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Food and Agriculture  
Organization of the  
United Nations

# Empowering women veterinary paraprofessionals through gender-responsive training

## LESSONS LEARNED





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# Abbreviations

<b>AHT</b>	Animal Health Technician
<b>AI</b>	Artificial Insemination
<b>BAC</b>	Bukalasa Agricultural College
<b>CAAS</b>	College of Agriculture and Animal Science
<b>CAHW</b>	Community Animal Health Worker
<b>CPD</b>	Continuous Professional Development
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FGD</b>	Focus Group Discussions
<b>ICT</b>	Information Communication Technology
<b>KII</b>	Key Informant Interview
<b>NAGRC&amp;DB</b>	National Animal Genetics Resource Centre and Databank
<b>PRA</b>	Participatory Rural Appraisal
<b>SAAAHT</b>	South African Association of Animal Health Technicians
<b>SDG</b>	Sustainable Development Goal
<b>SHF</b>	Smallholder Farmer
<b>TARDI</b>	Tsolo Agriculture & Rural Development Institute
<b>ToT</b>	Training of Trainers
<b>UNDP</b>	United Nations Development Programme
<b>USAID</b>	United States Agency for International Development
<b>UVB</b>	Uganda Veterinary Board
<b>VLC</b>	Virtual Learning Center
<b>VSb</b>	Veterinary Statutory Body
<b>VPP</b>	Veterinary Para-Professional
<b>WOAH</b>	World Organisation for Animal Health

# Terminology

## **Empowerment (of women and girls)**

Is the expanded ability of women, girls, and other marginalized groups to make strategic life choices and turn these into actions and outcomes, in a context where this ability was previously denied to them. It involves equal enjoyment of human rights, development of capabilities and increased access to resources and opportunities.

## **Gender**

Socially constructed roles, identities and expectations of women and men, and the differences between them. As a social construct, gender varies from society to society and can change over time. Other factors such as class, age, marital status, health status, disability status, sexual orientation and race determine the distribution of roles, power, and resources between men and women.

## **Gender equality**

Refers to the condition in which women and men have equal rights, opportunities, and entitlements in civil and political life. It entails equal participation in decision-making, equal ability to exercise human rights, and equal access to and control over resources, services and societal benefits, along with equal opportunities in employment and all other aspects of their livelihoods.

## **Gender integration**

The process of applying strategies in programme and policy planning, design, implementation, monitoring and evaluation to consider gender norms and compensate for gender-based inequalities. The gender integration continuum includes several approaches (gender-unaware, gender-responsive, gender-transformative):

- **Gender-unaware approaches**

Approaches that ignore gender aspects, gender differences and gender relations and may reinforce existing inequalities.

- **Gender-responsive approaches**

Approaches that acknowledge, recognize, and address the specific barriers, needs, priorities and outcomes of men and women based on the social construction of gender roles.

- **Gender-transformative approaches**

Approaches that seek to examine, challenge, and transform the underlying causes of gender inequalities rooted in discriminatory social structures. As such, gender-transformative approaches aim to address the unequal gendered power relations, discriminatory gender norms, attitudes, behaviours and practices as well as discriminatory or gender-unaware policies and laws that create and perpetuate gender inequalities. By doing so, these approaches seek to eradicate the systemic forms of gender-based discrimination by creating or strengthening equitable gender relations and social structures that support gender equality.

### **Gender mainstreaming**

The process of assessing the implications of any planned policy, programme or activity to ensure that gender perspectives and equality considerations are integrated at all stages of decision-making, implementation, and evaluation. Its goal is to promote gender equality and address existing disparities systematically.

### **Gender norms**

A subset of social norms, gender norms are informal rules and shared expectations that determine and assign socially acceptable roles, behaviours and responsibilities to male and female identities. By shaping what is considered appropriate masculine and feminine behaviour, these norms impact individuals' choices, freedoms, and capabilities.

### **Gender roles**

The behaviour, tasks and responsibilities that a society considers appropriate and assigns to men, women, boys and girls.

### **Masculinities**

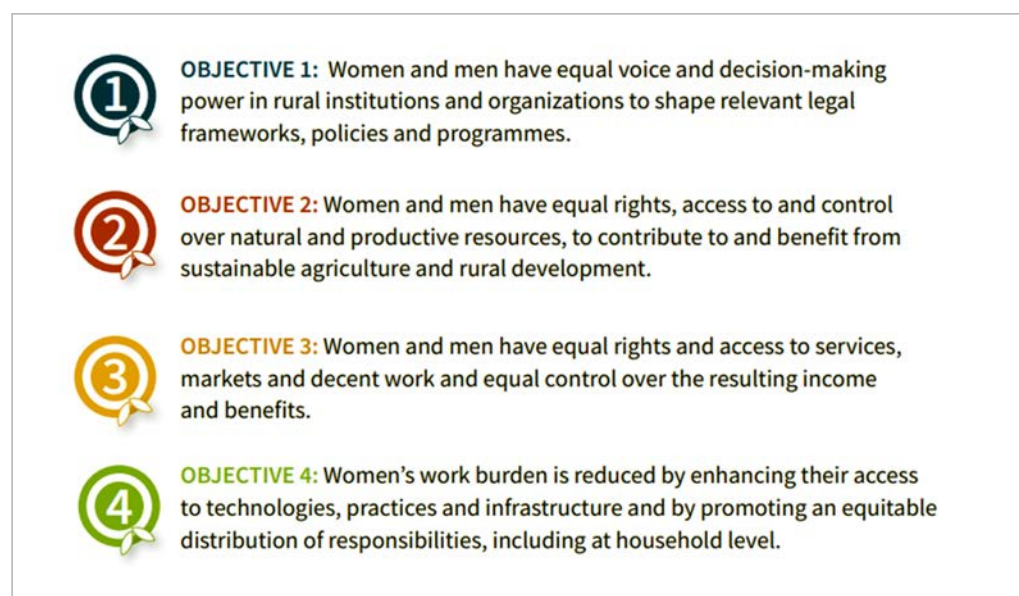
Masculinities comprise the various ways of enacting oneself and acting as a man. They refer to the specific expectations and values attributed with being and becoming a man in a given society.

# Introduction

Women make up two-thirds of the 600 million low-income livestock keepers globally (MacVicar. 2019/2020). Despite their leading role in day-to-day care of animals, they are severely underserved by veterinary extension and advisory services, meaning they are less likely to receive and benefit from these services compared with their male counterparts (Dione *et al*, 2021; Galie *et al*, 2017). Women veterinarians, veterinary paraprofessionals (VPPs), and community-based animal health workers (CAHWs) can be a crucial channel for reaching and addressing the specific needs of women livestock keepers, particularly in contexts where rigid gender norms restrict women's interactions with male service providers. Yet, in Sub-Saharan Africa, the veterinary workforce remains predominantly male, and women face significant gender-based challenges working in the field, including pay gaps, conflicting family responsibilities, gender bias, sexual harassment, limited confidence and technical training in animal restraint. As a result, many women professionals may shift to safer, more flexible, office-based positions (e.g. laboratory technicians stationed in clinics) or leave the profession entirely, furthering the gender gap in veterinary service access.

[FAO's 2020 – 2030 gender policy goal](#) is: “Achieving equality between women and men in sustainable agriculture and rural development for the elimination of hunger and poverty.” To achieve this goal, FAO's work is guided by four objectives that highlight key dimensions for promoting gender equality in agriculture, rural development, and natural resource management for attaining food security and nutrition for all:

**Figure 1.** FAO's 2020 - 2030 gender policy objectives



Source: **FAO**. 2020. *FAO Policy on Gender Equality 2020–2030*. Rome.

As outlined in objective 3, promoting gender equality in the animal health workforce and bridging the gender gap in animal health service access is critical to FAO's mandate. FAO has developed and piloted tailored training programmes to address these issues and empower women animal health service providers.

The two programme “Sustainable Business in Animal Health Service Provision through Training for Veterinary Paraprofessionals” (2021 – 20243) and “Equipping Veterinary Paraprofessionals and Local Service Providers” have developed and tested gender-responsive training packages for VPPs which would enhance productivity for women and men livestock keepers while promoting capacity building and business sustainability for women and men frontline professionals. Under the “Equipping Veterinary Paraprofessionals and Local Service Providers” project, a “Female Leadership in One Health” course was developed, for frontline animal and human health service providers to jointly guide women farmers and their households on improved livestock and family health under a One Health approach.

### Who are veterinary paraprofessionals?

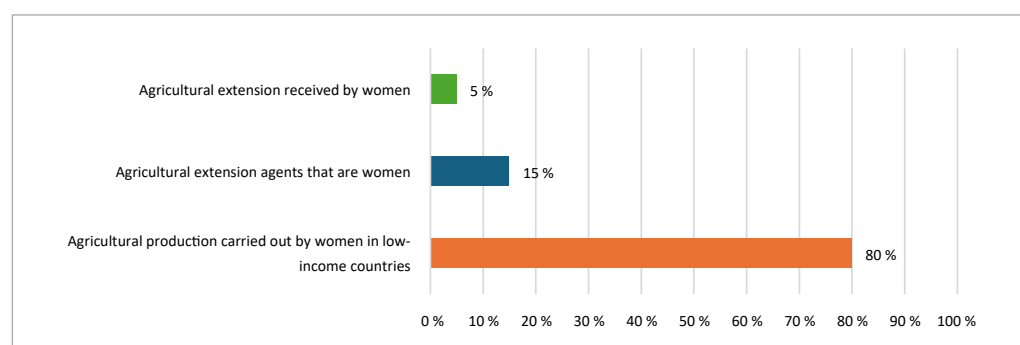
According to the [World Organization for Animal Health Terrestrial Animal Health code](#), a VPP is “a person who... is authorised by the veterinary statutory body to carry out certain designated tasks (dependent upon the category of veterinary paraprofessional) in a territory, and delegated to them under the responsibility and direction of a veterinarian. The tasks for each category of veterinary paraprofessional should be defined by the veterinary statutory body depending on qualifications and training, and in accordance with need.” VPPs typically have two to three years of formal technician level training on animal health and production which provides them with a wide basic skillset. VPPs are differentiated from community animal health workers (CAHWs) who are individuals selected from a farming community and given short training of several weeks duration in order to provide basic animal health functions within their community.



Nigerian VPP from Kaduna state

This paper provides an overview of how these training programmes were designed and implemented with a cross-cutting gender-responsive approach. It also shares key results, learnings and recommendations from the process that may benefit other stakeholders interested in integrating gender considerations into veterinary education programmes.

**Figure 2.** The percentage of agricultural production carried out by women in low-income countries (Davies, 2023) compared to the percentage of agricultural extension agents that are women worldwide (UNDP, 2012) compared with the percentage of agricultural extension received by women worldwide (USAID, 2014)



Source: **Davis**. 2023. Women produce up to 80% of food in developing countries; **UNDP**. 2021. Gender, climate change and food security; **USAID**. 2014. Effective Gender Integration Practices for Agriculture, brief 2: Increasing Women's Access to Resources.

# 1. Needs assessment

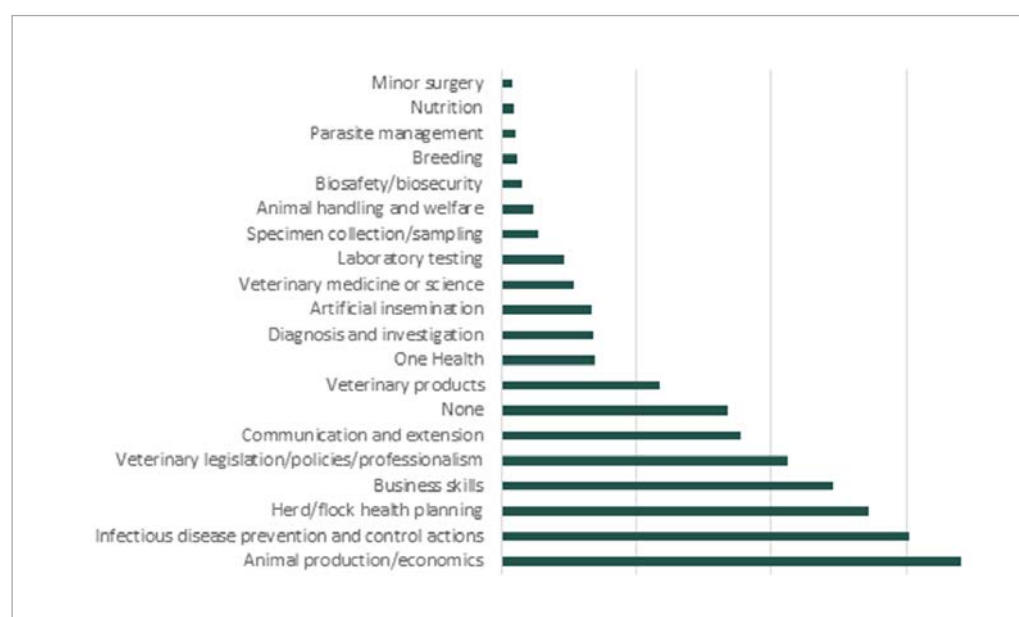
To design a training programme that takes into account the priorities of women VPPs and their customer base, the project conducted a needs assessment with a gender analysis to better understand VPP business environment, VPP skill gaps and priorities, most appropriate training modalities as well as gender disparities affecting VPPs and their professional development. Conducting a needs assessment helps ensure that the gender-responsive training design is informed by evidence-based and demand-driven approaches that will effectively meet the needs on the ground of women and men VPPs alike. A mixed methods approach was used involving a cross-country survey, Focus Group Discussions (FGD) with farmers and VPPs, key informant interviews and literature review.

Detailed findings can be found in the publication [Veterinary paraprofessional training and business environment needs assessment – Lessons learned](#). In the following section, only the findings directly related to gender are presented.

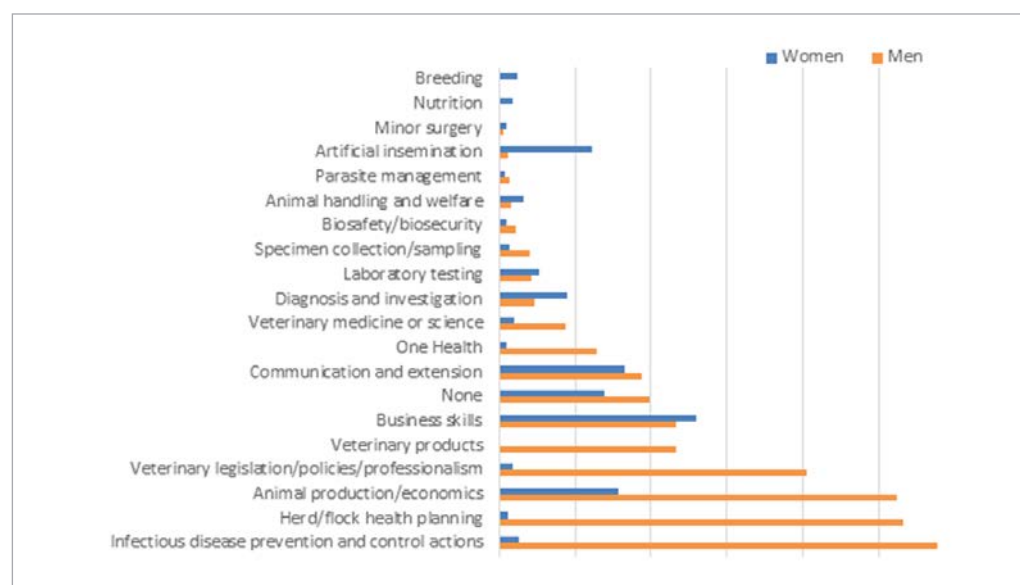
## 1.1 Priority topics for continuing professional development training

The needs assessment process highlighted several topics and thematic areas that VPPs in the three countries would like to prioritize for Continuing Professional Development (CPD) training. Disaggregating this data by sex revealed that Ugandan women and men VPPs give priority to different topics for CPD training.

**Figure 3.** CPD topics prioritized by veterinary paraprofessionals in Uganda (aggregate results)



Source: Author's own elaboration.

**Figure 4.** CPD topics prioritized by veterinary paraprofessionals in Uganda by gender

Source: Author's own elaboration.

Men gave highest priority to the topics:

1. Infectious disease prevention
2. Herd/flock health planning and animal production/economics
3. Animal Production/economics
4. Veterinary legislation/policies/professionalism
5. Veterinary products

Women gave highest priority to the topics:

1. Business skills
2. Communication/extension
3. Animal production/economics
4. None
5. Artificial insemination.

Disaggregating the results by sex helped to identify and recognize women VPPs specific learning priorities. As illustrated by the aggregate data (figure 4), without this level of analysis, the distinct needs and perspectives of women may be obscured, potentially leading to the development of CPD training programmes that do not fully address or reflect their unique concerns and aspirations.

## 1.2 Working environment of private sector veterinary paraprofessionals

### 1.2.1 Challenges

The needs assessment process highlighted a number of challenges VPPs faced in their work. Those related to gender include:

- **Gender bias and gender-based violence**

In all three countries, farmers—both women and men—expressed a preference for male VPPs, citing negative gender stereotypes. These included beliefs that women are less competent, unable to restrain large ruminants, or pose a threat to farmers' marriages. Gender bias against women VPPs manifested in various ways: farmers refused their services, doubted their technical competence, mistrusted their clinical advice, or paid them less than male counterparts for equivalent work. Traditional



gender roles also influenced perceptions, with some farmers asserting that animal health professions were unsuitable for women. Despite these biases, a subset of farmers expressed neutrality regarding the VPP's gender, emphasizing competence and commitment over gender. A few even preferred women VPPs, citing their nurturing approach to animal care and greater reliability compared to men. Safety related issues such as sexual harassment from male farmers were also reported.

- **Skill and confidence gaps**

Women VPPs expressed experiencing a lack of confidence compared to male counterparts. A particular challenge highlighted was restraining large ruminants, partly due to a lack of animal handling facilities on farms and also little exposure/ practice during initial training.

- **Gender norms dictating household responsibilities**

Women VPPs reported limited time availability due to conflicting household and caregiving responsibilities, in particular childcare. They also shared that they require their partners permission in order to attend training, and that their husbands would disapprove of them “overstudying” (e.g. in Uganda).

- **Barriers to service delivery due to rigid gender norms**

Across the three countries, gender norms create barriers to service delivery for both women and men VPPs. For example, in South Africa, women reported not being allowed to enter kraals or interact with livestock during menstruation due to cultural beliefs that this could cause illness or death for the animals. As a result, to examine the animals, they must be taken outside of the kraal, requiring extra manual labour to catch, move and restrain them. This added work can contribute to the perception of male service providers as more “convenient” and therefore preferable, reinforcing a bias against women VPPs. Similarly, in some South African communities, women VPPs are expected to wear skirts on duty, which can be less practical than the trousers they might prefer for safety and comfort. In Kaduna, Nigeria, gender norms restrict women from interacting with men outside of their household, especially if they are unmarried. Consequently, male VPPs sometimes cannot communicate directly with the women livestock keepers. Since these women often play crucial roles in daily livestock care (feeding, cleaning, milking, collecting eggs, etc.) this limitation can result in incomplete history-taking and assessments of the situation on the farm. Another implication is that the woman farmer misses out on crucial information from the VPP, or only receives it secondhand, risking loss of important details in transmission between family members.

- **Lack of transport, especially for female veterinary paraprofessionals**

In all three countries, transportation challenges were identified as a major obstacle for VPPs. In Nigeria and Uganda, most VPPs faced mobility limitations, with female VPPs being particularly affected. While male VPPs often owned motorcycles, cultural norms and the high cost of motorcycles and bicycles made these options less accessible to women. Even when women chose to ride motorcycles, they preferred lighter models to avoid physical strain and injury. However, the available motorcycles were often too heavy. As a result, female VPPs disproportionately relied on public transportation or taxies, which are often expensive and unreliable. The lack of affordable transportation was especially problematic when responding to emergency calls. Female VPPs also reported cultural and safety concerns when traveling alone or at night.

- **Insecurity**

In Nigeria it was found that the provision of VPPs services was threatened by insecurity in both regions surveyed. Remote areas and rural communities were particularly affected by frequent kidnapping, killings and banditry. This was especially seen as an issue for female VPPs.

## 1.2.2 Opportunities

In addition, the following potential opportunities related to gender were identified:

- **Empowering women veterinary paraprofessionals can help close the gender gap in veterinary service access**

Addressing gender-based disadvantages and investing in women's empowerment in the VPP profession may offer valuable opportunities to strengthen gender equality in the veterinary workforce. These efforts have the potential to enhance veterinary service outreach to women livestock keepers, contributing to achieving the necessary conditions for building community resilience in the context of disease outbreaks.

- **Unique business opportunity for women veterinary paraprofessionals in communities that practice norms of seclusion**

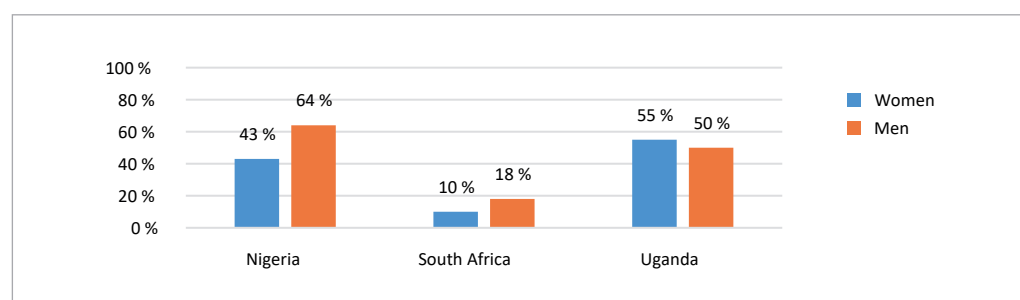
While seclusion norms in northern Nigeria can limit service delivery by men, they present a unique “win-win” opportunity for women VPPs to expand their client base and for women livestock keepers to receive quality animal health services. Since male heads of households are typically the ones who call, interact with, and pay for veterinary services (Dione *et al*, 2021), their financial contribution and endorsement of women service providers assisting their wives would be crucial for the business profitability of women VPPs. In other words, this win-win outcome may rely heavily on the support of male heads of household. In situations where a male VPP cannot interact with a woman livestock keeper, he can refer these cases to his female VPP colleagues through a collaborative referral network.

## 1.3 Training design considerations

### a) Continuing Professional Development access by gender

In Nigeria and South Africa, women VPPs were found to have undertaken Continuing Professional development (CPD) at lower rates compared to men. In Uganda, the opposite was the case, with women reporting having undertaken CPD training at higher rates than men.

**Figure 5.** Percentage of VPPs who have undertaken CPD training in the last 4 years by gender

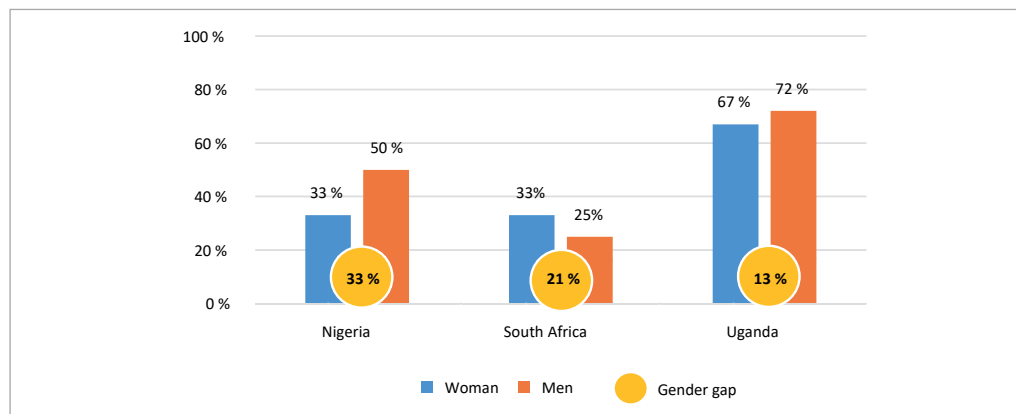


Source: Author's own elaboration.

### b) Mentorship opportunities by gender

In Nigeria and Uganda, women VPPs were found to have mentors at lower rates compared to men. The gender gap in this regard appeared to be highest in Nigeria, at 33 percent and 13 percent in Uganda. In South Africa, the opposite was the case, with women reporting having mentors at higher rates than men, with a gender gap of 21 percent. To read more about the VPP project's mentorship scheme, please see: [Mentorship model for veterinary paraprofessionals - Lessons learned](#).

**Figure 6.** Percentage of veterinary paraprofessionals who have a mentor by gender



Source: Author's own elaboration.

### c) Access to technology and learning preferences

The needs assessment also gathered information on the learning preferences and Information Communication Technology (ICT) access of male and female VPPs. The sex-disaggregated results revealed the differing needs, aspirations, and concerns of women and men, offering valuable insights into actions required to promote inclusion throughout the training. This information was used to shape the blended learning training design, with more details available in the publication [Delivery of blended learning models for veterinary paraprofessionals – Lessons learned](#). When asked about computer and smartphone ownership as well as access to internet, the following results were found:

#### Digital gender gaps

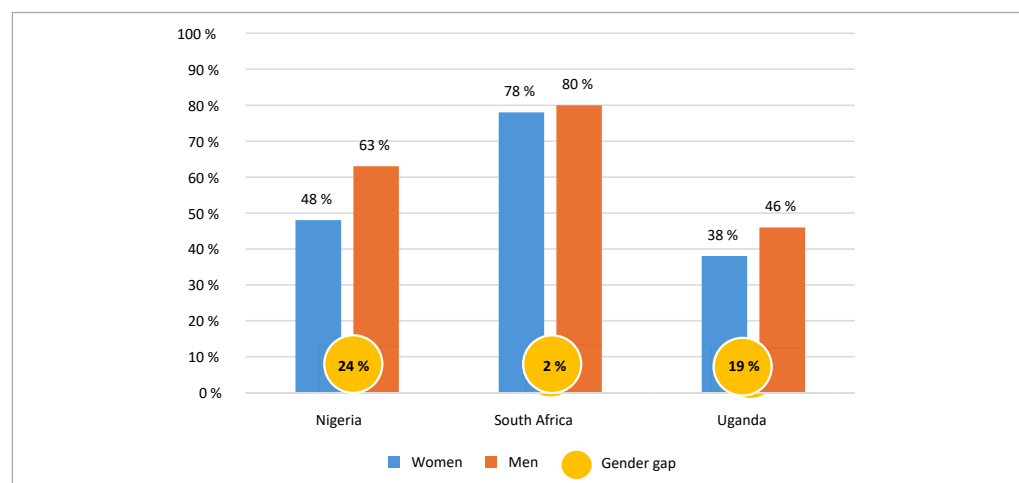


The misconception that access to technology is inherently gender-neutral overlooks persistent disparities that shape women's experiences in many low-to-middle-income countries. Women remain 10 percent less likely than men to own a mobile phone and 23 percent less likely to use mobile internet (FAO, 2020). As women are not a homogenous group, these gaps are not uniform. Factors such as age, disability, education, occupation, and geographic location intersect with gender, creating diverse challenges and opportunities for access. For example, while women VPPs may have relatively better access to digital tools, women livestock keepers may face greater and distinct barriers. Recognizing these intersecting factors is essential to developing needs-based digital solutions, ensuring that technologies do not inadvertently reinforce existing inequalities but instead drive inclusive and equitable change.

### Internet access

In all three countries, women VPPs have less consistent internet access than men with the gender gap widest in Nigeria (24 percent) and Uganda (19 percent) and narrower in South Africa (2 percent). Constant internet access is lowest in Uganda (below 50 percent for both genders), followed by Nigeria and South Africa.

**Figure 7.** Nearly constant access to internet by gender

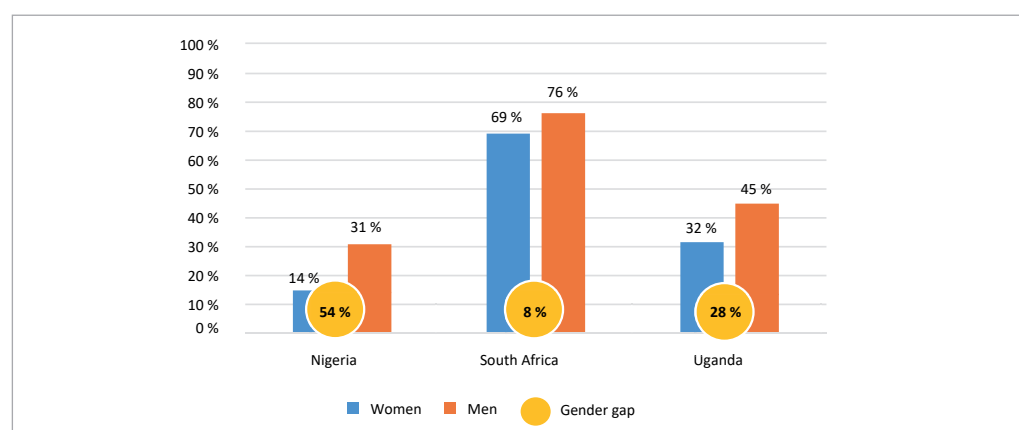


Source: Author's own elaboration.

### Computer ownership

Desktop and laptop computer ownership rates are significantly lower than smartphone ownership, with notable variation by country and gender. The lowest ownership rates were observed in countries with the most pronounced gender gaps, namely Nigeria (54 percent), followed by Uganda (28 percent) and South Africa (8 percent). In Nigeria, female ownership of desktop and laptop computers is especially low, with only 14 percent of women VPPs owning a device.

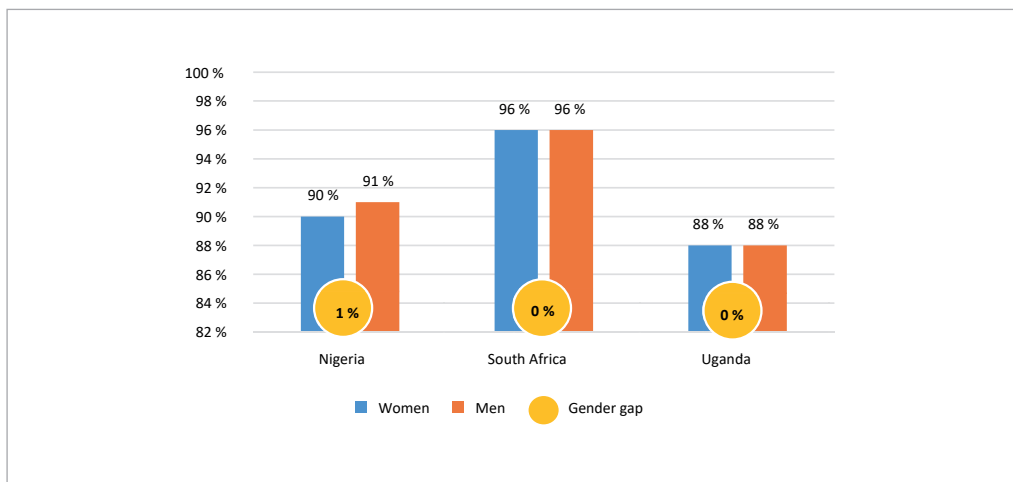
**Figure 8.** Computer ownership by gender



Source: Author's own elaboration.

### Smartphone ownership

Smartphone ownership rates are high and generally equitable by gender across all three countries, with a minor 1 percent gender gap in Nigeria. However, ownership rates vary slightly among the three countries, with South Africa highest at 96 percent, followed by Nigeria (90 percent for women and 91 percent for men) and Uganda (88 percent).

**Figure 9.** Smartphone ownership by gender

Source: Author's own elaboration.

These findings suggest that while smartphones are the most accessible devices for VPPs' online study, internet access remains a barrier. Cross-checking telephone survey results with the PRA findings revealed lower reported access to smartphones, internet, and computers in FGDs, likely due to the higher representation of peri-urban VPPs in the telephone survey. Despite digital barriers to online learning for more rural VPPs, some expressed interest in online learning for its perceived flexibility. One female VPP from Soroti, Uganda stated:

*"Online training would be the best but unfortunately, I don't have a smart phone. It would be number one since you can take the course from wherever you are, even at home. It does not necessitate transport, and the material can be re-read several times"*

### Gender-specific insights on training preferences

To inform training programme design, VPPs were consulted on their preferred learning methods revealing key gender-related insights during FGDs:

- **Preference for short face-to-face training:** Most participants, especially women with limited online learning experience, preferred practical in-person training. In Uganda's peri-urban areas, both genders favoured online learning for its flexibility. Women in particular preferred shorter training sessions due difficulty in absenting themselves for longer periods of time due to conflicting family commitments and work commitments.
- **Interest in online learning:** There was widespread interest among participants, regardless of gender, in acquiring skills to use online learning platforms.
- **Barriers faced by women VPPs:** Some women noted the need for their husband's permission and financial support to attend training. In Uganda, a few women shared that husbands might discourage participation over concerns of being "undermined if they overstudied". Additionally, women highlighted caregiving duties and household responsibilities as conflicting challenges, particularly when training facilities were located far from their homes.

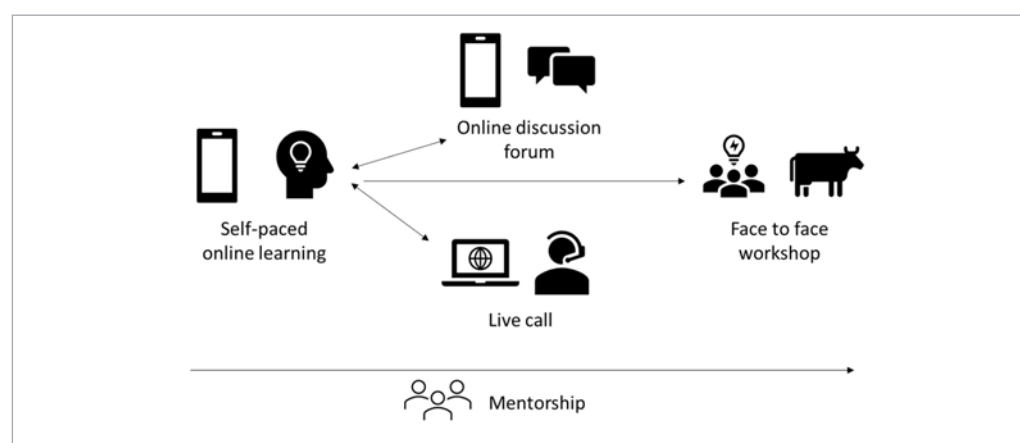
## 2. Designing a gender-responsive training model

### 2.1 Training format: blended learning

The needs assessment revealed that gender is one of the factors that can affect a learner's ability to participate in and benefit from training opportunities, both online and face-to-face.

The gradual shift to virtual teaching post COVID-19 has created new opportunities for inclusive learning, such as learning at one's own pace and eliminating costs and travel time associated with attending educational institutions. This added flexibility of online, self-directed learning can particularly benefit women whose mobility may be restricted by their husbands, and mothers, who may face time and mobility constraints due to caregiving responsibilities alongside work commitments. However, the increasing digitization of learning also presents challenges with gender-specific implications. For example, low levels of private access to digital technology, poor Internet connectivity, digital illiteracy, limited digital autonomy and decision-making power, and restricted time and mobility for personal learning. Additionally, while learning from home can facilitate multitasking, it can also make it difficult for women, in particular, to prioritize professional development and fully engage in virtual learning due to conflicting household and caregiving responsibilities in the private sphere. **These considerations partially informed the choice of a blended learning format for the VPP training which combines both virtual and in-person training.**

**Figure 10.** Training components of blended learning approach



Source: Author's own elaboration.

**Careful consideration was given to the design of both online and face-to-face formats to facilitate inclusivity and active participation for all. These included:**

#### ***Low bandwidth and smartphone compatible online learning***

Based on the sex-disaggregated findings from the needs assessment, the online learning was designed to be smartphone and low-bandwidth compatible to avoid disadvantaging women's and more rural VPPs' participation. The online components of the training were made available through [FAO's Virtual Learning Center \(VLC\)](#)

platform on the smartphone application “Moodle”. This allows users to study online modules without an internet connection and register their module completion in the system once reconnected. Participants were also given data support packages to address connectivity barriers. A maximum of five hours study was planned per week so that trainees could fit their study around their working and family commitments.

### ***Digital skill building and peer-to-peer support***

Qualitative sex-disaggregated FGD results reported that women were generally less interested and experienced in studying online. To overcome digital literacy barriers, participants were provided with onboarding support for the Moodle application and taught how to navigate the online learning course through the VLC platform using a learning-by-doing approach. Throughout the training, participants utilized peer-to-peer support and troubleshooting sessions via WhatsApp with trainers and project assistants to overcome challenges related to accessing online learning.

### ***Gender-responsive approaches to facilitate women’s participation in face-to-face workshops***

The following approaches were used to overcome the gender-based barriers to in-person training identified during the needs assessment:

- To minimize travel distance for participants, VPPs attended face-to-face workshops at local partner training institutions within their region.
- Face-to-face workshops were limited to a maximum of 2-3 days to minimize disruption to participants’ family and work commitments.
- Workshops were carefully scheduled to avoid religious or national holidays, such as Ramadan in Nigeria, when women typically have additional responsibilities related to festivity planning.
- Child-friendly facilities were provided for nursing mothers, allowing them to take breaks for breastfeeding during the training.
- Gender balance was encouraged among VPP trainers and assessed during the selection of partner training institutions.

**Photo 1.** Veterinary paraprofessional training cohort in Ibadan, Nigeria





## Family buy-in and support to participate in training

Women VPPs expressed interest in CPD training but highlighted challenges such as conflicting care and household responsibilities and, in some cases, the need for their husbands' permission to attend.

To encourage the support of partners of selected VPP participants, participant's families were provided with "welcome packages." These packages included a warmly written letter addressed to the VPPs and their families, highlighting the benefits of CPD training for the participant, their family, and the broader community, and underscoring the positive impact of family support, flexibility, and encouragement during the training period. Additionally, the package contained a detailed schedule of the training timeline, specifying the face-to-face workshop days and the hours required for online training. This served as a "heads-up" to anticipate that participants would need time to study online and attend face-to-face workshops, which could conflict with their other responsibilities at home and work. Communicating this information to both trainees and their families aimed to ensure that everyone in the household was aware of the time commitment and effort required for successful completion of the training and receipt of certification. It also allowed families to plan for the redistribution of household responsibilities in the participant's absence.

Such "family approaches" are grounded in research (World Bank, 2009) indicating that gender mainstreaming activities often alter gender roles and relations. If this change is not managed carefully and accompanied by adequate awareness-raising efforts targeting men, there is a risk of backlash, including an increase in domestic violence. This backlash can occur as men perceive women's increased empowerment as a threat to their traditional roles as men, breadwinners, and heads of households and communities. Anticipating and explaining the benefits of women's empowerment (e.g. through training opportunities) to men can facilitate a deeper understanding and support from their side which is crucial for sustainability impact (Ibid).

**Photo 2.** Woman Veterinary paraprofessional attends face-to-face training with her baby in Uganda



**Photo 3.** Veterinary paraprofessionals in Uganda participate in a live webinar from their smartphones



## 2.2 Training of facilitators

The role of facilitators in this context is to guide the learning process of VPP participants by creating a space for working VPPs to further their professional development, using non-formal, adult education approaches. To this end, they guide activities and group discussions and help groups reach a consensus on necessary actions to improve their professional practice. Throughout VPP training delivery, their tasks include:

- Facilitating exchange of knowledge and experiences;
- Supporting the design of learning activities;
- Ensuring that the curriculum reflects local needs and opportunities;
- Filling knowledge gaps (or inviting experts to do so);
- Enabling consensus-building;
- Documenting the process and results.

The integration of gender throughout this work is paramount and a collaborative effort with the FAO team. VPP trainers typically have a technical, scientific background, and may be less familiar with social science concepts such as [gender mainstreaming](#). Building facilitators capacity on gender is thus crucial, as facilitators play a key role in the success or failure of [gender integration](#) in VPP training. A three-day Training of Trainers (ToT) workshop was organized. The following key activities were included with regards to gender:

### a) Presentation of gender findings from needs assessment

To set the stage for addressing gender-related challenges in the training, findings from the needs assessment were presented to the facilitators, followed by in-depth discussions.

### b) Participatory approaches to learn basic gender concepts and terminology

Essential gender concepts were cascaded to the facilitators using participatory methodologies such as reflective exercises and role-play activities. This approach helped explore concepts like leadership, intersectionality, privilege, gender roles, and power dynamics. It created an adult learning experience that relied on everyone's active engagement, allowing diverse perspectives to emerge.

### c) Gender-responsive community visits

Additionally, community visits with farmers and animal health service providers were conducted to identify challenges faced by these stakeholders and to inform the design of the face-to-face workshops. Ensuring the participation of both women and men during these visits was crucial for balanced representation of perspectives.

An insightful aspect of the farm visits involved splitting into two groups: one group spoke with the woman farmer, while the other spoke with the man farmer. During subsequent brainstorming sessions, each group shared their findings, revealing two different yet complementary perspectives on the farm's situation. This highlighted the importance of involving both women and men farmers in animal health service provision to gather comprehensive clinical histories and provide effective veterinary/One Health advice.



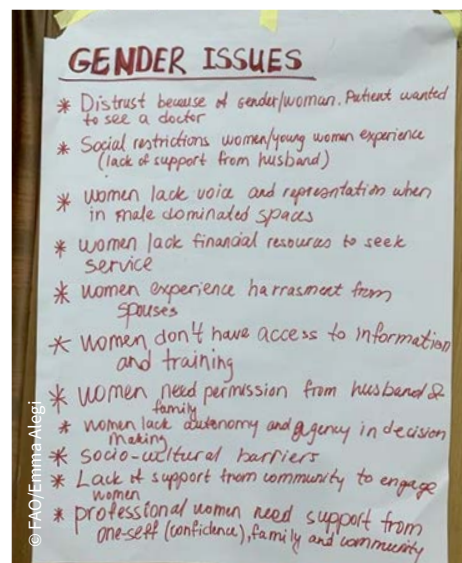
Training of Trainers (ToT) for the "Female Leadership in One Health"

The remaining time of the ToT was dedicated to collaboratively plan the face-to-face training workshops and receiving feedback and suggestions from facilitators to enhance the training content, ensuring it effectively addressed local contexts. The ToT aimed to equip facilitators with the skills and tools to integrate gender throughout VPP training but also provide a “big picture” understanding and commitment to gender equality, aligning with the United Nation’s Sustainable Development Goals (SDG). This means:

- Intentionally recognizing gender equality as a central component in ensuring the success of VPP training — not a collateral benefit — and taking tangible steps to involve more women (at both VPP and farmer level);
- Understand the reasons for their underrepresentation and marginalization, and actively respond to their feedback.

These approaches aim to enhance the experience of women VPPs and ensure their sustained participation in their field, as well as enhance all VPPs’ outreach to women farmers, for improved animal health resilience at the grassroots level.

**Photo 4.** Flip chart showing gender-based disadvantages identified by participants during reflective exercise of ToT workshop for “Female Leadership in One Health” course



**Photo 5.** Trainers engage in role-play activities during the ToT for the the “Female Leadership in One Health” course



## 2.3 Trainee selection process

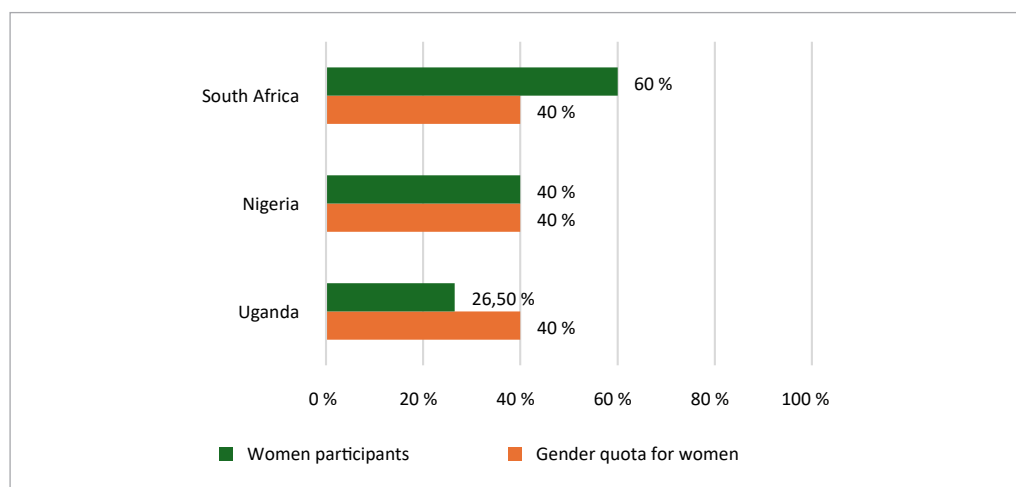
To proactively target and empower women VPPs, A gender quota was established in each project country to ensure a minimum 40 percent representation of women in the training. Given the relatively low representation of women in the VPP profession in Nigeria and Uganda (estimated at 20 percent - 30 percent<sup>1</sup>) a gender quota of 40 percent was considered to be more realistic to achieve than a fifty-fifty split between women and men.

Participants were selected through an open call for applications. Relevant details about the selection process include the following:

- The training opportunity was publicized via online flyers that detailed the course's scope and included a hyperlink to an online registration form. This information was disseminated over approximately one month by various stakeholders, including FAO, the local Veterinary Statutory Body, training institutes, VPP associations, and district/sub-county veterinary services.
- Eligibility criteria for applicants included living and working in the project pilot regions, being part of the private sector, actively working as a VPP, holding a recognized qualification, being registered with or willing to register with the Veterinary Statutory Body (VSB), having regular access to an internet capable smartphone and being fluent in English.
- The selection process was competitive, emphasizing the applicants' motivations for participating in CPD training.
- Special preference was given to female VPP applicants to meet gender quotas, as well as to rural VPPs and those serving as frontline service providers to livestock farmers rather than operating agrovet shops.

The VPP project successfully exceeded its gender target in South Africa by 20 percent, where 60 percent of the selected participants were women (see figure 11). In Nigeria, the gender quota was achieved with 40 percent of selected participants being women (see figure 11). However, in Uganda the gender quota was not achieved with only 26.5 percent of participants being women (see figure 11).

**Figure 11.** Gender quota established for women in each country versus the number of women selected for the veterinary paraprofessional training in each country

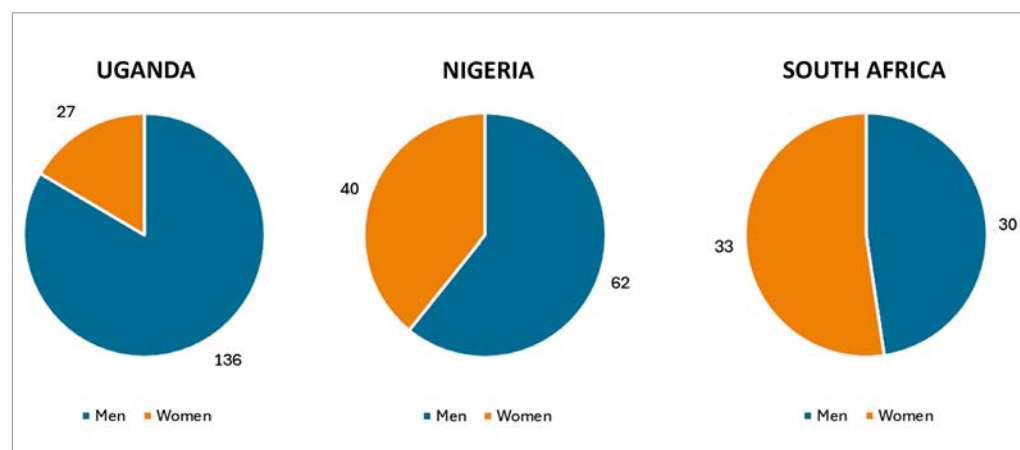


Source: Author's own elaboration.

<sup>1</sup> Data is based on an analysis of registered VPPs with the Uganda Veterinary Board (UVB) from 2020 – 2021 which states that 21 percent are women. Due to lack of published data, in Nigeria anecdotal evidence suggests that approximately 20-30 percent of the veterinary workforce in the country is female. In South Africa, data from the South African Association of Animal Health Technicians (SAAHT) showed that 48 percent of the Animal Health Technician (South African equivalent of VPPs) workforce is female.

Despite attempts to proactively target women participants for the training, this proved to be a challenge, particularly in Uganda, due to few applications received from women, as shown in as shown in figure 12.

**Figure 12.** Applications received in Uganda, Nigeria and South Africa by gender



Source: Author's own elaboration.

In South Africa, 33 out of 63 applications received were from women (see figure 12). In Nigeria, the number was 40 out of 102 (see figure 12), while in Uganda, only 27 out of 163 applications came from women (see figure 12). The number of women participants in the training programme across these countries closely mirrored the proportion of female applicants: Uganda had the fewest female applicants, followed by Nigeria, and then South Africa. While it was anticipated that, generally, fewer applications would be received from women due to their underrepresentation in the VPP workforce in all three countries, the project team recognized the need for a revised approach to encourage more women to apply and to enhance gender outreach in future training cohorts. The [results section](#) of this paper offers an analysis of this process and provides recommendations for refining the selection process to increase outreach and engagement among potential women applicants.

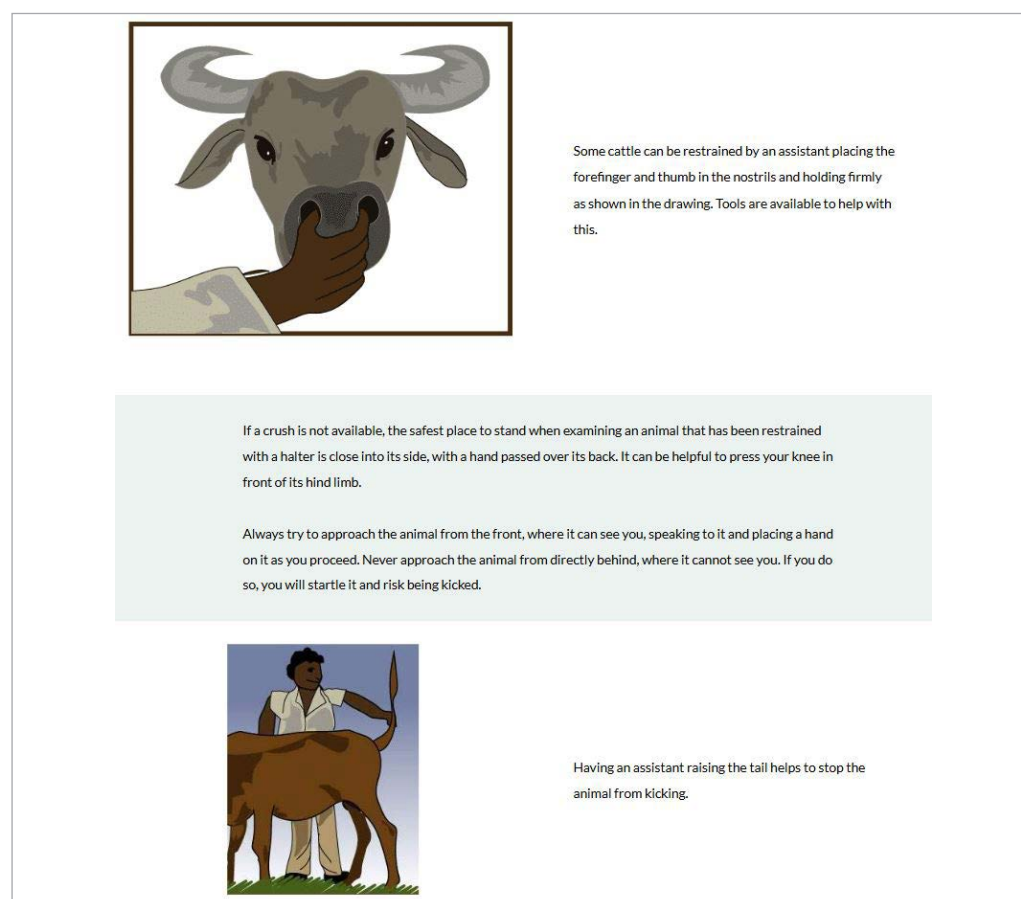
## 3. Choice of training topics

The needs assessment identified a range of gender-related constraints that women VPPs face in their profession (see subsection: [challenges](#)). To empower women VPPs and boost their confidence amid workplace challenges, the training topics were tailored to align with their priorities, as well as those of men. The following topics were therefore included in the training curriculum:

### 3.1 Animal handling and restraint techniques

Trainees studied an online module on “Livestock Handling and Restraint”. This topic was included in the curriculum based on reports that women VPPs had received minimal training in this area and feared handling large livestock due to the risk of injuries. Additionally, some livestock farmers stated they preferred male VPPs, believing them to be physically better suited for restraining large animals. The aim of incorporating animal handling techniques into the curriculum was thus twofold: to boost women VPPs’ skills and confidence and, by doing so, promote the implementation of animal handling facilities on farms, and help shift farmers’ negative perceptions that women cannot handle large animals.

**Figure 13.** Screenshot from the online learning module on "Livestock Handling and Restraint" under the "Building your Business Through Preventive Livestock Healthcare" module



Source: FAO Virtual Learning Center online course "Growing your Business through Preventive Livestock Healthcare".



**Competency acquisition for online learning focused on the following:**

- How to discuss the need for improved animal handling facilities with livestock keepers (communication skills);
- and practical livestock restraint techniques for different livestock species.

The theoretical learnings from the online learning were built on during the face-to-face components of the training through a “learning-by-doing” approach. The practical sessions provided hands-on experience in safe handling techniques, the use of restraint equipment, and injury prevention strategies under trainer supervision. Besides technical skill-building, this approach aimed to help women VPPs boost their confidence and overcome psychological barriers related to fearing restraining large animals. Open dialogue was encouraged to challenge the gender norms and stereotype that animal handling is a man’s job, emphasizing that effective animal handling relies on technique and equipment rather than physical strength and body structure alone.

**Photo 6.** Woman veterinary paraprofessional in Uganda practices restraining a cow during face-to-face training workshop



**Photo 7.** Women VPP in Nigeria practices restraining a cow during face-to-face training workshop





## 3.2 Overcoming gender bias and gender-based violence

To address gender bias from male farmers, a module on “Overcoming Gender Bias and Gender-based Violence” was developed for the training “Female Leadership in One Health”.

### **Competency acquisition focused on the following:**

- Defining gender bias and learning about the effects of conscious and unconscious gender biases that both women and men may encounter as health professionals, as well as exert towards their clients.
- Strategies for recognizing, effectively challenging biases, and strategies for preventing, de-escalating and safely managing harassment at work, whether verbal, physical, or sexual.

A key aspect of the above approaches can be achieved by fostering mutual support between women and men colleagues as gender allies, detailed further in section [3.3 Involving men as gender allies](#).


**Figure 14.** Screenshot from online module “Overcoming gender bias and gender-based violence” under the “Female Leadership in One Health” FAO VLC course

Examples of gender bias	Negative impacts on personal life	Negative impacts on professional life
<b>Inferiority in certain skills</b> Girls may not be as good at technical skills (like mathematics) as boys.	This can contribute to girls' lack of confidence in their ability to do well in math or sciences.	Can discourage girls' pursuit of technical careers (e.g., becoming an engineer or doctor).
<b>Emotional fragility</b> Women are emotionally fragile and prone to irrationality.	This can affect women's self-esteem and confidence.	Can undermine women's credibility that they can make decisive and effective decisions.
<b>Aggressive behaviour</b> Men should be strong, aggressive and dominant.	Can lead to harmful behaviours toward themselves and others (addiction, suicide or violence).	Can reinforce a culture of dominance and violence at the workplace.
<b>Emotional repression</b> Men need to be strong and not show emotions that display their weakness or sadness.	This can lead to difficulties in expressing vulnerability and seeking emotional support. For example, in cases of disease outbreaks, male livestock keepers may suffer emotional distress but struggle to process these feelings and ask for help.	This can put an emotional toll on men which is later expressed in poor performance at work.
<b>Inferior leadership skills</b> Women lack leadership skills or are too emotional to make rational decisions.	This can affect women's agency to take an active role in decision-making.	Can discourage women's pursuit of leadership roles in their profession or organization.

Source: Author's own elaboration.

**Figure 15.** Screenshot from online module “Overcoming gender bias and gender-based violence” under the “Female Leadership in One Health” FAO VLC course

**What can I do if I observe harassment of a colleague or client?**



It is important to support colleagues who are being harassed. Sometimes an observer can spot signs the person involved might not see. Harassment is challenging to deal with and having a supportive colleague by your side can make all the difference.

Start by assessing the situation: Does the person who was harassed appear uncomfortable or upset?  
Pay attention to non-verbal cues.

You may support a colleague through the following approaches:

- **Respond to harassment in real-time.** For example, stepping in to say, “We don’t tolerate that kind of language. Let’s keep it professional.” Provide the harassed with an opportunity to leave the situation.
- **Offer support to the harassed.** For example, by saying afterward “That was a difficult encounter, how are you doing?”
- **Empower to respond.** For example, by discussing afterwards “I want you to feel empowered and safe to speak up in situations like this. You have my support”. You could refer the person to tools for responding to harassment.
- **Encourage reporting of severe or pervasive sexual harassment.**

Source: Author’s own elaboration.

The online learning modules on FAO’s VLC invite participants to share their own reflections and experiences on the topics they are studying. Below are some extracts from discussion forums from 2023 on how gender impacts farmers’ perceptions of a VPP:

*“During my studies, we visited a farm to deworm sheep and goats. We met with different farmers, who insisted on only allowing males to handle their animals and not the females. Other times, women like myself have not been allowed to enter the kraals at all and we have to wait and just watch”*

**Female VPP from South Africa**



*I often work with female VPPs but the society we live in has not embraced the fact that they can perform good work in the field. This has greatly affected the self-esteem of most female VPPs compared to male ones. One farmer deep in Kakuuto, Kyotera district, Uganda, couldn’t get the contact of the male VPP who used to treat animals in their village. Although three female VPPs offered their assistance, he declined their help while it was still possible to treat the animals. The farmer lost two goats, all because he had a perception that female VPPs can’t perform work as well as male ones.*

**Male VPP from Uganda**

*“Regrettably, I was compelled to cease my activities not due to a lack of expertise, but rather because of the prevailing misconceptions among farmers about female veterinarians and payment disparity. My capabilities were unfairly judged by physical strength rather than professional competence. This prejudiced mindset not only undervalued my services but also eroded my confidence. As a female veterinarian working in northern Nigeria, our services are critical in regions where cultural norms restrict women’s access to animal health services”*

**Female VPP trainer from Nigeria**



## Radio as a tool for breaking down negative gender bias towards women veterinary paraprofessionals



VPP radio campaign in South Africa piloted in collaboration with Farm Radio International

VPPs were invited to participate in local radio campaign targeting livestock farmers in collaboration with Farm Radio International. This initiative aimed to provide women VPPs with a platform to highlight the positive impact of their work and to raise awareness among farmers that they are trusted and qualified providers of quality animal health services. The objective was to challenge deeply rooted gender norms and beliefs that the veterinary profession is better suited for men and to debunk the myth that women VPPs are less competent than their male counterparts through open dialogue. For example, the following programme aimed at breaking down negative gender stereotypes about female VPPs in Uganda was circulated with 3,000 radio partners across Africa: [Uganda: Trained women veterinary paraprofessionals help livestock farmers keep animal healthy, boost income: Barza Wire](#).

Additionally, the training included skill-building modules on business, communication, and professionalism. These modules provided VPPs with practical skills such as financial literacy, record keeping, marketing, confident price-setting, pricing negotiation, client management, and navigating challenging work scenarios.

### 3.3 Involving men as gender allies

To address some of the gender constraints faced by women VPPs, the project adopted a positive approach to engaging men as critical allies in supporting women's empowerment, whether as husbands, mentors or colleagues. This approach emphasizes framing men as part of the solution to gender inequality rather than the problem and highlighting the benefits of their engagement for women, men, their families, and communities.

[Gender equitable \(or positive\) masculinities](#) refer to masculinities that are supportive of women's empowerment and gender equality and that undermine unequal gender power dynamics (OECD, 2021). The training aimed to foster and encourage this mind-set among male training facilitators, VPPs and husbands. The training curriculum focused on deepening men VPP's understanding of the gender-related constraints that their women VPP colleagues face, including mistrust, pay gaps and sexual harassment from farmers, and how this negatively impacts women VPPs, as well as their outreach, to women livestock keepers.

It also emphasized how gender inequality and rigid gender norms can be harmful for all genders, including men, in rigidly determining what behaviours are socially acceptable for women, men, boys and girls. Additionally, the training focused on how men and women VPPs can work together as gender allies mutually supporting each other for the betterment of farmer's attitudes towards women VPPs, and to achieve their long-term goals for their businesses and the communities that they service. For example, setting up case-referral systems to ensure outreach to women livestock keepers, in communities where women cannot speak to unrelated men.

### Role-play activities practicing being gender allies during face-to-face workshops

One of the ways in which the VPP training in Kaduna, Nigeria integrated the concept of working as gender allies into its face-to-face workshops was through role-play activities. In this exercise, participants shared personal experiences and reflections on how gender norms and inequalities impact the provision of animal health services in their communities, and brainstorm ways in which women and men VPP colleagues can collaborate as VPP gender allies to overcome the identified gender-related challenges in their work. Participants then engage in role-play activities where they enact the scenario and solution in front of their course mates, who can provide constructive feedback.



*Woman and man VPP engage in role-play activity, practicing a gender-ally approach during face-to-face workshop*

In photo 10, VPPs enact a scenario in which a female VPP has called on a male VPP colleague to accompany her during a farm visit for support because she has experienced repeated instances of gender bias from the farming community. In this role-play exercise, the trainees are practicing their communication skills in working collaboratively with community leaders to sensitize farmers on the fact that VPPs can be men or women, and that the women VPP is just as qualified and competent as her male colleague, with a proven track-record of assisting farmers boosting their livestock productivity. They are practicing using a solution-oriented approach to communication, explaining the benefits of allowing the female VPP to assist the farmers.

## 4. Results

Evaluation of the blended training model involved key informant interviews, FGDs (with VPPs, trainers, mentors), online surveys, and reflections from the project team. These results are from the VPP training programme “Sustainable Business in Animal Health Service Provision through Training for Veterinary Paraprofessionals” and do not include evaluations from the “Female Leadership in One Health” course.

**The key lessons learned with regards to gender integration of the training delivery were:**

- **The training had a 100 percent completion rate for women in Nigeria and Uganda**

The training programme achieved a 100 percent completion rate among women VPPs in Nigeria and Uganda, despite its eight-month duration, the absence of financial incentives such as phones or daily allowances, and the requirement to attend four in-person workshops. Of the 100 participants, 98 completed the entire course, with 36 men and 13 women in Uganda and 28 men and 21 women in Nigeria. Both male and female VPPs cited the flexible, self-paced online format as a key factor in their success, as it enabled them to complete the training during evening hours, outside of business and family responsibilities.

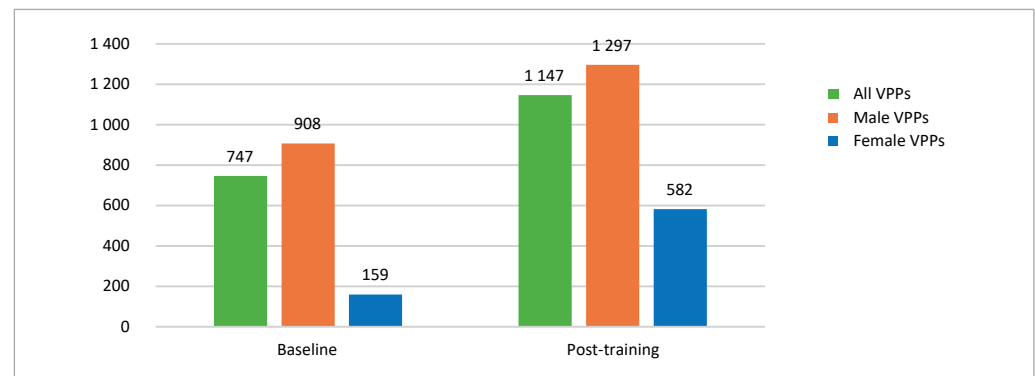
- **The training led to an increase in VPPs monthly income, especially for women in Nigeria and Uganda**

The training contributed to a notable increase in the monthly income of VPPs, with women benefiting the most. A post-training survey conducted in October 2024 showed a 53 percent rise in average monthly income among VPPs in both Uganda and Nigeria.

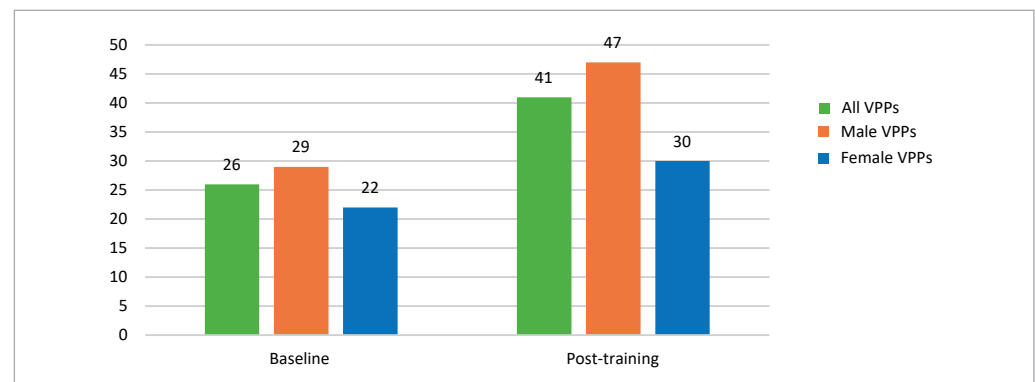
In Uganda, average monthly income grew from USD 747 (2 739 571 UGX) to 1 147 USD (4 204 839 UGX). Women’s starting income was significantly lower than men’s (USD 159 for women versus USD 908 for men), yet their income growth surpassed that of men, both in relative (267 percent for women vs. 43 percent for men) and absolute terms (an increase of USD 582 for women vs. USD 389 for men).

In Nigeria the average monthly income increased from USD 26 to USD 41 (43.535 Naira to 66 608 Naira), with the observed increase greater for men (64 percent for men versus 38 percent for women)<sup>2</sup>.

<sup>2</sup> Overall monthly income in USD is markedly lower compared to Uganda, this is due to the conversion of the Naira income into USD using the October 2024 exchange rate following the extreme devaluation of the Naira in June 2023. If the exchange rate prior to currency devaluation were applied baseline income would have been USD 944, and post-training income USD 1 445.

**Figure 16.** Ugandan veterinary paraprofessionals income pre and post training

Source: Author's own elaboration.

**Figure 17.** Nigerian veterinary paraprofessionals income pre and post training

Source: Author's own elaboration.

- **The training strengthened women veterinary paraprofessionals confidence and client-relationships**

Women VPPs reported that the training boosted their confidence and strengthened their relationships with clients. Women noted that they previously felt excluded from similar programmes, which they perceived as being primarily for men, and expressed appreciation for being contacted and encouraged to participate. The gender-related content in the modules were described to be particularly impactful, leading to changes in how they view themselves and their work. Some women also described a shift in how their clients perceive them, explaining that, prior to the training, communities often doubted their capabilities simply because they are female. However, since completing the training, they described being able to expand their client base, largely through referrals, demonstrating the increased trust and confidence in their abilities as service providers. However, others noted that bias towards them as women remains a persistent challenge when working with farmers.

- **Business, communication and animal restraint training was particularly impactful for women veterinary paraprofessionals**

Both male and female VPPs expressed that the training fostered an entrepreneurial mindset in their work. However, women, in particular, highlighted the business training as the primary motivation for their participation and found it to be especially impactful. As one female VPP noted, *"It has had a great impact on my business, it has taken on a new structure, now it has a proper structure."*



Many women also appreciated the training on communication and managing difficult work situations. One participant shared that, before the training, she would often argue with farmers, but she has since learned to control her temper and respond professionally. Another female VPP mentioned that the communication skills she gained significantly improved her ability to set prices and negotiate: *“I learnt so much on communication. It has really helped my way of communicating. Before any treatment is taking place, I learn how to communicate with the client to reach an agreement on the payment.”* Additionally, several women identified the practical sessions on animal handling and restraint techniques as their favourite part of the training, stating its impact on their day-to-day work.

- **Practical application of gender ally approach by men post training**

Male VPPs in Kaduna state, Nigeria, reported applying the gender ally approach (see [section 3.3](#)) when working in communities where cultural norms disallow men from interacting with unrelated women farmers. These male VPPs described the challenges they face in approaching female farm owners, with one stating, *“As a male, I cannot go directly and start talking to a woman.”* In such situations, they collaborate with female VPP colleagues, who initially engage with the female livestock keepers. The male VPPs then join their female colleagues to jointly treat the animals, ensuring that cultural boundaries are respected while providing the necessary services. While the application of the gender ally approach was discussed positively in FGDs with men in Nigeria, some male VPPs in Uganda expressed concerns during discussions about the gender components of the training. They felt that men were being marginalized and that the selection process, which prioritized female participation, was unfair. As one participant remarked, *“The scale is tilted”*, suggesting that further awareness-raising and sensitization is needed for innovative approaches such as positive masculinities and gender allies to be more widely adopted.

- **Support from families**

Both women and men generally reported strong family support for their participation in the training, with many expressing confidence that their families would back future training opportunities as well. As one participant noted, *“They have seen the changes. They have seen the impact.”* The welcome package provided to trainees, which included letters to their families explaining the course’s purpose, time commitments, and the need for family support, was widely praised. This initiative helped families plan their time more effectively, contributing to the overall support trainees received. Many female participants, in particular, attributed their family’s support to these letters and the childcare provisions, which facilitated their participation in the training.

- **Women veterinary paraprofessionals generally reported having control over the income generated from their businesses, including the additional profits gained after completing the training**

When asked about personal control over their earnings, many women expressed a strong sense of autonomy. As one participant put it, *“Only I decide what to do with my money.”* Another female VPP noted a shift in financial decision-making after the training, explaining that while she previously consulted her husband, she now independently manages the income, primarily using it to support her family. However, during FGDs in Nigeria, participants highlighted potential risks associated with openly displaying financial independence. Concerns were raised that having



visible control over money could lead to it being appropriated by husbands, increase the risk of kidnapping, or even prompt a husband to take another wife. One woman remarked, *“If following it according to the law, the husband is supposed to decide. Men used to take advantage of joint money, instead of encouraging you they would discourage you. They will remove the money and you don’t have any say. To avoid this, they keep it for themselves, use part of it to support the family.”*

### **The key challenges related to gender with regards to the delivery of the training were:**

- **Low participation rate of women veterinary paraprofessionals in some of the countries:**

having a quota for female participants is not sufficient as an approach to ensure women’s participation when the number of women in the workforce is low and the number of applications is low. As illustrated in Figures 19, 20, and 21, the number of women who participated in the VPP training in each country closely corresponded to the proportion of female applicants. One major challenge identified was the underrepresentation of women in VPP associations and VSBs compared to their male counterparts. This disparity can limit their awareness of training opportunities typically disseminated through these formal networks. To improve outreach to women VPPs, the selection process should be revised to include additional strategies such as:

- pre-scoping a list of women VPPs to encourage to apply to the training;
- leveraging informal communication channels to advertise the training;
- using non-digital advertisement channels to increase visibility of training opportunity, including printed posters to be displayed in community centres, churches and training institutions within the selection regions.

These strategies aim not only to boost the number of female applicants but also to ensure that women with the desired profiles and qualifications are effectively targeted. When applying positive discrimination to increase women’s participation in VPP training programmes, it is important to ensure that selected candidates meet minimum criteria and demonstrate genuine motivation to participate in training and work as VPPs. Selecting individuals who do not meet these criteria or lack motivation and interest, solely to fulfill gender quotas, risks triggering negative gender backlashes, reinforcing stereotypes, and undermining programmes goals. A thoughtful and strategic approach is therefore essential to achieve sustainable and inclusive outcomes.

- **Conflicting work and family commitments**

Face-to-face workshops emerged as a highlight of the training, with many trainees identifying them as their favorite component and expressing a desire for more hands-on, practical sessions. Female VPPs in particular emphasized the importance of these workshops, stating, *“We need more practicals to instill confidence.”*

However, some participants encountered logistical difficulties in attending, with both women and men noting the negative impact on their families. Men primarily cited financial losses due to their absence from work, while women pointed to their dual responsibilities as primary caregivers and income earners. As one female VPP from Uganda shared: *“In my home I am like a man as well as a woman. Almost all of the responsibilities [are] on me. Why? My husband doesn’t work. When he wants money he gets [it] from me”*. Some women with younger children attended the face-to-face workshops by bringing their young children along, and stated that this

facilitated their participation. However, others acknowledged that this arrangement was not feasible for those with older children of school-age. These women had to rely on others—typically mothers, maids, or siblings—to care for their children and accompany them to school, which added to their burden and concern. As one female VPP expressed, *“It is not easy, it is a kind of sacrifice.”* Despite these obstacles, participants also reflected on the long-term benefits of the training, noting that it ultimately outweighed the difficulties. As one woman explained, *“Every bad thing also has an advantage at a certain part... I am in a position to acquire more money than I’m used to and it [the training] has helped me”.*

- **Need for more women facilitators, especially in business training**

During training feedback sessions in South Africa, participants suggested that incorporating more women facilitators, particularly for the business training, would be beneficial. Women participants, in particular, expressed that having additional female facilitators would help them feel more comfortable speaking up and actively contributing to discussions.

Overall, the training programme successfully supported the participation, active engagement, and empowerment of female participants through gender-responsive approaches. However, challenges related to network connectivity, data costs, financial constraints, and affordable transportation disproportionately affected women and rural VPPs. For more details on these aspects, please refer to the final section of the publication [Delivery of blended learning models for veterinary paraprofessionals – Lessons learned](#).

- **Facilitator training on gender-responsive facilitation**

Whilst the facilitators had a first training on gender sensitivity and were exposed to these topics, facilitators’ facilitation skills can be further strengthened to ensure an inclusive learning environment, particularly by enhancing their gender-responsive skills. While cascading gender curricula to VPPs remains essential, facilitators are pivotal in creating a space where all participants feel included and respected. Future training sessions can be improved by equipping facilitators with advanced pedagogical skills and conflict resolution capabilities, enabling them to recognize and address gender discrimination effectively. This is especially crucial when facilitating discussions on sensitive topics such as gender bias, animal handling and gender-based violence (GBV).

For instance, if a participant expresses harmful gender stereotypes, facilitators should be prepared to intervene and use such moment as an educational opportunity to help VPPs deconstruct discriminatory behaviours. This can be achieved through participatory methodologies grounded in equity, inclusion, and gender-responsive approaches, such as open reflective dialogue and role-play exercises. Facilitators should also be trained to monitor and encourage the participation and engagement of all trainees, implementing affirmative action strategies where necessary. For example, they might rotate leadership roles within group activities to ensure that both women and men actively participate and develop their skills, and improve their confidence. Additionally, the project recognizes the importance of considering the gender of facilitators. Women facilitators can serve as role models for female VPPs, offering relatable mentorship, encouraging leadership and confidence among women participants. Conversely, male facilitators can be instrumental in engaging male VPPs in the pursuit of gender equality, acting as positive examples of “male allies.”

## **Gender-responsive facilitation strategies that can be cascaded to facilitators during Training of Trainers:**

### **Positive discrimination**

Positive discrimination, also known as affirmative action, refers to policies and practices aimed at providing preferential treatment or opportunities to certain individuals in light of specific characteristics of their identity (sex, ethnicity, age, etc.) which typically constitutes an element of negative discrimination. In the context of VPP training, positive discrimination and affirmative action can encourage the meaningful participation of all participants.

### **Some concrete examples of positive discrimination are:**

- Address, or encourage the active participation of women or men directly during certain exercises, for example by asking for their opinion/view on a certain matter. In different contexts, women or men may take a back-seat or be sidelined when discussing certain topics. It is the role of the facilitator to foster open dialogue and encourage them to participate actively and express their opinion (e.g. why should be explicitly target women livestock keepers during service delivery).
- Due to traditional gender roles, men might feel more comfortable in taking the lead on certain activities (e.g. animal handling and restraint). It is important to use strategies such as rotating leadership to encourage women to take the lead and make the most of the training experience to develop their skill set and confidence. Vice versa may be the case for other topics.

## 5. Post training case study

Approximately six months post training, women VPPs report that the training has helped them grow their private practice as frontline service providers.

### **Andrew Blessing in action in Kaduna state, Nigeria:**

Despite being a qualified VPP with a two-year diploma, Blessing Andrew found farmers questioning her competence and abilities, particularly in handling large ruminants. She was often paid less for providing the same services as her male counterparts, at times operating at a loss. Given these disparities, Blessing struggled to motivate herself to continue down this career path, although the demand for her services was high. The tailored training for VPPs, provided by FAO in collaboration with the Ahmadu Bello University's College of Agriculture and Animal Science renewed her drive to stay in this field: *"Before the VPP training, I was running my practice with no motivation due to the little profit I made and sometimes I thought of quitting. After participating in the VPP training, I dusted off the equipment I had abandoned and began to take my practice seriously. I'm glad it paid off"*, Blessing states.

Through training, Blessing realized that as the only female VPP in her community, she could be a crucial resource to the many women farmers in her local area who due to rigid social norms are not able to interact with male animal health service providers. By tapping into the existing gap in the veterinary service market, Blessing has been able to leverage on women clients as an opportunity to grow her business. By building relationships with farming households and changing her approach to service delivery, she realized that she could act as a crucial agent of change.

Using her newfound skills in gender-responsive approaches and service-oriented communication, Blessing began taking time with male clients to explain to them the benefits of involving their wives in service delivery and investing in vaccination plans for the goat herds or chicken flocks under their wives' care. Over time, as farmers saw positive results from her advice, Blessing noticed a shift in farmers' perceptions of her and has been able to gradually grow her business through client referrals. Blessing now stands shoulder-to-shoulder with her male VPP counterparts in the community, progress which has brought her a sense of pride and motivation to continue her essential work in veterinary practice. Her client base has grown, from approximately 300 to 500. Notably, she has doubled her female farmer client base from 100 to 200. She has also doubled her monthly income allowing her to provide for her family and upkeep her house.



VPP Andrew Blessing assists woman livestock keeper during service delivery in Kaduna, Nigeria

## 6. Conclusion

This lessons learned document on empowering women VPPs through gender-responsive training design is part of a broader series available at: [Smallholder farmer access to livestock services \(fao.org\)](https://www.fao.org/publications/defaultcard/collection/en/collection.do?lang=en&collection_id=13222). The collection and analysis of sex-disaggregated data from the needs assessment provided essential insights into the specific barriers, needs, and priorities of both women and men VPPs. This context-specific information facilitated the development of a gender-responsive training approach tailored to the realities on the ground for VPPs in Nigeria, Uganda, and South Africa. The approach focused on addressing gender gaps to effectively support and empower VPP professionals.

The high completion rates and positive feedback from both women and men VPPs validate the success of integrating gender considerations into CPD training for frontline animal health service providers. Women VPPs, in particular, completed the training with no drop-outs, experienced increased income, confidence, expanded their client bases, and reported a stronger sense of professional identity. However, persistent challenges such as gender biases, and the underrepresentation of women in the sector highlight the need for ongoing support and targeted recruitment strategies so that training opportunities reach and benefit women.

These findings highlight that gender-responsive approaches not only enhance the accessibility and relevance of training but also significantly promote the professional growth and empowerment of women VPPs, gradually advancing gender equality in the sector. Moving forward, it is crucial that training programmes continue to evolve by addressing the unique challenges faced by women VPPs, such as access to digital technology, transportation, and balancing professional with personal responsibilities. Additionally, fostering the role of men as gender allies and promoting more equitable gender dynamics in agricultural communities will be key to sustaining these gains. Overall, gender-responsive training offers a valuable pathway toward bridging the gender gap in animal health services, enhancing both service delivery and the empowerment of women in rural communities.

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# Appendix 1

From this pilot phase the following findings and tailored recommendations are made for others considering designing a blended learning training for paraprofessionals:

Thematic area: Facilitating women VPPs participation and engagement in training and business expansion	
Findings	Recommendations
<b>Gender constraints in the VPP profession:</b> <i>Women VPPs face a variety of challenges related to gender in their profession including bias, pay gaps, large animal restraint, sexual harassment, and lack of self-confidence. These factors pose significant setbacks to women VPPs business growth and to bridging the gender gap in animal health service access.</i>	Organize FGDs and key informant interviews to capture women VPP's specific constraints and preferences.
	Train facilitators on how to support women participants' self-confidence through facilitation strategies grounded in principles of equity and empowerment.
	Tailor curriculum to include key areas which women identified due the gender specific constraints they face. For example: <ul style="list-style-type: none"> <li>Financial literacy and business skills</li> <li>Negotiation and communication</li> <li>Animal handling techniques</li> <li>Strategies to prevent and de-escalate gender bias and sexual harassment.</li> </ul>
	Create safe spaces for open dialogue about how gender inequality impacts the VPP profession.
	Incorporate tailored practices (e.g. rotating leadership roles during group activities) and activities to improve confidence and public speaking skills.
	Facilitate exposure of women participants to female role models and mentors in the animal health sector.
	Create platforms for women VPPs to showcase the positive impact of their work in assisting livestock keeping families with boosting their productivity. This can help break down negative gender stereotypes towards women VPPs, such as the notion that the animal health profession is more suitable for men. <i>Example:</i> Organize radio campaigns were women and men can raise awareness about their services and market their businesses.
<b>Gender constraints in accessing training opportunities:</b> <i>Women VPPs may face challenges related to gender in accessing and engaging in training activities (both in-person and online). These include care responsibilities, time and mobility constraints, limited access to digital devices to participate in online learning and requiring permission from partners/family members.</i>	Collect gender disaggregated baseline data on VPPs' access to digital technology to identify the most inclusive modalities for virtual learning.
	Organize FGDs and key informant interviews to capture women VPPs' specific constraints and needs.
	Choose training modalities that are accessible to women and men participants. For example: <ul style="list-style-type: none"> <li>Shorter workshop duration, accessible training locations and avoid national or religious holidays.</li> <li>Smartphone compatible and low-bandwidth online learning as opposed to strictly computer and Wi-Fi dependent modalities may facilitate the participation of women.</li> </ul>
	Provide training on digital skills and navigating online learning platforms.
	Allow for flexible, self-paced online learning which can be fitted around work and family commitments.
	Provide childcare facilities for nursing mothers during in-person workshops.
	Send out "welcome packages" to VPPs' families to encourage buy-in and support and allow for families to plan to redistribute roles and responsibilities during the training period.

(cont.)



Thematic area: Facilitating women VPPs participation and engagement in training and business expansion	
Findings	Recommendations
<b>Gender constraints in recruiting women VPPs for training opportunities:</b> <i>Women VPPs often make up a minority in their profession and are less likely to be registered with the Veterinary Statutory Bodies or VPP associations. Smaller networks, limited access to digital technology and time and mobility constraints can also affect women's capacity to find out about existing training opportunities.</i>	<p>Pre-scope list of local women VPPs for selection. For example, ask women VPPs to nominate other women VPPs that you can reach out to and inform about the training opportunity.</p> <p>Invest in offline promotion and visibility of training opportunity e.g. posters and flyers. Explicitly state that women are encouraged to apply.</p> <p>Utilize informal channels to promote training opportunity e.g. WhatsApp groups.</p> <p>Allow for sufficient time between the launch of call for applications and selection of participants so that the opportunity can circulate as widely as possible.</p> <p>Establish gender quotas to ensure fair participation of women VPPs.</p>
<b>Intersectionality</b> <i>Gender is not the only aspect of a person's identity that can create barriers to people's participation in VPP training - there are multiple factors.</i>	<p>Mind intersectionality (aspects of a person's identity which can lead to marginalization). Consider how factors like age, location (rural, urban, peri-urban), public/private sector may impact a VPP's ability to meaningfully engage in training on top of gender.</p>
Thematic area: Facilitators	
Findings	Recommendations
<b>VPP training facilitator's skills on gender</b> <i>Facilitators play a key role in integrating gender in VPP training and in ensuring women and men fully benefit from participation. It is fundamental they are aware, committed, and knowledgeable about gender equality.</i>	<p>Enhance facilitators' awareness and knowledge on gender through dedicated training(s).</p> <p>Enhance facilitators' understanding of the tools available for integrating gender in VPP training e.g. discussions, activities and exercises.</p>
<b>Gender-responsive training facilitation</b> <i>To maximize learning outcomes, facilitators should adopt pedagogical teaching approaches grounded in equity and inclusion and tailored to specific context. This involves strategies such as actively encourage women's participation by creating opportunities for them to contribute during training activities.</i>	<p>Train facilitators to consider and address unequal gender dynamics and discriminatory gender norms by enhancing their facilitation skills.</p>
<b>Motivation of facilitators to work on gender issues</b> <i>The selection of facilitator who are motivated and passionate about women's empowerment is fundamental for a gender-responsive VPP training</i>	<p>Selection of facilitators with context specific criteria.</p>
Thematic area: Men's engagement	
Findings	Recommendations
<b>Gender ratio of participants</b> <i>Except in given religious and cultural contexts, mixed gender trainings are deemed to be more effective in enhancing gender equality and women's empowerment.</i>	<p>Strive for gender balance in VPP training participation.</p>
<b>Positive masculinities</b> <i>The engagement of men on topics related to gender is an effective means to strengthen women VPP's empowerment and challenge entrenched gender norms in livestock keeping communities.</i>	<p>Involve men in group activities, including discussions on social norms and gender issues.</p> <p>Include discussions and participatory methods in training on how women and men can collaborate as gender allies to overcome challenges in reaching women farmers in their communities.</p> <p>For example, if a female VPP is experiencing gender bias from a farmer, a male VPP colleague can step in to support her by explaining that she is qualified, experienced and has a track record of helping farmers boost their productivity. In communities with seclusion norms where men cannot interact with unrelated women, a male VPP can refer cases to a female VPP colleague.</p> <p>Train facilitators to create a safe and equitable environment for constructive discussions on gender.</p>

(cont.)

Thematic area: Monitoring, Evaluation and Learning (MEL)	
Findings	Recommendations
<b>Gender-responsive monitoring, evaluation and learning</b>  <i>There is need to produce knowledge and enhance the visibility of the linkages between gender responsive veterinary education and gender equality and women's empowerment.</i>	Produce evidence on the gender related impact of VPP training at farmer level
	Disseminate gender related evidence among VPP practitioners and with relevant stakeholders in the livestock sector
	Monitor and evaluate the gender dynamics within VPP trainings to identify any barriers or challenges faced by women's participants through, for instance, the collection of sex- and age-disaggregated data. Also, there should be some qualitative questions related to gender in the monitoring and evaluation process.
Thematic area: Multi-disciplinary team and staff awareness	
Findings	Recommendations
<b>Gender integration is facilitated by the inclusion of a gender specialist in the project team</b>  <i>It is key that all the personnel involved within VPP training (e.g. manager, MEL person, master trainers) are aware, motivated, and knowledgeable of gender equality.</i>	Hire a person with an academic background/experience in gender mainstreaming to lead the gender strategy of the project.
	Conduct a gender capacity assessment amongst employees involved in implementation activities
	Organize trainings on social inclusion, gender equality, women's empowerment, and gender-responsive approaches mandatory for employees, including employees of partners.
	Encourage regular reflections amongst the team members about gender dynamics and unequal power relations in different contexts.
	Use behavioral insights that promote gender equitable environments

## Appendix 2

Metrics used to calculate gender gaps in figures: 7, 8, 9 and 10

Male majority	$\text{Gender gap in ownership/use} = \frac{\text{Male owners / users (\% of male survey participants)} - \text{Female owners / users (\% of male survey participants)}}{\text{Male owners / users (\% of male survey participants)}}$
Female majority	$\text{Gender gap in ownership/use} = \frac{\text{Female owners / users (\% of male survey participants)} - \text{Male owners / users (\% of male survey participants)}}{\text{Female owners / users (\% of male survey participants)}}$

Source: Author's own elaboration.





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