

This publication is a brief overview of gender inequality in agriculture, its challenges and impacts, and how CABI is working to address these through its projects and implementation now and in the future.

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Key messages

- Women are vital to rural economies but they have less access than men to credit, education, land ownership, high quality inputs, and rural advisory services.
- A deep understanding of the different societies around the world is essential for making meaningful change and CABI adopts a gender responsive approach.
- It is vital to incorporate a gender focus in the planning, implementation, and evaluation of our work and to work directly with women, youth, and minority communities.
- Moving forward, CABI will continue to work on increased opportunities and improved decision-making for women through the provision of knowledge and technology.

Background

Globally, women represent 43 percent¹ of the 1.5 billion-strong agricultural labour force, producing over half of all the food that is grown world-wide². Yet because women use fewer productive inputs (due to gender-specific social norms), their yields continue to be 20-30 percent lower than that of men³.

Female smallholder farmers struggle to achieve equal representation across many areas such as land ownership, high quality inputs, access to credit, insurance, education, and rural advisory services. CABI-led research found that in some countries women's agricultural information access was less than ten percent⁴. This highlights a serious issue given the complex role of women in the agricultural value chain and their importance in increasing agricultural productivity.

According to the Food and Agriculture Organization of the United Nations (FAO), growth in agriculture in low-income countries is on average almost 3 times more effective in reducing poverty⁵ (relative to non-agriculture GDP growth). Further, the FAO suggest that by closing the gender gap in agriculture, output in these countries could increase by up to 4 percent thereby reducing the number of undernourished people by 12-17 percent – **a drop of 100-150 million people**³.

It goes without question then that empowering women in agriculture is fundamental to achieving the global development goals.

When you picture a farmer, are they a woman?

Today, 80 percent of the world's extreme poor live in rural areas⁶, and 70 percent of the world's poor are women⁷. In these rural communities, women produce most of the food consumed locally. In contrast to men, women are involved in every stage of food production; sowing, weeding, fertilizing, harvesting, and processing.

Women's role in agriculture also extends to kitchen gardens, which are crucial to nutritional security. Women consistently under-report the amount of agricultural work they do, often not self-identifying as farmers despite being in charge of kitchen gardens and producing subsistence crops for the family.

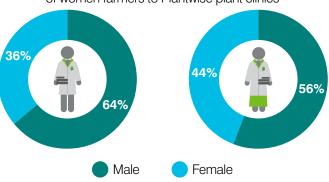
As well as this, women's off-farm roles can include: food preparation, cooking, cleaning, childcare, water collection, fuel collection, and community activities; though being unpaid, traditionally not many of these activities are viewed as "work". This is known as the women's triple role⁸: productive (income generating), reproductive (keeping a home), and community (organising ceremonies, celebrations, funerals...). Women are not only looking after families and doing the housework, but they are also a part of the agricultural labour force – **they are carers and workers**.



Women throughout agriculture

This also extends beyond the farmers: women work throughout the agricultural value chain and related endeavours. Women often take the lead in post-harvest processing where much of the value is added and product quality is determined. More women in agricultural research and extension means the workforce appropriately represents its client base. Data from CABI's Plantwise programme in Kenya showed that **female plant doctors attracted a greater proportion of women farmers to plant clinics**. Better jobs for women in agriculture, leads to better wages and more decision-making power, which ultimately has a positive impact on the way households spend money on nutrition, health, and education.

Female plant doctors attract a greater proportion of women farmers to Plantwise plant clinics



It is therefore vital to not only create space and opportunities for women within the sector but build systems that work for them; rather than **expecting women to fit within a space built around men**. Responding to the specific needs of women and helping to build that system contributes to building female capacity and facilitating agency.

Meeting their needs

However, changing subconscious attitudes to gender is not easy and cannot happen overnight. This is pertinent when implementing work in different countries each with unique socio-cultural norms, particularly in patriarchal countries where gender inequalities in agriculture are reinforced through their socio-cultural contexts like the gender gap in education.

Although many countries have made strides in achieving gender parity in schooling, the effects of historical inequality can still be seen in agriculture, and in some countries that gap in education prevails. Improving literacy rates would contribute to improving women's access to formal agricultural extension services³ and help them make use of printed and/or digital resources. But that would only go so far, even if more women and girls were literate, would it increase their willingness or capacity to visit official locations to obtain the services; locations mostly geared towards men?

Using more appropriate information channels and providing more relevant information for women are two key **gender responsive** actions that enable farmers to take greater advantage of extension systems and increase the accessibility of new agricultural technologies and innovations.

Ensuring women have access to information and are able to use that knowledge well is key, yet only part of the story. Women's contribution to agriculture may go under recognised but they are highly experienced. Drawing on their indigenous knowledge can shed light not only on where problems and obstacles lie, but also how best to solve them using local, village-level expertise.

Gender Equality Continuum

Even if new knowledge increases yield and/or income, it may affect the lives of farmers in an unexpected and possibly negative way.

Research by FAO¹¹ in India revealed that increasing poultry production, which is controlled by women, improved household nutrition and cash savings. Conversely, increasing goat herds set back efforts to expand women's education because girls were being pulled out of school to tend to the larger herds.

Capturing realistic data (i.e. gender disaggregated data) about rural communities is therefore also a key component. The lives of farmers are different and collecting data about rural livelihoods without considering gender differences is naïve and irresponsible if we are to make sure that **the needs of all farmers** are understood and included in agricultural development. A gender responsive approach recognises these different needs, priorities, and realities of men and women and seeks to address them adequately.

Gender Responsive Programming When gender norms, roles, and inequalities have been considered, and measures have been taken to actively address them; creating an environment that reflects an understanding of the realities of the lives of women and girls and addressing their specific issues. Gender responsive programmes can range from gender sensitive, through to transformative, based on the focus area and issues. Exploitative Sensitive Specific Transformative

Case study: African Indigenous Vegetable cultivation in Uganda

In 2013, CABI launched a project to promote good seed in East Africa. The project's key aim was improved access to African Indigenous Vegetables (AIVs) both for seed and consumption.

In Uganda, the project aimed to work with existing farmer groups. Since AIVs are not traditionally a cash crop, many male farmers did not take an interest in growing them, or the post-harvest processing required for seed cultivation. In the end around 70% of those that took part were women.

These women found that sales were high, especially with scarlet eggplant (known locally as *nakati*), and the women in the groups saw a big increase in income, and some were even able to profit independently from their husbands.

Almost all the women said that their primary motivation for cultivating AIVs for seed were their children's school fees. Some women bought livestock or better livestock feed, while others were able to make home improvements like corrugated iron roofing.

Aside from the increased income, women reported that farming as part of a group and pooling their resources also brought advantages like gaining better access to inputs, and they reported that being part of a group brought them a feeling of togetherness working together for shared benefit.

Some women were even leaders or in important roles (e.g. treasurer, secretary) for their group, and two groups developed a saving culture that was strengthened by the proceeds from the seed sales.

These women were able to make decisions about agricultural production, access productive resources, control their income, and lead in their community: four out of the five domains in the Women's Empowerment in Agriculture Index¹¹ that measures the empowerment, agency, and inclusion of women in agriculture.

Additionally, bringing women together in this organized way builds power-with and enables them to take collective action that improves their lives.

This project did not set out to be focused on women, but by deciding to invest in an agricultural activity in which women take a major share, it revealed the benefit of female agency in agriculture. The women were empowered by their increased income, which translated into improved household wellbeing, with that money being spent on education and nutrition. This highlights the importance of ensuring a gender perspective in project planning. Here, the impact here was positive, but ignoring gender aspects could risk encountering unwanted negative impacts for participants.

"As a woman, I never had money that was just mine. Now I have some saved which gives me peace of mind"



Case study: Women-only plant clinics in Pakistan

In Pakistan, women utilise fewer sources of information than men, focusing mainly on non-formal individual sources, such as female friends and neighbours. In spite of their many roles and responsibilities in the field, women have minimal roles in decision-making due to existing cultural norms.

Since 2011, Pakistan has established approximately 900 Plantwise plant clinics. At these clinics, farmers can bring a sample or photograph of their crop and get free advice from trained plant doctors on how best to manage pests and diseases on their farms.

The new women-only clinics not only provide farmers with this plant health advice, but also serve to empower women in agricultural decision-making, including over the use of productive resources, time, and income.

By adapting the traditional plant clinic method to fit the needs of women farmers means that the plant doctor also takes time over practices only carried out by women: vegetable cultivation for kitchen gardens, cotton picking, weed management, and crop harvesting.

With a special focus on women's activities, these farmers are then also able to see the same benefits from plant clinics as male farmers – better crops and increased income – thus helping to close the gender gap.

It is also important that more women in Pakistan are trained to be extension workers to ensure that farmers continue to have access to a network of trained and knowledgeable female advisors.

Noureen Anum is a plant doctor in the Punjab province of Pakistan. She hosts weekly plant clinics and is a Plantwise master trainer.

Anum acknowledges the constraints plant doctors like herself face, such as reaching more rural communities. Public transport can prove difficult for women in Pakistan and so she suggests mobile plant clinics; showing innovation due to the obstacles she faces.

Plant doctors like Anum inspire other women and in her own district more and more women are training with Plantwise as plant doctors or data managers.

Their contributions help to build capacity in women farmers and together they strengthen the whole country's plant health system.

By thoroughly understanding the country's socio-cultural norms, Plantwise has been able to take this gender approach; adapting its model to be more inclusive of women to develop capacity and agency. However, this separate service for women was needed because the mainstream services could not cater for the needs of women farmers. To be transformative would be to influence these mainstream services to include women's needs as much as they do for those of men.

"We get limited chances for capacity building but thanks to Plantwise training we are able to acquire hands-on skills for greater community benefit."



What next?

For a number of years, CABI has made efforts to introduce a gender focus to its work through a variety of channels. There have been successeses as well as areas where could certainly improve, all of which have been valuable lessons on how we work and what we can do differently in future.

Key focus areas

- 1. Improved decision-making through knowledge and technology
- 2. Increased use of productive resources for women and youth
- 3. Increased opportunities for women and youth

Gender responsive programming must be innovative, evidence-based and data generating, expert-led, and well-resourced. Project managers and development staff must ensure that gender considerations are built into the work from the start. Therefore, CABI will:

- Apply a gender lens to advice provision
- Work directly with women, youth, and minority communities by:
 - · Facilitating access to resources and credit
 - · Enhancing production and business knowledge
- Work with the entire value chain
- Maintain a gender focus in how we plan, implement, and evaluate our work

This is not done just through training but through consistent iterative conversations and personal awareness. Working with partners with expertise in gender is fundamental, especially with on-the-ground delivery. Changing subconscious attitudes and unconscious bias is not easy and cannot happen overnight, but by ensuring that gender is built-in and continually considered within our work, over time it will grow and develop.

Sharing knowledge and technologies

By using our understanding of how information is accessed, we are better placed to tailor our extension approaches, ensuring that advice and training is tailored for all farmers – women, men, and young people.

This means implementing and evaluating multi-channel and multi-format communication campaigns in order to balance reach, adoption, and improved decision-making.

It's vital to use our knowledge of how new technologies may affect time and labour burdens on farmers to ensure these are not barriers to adoption.

For example, innovations in mobile technology since the turn of the 21st Century have seen mobile phones move from simple communication tools to service delivery platforms.

This change is certainly something that has been taken up by the agriculture sector with the development of apps and the use of messenger platforms like WhatsApp or Telegram as farmer forums. Access to this technology may not necessarily be limited for rural women but their use of it might be.

Studies have shown that women tend to have lower computer self-efficacy and higher computer anxiety than men¹³, but a CABI study using an app developed for Plantwise plant doctors found that although men were more successful at downloading the app, women were more likely to continue using it over time¹⁰. Therefore, contrary to popular narratives that women do not benefit from ICT apps, with the right levels of support women can overcome initial struggles to benefit from technology more than their male counterparts. Therefore, since the female extension workers in the study were more likely to retain that technology, by corollary the farmers who come to them for advice would reap advantages too.

This all draws back to having that deep understanding of communities and cultures; learning and implementing with evidence-based data.



Working in partnership

Facilitating access to resources and credit, providing women with the knowledge and skills they need to make informed decisions; empowering them beyond being passive actors in the value chain would not be possible without key partnerships on the ground. Working through women's groups and youth groups enables us to gain much better reach.

By working with others to facilitate access to resources and credit, women can – among other things – obtain loans to apply new technologies. With partners, we can create change so that women can increase economies of scale and market competition, and increase their bargaining power in markets. With enhanced production and business knowledge women will be recognised value chain actors who can contribute to decision-making and carry out negotiations from a more knowledgeable position; taking their increased yields and making more of them as informed entrepreneurs.

This all goes towards supporting the tenets of SDG 17 (global partnerships) – finance, technology, capacity-building – while focusing on SDG 5 (gender equality and empowerment) as a key priority.





Women as leaders

Ultimately, empowerment is the goal: helping to bring the women who are currently on the outside of the decision-making process in by recognising women's knowledge and participation and promoting them into leadership roles within producer organisations and cooperatives. Then supporting these groups with the skills to navigate the private sector, such marketing and negotiation, thereby ensuring their involvement and decision-making in resource management initiatives.

Conclusion

The lack of empowerment for women not only increases their hardships, it also places an extra burden on the entire agriculture sector, the broader economy, and society as a whole. Therefore, empowering women in agriculture – farmers, extension workers, researchers – can make a fundamental contribution to sustainable development. It will serve to transform regional economies and increase food and nutritional security in poor and rural communities.

CABI believes its commitment to gender responsive programming will lead to more inclusive agriculture, supporting the United Nations' sustainable development goals, and **improving the livelihoods of all farmers globally**.



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