level meeting with Digital Green's extension agent to discuss agronomic advisories

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About Digital Green

Digital Green is a global development organization that empowers smallholder farmers to lift themselves out of poverty by harnessing the collective power of technology and grass roots-level partnerships.

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