



Gender Assessment of Plantwise Programme

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1 Introduction

Background

Plantwise, a global programme led by CABI, implemented in over 30 countries world-wide, aims to contribute towards increased food security and improved rural livelihoods by reducing crop loss. The programme, working with rural extension service providers, government regulatory organs, agriculture research institutions and input suppliers, has supported development of plant health systems, knowledge banks on plant health issues and facilitated stakeholder platforms. It has introduced plant health clinics and plant health data collection concept in at least 35 countries and has trained over 10,000 personnel in plant doctor training. To varying degrees, the approach has been imbedded in the agricultural extension programmes run by partners who, in some cases, have made structural changes to revise staff job descriptions and allocate budget for the programme activities. The Plantwise Knowledge Bank provides huge amount of resources, such as, pest distribution maps, online diagnostic tools and crop management support fact sheets that are being used as reference materials in Plantwise countries.

Despite the evident successes of the Plantwise programme, there have been limitations in mainstreaming gender and ensuring the services delivered by the programme are accessed by male and female farmers, equally. Studies and monitoring reports show the attendance of women in Plantwise clinics is generally low, as compared to the proportion of women employed in agriculture or contributing to agriculture labor force, with wide differences across countries. Women make up 43% of the agriculture labor force globally and 50% in Sub-Saharan Africa and 45% in South East Asia (FAO, 2011). Women's participation in plant clinics, on the other hand, ranges from 24% in South Asia, to 35% in Sub-Saharan Africa and 37% in South East Asia (Williams and Taron, 2020).

After observing limited participation of women in the programme initially, some Plantwise implementing countries have taken different measures to address the problem. It will be useful to understand how such measures helped improve women's participation, as well as, the overall constraints women faced to participate and benefit from the programme interventions. This understanding would be useful to inform the development of the next phase of the Plantwise programme, to enable it to contribute to more gender equitable outcomes.

Objective of the assessment

The overall objective of this assessment is to examine how gender is mainstreamed in the Plantwise programme by identifying strengths and limitations and drawing out lessons that will inform the development of the next phase of the programme.

Specific questions addressed by the assessment are the following:

- (1) What gender considerations were made during the design and implementation of the programme?
- (2) What gender related challenges were encountered and gaps observed during implementation?
- (3) What recourse measures were introduced and what changes were observed as result of implementing these measures?
- (4) What are the lessons learnt for more gender equitable outcomes?

Method and Scope

The assessment focuses on the program design at the global level and implementation in five countries: Ghana, Uganda, India, Afghanistan and Bolivia. The assessment focused mainly on the plant health systems development component, with the assumption that farmers' main interaction is with plant clinics and plant doctors. Other in-country interventions, such as extension information that is available through the Knowledge Bank was considered to be accessed mainly by plant doctors and other sector experts, rather than farmers.

The assessment was conducted by doing desk review and key informant interview with Plantwise CABI Country Coordinators of the five selected countries. The documents reviewed include: Plantwise five-year program strategy, log-frame, gender mainstreaming strategy, global and annual reports of the selected countries; external evaluations; impact stories and studies done on gender aspects of the program. The Plantwise Online Management System was also reviewed for the five countries to understand the trends in men and women farmers seeking extension advice from plant clinics.

2 Conceptual framework on gender integration

Integrating gender in development programmes is about applying a gender lens to look at how social relations of gender and underlying power dynamics affect men's and women's participation and benefit from development. Gender integration is required to ensure everyone benefits equally from development interventions, to make sure inequality is not perpetuated and to enhance the impact of development investments. Actions taken to integrate gender can range from removal of gender related barriers or constraints to improving gender equity, change in gender roles, improving gender power relations in access to or control of resources, in decision making etc, depending on the level of ambition of projects. At the minimum, development programmes should not be gender blind and should be designed with a prior analysis of culturally defined set of economic, social, and political roles; responsibilities; rights; entitlements; obligations; and power relations associated with being female and male, in a given context. They should acknowledge that people may experience development problems differently, based on their gender and other social categories, and aim to reduce the gender gap in access to resources. They should also measure progress in bridging the gender gap. More gender transformative programmes will go beyond this minimum compliance and try to address the systemic causes of gender inequality imbedded in formal and informal institutions and structures. (See Annex 2 for more information on the conceptual framework.)

3 Key highlights on integration of gender in Plantwise programme design and implementation and lessons learned

Mainstreaming gender in the Plantwise programme would mean (1) understanding gender relations and how they affect access to agricultural advisory services and adoption of new practices and technologies for pest management in programme areas, and (2) removing gender related barriers to access and adoption and improving gender equity. This would require a gender analysis in programme implementation areas on how men's and women's

access to agriculture extension advice is differently affected and how other factors of exclusion come into play. It would require also an analysis of who is likely to be left out or not benefit from programme activities and identifying interventions to reduce the identified gender gaps or removal of gender related barriers, which should be reflected in the programme objectives, outputs and activities. It would require setting indicators to measure progress in reducing the gender gap or removing barriers, in the programme's monitoring and evaluation framework.

Some efforts have been made to mainstream gender in the Plantwise programme design (referring to 2015-2020 strategy and Log-frame) and implementation, although the efforts lack consistency with the intentions outlined in the programme strategy and gender mainstreaming strategy. The 2015-2020 Plantwise programme strategy acknowledges the need for a gender analysis that should be done at country level. The strategy also recommends specific actions that can be undertaken to address gaps in participation of women in the programme, which was a limitation observed since the programme's implementation in 2012. The same recommendations were reflected in the gender mainstreaming strategy of the programme developed in 2012. The log-frame, revised in 2016, includes gender-disaggregated indicators at impact, purpose and output levels. While gender analysis hasn't been conducted in programme countries, Plantwise programme countries have identified gender related barriers to women's access to plant health services during implementation. Different programme countries have come up with innovative solutions that best fit their context, to address the problem. Country programmes have also made an effort to collect and report sex-disaggregated data from programme activities and outputs, although it is often not accompanied by a discussion about the implication of the data and how it might inform design and implementation of ongoing activities.

The gender related barriers identified during implementation have similarities across countries, although the emphasis might be different from one context to another. Socio-cultural and gender norms are one of the major barriers for women to access extension advice and adopt new practices and technologies. Social and gender norms restrict women's mobility, limit interactions with male service providers in certain contexts, dictate gender roles in agriculture, determine what sources of information women can access and which meetings they could attend. Social and gender norms also influence the way extension workers perceive male and female farmers and interact with them. Another major challenge shared by many of the implementing countries is the burden of unpaid care work. Women's unpaid care work responsibility, coupled with lack of redistribution in the household and limited access to technologies and infrastructures that can reduce the time and labor required to do care work, reduces the time women can have for agricultural meetings. Lack of control of productive resources, such as, land, cash crops, limits women's ability to access finance to buy inputs and apply recommendations from plant doctors.

Strategies applied by countries to address the different gender related barriers mostly tried to meet practical needs of women and other excluded groups, in order to achieve programme objectives, without challenging social norms and institutional practices, which are the underlying causes of inequality. For example, strategies used by the programme worked around restrictive social norms, introducing women only clinics in places where mixing of men and women in public is a problem. Women's time constraint, related with unpaid care work responsibility, is dealt with by introducing flexible arrangements for plant clinics, selecting a time that is most suitable for men and women, setting up mobile clinics and going closer to communities. When mainstream agriculture communication systems were not able to target

or reach women, reaching women farmers through women's groups, mass media and peer communication through community plant health promoters is introduced.

A few strategies introduced have tendencies to be gender transformative trying to address underlying social norms and institutional practices that perpetuate inequality. There were attempts to shift social norms about gender roles in agriculture, showing messages and testimonies where women farmers use plant health services and share their experience, which tried to shift the norm that 'seeking extension advice is a man's role'. Another strategy that has a potential to be transformative is training agriculture extension agents to become more gender sensitive, although this was not integrated into the training modules of plant doctors. This strategy could contribute to changing organizational practice of public institutions providing extension service and can have a wide reaching impact. (See Annex 1 for detailed reports on the five countries.)

Reviewing the programme's performance in mainstreaming gender, especially in the five selected countries, the following key lessons emerge, which can be taken forward in the next phase of the programme.

- It is useful to do a **gender analysis** in programme implementation sites to inform the design of programme activities through an understanding of the gender relationships on the ground. For example, such an analysis, could have helped the programme to design equal number of separate plant clinics for women and men farmers in countries and regions where religion and social norms don't allow men and women to mix to access public services. This is important, especially if women are significantly involved in crop production activities, such as in Afghanistan where they make up over 50 percent of the agriculture labor force. A social inclusion analysis can also be added to look at a range of farmers who can be excluded from plant health services due to different social exclusion factors and design ways to reach them.
- The practice of training a cadre of men and **women community plant health promoters**, who live within the community and support plant doctors is a good practice to support agriculture extension workers, which is a tried and tested approach in extension systems in other sectors as well. This is especially useful in contexts where there aren't enough women extension workers or plant doctors working in the community due to various reasons, and in contexts where women farmers are not keen or active in seeking extension advice. The women plant health promoters can easily reach out to other women farmers and serve as a bridge between them and the plant doctors. This is something that can be replicated in other programme countries as well, in addition to those who have started it.
- **Involving men and women students in colleges** to participate in plant health campaigns, which is tried in Bolivia, can be a good strategy to get young men and women interested to be trained as agriculture extension agents. It can especially be a good strategy to get women involved, getting opportunities as interns, in a sector where there aren't enough women represented.
- It is useful to conduct **assessments on communication channels** most accessed by men and women farmers, before starting communication campaigns, although the programme countries have tried to innovatively apply different strategies, after initial failures in some places. It is also important to use the communication messages to counter social norms that act as a barrier for women's access and use of plant health services. For example, the communication messages can show traditional gender division of roles in agriculture can change and women farmers can and should access extension advice.

- **Consultation of men and women community members about plant clinics sites and time** should be a standard practice. Leaving it for plant doctors to decide on siting of plant clinics with the assumption that they know the community better, might lead to oversight of women's needs, as most agricultural extension workers have an image of a man as the primary farmer in need of extension advice.

- Agriculture extension agents' gender awareness can go a long way in facilitating access to extension services for women farmers, as seen in some of the programme countries. **Basic gender awareness training** would help agricultural advisors to become more sensitive to the needs of men and women farmers and the barriers they encounter, in order to provide a better service.
- Beyond access to extension advice, several factors affect women's ability to access and use different agricultural inputs and technologies. It would be useful if **plant health stakeholder meetings include discussions on gender and social inclusion**. For example, the discussion can include challenges faced by women farmers and other excluded groups of farmers to access agriculture supplies and come up with recommendations to address the major hurdles.
- **Social and gender norms** are a huge challenge for women to access extension services and to apply them throughout the programme countries. A lot could be learned from a study on specific social norms that affect women's access and use of extension advice, assessing how social norms are maintained and identifying gate keepers of the social norms. Based on the study, a behavioral change communication strategy could be developed and implemented along with plant health information communication.

The set of recommendations below, are more inward looking, focusing on how CABI can improve its capacity to deliver more gender sensitive and transformative projects through developing staff skills, facilitating internal learning and working in partnership.

- **Raising gender consciousness and building skills of CABI and partner's staff** on gender analysis, gender mainstreaming, developing gender sensitive indicators through trainings can help to improve gender mainstreaming in this and any other programme/project.
- **Collaborating with agencies that have expertise in gender mainstreaming** from government and partners' side will be helpful for the programme in mainstreaming gender. This has been tried to some extent in few of the countries.
- Standard **reporting templates** that require countries to respond against specific gender indicators, or that have guiding questions on gender will help to improve monitoring and reporting on gender. The guiding questions can help to capture more qualitative information on gender related gaps, solutions implemented and changes observed in the programme.
- There are a number of good practices in mainstreaming gender tried in the different countries. It would be useful if some of those **best practices are documented and shared** and partners are invited to present their best practices in national stakeholder meetings and cross-country learning events organized by CABI.

Annex 1. Detailed country assessment reports

The section below describes the implementation of the programme in five countries, looking at the challenges faced in gender integration, participation of women and innovative strategies adopted by the countries to overcome the challenges.

Ghana

Agriculture contributes to 18% of GDP in Ghana, according to the 2018 World Bank national accounts data. The sector accounts for 34% of total employment of economically active population and about 26% of women and 40% of men were employed in the agriculture sector, in 2018. Although, employment in agriculture is declining, previous studies showed women contributed to about 52% of agricultural labor force and produced 70% of food crops in Ghana (World Bank 2012 & FAO cited in Mary SurrIDGE and Rufsana Begum, 2015).

There is a gender division of roles in agriculture in Ghana. Women are primarily involved in farming activities, such as, planting, weeding, pruning, harvesting and collection, while men are involved in land preparation, clearing, ploughing and marketing. Men are also responsible for the application of farm inputs, such as, pesticides and women don't usually handle pesticides. However, the gender division of labor varies across different regions and the type of crops cultivated. Women are more involved in production of subsistence crops, and crops marketed in small quantity in local markets, while men are more involved in production of cash crops. Main crops produced by women include: cassava, plantain, yam and maize. Female headed households make up 20% of the population and they are involved in production of cash crops like cocoa. Women farmers, in general, face constraints, such as, low access to education, finance, transportation and higher markets. Socio-cultural restrictions also affect women's participation in agriculture (Mary SurrIDGE and Rufsana Begum, 2015).

Plantwise has been implemented in Ghana since 2012. Programme partners include a mix of government organizations (Ministry of Agriculture and food), bilateral donor funded programmes supported by GIZ and USAID, and civil society organizations (International Development Enterprise, Modernizing Agriculture in Ghana programme) and research institutions (Council for Scientific and Industrial Research). According to the 2018 country report, 199 plant clinics are established in Ghana, of which 109 plant clinics are currently active. The programme has also trained 170 plant doctors, out of which 9 are women. According to the country report, the low number of women plant doctors is attributed to the limited number of women working in agriculture extension. Another factor reported by the Plantwise CABI Country Coordinator is that the working conditions for extension workers is not conducive to attract women. For example, educated women and those with children do not want to live among rural communities where they would provide extension services.

The participation of women in plant clinics has shown gradual increase in Ghana from 22% in 2013 to 34% in 2017. The proportion of women attending plant clinics since 2012 up to 2019 is 28%, looking at the data from Plantwise database.

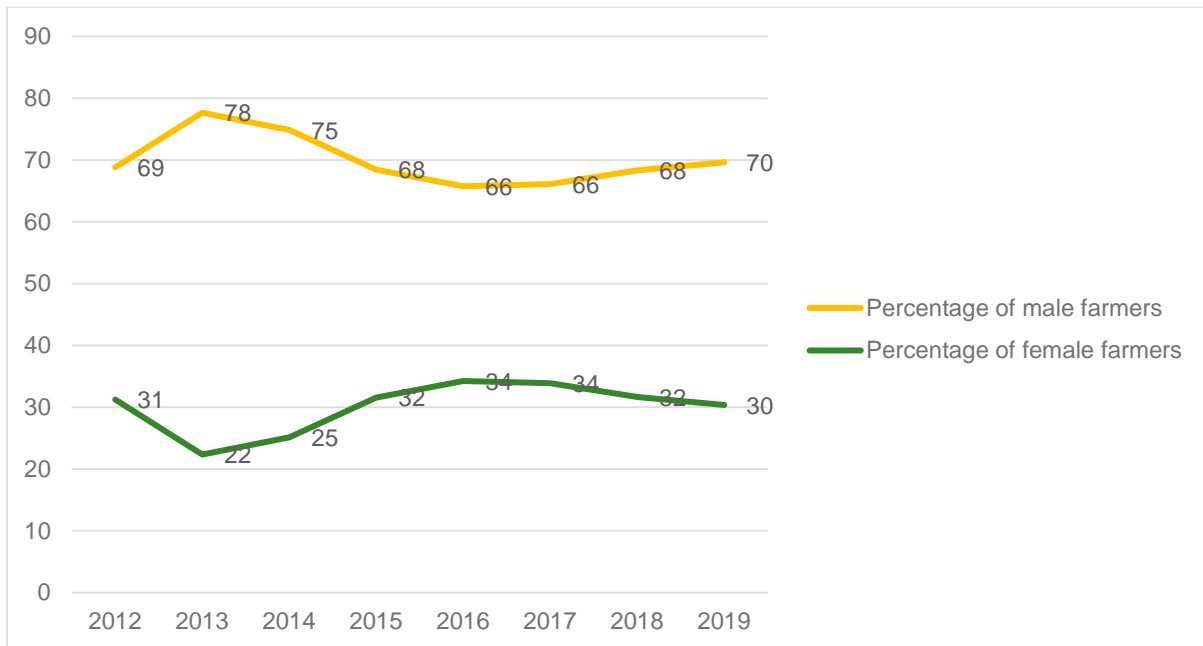


Figure 1- Ghana, proportion of male and female farmers out of total farmers attending plant clinics

There are several factors that affect the participation of women in Plantwise activities and their access to extension advice provided by the programme, in plant clinics, and complementary agriculture outreach activities. The factors include: socio-cultural norms, communication methods, burden of care work and location and timing of plant clinics.

In traditional Muslim communities the norm prohibits women farmers from meeting and receiving advice from male farmers. In these communities, the lower number of women plant doctors restricts women farmers' access to extension advice.

In the early period of the programme, communication channels selected to communicate information about services provided by plant clinics were not able to reach women. Initially, information about plant clinics was communicated through extension workers and local leaders in agricultural meetings, which were mostly attended by men. As a result, women used to associate services provided by plant clinics as services meant for men (Mary Surridge and Rufsana Begum, 2015).

Timing constraint was also a barrier for women to attend plant clinics and plant health meetings, especially for single female heads of households. Women's responsibility for unpaid care work, in addition to agricultural activities, creates a burden on them and restricts the time they have for agricultural activities. This time constraint was exacerbated by the distance of clinics from communities, especially for those living in remote areas. Although it differs from one region to another, women usually preferred plant clinic sites to be closer to them, such as local trading areas, while men preferred clinics to be located in bigger markets, places that they usually access. In terms of time, women mostly preferred clinics to be held in late afternoons, after they finish their care work activities and farm work, after 2pm, while men preferred earlier hours (Mary Surridge and Rufsana Begum, 2015).

Several factors affect the application of advice farmers receive from plant doctors. For women farmers, affordability was one barrier when advice given by plant doctors requires purchasing pesticides or other inputs. Women have limited access to loans to buy pesticides or other

recommended technologies, because they don't produce for commercial purposes. Mostly, they have to rely on their husbands to provide cash to buy inputs. In some instances, low literacy rate was a challenge for women to clearly understand the written prescription note from the plant doctors and apply the recommendations given. Agriculture gender division of roles are also restrictive on women's ability to apply advice received from plant doctors. For example, for pesticide application, since this is not traditionally done by women, they have to hire laborer's or depended on male family members.

To address the restriction put by socio-cultural norms in conservative Muslim communities, according to 2016 country report, dedicated clinics for women are set up, working with women's affairs offices and more women plant doctors are trained to work in these clinics. Over time, the programme adopted diverse communication channels to share information about services provided by the programmes, such as communication through mosques and churches and mass communication channels, such as, radio, which are also used for mass extension campaigns. According to the 2019 annual report, the programme also started organizing separate/or additional plant clinic sessions for women farmers, during times that are more convenient to them. Flexible arrangements are adopted as some clinics operated providing support to men one week and women, the next week. In addition, in order to make plant health service accessible to farmers, plant doctors started moving to various communities within their operational areas running clinics.

To overcome challenges related to literacy, plant doctors were asked to clearly, and in detail, explain, to men and women farmers, the application of written recommendations, giving step by step instructions. To overcome challenges related to affordability, plant doctors tried to link women farmers with other projects that provide loan assistance for the purchase of agricultural inputs.

Uganda

Agriculture makes up 24% of Uganda's GDP. According to world bank's statistics in 2018, about 76% of women and 65% of men are employed in the agriculture sector. The World Bank's publication, based on Living Standards measurement survey in 2014, shows women contribute about 56% of crop production labor. Plots managed by women farmers produce 13% less per acre than plots managed by men. Women farm managers are less likely to receive extension advice and use less agricultural inputs, such as, pesticides and organic fertilizers compared to men (World Bank, 2014). Crops mostly produced and controlled by women in Uganda include: sweet potatoes, cassava and maize on a small scale. There is a gendered division of labor in agriculture work. Women usually undertake cultural methods to protect crops from pests, while men are responsible for chemical solution application (Miuro et al, 2015).

Implementation of Plantwise in Uganda started in 2011 A mix of government, civil society, research organizations and higher education institutions implement the programme. The programme, working with Uganda's Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), has trained about 500 plant doctors that run plant clinics at sub-county level. According to the 2018 country annual report, 25% of trained plant doctors are women. The lower proportion of women trained as plant doctors is attributed to the fact that there is a limited number of women staff working in district agriculture offices.

The participation of women in plant clinics in Uganda has increased from 23% in 2012 to 38% in 2017. Women overall account for 29% of plant clinic users, based on data from 2012-2019 in the Plantwise Online Management System (POMS). According to the 2016 country annual report, 1/3rd of participants in plant health rallies were women. Overall, women constitute around 45% of the farmers reached by different programme activities.

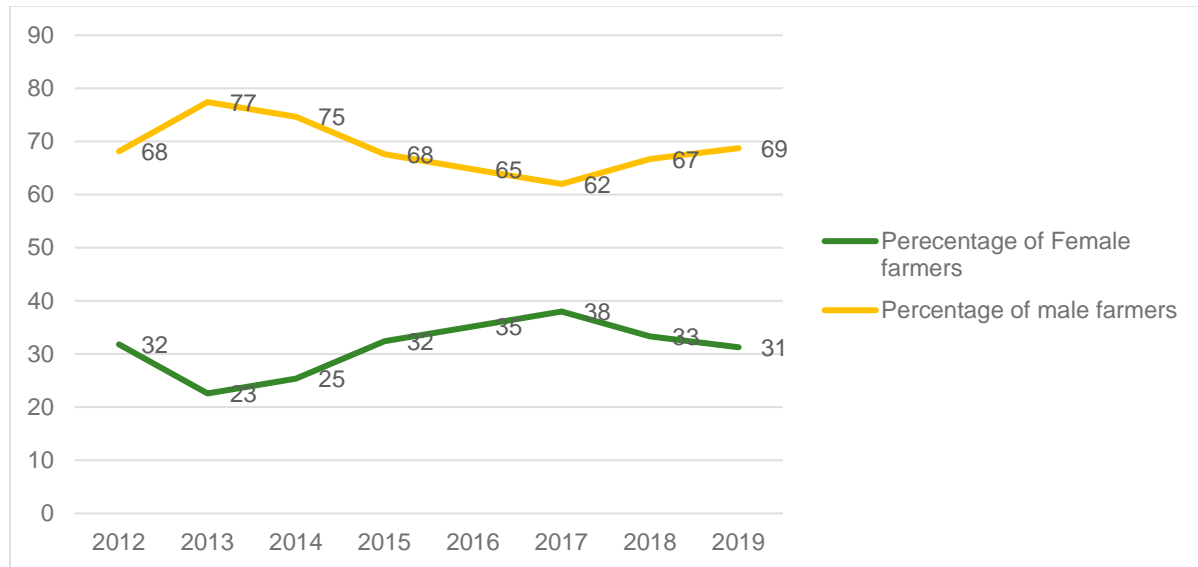


Figure 2- Uganda, proportion of male and female farmers out of total farmers attending plant clinics

Women farmers participation in the programme is affected by several factors. Gender roles and social norms, in some regions like central Uganda, dictate that linking with extension agents is men’s responsibility, despite the fact that women do most of the farm work. The channel of communication used to advertise the services provided by plant clinics affects the programme’s ability to reach men and women farmers. According to the gender assessment done by CABI in 2015, women accessed more informal sources of information, such as other farmers or women’s groups, while men accessed more formal sources of information, such as, communication by agricultural extension workers and plant doctors (Miiro et al, 2015).

Location and timing of plant clinic sessions are among the factors influencing men and women farmers’ access to plant clinics. Men and women farmers have different preferences of time, based on their farm and unpaid care work activities, although the preferred times were different across regions. The distance to access plant clinics is a common challenge faced by both male and female farmers living in remote rural areas, where local transportation is not available. Women with young children, especially faced time constraints to attend plant clinics or apply labor intensive recommendations made by plant doctors.

Application of advice received from plant doctors is constrained by other additional factors. Affordability is a challenge for both men and women farmers to buy improved variety of seeds or pesticides recommended by plant doctors. For women, this is especially a constraint because of their limited decision-making power in the household and agricultural roles more geared towards production and control of subsistence crops. Households and men usually prioritize cash crops, and subsistence crops are not considered worthy of the investment required (Miiro et al, 2015).

Literacy was another challenge to receive prescriptions made by plant doctors and apply them accordingly, as only 62% of rural women were literate in Uganda, in 2015. In some instances, women also didn't have information about where they can access recommended solutions by plant doctors.

A number of measures are taken to address identified challenges in access to plant health advisory services in Uganda. Different channels of communication, such as radios, mobile services, communication in churches and mosques and to farmer groups were used to reach women. Innovative communication methods using community change agents was also introduced.

Timing for plant clinics was decided in consultation with farmers. Mobile plant clinics are also set up to move closer to communities and reduce the distance they travel to access the plant clinics. In addition, plant clinic sessions are held during women's groups meetings, such as, saving and loan group meetings. The number of plant doctors trained at the district level increased. The measures taken helped, overall, to increase the attendance of farmers in plant clinics.

Gender sensitivity of extension workers played a role in strengthening their ability to reach women farmers, in some instances. Some extension agents made a point of discussing with both women and men during their farm visits, conveying that women are farm managers, responsible for application of the advice provided by extension agents, despite the limited decision-making role given to them. In plant clinics, some plant doctors included in their recommendation, advice for women farmers as to how to incrementally implement their recommendations, if the task appeared to be daunting or labor and time consuming (Miiro et al, 2015).

To overcome challenges related with lack of finance to apply advice received from plant doctors, some implementing partners organized women in saving and loan groups, enabling them to access loans to buy technologies and inputs and conduct farming as a business. Women active in farmers' cooperatives, who assumed leadership positions and were seen as a role models in the community were used to promote and influence other women to participate in Plantwise programme activities.

Bolivia

Agriculture accounts for 11% of GDP in Bolivia. According to World Bank statistics in 2018, about 28.3% of women and 27.9% of men are employed in the agriculture sector. In South America, agriculture is traditionally considered as men's role, although this is now changing. As men migrate to urban areas in search of non-farm employment, women are getting more involved in farming (Eduardo Quiroga and Bruce Kernan, 2016). The participation of women in agriculture in Bolivia is also different from region to region and from one ethnic group to another.

The Plantwise programme has been implemented in Bolivia, since 2011 in partnership with local government organizations, private sector organizations and technical and higher education institutions. The programme is implemented in two regions: Santa Cruz and Cochabamba. The programme works with communities from minority ethnic groups in Cochabamba.

The Plantwise programme in Bolivia has so far supported establishment of 32 plant clinics. About 25% of the plant doctors trained by the programme are women. The limited number of women trained in agronomy and working in agriculture extension is the reason for the relative low proportion of women plant doctors trained by the programme.

The attendance of women in plant clinics has historically been low in Bolivia, although it differs depending on the type of crop and geographic area (Eduardo Quiroga and Bruce Kernan, 2016). Clinici data in the POMS shows the proportion of women participating in the plant clinics since 2013-2019 is 15%. The clinic data doesn't show a steady increase or decrease in the level of women's participation plant clinics in Bolivia. (See Figure 3)

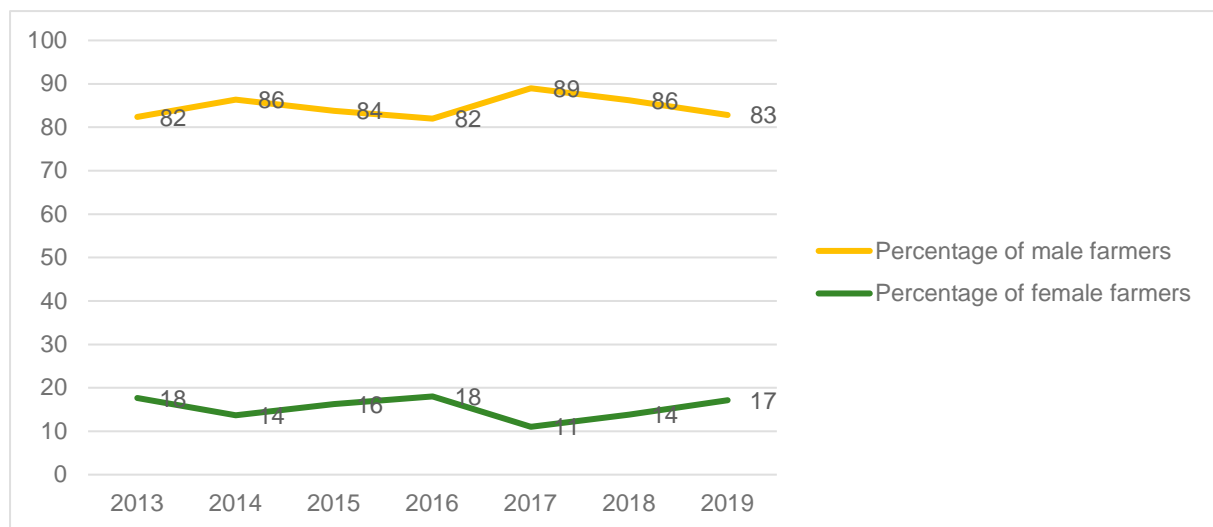


Figure 3-Bolivia, proportion of male and female farmers out of total farmers attending plant clinics

One of the reasons for limited attendance of women farmers in plant clinics is the lack of female agriculture extension agents. A 2015 study showed there is a significant increase in participation of women in plant clinics, when the plant doctors are women. Women plant doctors were seen as role models by women farmers (Jose Maria Gomez Varga, 2015). Factors affecting adoption of advice received from plant doctors includes affordability to buy recommended pesticides.

To improve the participation of women in the programme and their access to agriculture advisory services, different actions are taken by the programme in Bolivia. Women lead farmers were identified and trained to work with the programme acting as community promoters, passing plant health information to other women farmers and linking them with plant doctors. Communication about the services of plant clinics and plant health information was disseminated using videos that show women participating in plant health programme activities. In addition, advertisements were made through public radios with messages tailored to reach women farmers. In places where women have limited exposure to public meetings, different participatory techniques are used to engage them. Local language, including local accents, are used for communication.

Where necessary the siting of plant clinics has changed to make them more convenient for women farmers. The timing of plant clinics is arranged in a way it doesn't conflict with other

agricultural activities, including irrigation schedules. The preference differed from morning in some places, to afternoons in others. Female farmers burdened with unpaid care work, usually, preferred to come in the afternoons.

In extension outreach campaigns, the programme tried to involve youth. The programme worked with technical institutes in universities to recruit students to participate in implementation of the campaigns. Among the recruited youth are also young women studying in agriculture programmes of the colleges to become extension workers.

India

Agriculture contributes to 15% of GDP in India. According to 2018 World Bank estimates, 40% of men and 57% of women are employed in the agriculture sector. In regions, such as, Tamil Nadu and Maharashtra, where the Plantwise programme is implemented, the percentage of economically active population engaged in agriculture is 59% and 74%, respectively. There is a gender division of roles in agriculture work in India. Men are involved in activities, such as, ploughing and applying fertilizers and pesticides, while women are involved in seeding, weeding, harvesting and cleaning.

The Plantwise programme has been implemented in India since 2012. Implementing partners are a mix of local government, civil society and private sector organizations, research institutions and universities. The programme has supported establishment of 71 plant clinics, of which 60 clinics were in operation in 2017, according to the annual country report. The programme has trained about 400 plant doctors. However due to high turnover of staff, currently only 70 plant doctors are active.

The participation of women in the programme varies from one region to another. Women are actively involved in the southern part (Tamil Nadu state), while their participation is lower in the northern part (Jammu & Kashmir states). Initially, equal numbers of male and female plant doctors were trained by the Plantwise programme. In the north, 22 plant doctors were trained and out of the trained, 11 were women. Now only 3 are left. In the southern part, out of the total 30 plant doctors, there are 10 currently active female plant doctors. The reason for higher drop out of female plant doctors is reported as lack of incentives or poor attractiveness of the job of an agriculture extension agent. However, most of the women plant doctors that left are those hired by government partners, while those hired by civil society partners have continued to work. It would be useful to understand if different approaches employed by the partners have contributed to the different results observed.

Attendance of female farmers in plant clinics was initially low, but it gradually improved in locations where the NGO partner M.S.Swaminathan was implementing the programme. The POMS data shows women participating in plant clinics increased from 17% in 2012 to 20% in 2019. Overall, women account for 16% of farmers attending plant clinics, based on plant clinic data between 2012-2019. The participation of women in plant health rallies and extension campaigns reaches 45%.

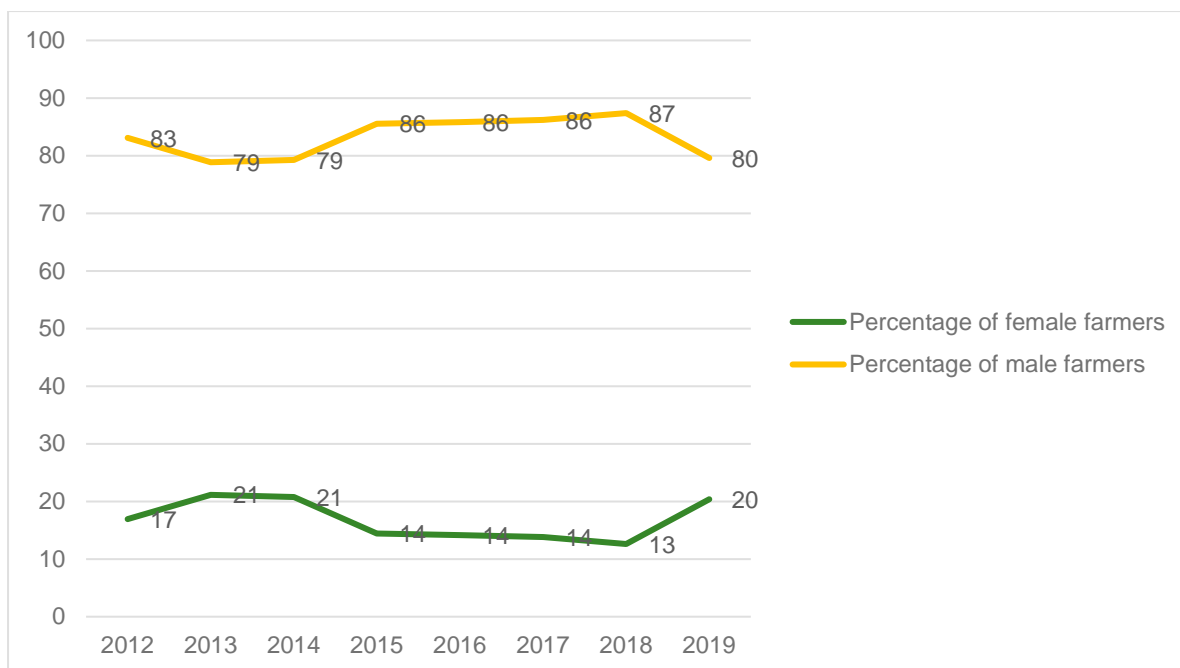


Figure 4- India, proportion of male and female farmers out of total number of farmers attending plant clinics

In India, a complex array of interlinked factors act as barriers for women to access agriculture extension advice from plant clinics, and to apply the advice received. Women have limited access and control of productive resources, including land. They are financially dependent on their spouses and have limited decision-making power in the household. Lack of ownership of productive resources combined with socio-cultural norms limit women’s access to credit to buy agricultural inputs. For example, agro-dealers could have credit arrangements with male heads of households and trust men more to provide loans.

Women’s mobility is also restricted and they have limited information and access to agriculture input suppliers, as a result of various factors, such as, unpaid care work responsibilities in the house that takes up their time and limits their opportunity to develop networks. Socio-cultural norms also restrict women’s mobility. As a result, women often depend on male relatives to buy agriculture inputs they need. Women’s limited access to transportation, such as, ownership of their own bicycles or motorbikes also contributes to limiting their mobility.

Gender division of roles in agriculture assigns pest management using chemical solutions for men, while women are responsible for implementing cultural solutions. Application of other inputs, such as, chemical fertilizers is also assigned as men’s role. This limits women’s opportunity to develop skills in new areas in agriculture production. Limitation in literacy skills also prevent women from verifying that the inputs supplied by agro-dealers are in line with recommendations of plant doctors, often sent through SMS messages.

The Plantwise programme in India came up with a number of innovative solutions that helped to address barriers that limit women’s participation and benefit from the programme.

A wide range of communication channels and methods are used to advertise the services provided by plant clinics, in order to reach women farmers in communication messages. Various farmers groups, such as, producers’ organizations, farmers gatherings in national rural employment guarantee schemes work places, women’s self-help group meetings were

targeted in communication messages about plant clinics. Village knowledge centers set up to work on different programmes were used to communicate information about the programme to farmers. Various digital and print communication messages are developed including: voice SMS, short video screenings of women farmers participating in Plantwise activities or giving testimonies and brochures and leaflets. Plantwise messages were also put up in advertisement spaces, such as, sign boards, notice boards and bus stops.

Farmer peer communication was used as a further method, by training women lead farmers to reach out to other women. The lead farmers served as an intermediary cadre at the village level, as plant health monitors who are trained on identification of pests and diseases and to interact with farmers. Experience sharing sessions among women farmers were also organized, creating opportunities for successful women farmers to share their stories.

Efforts were made to identify accessible location and time for plant health clinics. The date and time for holding plant clinics is decided in consultation with local communities by plant doctors. Both men and women farmers are involved in the discussions. In addition, separate plant clinic sessions for women farmers, which focused on the type of crops produced by women, were held.

During outbreaks of pest epidemics, campaigns are organized. During the campaigns, women farmers who frequently visit plant clinics are assigned the job of dissemination of information to mobilize the collective action required to address pests. The campaigns are also linked with farmers producers' organizations, self-help groups and federations.

The programme tried to improve the gender sensitivity of plant doctors to encourage participation of women farmers. For example, plant doctors are guided to ask male farmers who come to the plant clinics to bring their wives along, as they are involved in the field operation and their participation is crucial. The programme also tried to ensure a gender balance in recruitment and training of plant doctors.

The participation of women farmers in extension campaigns reached 45%. The programme also reports improved skill and knowledge of women farmers in pest management. The programme team reports the application of extension advice received by women farmers shows mixed result.

Afghanistan

Agriculture contributes to 20% of GDP in Afghanistan and the sector employs 38% of the economically active population. According to 2018 World Bank statistics, 56% of economically active women are employed in the agriculture sector, while the figure is 29% for men. Women make up half of the agriculture labor force. In the gender division of roles in agriculture in Afghanistan, women participate in harvesting, processing, weeding and planting seeds, while men do ploughing, irrigation and other agricultural activities that require heavy labor. The gender division of work on farming varies from one place to another. In some places, men work on their farms, while women work on kitchen gardens, while in other places both men and women work on the same farm.

Plantwise programme implementation started in 2012 in Afghanistan. The programme is implemented in partnership with government - Ministry of Agriculture, Irrigation and Livestock, a National Horticulture and Livestock Project (NHLP) funded by World Bank and implanted by the Ministry of Agriculture, Agha Khan Foundation-Afghanistan and the Danish Committee for

Aid to Afghan Refugees (DACAAR). The programme trained 573 plant doctors out of which 32 are women. It also supported setting up of 258 clinics. Out of these, 5 are women-only plant clinics.

The participation of women farmers in Plantwise activities in Afghanistan is very low, although it has improved slightly over the years. Only 1% of plant clinic attendants were women in 2012. This figure has grown to 5% in 2019.

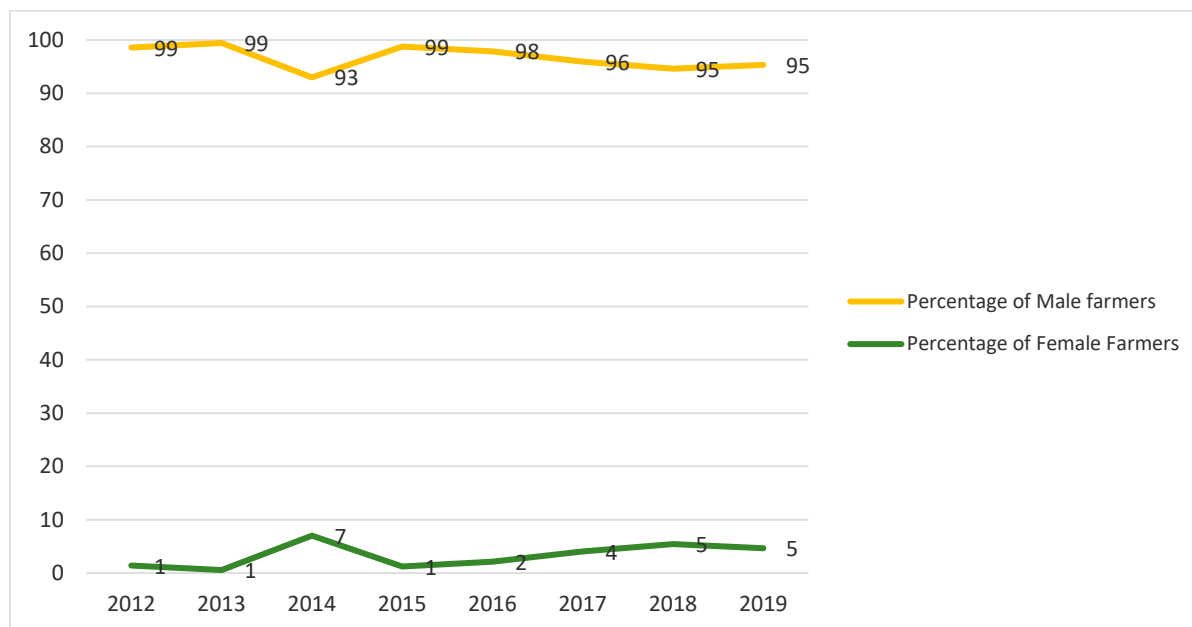


Figure 5- Afghanistan, proportion of male and female farmers out of total number of farmers attending plant clinics

Socio-cultural norms in Afghanistan prevent women and men from coming together to attend public events. As a result, the programme established 5 women only mobile clinics to provide separate services for women. A USAID horticulture project provides agricultural inputs, such as, improved seeds and pesticides to women. Due to ongoing conflict in the country, the number of women working in agriculture sector offices at the district level is very limited.

Annex 2- Conceptual framework on gender integration

Mainstreaming gender refers to a twin track approach of applying a gender lens across programmes and sectors and targeted work to advance women and girls' empowerment through investments specifically targeted to address gender gaps. Applying a gender lens involves looking at how social relations of gender and underlying power dynamics affect men's and women's participation and benefit from development. Gender mainstreaming includes removal of gender related barriers or constraints, improving gender equity, change in gender roles, improving gender power relations in access to or control of resources, in decision making etc. More recently, engaging men to advance gender equality is also recognized as an important complimentary approach. Gender mainstreaming is required to ensure everyone

benefits equally from development interventions, to make sure inequality is not perpetuated and to enhance the impact of development investments.

There are different levels of gender integration in projects and projects can fall across a continuum of categories depending on their level of ambition in mainstreaming gender. On one extreme end are projects that are gender blind and ignore gender considerations altogether. The projects are designed without prior analysis of the culturally-defined set of economic, social, and political roles; responsibilities; rights; entitlements; obligations; and power relations associated with being female and male. They don't acknowledge that people may experience problems differently based on their gender and other social categories. Project outputs and outcomes don't try to address gender gaps.

In the middle of the continuum lie gender sensitive projects that try to be accommodating and empowering to a certain extent. The projects acknowledge gender differences and inequalities to achieve project objectives. They aim to reduce the gender gap in access to resources, which is reflected in project outcomes, outputs and activities. Sex-disaggregated data is collected and indicators are used to measure the progress in bridging the gender gap. However, the approach taken by the projects does not attempt to address gender systems that contribute to differences and inequalities.

On the other extreme are gender transformative projects that seek to transform gender relations and to promote equality in agency over resources, which includes control and decision-making power. The projects critically examine inequalities and gender roles, norms, and dynamics; recognize and strengthen positive norms that support equality and an enabling environment and promote the relative position of women, girls, and marginalized groups. They try to change underlying policies and practices and broadly held social norms that perpetuate gender inequalities.

Mainstreaming gender in projects requires a number of actions that need to be taken during design and implementation of projects. As part of the problem analysis there should be an analysis of the social context in which the problem exists. This involves understanding who is the most affected by the problem and how gender related barriers intersect with other forms of discrimination (eg. age, social class, ethnicity, race etc.) to influence how people experience the problem. It also involves understanding who will likely benefit from the planned project investment, who will likely be left out and how might men and women and other social groups be affected by the investment. The analysis can then be used as an input to plan investments in a way that the investment helps to address identified gender gaps. The project outcomes and outputs should include specific statements that set targets for reduction of gender gaps or removal of gender related barriers. The project monitoring and evaluation framework should contain plans to measure change in identified gender gaps, through sex-disaggregated data and qualitative gender sensitive indicators that collect data on gender gaps and barriers.

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Other documents reviewed

- Plantwise programme strategy 2015-2020
- Plantwise log-frame 2017 revision
- Plantwise programme gender mainstreaming strategy
- Plantwise annual country reports for the five countries

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