

# Report of the pre-workshop veterinary workforce survey November 2022

*The WOAHS Sub-Regional Awareness Raising Workshop on Veterinary  
Workforce and Veterinary Paraprofessionals for Southern Africa in Arusha,  
Tanzania*

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## Abbreviations

CAHWs: Community Animal Health Workers .....	4
NGO: Non-Governmental Organisations .....	15
WOAH: World Organisation for Animal Health .....	3
WOAH-PVS: The WOAH Performance of Veterinary Services .....	3
SADC: Southern African Development Community .....	9
SEA: South East Asia.....	9
VPPs: Veterinary Paraprofessionals .....	3
VSB: Veterinary Statutory Body .....	8
WAHIS: World Animal Health Information System.....	4

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## The context

The World Organisation for Animal Health (WOAH) is developing a Veterinary Workforce Development Programme to produce tools and approaches to support Member countries in veterinary workforce assessment and development. WOAH encourages Members to assess their veterinary workforce needs systematically and to realistically address those needs within the limits of the financial, human, and educational resource constraints they may face. Many countries have different levels of cadres of trained personnel to fill the identified needs of veterinary services. The personnel in Veterinary Service delivery is often a mix of Veterinarians, Veterinary Paraprofessionals (VPPs), and even Community Animal Health Workers (CAHW). The workforce assessment, planning, and capacity building of all of these categories of personnel help countries achieve the goal of maximizing the performance of veterinary service delivery.

Unlike veterinarians, the position of VPPs is often not defined, with many different categories of VPP existing and with varying levels of training, which very often may not deliver the skills and competencies required. Cognisant of the vital role that VPPs can play in support of robust National Veterinary Services, through its Sixth Strategic Plan (2016-2020), the WOAH committed to better defining the role of veterinary paraprofessionals and non-veterinary specialists, including the requirements of their education and training. Through its Seventh Strategic Plan, WOAH commits to continue implementing the updated PVS Pathway, ensuring member engagement through an enhanced set of options targeting specific areas of interest, including VPP activities through the Veterinary Workforce Development program.

## About the workshop

WOAH organised a Sub-Regional Awareness Raising Workshop on Veterinary Workforce and Veterinary Paraprofessionals in Arusha, Tanzania in November 2022. The workshop's objectives were primarily to raise awareness amongst participants about the WOAH-PVS Pathway, approaches to workforce development, the role of VPPs in Veterinary Services, and the content /use of tools like competency/curriculum guidelines developed for VPPs. The other objective of the workshop was to discuss the elements contributing to an enabling environment for the effective deployment of VPPs.

## The analysis

The pre-workshop survey objective was to obtain an overall picture of the veterinary workforce development situation, enabling environment and country responses focusing on VPPs in animal health and production in the region of Southern Africa. The references to a few recent studies supported by WOAH helped fix the scope of the investigation, essentially incorporating existing learning, to achieve the objective of obtaining a comprehensive picture. A consultative method was adopted involving several experts to develop the questionnaire. The objective and limitations of the workshop also guided the design, length, and administration of the survey instrument. Instead of collecting new quantitative data on numbers of personnel, WOAH used the most recently available workforce data of participant countries from WAHIS.

A total of 24 invited participants contributed to the survey. The majority of countries represented the Southern African Development Community (SADC) region and 4 Eastern African countries, (



Figure 1). The survey was administered electronically between 15 October and 25 October 2022. The analysis avoids referring to any specific member countries except for reference to studies conducted earlier.



Figure 1 Southern African countries at a glance

## Findings and discussion:

### Workforce structure

The available World Animal Health Information System (WAHIS) data of Members from the Southern Africa sub-region was the basis of the analysis of workforce numbers. The workforce in animal health among the 14 members of the sub-region generally comprises Veterinarians, VPPs, and CAHWs. If we look into the workforce structure in Animal Health, 17% ( $n=5133$ ) of personnel are veterinarians, 44% ( $n=13325$ ) VPPs, and CAHWs comprise 39% ( $n=11741$ ) (Figure 2). The sheer size of the VPP and CAHW ( $n=25066$ ) (83%) combined workforce indicates the need to focus on better operationalisation of these personnel for enhanced performance of national veterinary services, ensuring service adequacy and regulations protecting public health and animal welfare interests.

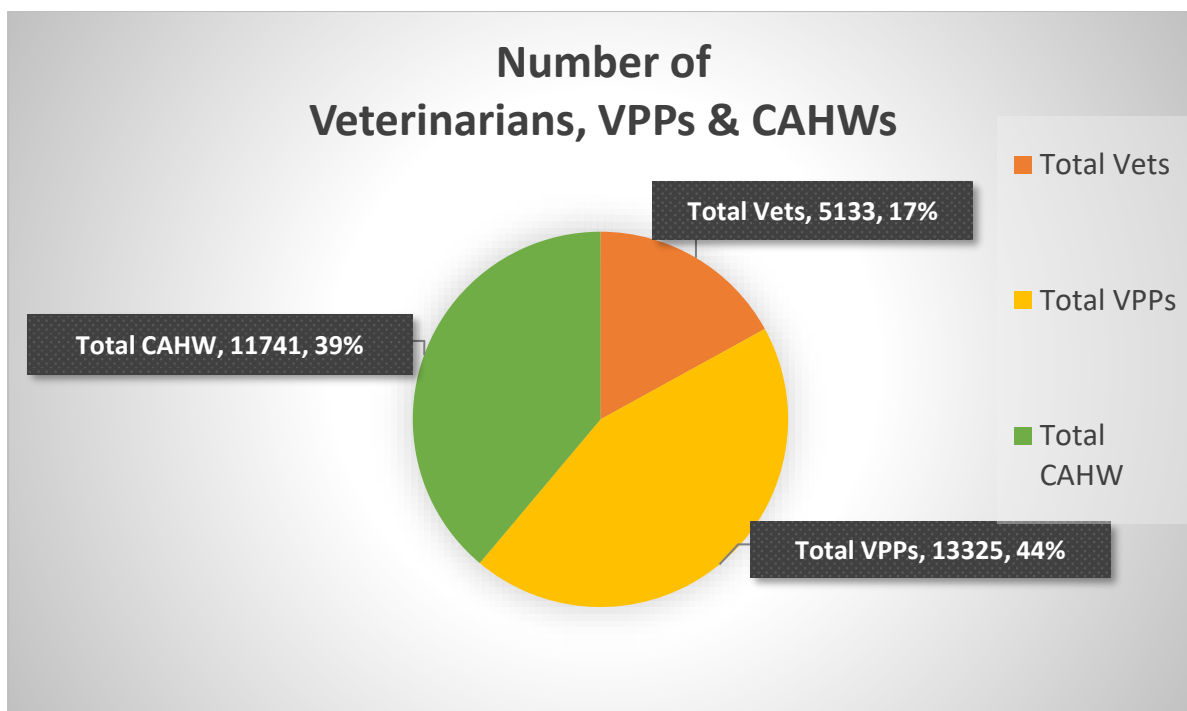


Figure 2 Veterinary workforce structure as per WAHIS for SADC & 4 Eastern African countries

Further, the analysis indicated that 37% ( $n=1879$ ) of veterinarians work as public veterinarians in Animal Health. A very limited number of veterinarians 10% ( $n=546$ ) are involved in public health either within the private or public service (Figure 3 ). Further to the above, a total number of 878 (17%) veterinarians are involved in academia (Figure 3).

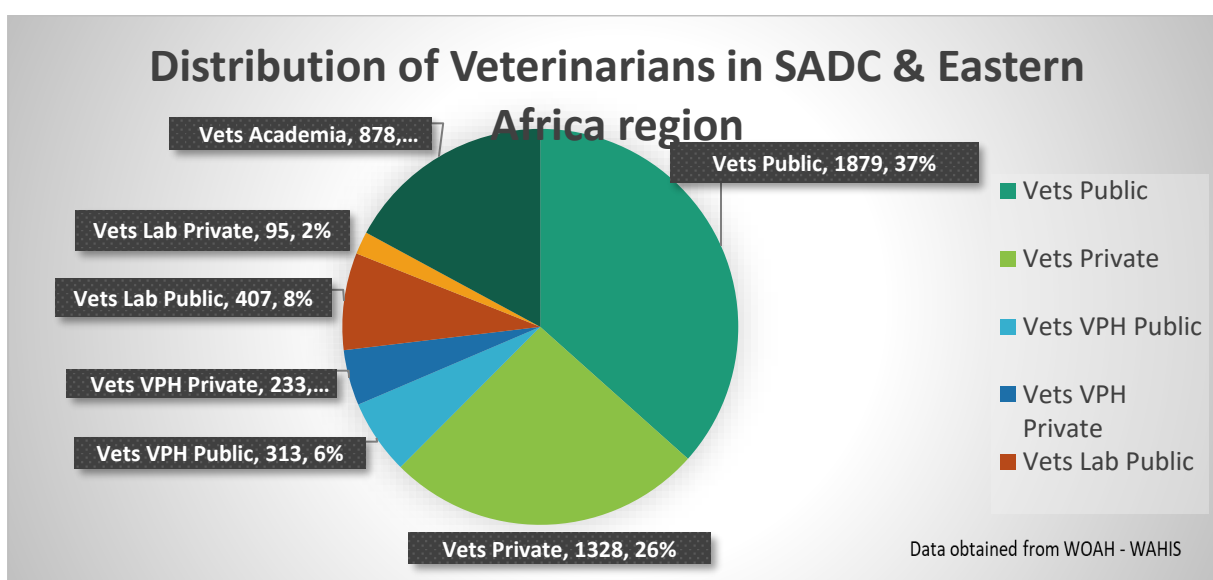


Figure 3 Percentage of Veterinarians involved in the different fields

The distribution of veterinarians between the public and private sectors seems to be almost equal with 51% in public service and 49% working in the private sector (Figure 4).

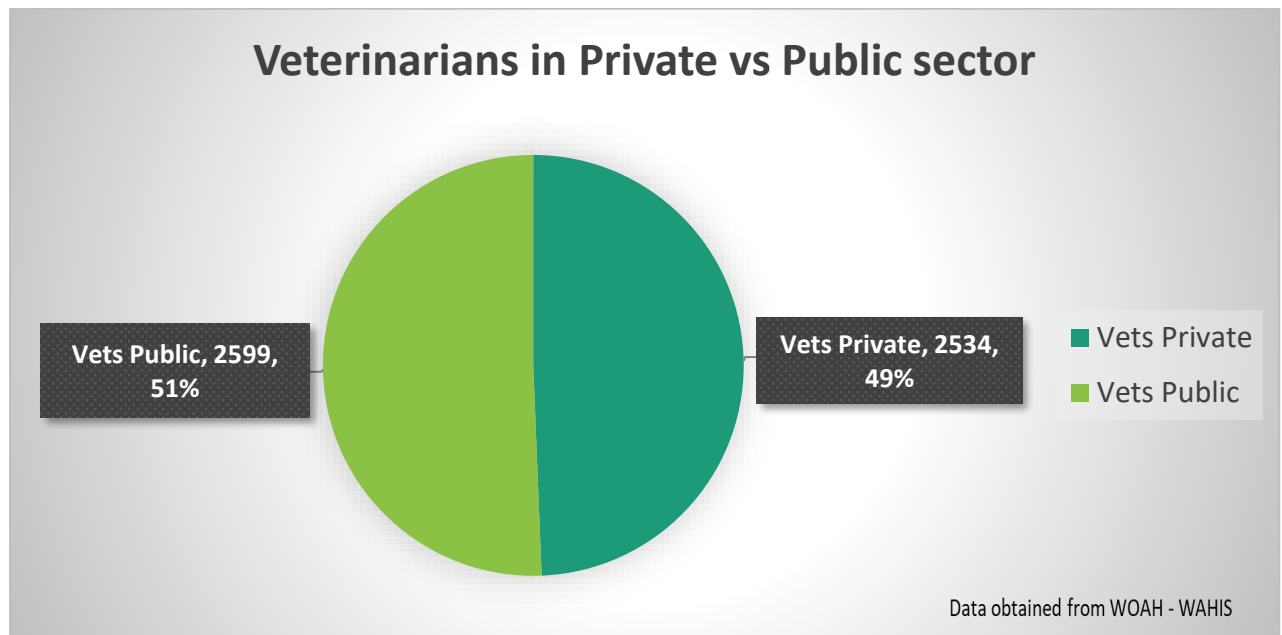


Figure 4 Public vs. Private veterinarian in animal health activities

#### Work areas of veterinarians and VPPs

The distribution of veterinarians within the SADC and Eastern Africa regions according to WOA - WAHIS 2018 data are as follows:

Most of the veterinarians ( $n=3207$ ) are delivering services within the Animal Health sector with a substantial number of veterinarians ( $n=878$ ) involved in the education and training of veterinary professionals within academia. The balance of veterinarians are involved in veterinary laboratories ( $n=502$ ), and veterinary public health ( $n=546$ ) (Figure 5).

In the public service context, veterinarians' contribution is of paramount importance. They play a crucial role in preventive care, public health, and food safety regulation besides planned delivery of clinical care, essentially leading teams comprising VPPs and other veterinary staff. The VPPs play a complementary role as assistants, technicians, and veterinary nurses, amongst other categories, often with specific skills, and also provide services in more rural and remote areas.



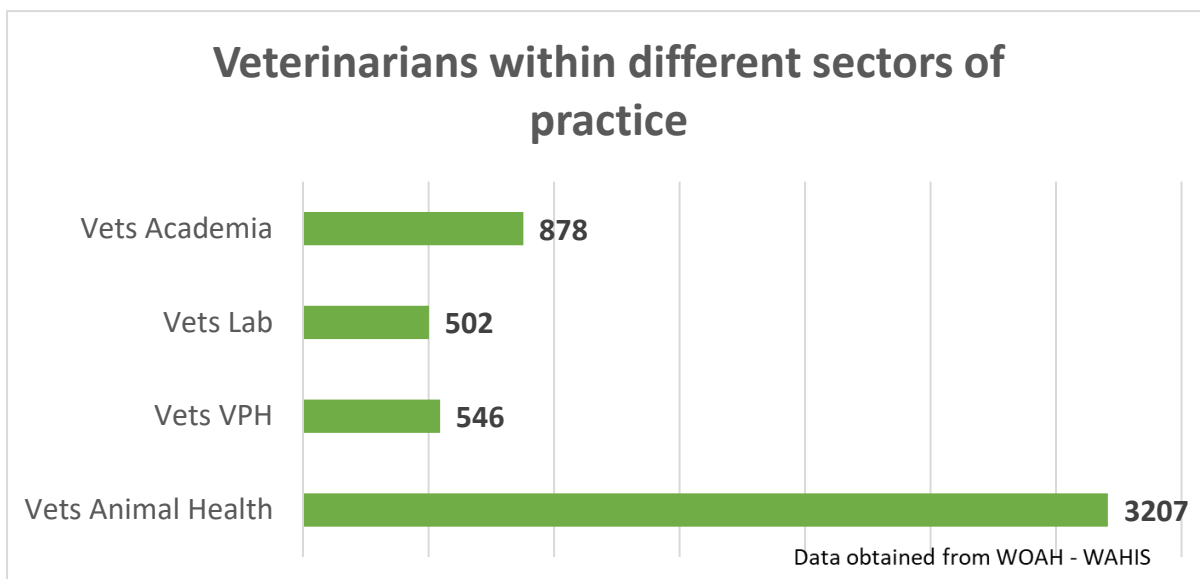


Figure 5 Work area of veterinarians of SADC & Eastern Africa countries as per WOA 2018 Survey

The same survey also indicated that the ratio of VPPs vs Veterinarians within the SADC & Eastern Africa regions is 75%:25% or 3:1 (Figure 6).

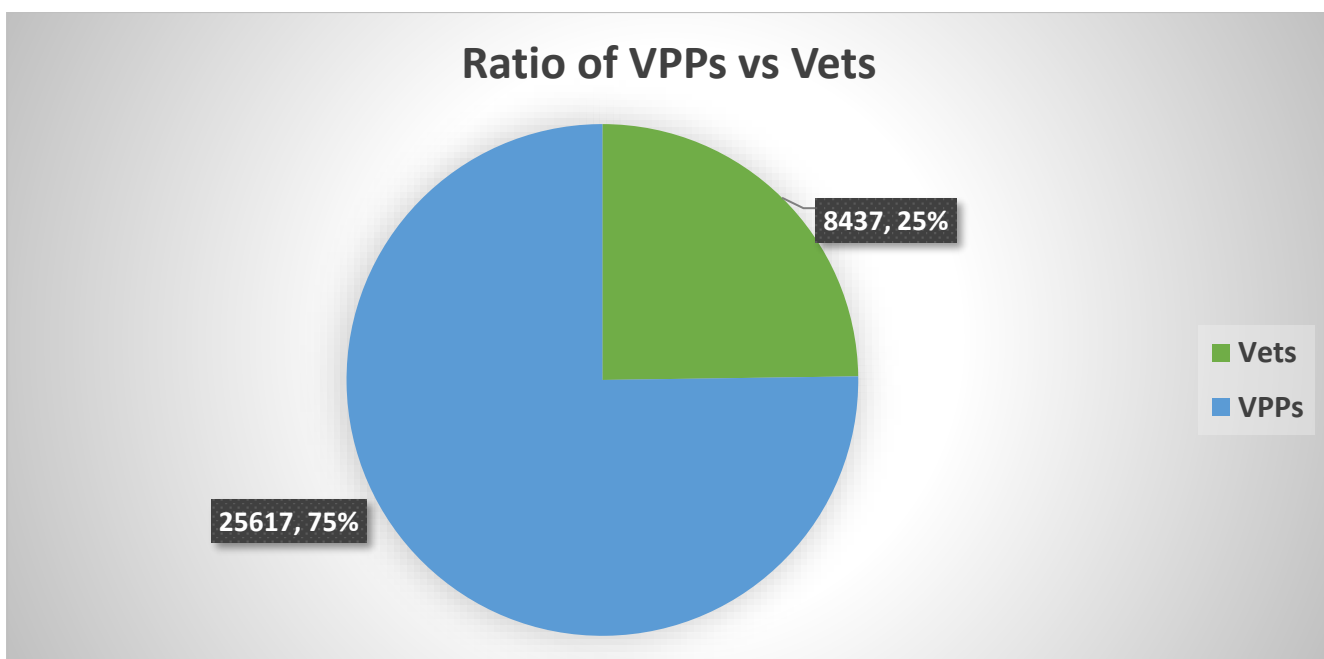


Figure 6 Ratio between VPPs and Veterinarians within the SADC & Eastern Africa regions as per the WOA 2018 survey.

## Definition of a VPP

Veterinary paraprofessional (VPP) according to the WOAH Terrestrial Animal Health Code (TAHC) means “a person who, for the Purposes of the Terrestrial Code, is authorised by the veterinary statutory body to carry out certain designated tasks (dependant upon the category of veterinary paraprofessionals) 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 according to need.”

*Figure 7 Definition of VPPs as per Terrestrial Animal Health Code, 2019*

### **VPP – Veterinary paraprofessional**

A person who is not a veterinarian but has received at least one year of formal training in animal health/production from a recognised /accredited institution resulting in a certificate, diploma or degree, and who is currently active. In practice this may include Animal health technicians, Animal health assistants, Meat inspectors, Laboratory technicians, Veterinary nurses and other similar job titles.

*Figure 8 Unofficial definition of VPP for situations where there is an absence of VSB*

The official definition (Figure 7) indicates that a VPP receives training only for the designated tasks assigned to them by the country VSB. The work area assigned to VPPs can vary widely from country to country. As referred to the unofficial definition (Figure 8), a VPP typically receives training for at least one year. The duration of training and skill level are the primary differentiating factors between VPPs and CAHWs, besides CAHWs being essentially from the immediate community.

## Pre-workshop workforce survey results

The pre-workshop workforce survey recorded various functions the VPPs perform (Figure 9), with a mix of animal health, laboratory, and public health functions. VPPs are also active in animal husbandry and breeding-related roles. Functions performed by VPPs are also very diverse with meat inspection services being the most selected (22/24) 92% followed by extension activities, clinical services, and animal disease control as well as animal husbandry between 75 – 79%. 20/24 participants indicated VPP functions include animal disease control activities while 19/24 indicated animal disease control and clinical services as part of the VPP functions. If compared to the Asia 2021 survey a very similar pattern can be seen with regard to VPP functions (Figure 10). The analysis suggests that governments need to assess the gap in service provision and describe the appropriate role definition of VPPs.

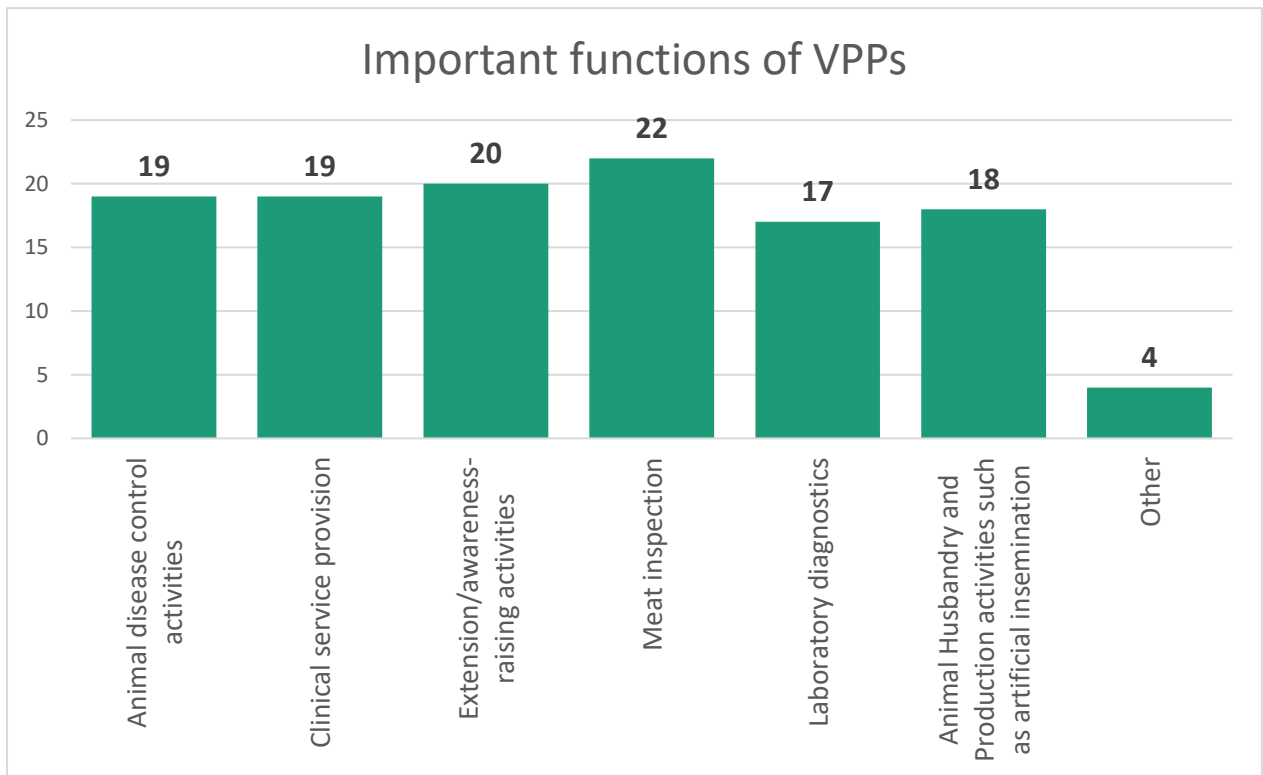


Figure 9 Most important functions performed by VPPs

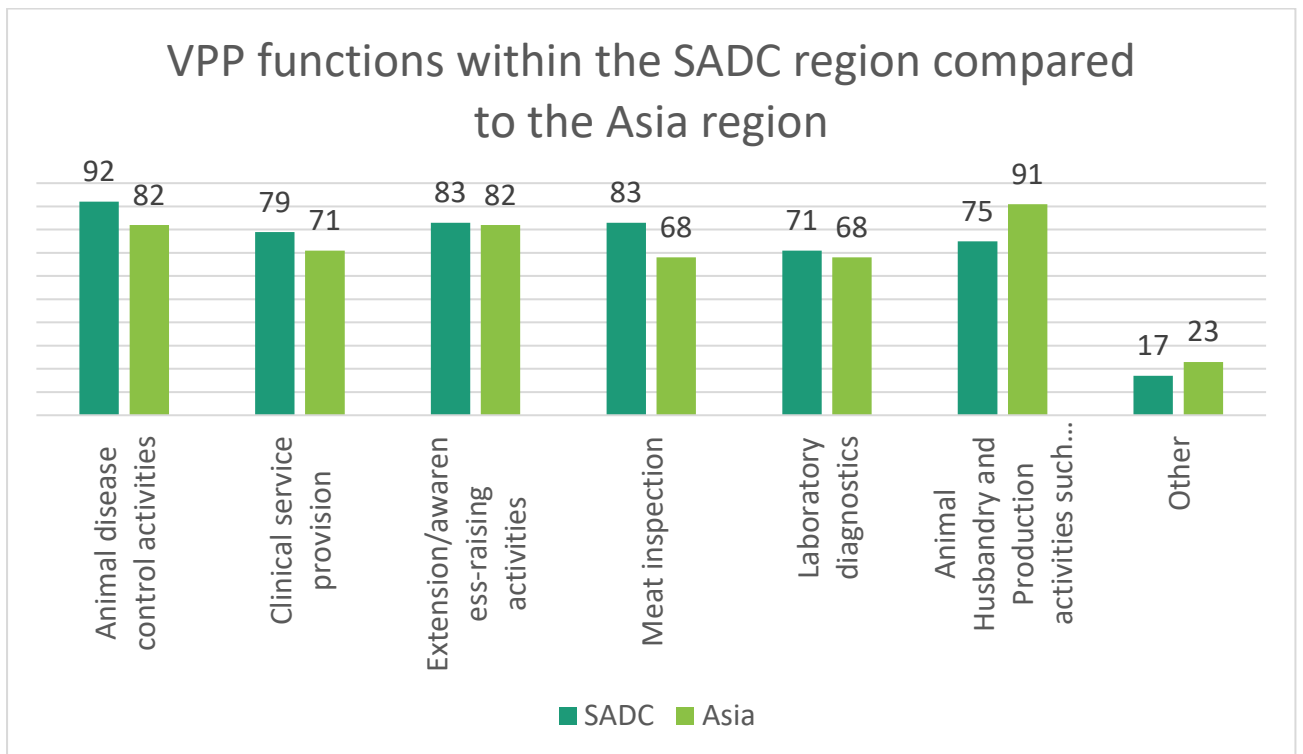


Figure 10 A comparison between the SADC and Asia regions of the most important functions performed by VPPs

## Veterinary workforce and Community Animal Health Workers (CAHWs)

The unofficial definition of a CAHW as used by WOAHA is “A Community Animal Health Worker (CAHW) is a person selected\* by their own community and provided with short, initial or recurring vocational training to perform very basic animal health and animal husbandry-related tasks, who is accountable to a VPP and/or veterinarian, and who is currently active in their community. The CAHW can also play an important role in a range of sanitary tasks such as disease reporting.”

According to the pre-workshop survey, CAHWs participate extensively in veterinary service provision within the SADC & Eastern Africa countries. Two-thirds (67%) of the members indicated the participation of CAHWs while 33% indicated either no or not sure regarding the involvement of CAHWs in their veterinary services (Figure 11).

The finding is indicative of the need to appreciate the role played by CAHWs vis à vis the country context and resource availability. There is scope for exploring ways to help CAHWs graduate to VPPs with access to appropriate training.

Regulation of CAHWs however seems to be almost non-existing and they are employed and or utilized as per country needs delivering a much-needed in some instances emergency service or function without the need for regulation and or registration. Although regulation seems very low it seems they mostly work under the supervision of a VPP and report to the local veterinary services.

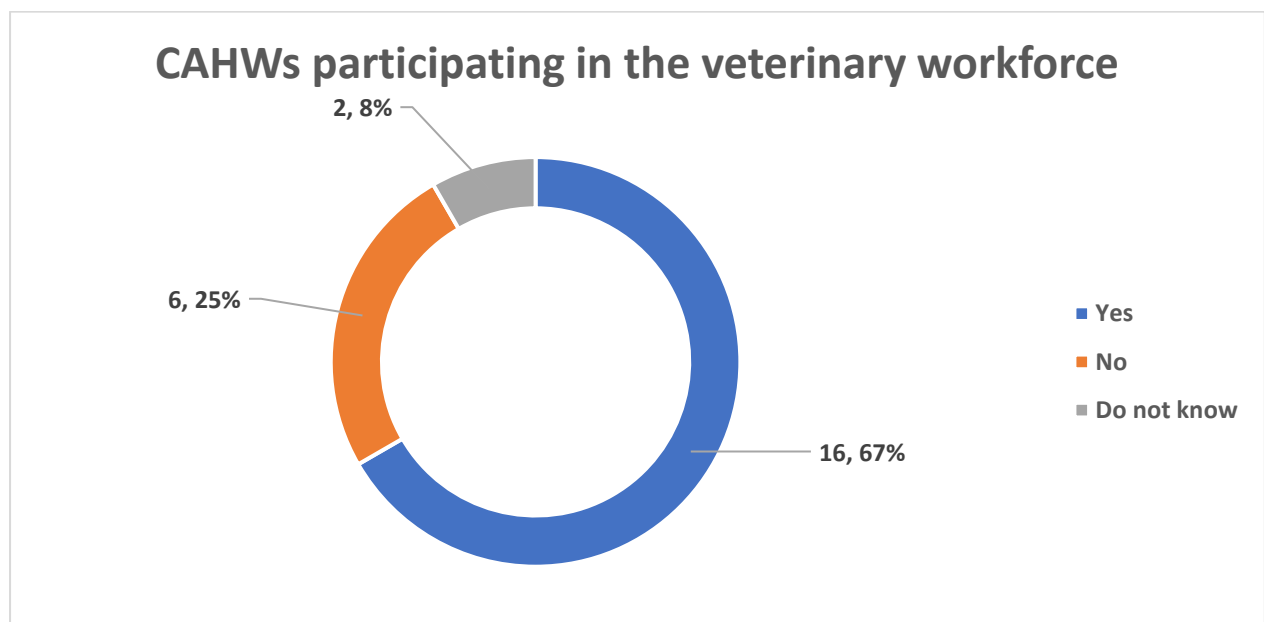


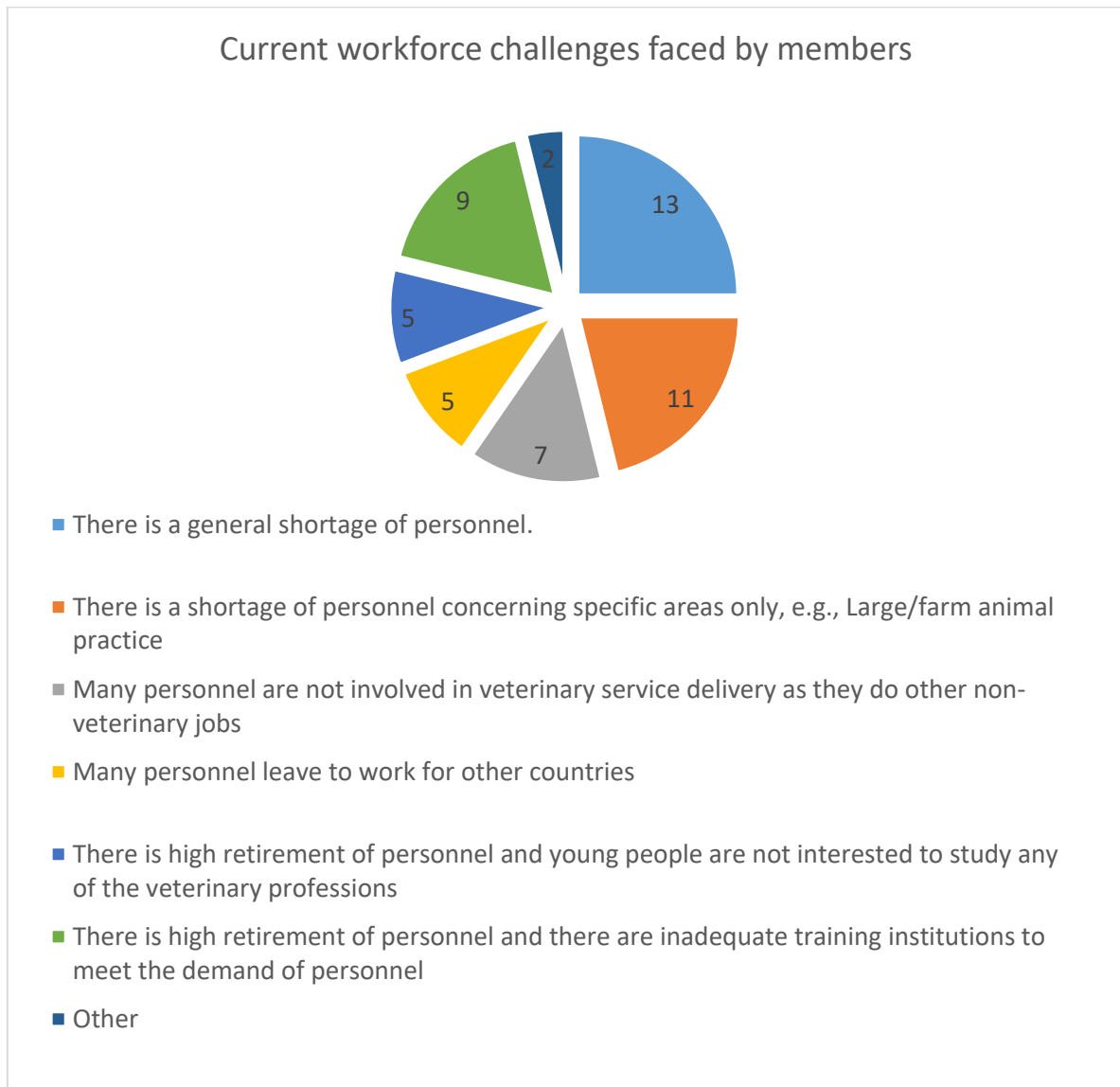
Figure 3 Number of CAHWs participating in the veterinary workforce within the SADC & Eastern Africa regions

## The workforce situation

The survey wanted to record participants' views concerning the national workforce situation. Notably, 54% (13/24) of participants indicated a definite shortage of personnel within specific areas. A high retirement rate indicated by 9/24 participants with fewer new recruitments to replace the retired is a

matter of national concern. Another interesting observation is that, for up to 21% (5/24) of participants, young people are not opting for veterinary careers as a career choice.

The analysis indicated that situations vary from country to country, and governments must regularly keep reviewing factors that can influence a country's workforce availability.



*Figure 12 The workforce situation challenges within the SADC and Eastern Africa region*

An ideal workforce is balanced (representative of all skill categories) and has a gender mix. The pre-workshop survey aimed to describe women's participation in the workforce and access to decision-making roles. The survey explored the status of women in the veterinary workforce. Some positive increase in women's participation can be seen as indicated by 19/24 (80%) of participants (Figure 13).

According to the participants, various corrective matters have been put in place to address the imbalance of women in the workforce including affirmative action policies, the promotion of women to higher ranks within veterinary services as well the inclusion of women in workshops and veterinary studies.

However, the involvement of women in the workforce is likely to differ significantly amongst the countries. Each country needs to explore ways to address various factors specific to its country to ensure the appropriate participation of women in the workforce.

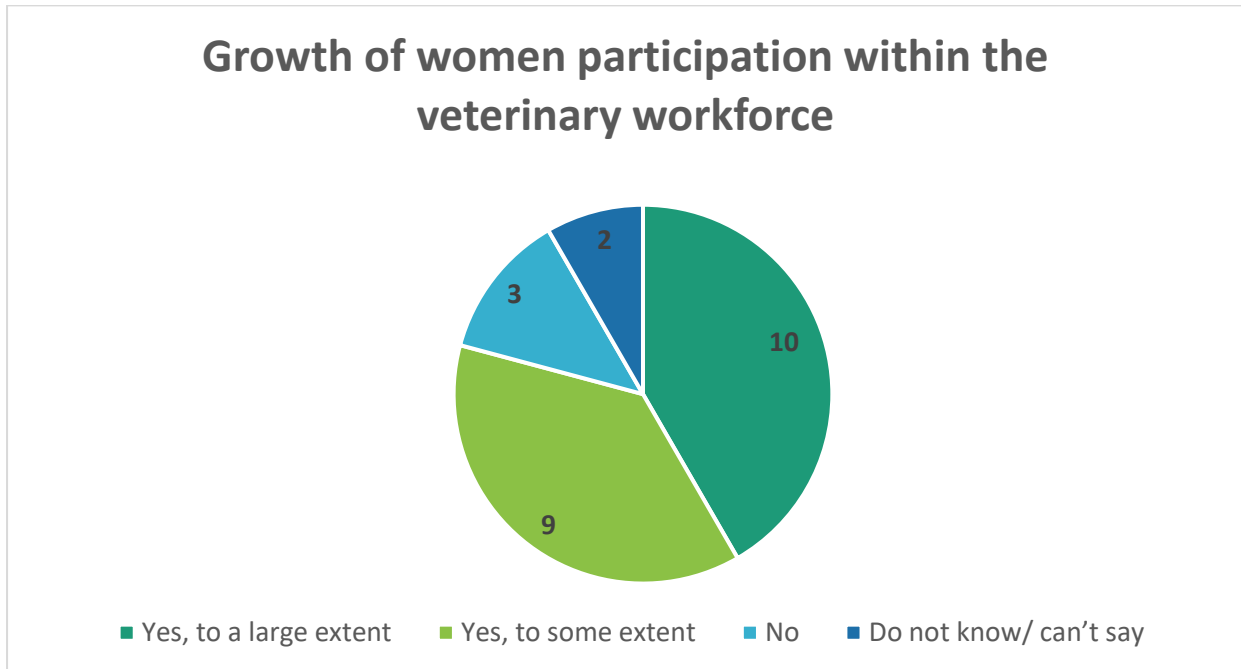


Figure 13 Growth of women participation within the veterinary workforce

#### The enabling environment for VPPs

The pre-workshop survey explored if the legal enabling environment exists for VPPs to expand and sustain their participation in veterinary services. Almost 88% of participants indicated recognition of VPPs within the public sector while 79% indicated recognition within the private sector. Supervision seems to be also important as indicated by 18/24 (75%) of participants with 79% of participants indicating registration with the statutory body as a pre-requisite (Figure 14).

The findings indicated that member countries should focus on a more systematic analysis of their respective countries' situations to understand better how to create the needed environment for the growth of VPP services when permitted. Clear role definitions, appropriate supervision framework, formal recognition, and regulation of VPPs through registration under a statutory body can be critical action areas depending on the country's context.

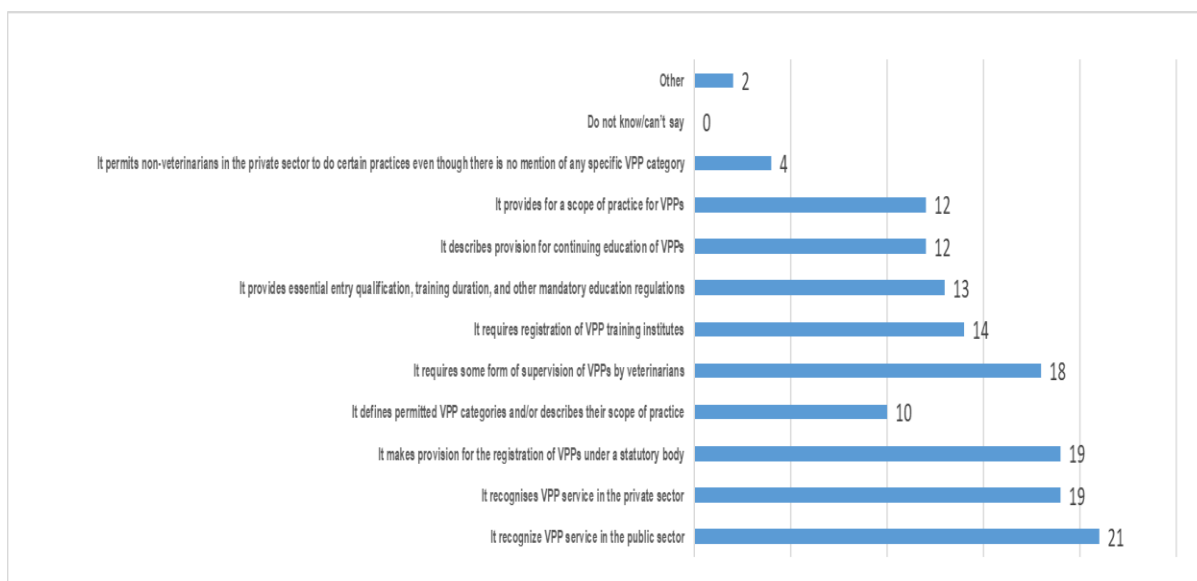


Figure 14 Do we have an enabling environment of VPPs within the veterinary workforce?

Table 1: Do we have an enabling environment of VPPs within the veterinary workforce?

Other	2
Do not know/ can't say	0
It permits non-veterinarians in the private sector to do certain practices even though there is no mention of any specific VPP category	4
It provides for a scope of practice for VPPs	12
It describes provision for continuing education of VPPs	12
It provides essential entry qualification, training duration, and other mandatory education regulations	13
It requires registration of VPP training institutes	14
It requires some form of supervision of VPPs by veterinarians	18
It defines permitted VPP categories and/or describes their scope of practice	10
It makes provision for the registration of VPPs under a statutory body	19
It recognizes VPP service in the private sector	19
It recognizes VPP service in the public sector	21

As mentioned above, the least managed enabling environment factor relates to VPP training. The finding related to institutions recognizing VPP training within the region indicates that various stakeholders are involved. Agencies linked to the skill / vocational sector are also engaged in VPP training. A significant finding is that the role of VSB in VPP training is still limited.

Although 10/24 participants indicated the VSB to be the organisation accrediting formal qualifications, it is obvious that a wide range of other stakeholders are also involved with the accreditation process. (Figure 15)

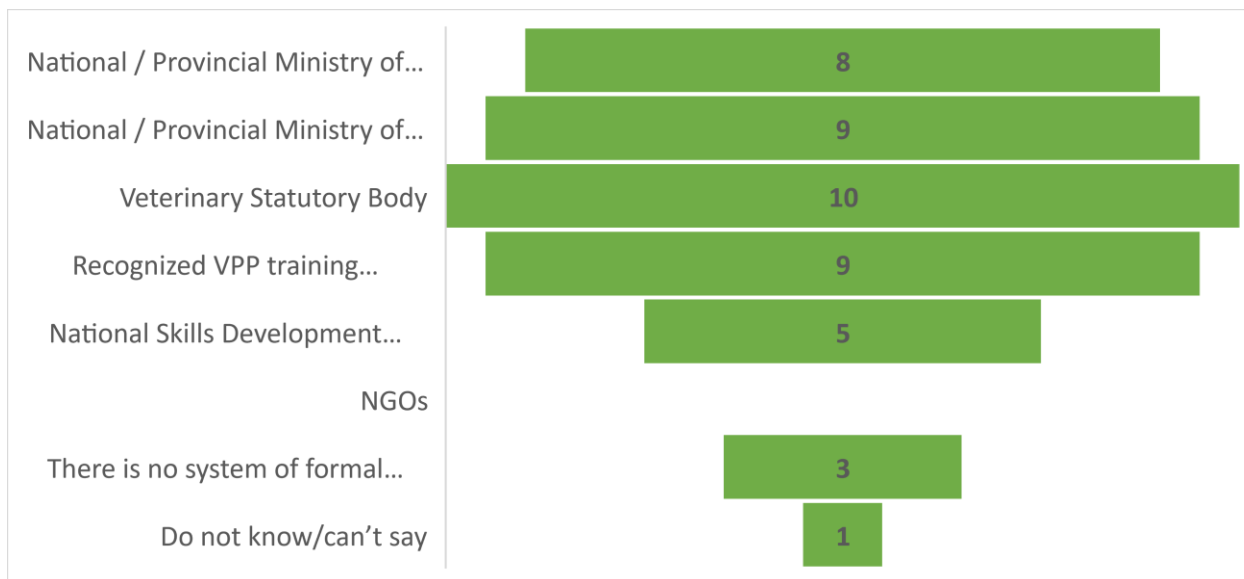
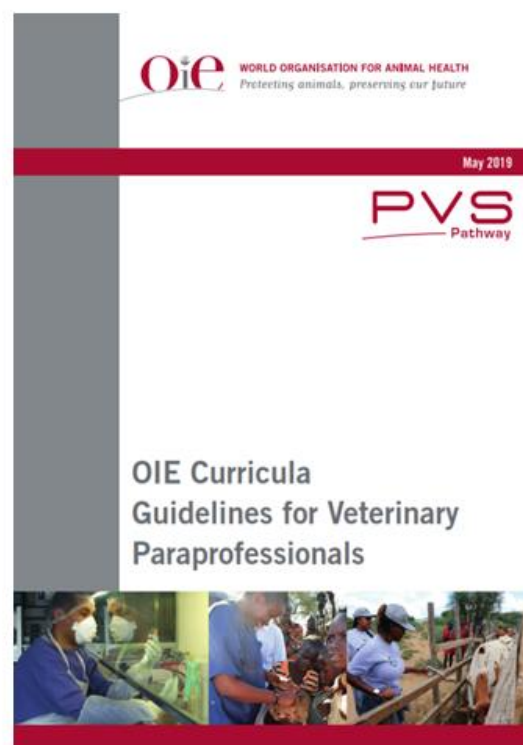
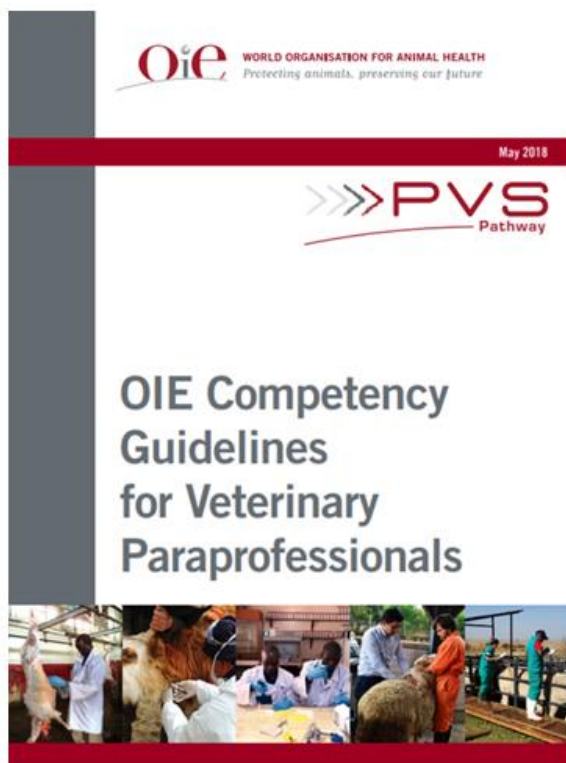


Figure 15 Stakeholders involved in recognition of VPP training

Appropriate training and transparent certification at par with the country's education or skilling framework are important elements for improving service delivery, enhanced recognition at the service place, career growth, and mobility of VPPs. It is also important to attract talented youth to contribute as VPPs. Certified training also enhances the organised development of the job market. Recognising the importance of quality training of VPPs, WOAHP published both competency and curriculum guidelines for VPPs in 2018 and 2019, respectively.



Have the WOAHP Competency and /or Curriculum Guidelines for VPPs been reviewed or used by the Veterinary Services or stakeholders responsible for VPP training?



Notable only 9/24 (38%) of participants indicated the use of the 2 VPP guidelines to some extent while only 13% (3/24) participants indicated a more in-depth use thereof (Figure 16). In essence, only 50% of participants indicated any previous use of such.

Many participating countries have responded to the need to ensure a better training system for VPPs as an integral step towards developing the VPP workforce and improving veterinary service delivery to smallholders thereof. It is important to note that the WOAAH recognizes the diversity of the VPP situation in various member countries, and the developed documents are, therefore, only guidelines.

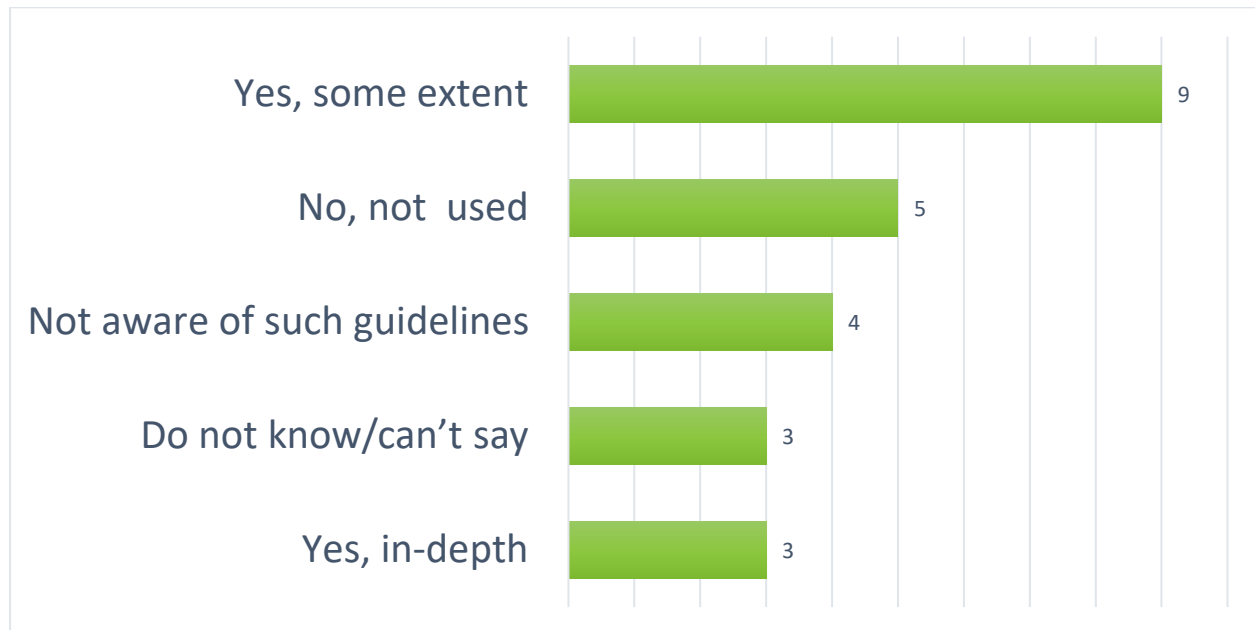


Figure 16 Countries' utilization of the WOAAH competency and curriculum guidelines

Participants indicated the following as being some of the challenges currently encountered by VPPs in the work environment:

- The lack of CPD in the VPP sector is a big deficiency that will need to be addressed urgently
- Curricula guidelines for VPPs should be standard across the nations.
- The legislation should allow many categories with a clear scope of work at different levels of VPP qualifications.
- The minimum qualification to practice as a VPP, currently, there is no distinction between three years diploma holder and a person with a 6-month training certificate.
- In some countries, VPPs are not allowed to form their own association to represent their view.
- The training institutions including the university produce a number of VPPs to fill a lot of vacancies in the civil service, but this is not adequately fulfilled and VPPs end up either unemployed or into some sort of self-employment which can be demoralizing.

### The country responses

The survey finding indicated that 50% of countries regularly review their human resource need within the veterinary workforce, such as the number of veterinarians or VPPs needed to prepare against any shortage (Figure 17). It is important to note that besides workforce numbers, the distribution, the composition of the workforce, etc. are also essential aspects. The WOAAH encourages countries to regularly review their human resource needs and intends to provide access to necessary tools to review requirements more systematically.

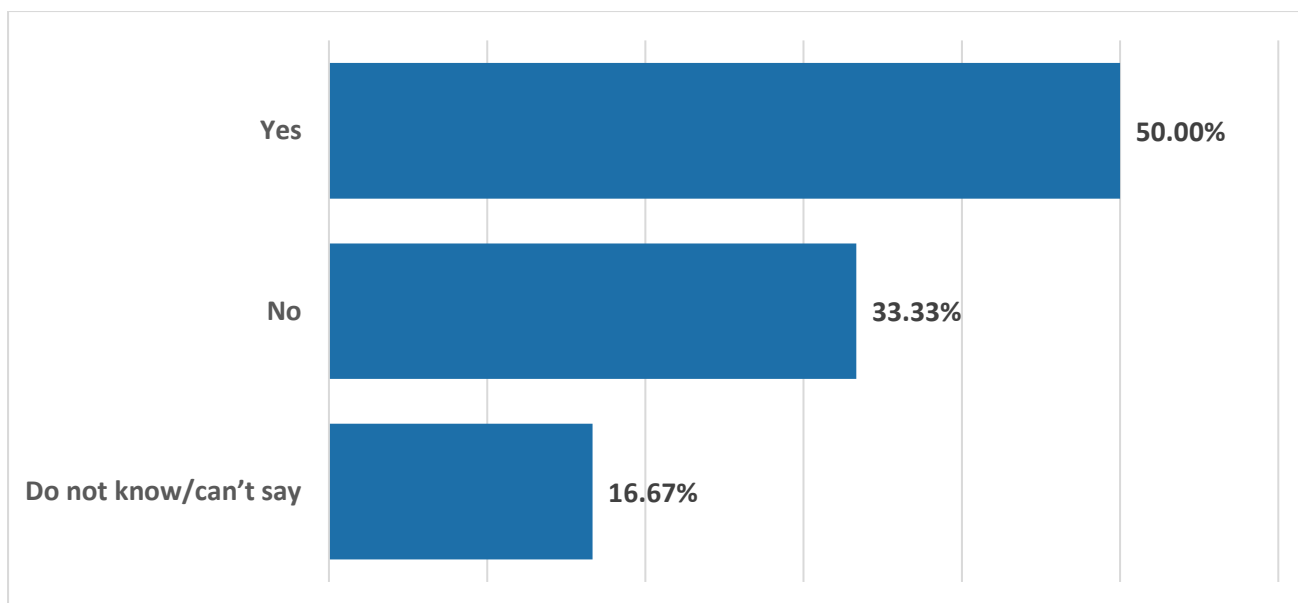


Figure 17 Countries reviewing human resources

As a response strategy to address a possible shortage of personnel in public service, the survey explored if governments are opting for contracting private veterinarians and VPPs to carry out work that is usually the responsibility of government veterinarians and VPPs. 8/24 respondents (34%) are considering this option to meet the workforce needs in the public sector while 15/24 participants indicated no need for such (Figure 18).

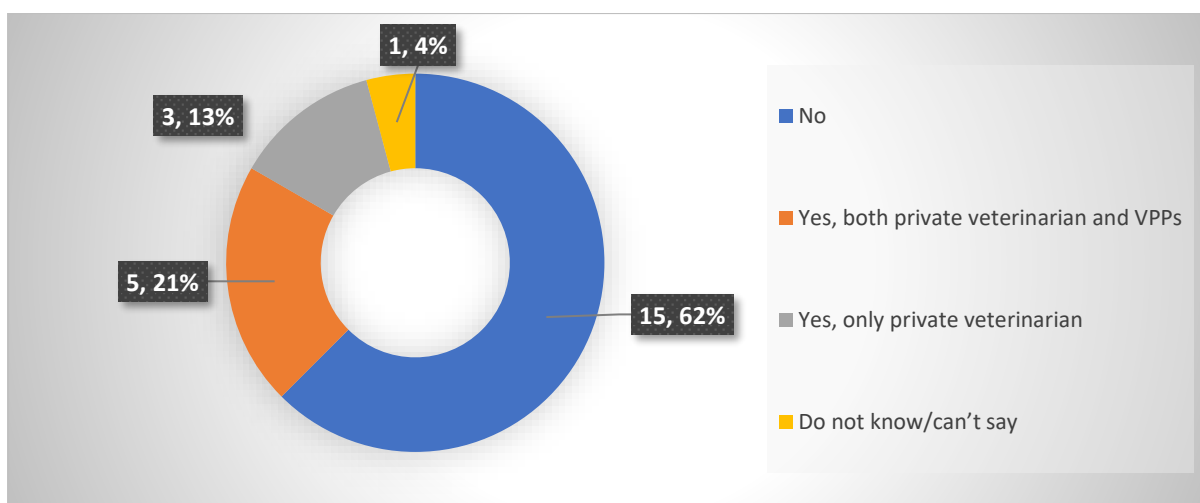


Figure 18 Countries opting to contract private veterinarians and VPPs

A way to ensure availability and access to services to smallholders in remote areas can be the increase of sustainable self-employment amongst service providers. The promotion of self-employment assumes significant importance in many developing nations where public services face severe resource constraints. It was beyond the scope of the survey to understand the trend of observed self-employment amongst VPPs. However, various revenue models of private services are fast emerging, including Public-Private partnerships (OIE PPP Handbook<sup>1</sup>. 2019). Member countries can explore if

<sup>1</sup> <https://www.oie.int/app/uploads/2021/03/oie-ppp-handbook-20190419-enint-bd.pdf>

self-employment of VPPs is a solution for workforce needs at the last mile of service delivery, and what the pros and cons are of promoting self-employment amongst VPPs within the respective country context. Countries also need to explore necessary measures to make private services accountable to national veterinary services, e.g., mandatory reporting of diseases and regulations to safeguard against public health, food safety, and animal welfare-related threats.

The survey showed that Members are using different strategies to empower women in veterinary services. 46% of respondents informed that their government makes formal efforts to promote women in the veterinary workforce towards decision-making roles (Figure 19). The 2015 gender study mentioned earlier has indicated that women can equally contribute to the veterinary profession. Countries need to give value to a mixed workforce, help women achieve work-life balance, ensure equal opportunity, and create an environment conducive to working in remote areas.

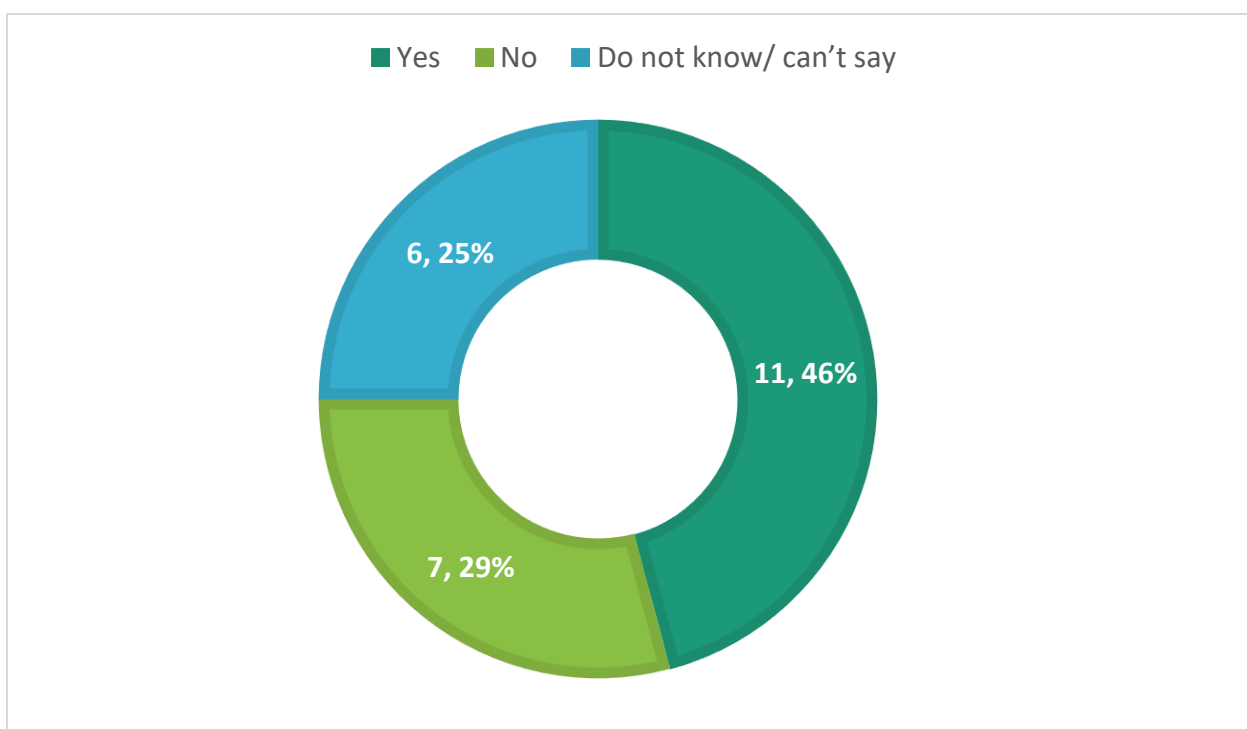


Figure 19 Formal effort by Veterinary authority to promote women toward decision-making roles

## Conclusions

The findings from the pre-workshop survey, together with data from WAHIS and from previous regional surveys, show that VPPs play an important role in the veterinary services in the Southern and Eastern African regions, both in terms of their proportion of the workforce, and in terms of their tasks and duties. The majority of VPPs work in animal-health-related functions.

Most countries see a growth in women's participation in veterinary studies and in the veterinary workforce, but do not necessarily have strategies to support women's career pathways.

Legislative frameworks that recognise VPPs vary between countries, and there is potential for further development and refinement of legislative and regulatory terms and scope of work for VPPs, including with regulation of the professions through VSBs.

Awareness of the WOAAH Competency and Curricula Guidelines for VPPs is already quite high and can be developed through further efforts related to VPP education.

Materials related to the WOAAH Virtual Regional Awareness Raising Workshop on Veterinary Workforce and VPPs are available here:

<https://rr-asia.oie.int/en/events/oie-virtual-regional-awareness-raising-workshop-on-veterinary-workforce-and-vpps/>

## References

Technical item for WOAAH Tunisia regional commission, 2019 [technical20item201-veterinary20paraprofessionals20their20governance20and20role20in20improving20animal20health20and20welfare20in20africa-final.pdf \(woah.org\)](#)

PCTAD internal report – feasibility study on Eastern and Southern Africa, 2021 (see folder WAHIS data from 2019 on numbers of vets, VPPs and CAHWs)

Technical item 1: veterinary paraprofessionals: their governance and role in improving animal health and welfare in Africa

Prevention and Control of Transboundary Animal Diseases for the benefit of smallholder farmers (PC-TAD) project

WAHIS Data

Survey template online:

[Pre-meeting survey for OIE Workshop on Veterinary Workforce and VPPs \(Copie\) \(office.com\)](#)

WOAH Asia Pacific Workforce survey report 2021: [workforcesurveyreport\\_09082021-oie-review.pdf \(woah.org\)](#)

WOAH Asia Pacific Workforce survey presentation 2021: [PowerPoint Presentation \(woah.org\)](#)