## **Study Brief 50: Research**





# Women farmer experiences with plant clinics: the case of Tororo District, Uganda Moreen Kokoi

## Summary

While women play an important role in agricultural production and global food security, they face more challenges than men in accessing agricultural resources and services, including plant health advisory services. Through the CABI-led PlantwisePlus programme, plant clinics are offering demand-driven plant health diagnostic and advisory services to male and females in many countries worldwide, including Uganda. This study presents the experiences of female farmers in accessing plant clinics in Tororo district of Uganda. Using qualitative research methods, the study examines women farmers' access to plant clinics, and the challenges they face in interacting with plant doctors and participating in plant clinics.

# **Highlights**

- After attending plant clinic sessions, women farmers reported an improved knowledge of managing pests and increased yields.
- They learnt about non-chemical pest management practices and safe handling of pesticides through visits to plant clinics.
- There is limited availability of plant doctors, and there are no female plant doctors in the study district.
- Women farmers requested that plant clinic services should be continuously available and much closer to them as they have to walk long distances to visit a plant clinic.
- Plant doctors require support in order to make these plant clinic sessions more frequent, especially financial support that will enable them travel to the sub-counties.

# Context

Boosting agricultural productivity is one of the key development targets of many countries, including Uganda. Improving agricultural production can also contribute to the achievement of the Sustainable Development Goals, such as ending poverty in all its forms everywhere (Goal 1), and ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture (Goal 2) (UN, 2016). Crop pests jeopardize food security and have a broad socio-economic impact, thereby affecting the achievement of the global goals (Savary et al., 2012).

The role of agricultural extension in supporting farmers in pest management has become more important than ever due to increased outbreaks of crop pests as a result of climate change (Early et al., 2016). However, due to weaknesses in public extension systems, many smallholder farmers in developing countries have limited contacts with extension agents, and women farmers are even further disadvantaged. It is well recognised that women make important contributions to agricultural production, but face numerous constraints compared to men in their access to inputs and information (FAO, 2011).

To help address pest challenges, plant clinics had been established in several countries worldwide (including Uganda) as a new way of providing plant health services to smallholder farmers (Boa, 2009; Mur et al., 2015; David et al., 2019). Plant clinics are meeting places where farmers bring in samples of their infested crops and receive diagnostic and management advice from extension workers trained as plant doctors. The plant clinics are supported by PlantwisePlus, a global programme managed by CABI that aims to improve smallholder income and food security and reduce biodiversity loss through sustainable crop production practices.

Plant clinics are designed to deliver plant health extension services that are accessible to both women and men farmers. The PlantwisePlus programme has also made considerable efforts to attract women farmers to plant clinics, including training female plant doctors, linking plant clinics with women's groups, running female-only clinics and adjusting plant clinic opening hours to suit women farmers (David et al., 2019; Terefe, 2020). Studies have shown that plant clinics have contributed to improved access to extension services for women (Williams and Taron, 2020) and are playing an important role in helping women and men farmers address plant health problems, increase productivity and reduce food insecurity (Tambo et al., 2021).

Using the case of Tororo district of Uganda, this study aimed to examine women farmers' experiences with and access to plant clinics, including benefits and challenges of using plant clinic services.

# What we did

The study was conducted in Tororo district, in the Eastern region of Uganda. Tororo district lies approximately 10 km west of the town of Malaba at the border between Uganda and Kenya. Data collection took place in four sub-counties where plant clinic sessions have been frequently held in the district. The sub-counties include Kwapa, Merikit, Sopsop and Nagongera.

Data were collected in October 2021 using qualitative methods, such as in-depth interviews (IDIs), focus group discussions (FGDs) and key informant interviews (KIIs). The type and number of respondents are presented in Table 1. Note that the farmer sample included users and non-users of plant clinic services. Separate FGDs were held with women and men farmers, and with a mixed group of women and men farmers.

Method	Target	No. per sub-county	Total
In-depth interviews	Women farmers	10 in Kwapa 10 in Sopsop 10 in Nagongera	30
Focus group discussions	Women and men farmers	3 in Kwapa 3 in Sopsop 1 in Nagongera 2 in Merikit	9
Key informant interviews	Sub-county Agricultural Officers (Plant doctors)	1 in Kwapa 1 in Sopsop 1 in Merikit 1 in Nagongera	4
	District Agricultural Officer, District Gender officer, 2 NGOs, and a CABI staff in Uganda		5

Table 1: Study sample

# **Findings**

#### Challenges faced in accessing plant clinics

A major challenge faced by women farmers in using plant clinic services is the lack of proximity to plant clinics. The farmers have to walk long distances to access plant clinics; hence, many of them are not able to attend clinic sessions. Due to long distances to plant clinic sites, some women farmers who had reportedly benefited from attending plant clinic sessions were unable to revisit the clinics despite facing new pest problems. Besides the long distances, many of the interviewed women farmers claimed that they were not able to afford transport costs, especially 'boda bodas' (i.e., motorcycle taxis), which can serve as a faster alternative to walking to where the plant clinics are sited. As stated by a farmer:

"Yes, my home is far and because I stay far away, so most times I reach late. Not easy to get money for transport" (IDI female farmer, Sopsop Sub county, 2021).

Two FGD participants opined that:

"It is very far and I have a sick leg which makes it difficult to walk. Sometimes I miss out due to the long distance. Sometimes I have to get a boda boda, and during the rainy season water blocks the road and it is difficult to cross through" (FGD female farmer, Sopsop Sub county, 2021).

"Transport is a major problem for us. I come from Namwendiya parish which is almost 4km from the sub county headquarters" (FGD female farmer, Merikit Sub County, 2021). Thus, some women farmers missed the opportunity to receive advisory services that would enable them to use effective and safe plant health management strategies to increase crop yield, and to have enough food and income for their families because of the lack of proximity to plant clinics.

The productive, reproductive and community roles of women played a big role in limiting women's access to plant clinics. After taking care of the household, women were either too tired to attend plant clinics or had no time left to attend the plant clinics. They reported that they were sometimes not able to attend plant clinics because they did not have someone to stay and take care of their homestead. This was highlighted in the IDIs, as shown below in the example below:

*"I don't have anyone to help me take care of the children at home" (IDI Female Farmer Nagongera Sub-county, 2021)* 

Hence, it was found that a large majority of the farmers who visits plant clinics for advisory services were male farmers.

Poor mobilization prior to the holding of plant clinic sessions was also a concern among the women farmers. It was observed that to attract farmers to the plant clinics, announcements were made before clinic sessions were held. However, the announcements were usually done in places and at times that were not suitable for women farmers to get exposed to the information. Another obstacle to access to plant clinics, which was particularly expressed by women farmers, was a lack of awareness of the existence of plant clinics and the services they provide.

Unfavourable opening hours were also identified as a challenge to women farmers' access to plant clinics. Some of the women farmers stated that while their men counterparts were usually able to visit the plant clinics at any time, their preferred times for reaching the clinics were between 2.00 pm and 5.00 pm. However, the plant clinic sessions were held between 9:00 am and 1:00 pm when women farmers were still busy with garden work and household roles.

Other accessibility challenges cited by both women and men farmers included the limited availability of plant doctors and the irregular nature of the plant clinics. The few available plant doctors found it hard to conduct the plant clinic sessions on a weekly basis, as they had to operate in different sub-counties every two weeks because of the heavy workload. This made the plant clinic sessions inconsistent. In some cases, the plant clinics were not conducted weekly or even fortnightly, and this limits the opportunity to access the plant clinics when there is a pest outbreak that requires immediate attention. One of the key informants attested to this:

"That's the challenge we have now; the second plant doctor has also retired. We tried using him but it reached a point where he was exhausted. Currently I'm alone and it's a very big challenge. Last year we tried to engage with the Ministry to conduct a training for the majority of our staff but we couldn't achieve that because of the high logistical costs, which we hadn't budgeted for. It still leaves a risk of having one trained plant doctor who is also an administrator in his office". (Agricultural officer in Sopsop sub-county, 2021)

#### Challenges faced in interacting with plant doctors

Language barriers were one of the biggest challenges, as some plant doctors use English language when giving information to farmers. It should be noted that many of these women farmers were illiterate or had not attained higher levels of education. Therefore, communicating in English rather than the most common mother tongue (Jopadhola) makes it challenging for the farmers to properly comprehend what was being communicated. One of the farmers was quoted saying:

# *"I have not gone to school and my English is not good. So I don't understand some things." (IDI Female Farmer, 2021)*

Technical terms used to describe pests was another related challenge. It was found that plant doctors would use terms not known to farmers, and this created a problem in proper management of pests. It was even more challenging for farmers who did not carry samples of infected plants to plant clinics.

"Plant health is a 'language of science' and not ordinary English. Plant doctors' advice contains a lot of scientific words and yet majority of our female farmers probably didn't study much so they may attend the plant clinics, but the communication language used by the plant doctors may be a challenge, and understanding the recommended management practices may be hard for most of the farmers" (KII CABI staff, 2021).

Training plant doctors in both English and the local language would greatly improve communication between farmers and plant doctors and help farmers understand and correctly implement the plant clinic recommendations.

Some farmers do not carry along samples of the affected plants to the clinics and also do not properly describe the plant health problem. This made it very difficult for the plant doctors to properly diagnose the problem and offer appropriate recommendations.

Scarcity of plant doctors also hinders the quality of services farmers received at plant clinics. Given that one plant doctor attends to many farmers, little attention is given to each farmer. A farmer will not freely ask all the questions as there are many more in the queue waiting to be attended to.

The District Agricultural Officer (DAO) who is also a plant doctor explained in detail that some female farmers take it for granted when they see minor pest infestations on their crops and only complain when the entire plantation has been destroyed. Sometimes, they find it hard to uproot the few affected plants because they feel like they are losing. Then in the long run, the entire garden gets infested, and nothing is reaped out of it. *"The women take it for granted whether it's an infection/disease. To them, they don't see much effects early but at the end the crops do not do well."* (DAO Tororo District, 2021).

While plant clinic users were inclusive of male and female farmers, there was gender bias in terms of the plant doctors who attend to the farmers. All the plant doctors in the study district were men. One of the key informant noted that: "Initially all the staff that were taken for the plant doctor training programme were male, and they were selected based on those who were trainable and had interest in plant pests and diseases" (DAO Tororo District, 2021). There were no deliberate efforts to get trainable women to work as plant doctors. The implication is that it was not possible for women farmers to receive plant clinic services from female plant doctors even if they desire to due to a lack of female plant doctors.

Generally, the plant health diagnosis and advice given to women farmers are not different from those given to men farmers. However, a few female farmers were of the view that there are some gender differentials in the pest management advice they get from plant clinics. They claimed that they were mostly advised on the use of cultural methods to fight pests and diseases, rather than using pesticides which they would not be able to afford. The key informant from CABI noted that female farmers opted for cultural and mechanical pest management methods, in some cases due to the lack of proximity to genuine chemicals as well as the lack of money and labour to apply the recommended chemicals.

#### Benefits of attending plant clinics

A large majority of the interviewed women farmers were satisfied with the services they receive at the plant clinics and reportedly implemented the plant doctors' recommendations. Besides pest diagnosis, some practical skills are taught to farmers at the plant clinics, such as how to identify crop pests, the type, quality and quantity of chemicals to buy, how to use spraying pumps and how to properly use protective gears during the spraying of pesticides. Some of these skills not only helped farmers manage their crops better but also helped them stay safe when handling pesticides, given that pesticides can pose high risks to human health.

Visits to plant clinics also provided opportunities for farmers to learn about non-chemical pest management practices, such as appropriate planting



times, the use of clean seeds to reap more, handpicking pests from the farm, uprooting infested plants, as well as improved soil fertility, intercropping and crop rotation practices. These cultural methods are less expensive methods of crop management compared to buying pesticides which are not affordable for many of the women farmers.

Another benefit from attending plant clinics is that it stimulates the adoption of pest management practices, leading to reduction of crop loses and increased productivity. Some of the female farmers that attended or visited plant clinics reported high yields. One such farmer expressed how her household experienced increased production after a series of visits to the plant clinics: *"I get increased yields on maize when there is enough rainfall. I also harvested a lot of bananas in the first season by following the advice of plant doctors." (Female farmer Sopsop Sub County, 2021).* With such positive results, farmers are motivated to make frequent visits to the plant clinics.

## The way forward

This case study from Tororo district in Uganda suggests that plant clinics are serving as an important source of timely information and practical advice on pest management for women farmers in the areas where they operate. However, farmers face some challenges in accessing plant clinics, thereby limiting the possible positive outcomes. For instance, women farmers face challenges in accessing plant clinics and achieving maximum benefits due to limited mobilization to raise awareness of plant clinics, travel costs to the clinic sites, the opening of clinics at inconvenient times, limited number of plant doctors, especially female plant doctors, and lack of resources to implement some of the recommendations received at the plant clinics. Addressing these challenges can help reduce the gender gap in access to plant health advisory services and agricultural productivity.

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