

Report of the pre-workshop veterinary workforce survey

July 2021

*The OIE Regional Virtual Awareness Raising Workshop on Veterinary Workforce
and Veterinary Paraprofessionals in Asia and the Pacific*

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Abbreviations

CAHWs: Community Animal Health Workers.....	4
NGO: Non-Governmental Organizations	15
OIE: World Organisation for Animal Health	3
OIE-PVS: The OIE Performance of Veterinary Services	3
SA: South Asia	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 (OIE) is developing a Veterinary Workforce Development Programme to produce tools and approaches to support Members in veterinary workforce assessment and development. The OIE encourages member countries 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/Village 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 OIE 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, the OIE 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

The OIE organised a Regional Virtual Awareness Raising Workshop on Veterinary Workforce and Veterinary Paraprofessionals during June-July 2021. The workshop's objective was primarily to raise awareness amongst participants about the OIE-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 use of services of VPPs. The workshop was also an opportunity to inform on various OIE activities to improve the participation and performance of VPPs.

The survey

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 Asia and the Pacific. The references to few recent studies supported by the OIE 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, the survey decided to depend on the most recently available workforce data of participant countries from WAHIS. As referred, the survey's findings included

learning from two recent independent OIE-sponsored surveys to build a storyline and help participants quickly reflect on issues. The pilot testing of the questionnaire with several OIE staff acting as different countries helped to improve the design. The official representative of 22 countries out of 23 invited participating countries (excluding observers) contributed to it. The majority of countries represented South East Asia, followed by South Asia and the Pacific (Figure 1). The survey was administered electronically between 7th June to 24th June. The analysis avoided referring to any specific participating member countries except for reference to studies conducted earlier.

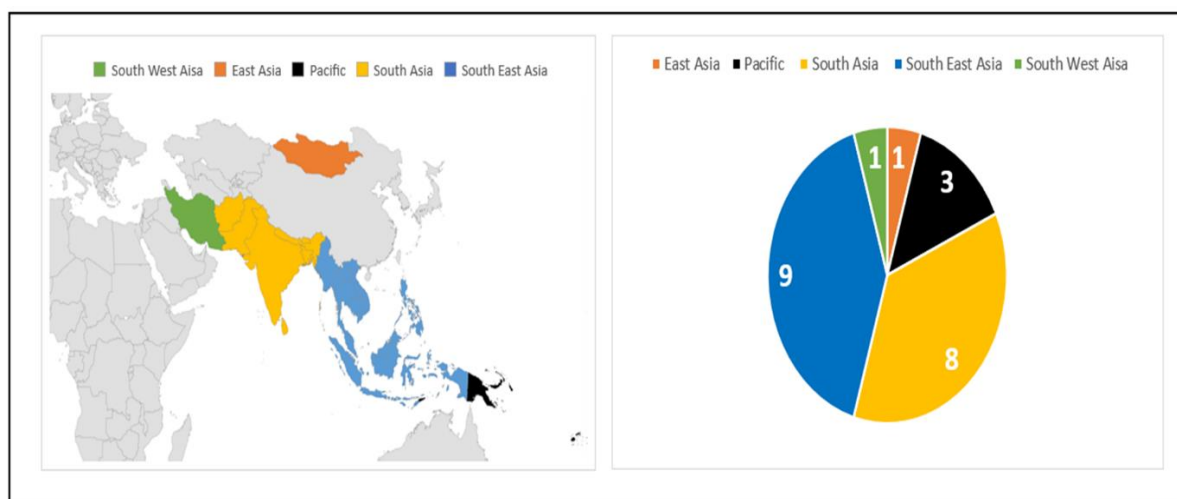


Figure 1 Participating countries at a glance

Findings and discussion:

Workforce structure

The available World Animal Health Information System (WAHIS) data of 17 countries out of 22 participating countries was the basis of the analysis of workforce numbers. The workforce in animal health amongst the select 17 participating countries generally comprises Veterinarians, VPPs, and CAHWs. If we look into the workforce structure in Animal Health, 32% of personnel are veterinarians, and VPP and CAHWs comprise 51 and 17%, respectively (Figure 2). The ratio of VPP Vs. Veterinarian is 8:5 (Figure 3). The sheer size of the VPP and CAHW combined workforce indicates the need to focus on better use of this resource for enhanced performance of national veterinary services, ensuring service adequacy and regulations protecting public health and animal welfare interests.

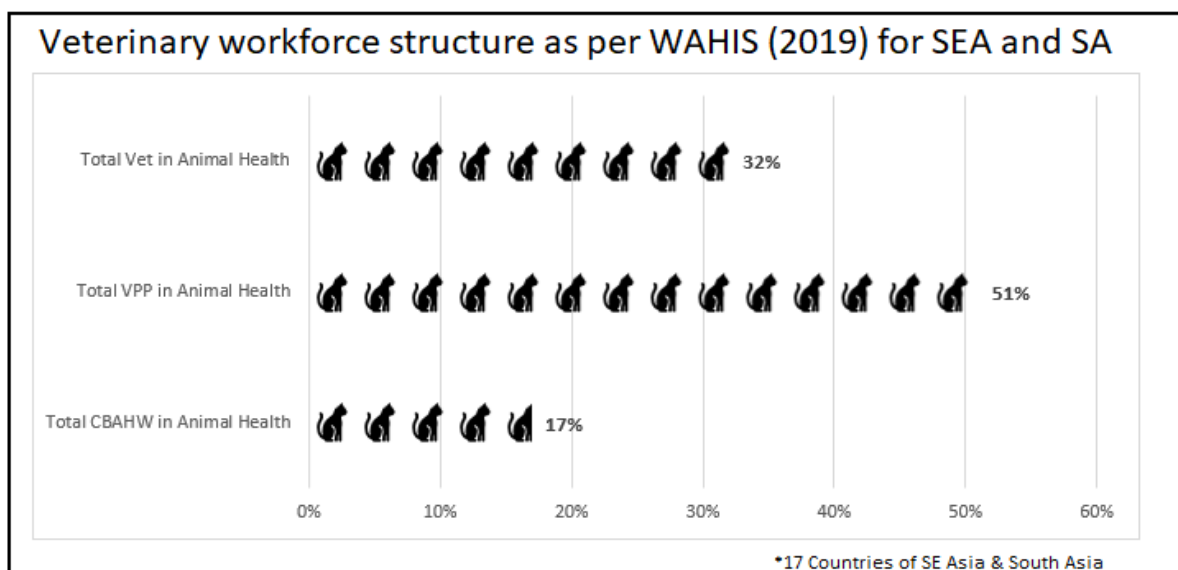


Figure 2 Veterinary workforce structure as per WAHIS for SEA and SA

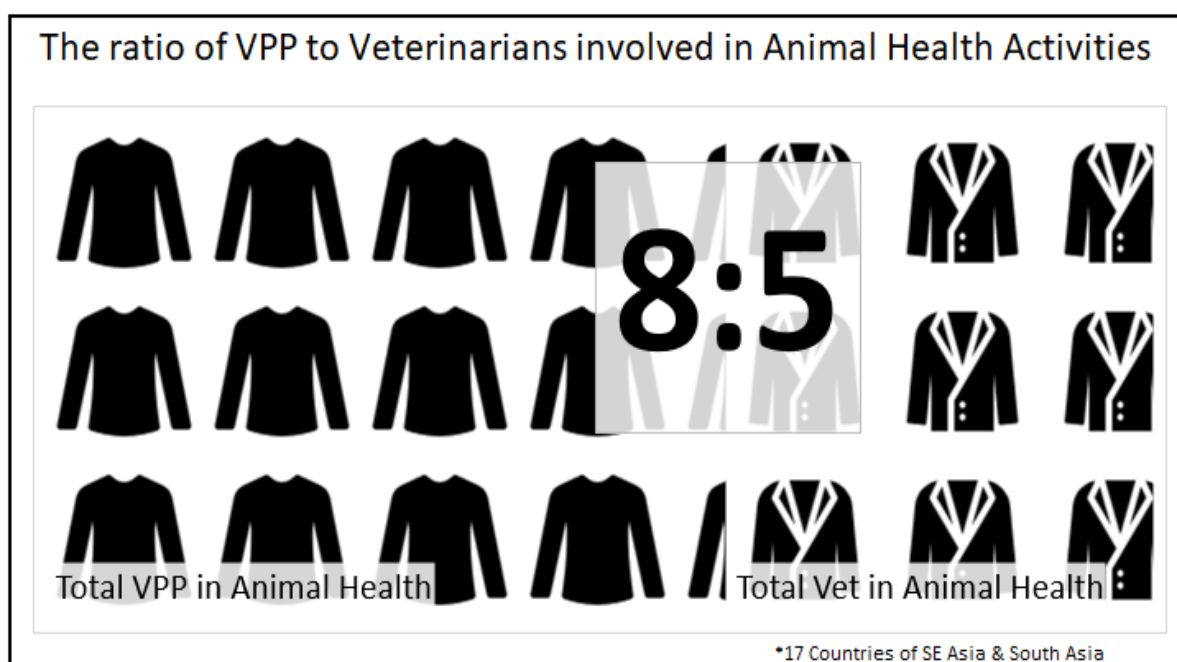


Figure 3 The ratio of VPP to Veterinarian involved in Animal Health Activities

Further, the analysis indicated that the majority, 64% of veterinarians, work as public veterinarians in Animal Health. Very limited number of veterinarians are involved in public health (Refer Figure 4). Again, only 21% of the veterinarian with animal health functions are working with the private sector (Refer Figure 5)

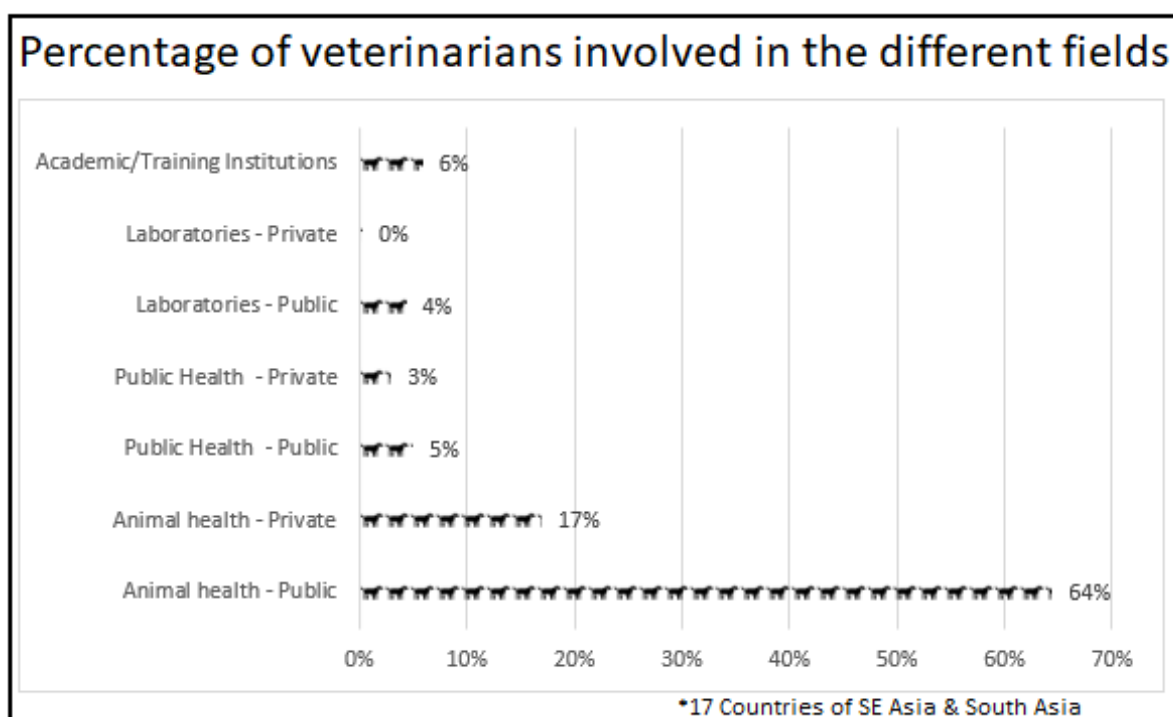


Figure 4 Percentage of Veterinarians involved in the different fields

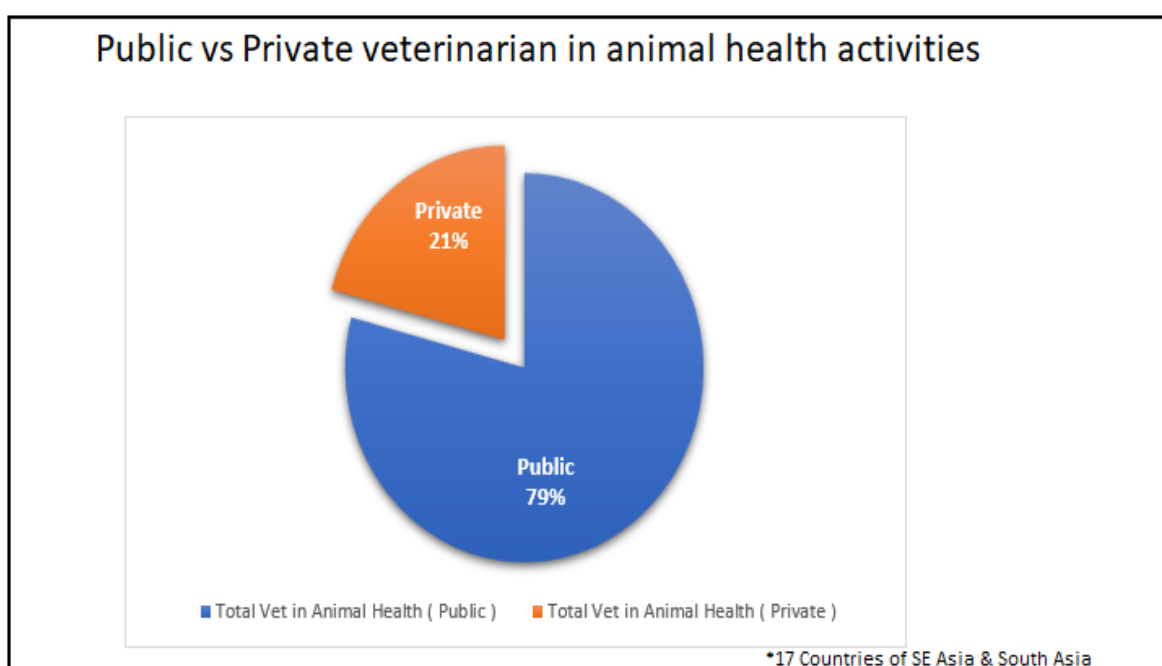


Figure 5 Public vs. Private veterinarian in animal health activities

Work areas of veterinarians and VPPs

The analysis of the OIE 2018 survey of Asia and Pacific indicated that the work area of veterinarians is mostly companion animals (9/16) and government administrative work (4/16) (Figure 6). 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 of VPPs and other veterinary staff. The VPPs play a

complementary role as assistants, technicians, veterinary nurses, amongst other categories, often with specific skills, and also provide services in more rural and remote areas.

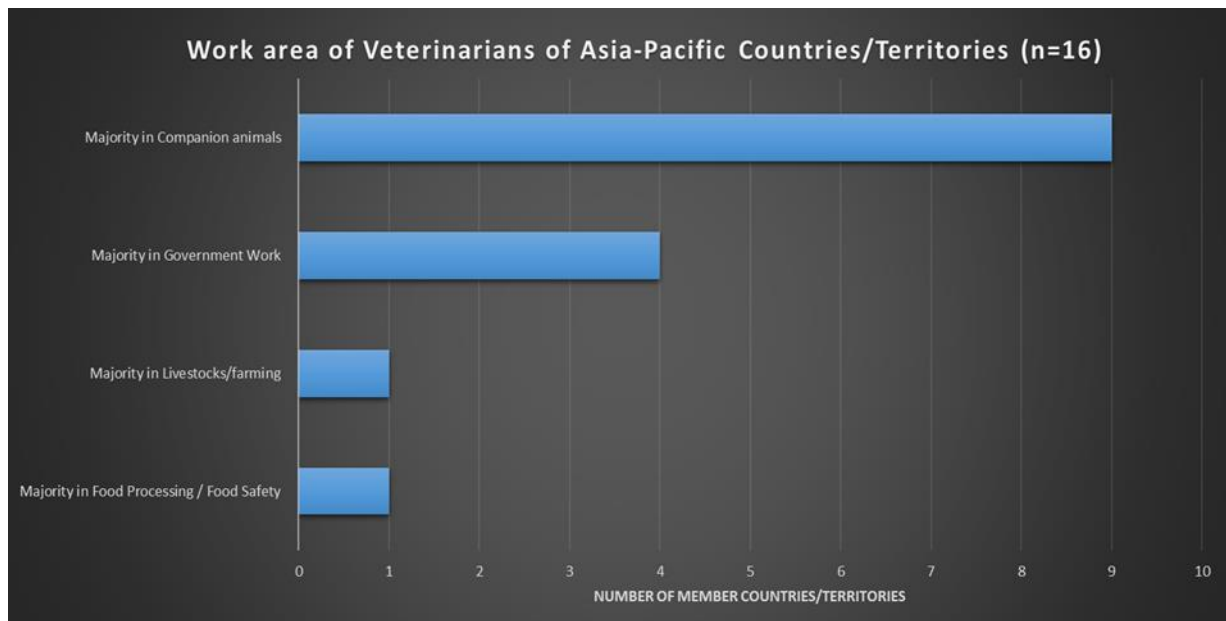


Figure 6 Work area of veterinarians of Asia-Pacific countries / Territories as per OIE 2018 Survey

The same survey also indicated that VPPs are mainly categorised based on their functions, such as Animal Health Workers, Meat / Food inspectors, Veterinary Nurse, Laboratory technicians, Veterinary Field Assistants, etc. Figure 7 shows the categories.

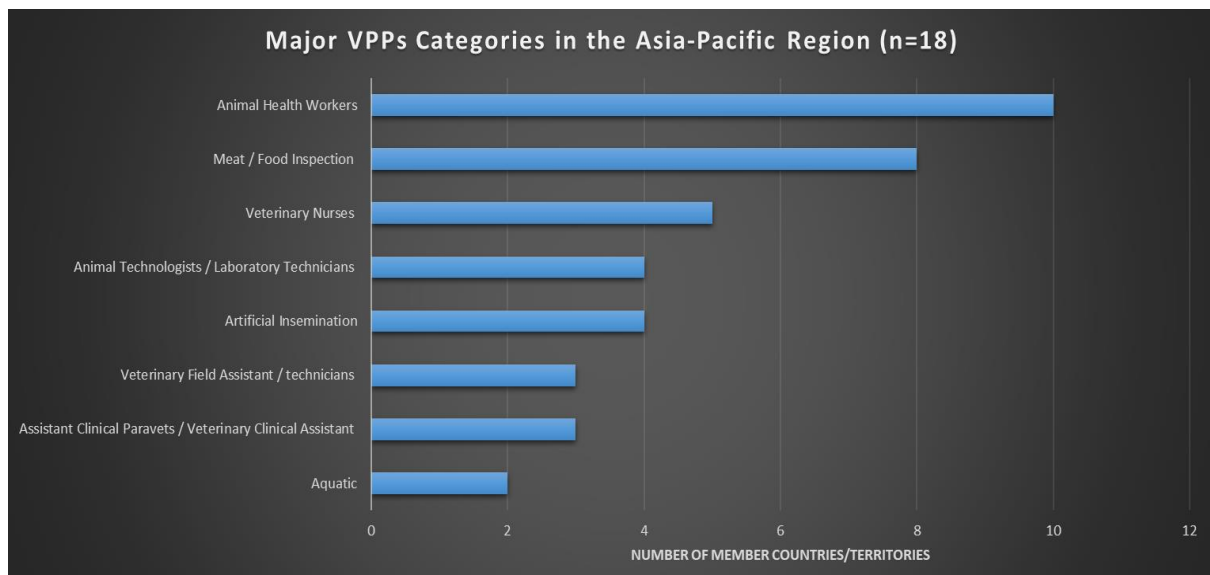


Figure 7 Major VPP categories in the Asia-Pacific Region as per OIE 2018 Survey

Veterinary para-professional (VPP) according to OIE Terrestrial Animal Health Code (TAHC) means a person who, for the purposes of the Terrestrial Code, is authorized 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 according to need.

Figure 8 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 9 Unofficial definition of VPP for situations where there is an absence of VSB

The official definition (Figure 8) 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 in the unofficial definition (Figure 9), a VPP typically receives training for at least one year. The duration of training is the primary differentiating factor between VPPs and CAHWs, besides CAHWs being essentially from the immediate community.

The current survey recorded various functions the VPPs perform (Figure 10), and it is a mix of animal health, laboratory, and public health functions. VPPs are also active in animal husbandry and breeding-related roles. 18/22 countries indicated that VPP functions include animal disease control activities. Few countries opted for the 'others' option and mentioned interesting functions like assistance in livestock trade. The analysis suggests that governments need to assess the gap in service provision and describe the appropriate role definition of VPPs.

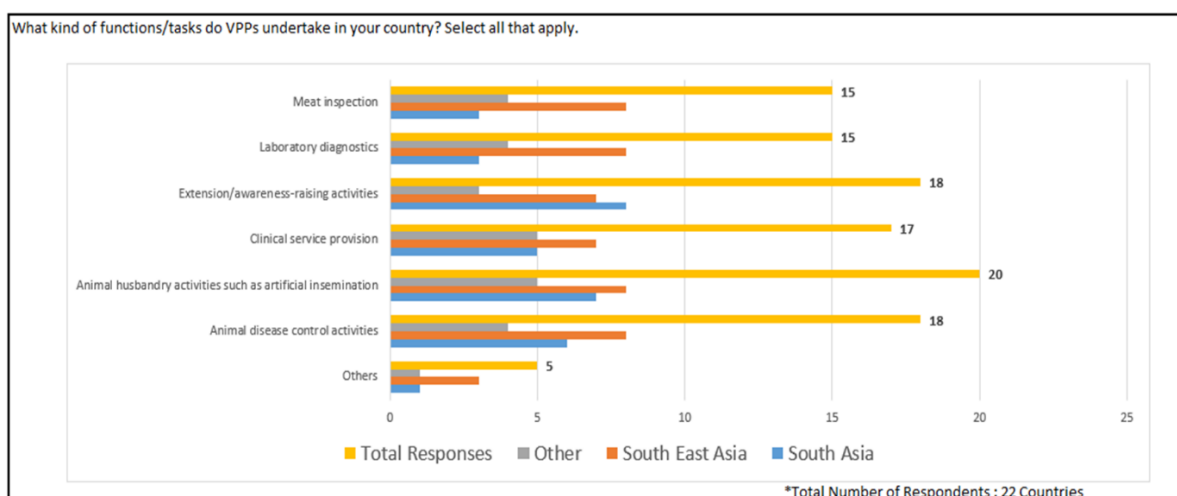


Figure 10 Functions performed by VPPs

Veterinary workforce and CAHWs

There is the provision for reporting CAHWs to WAHIS (the details will change with the updated WAHIS in 2022). The data analysis of 17 select participating countries indicated that seven countries had reported CAHWs, and their number varies from 512 to 14000 in these countries. (Figure 11)

Countries in S E Asia and South Asia with reported number of CAHWs

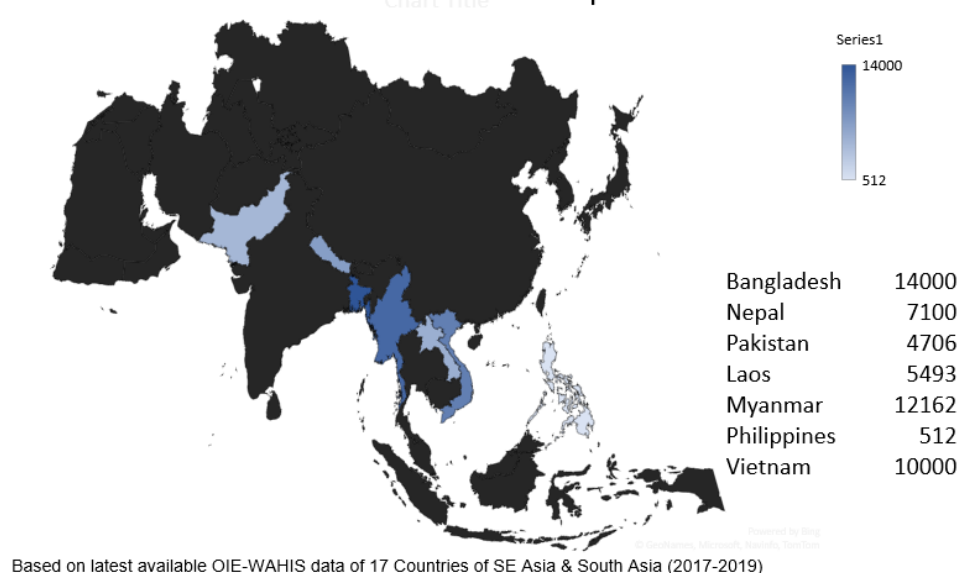


Figure 11 CAHWs in veterinary workforce

As per the survey, CAHWs participate in animal health service provision in 63% of participating countries. They are contributing in 78% of countries in SEA and 50% in the case of SA (Figure 12)

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.

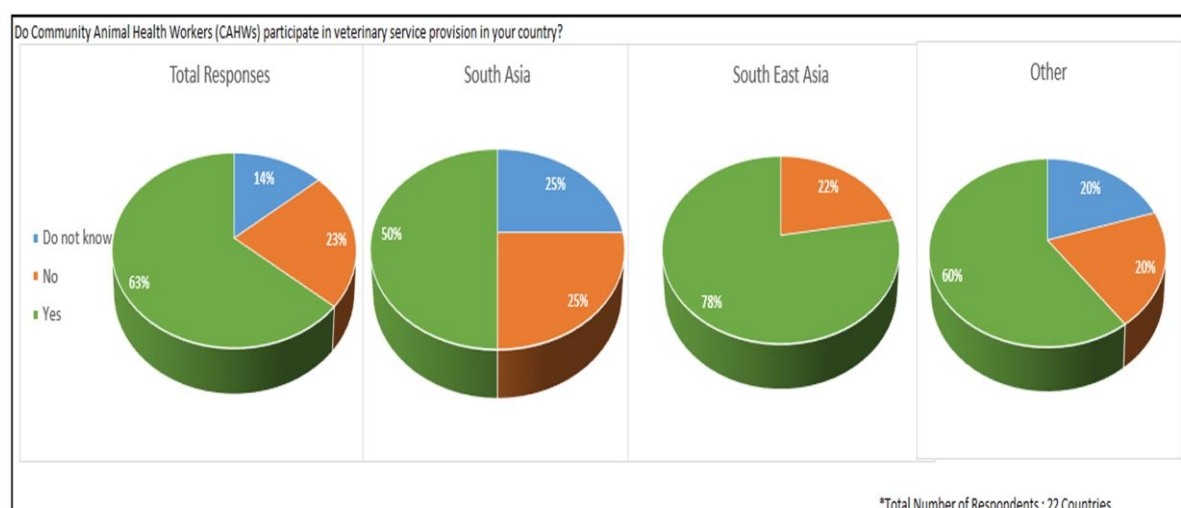


Figure 12 CAHWs participation in veterinary service provision

The workforce situation

The survey wanted to record the participants' views concerning the national workforce situation. Notably, 73% (16/22) of the participants indicated a general shortage of personnel in their national veterinary services. More South East Asia (SEA) participants described this situation than South Asia (SA) participants. The engagement of trained people in actual veterinary-related jobs and timely promotion of personnel, and recruitment of new people are of great importance. As high as 41% (9/22) of countries reported that veterinary graduates are doing non-veterinary jobs. The same percentage of countries (9/22) also mentioned high retirement and fewer new hires. Another interesting observation is that, in up to 30% (7/22) of countries, young people are not opting for veterinary careers as a career choice. Mostly the respondents from the SA region have mentioned inadequate interest of young people to join the profession. (Figure 13). The analysis points out that situations vary from country to country, and the government must keep reviewing factors that can influence a country's workforce availability.

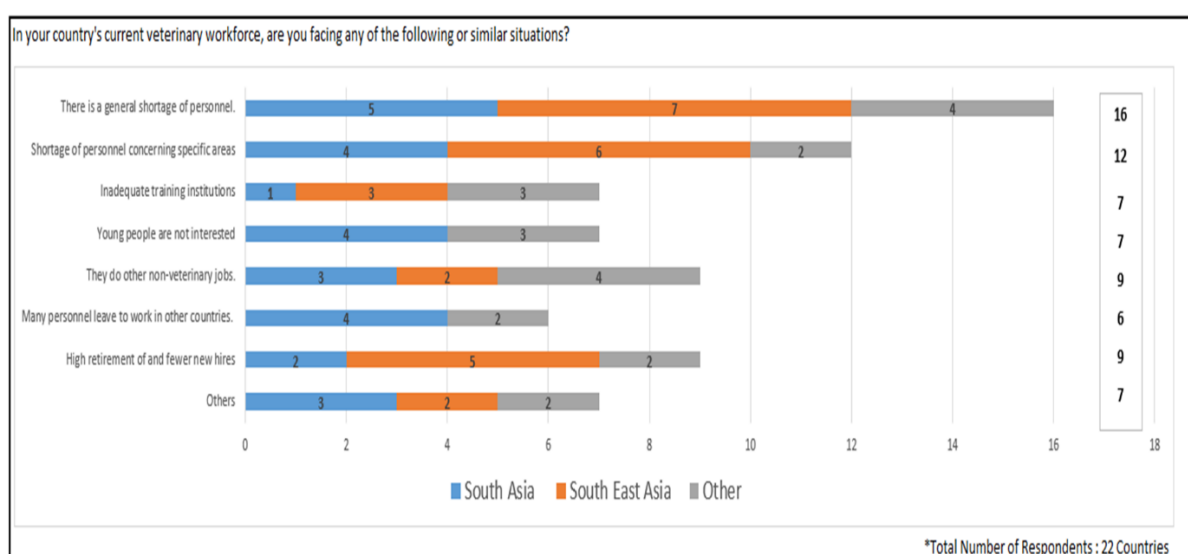
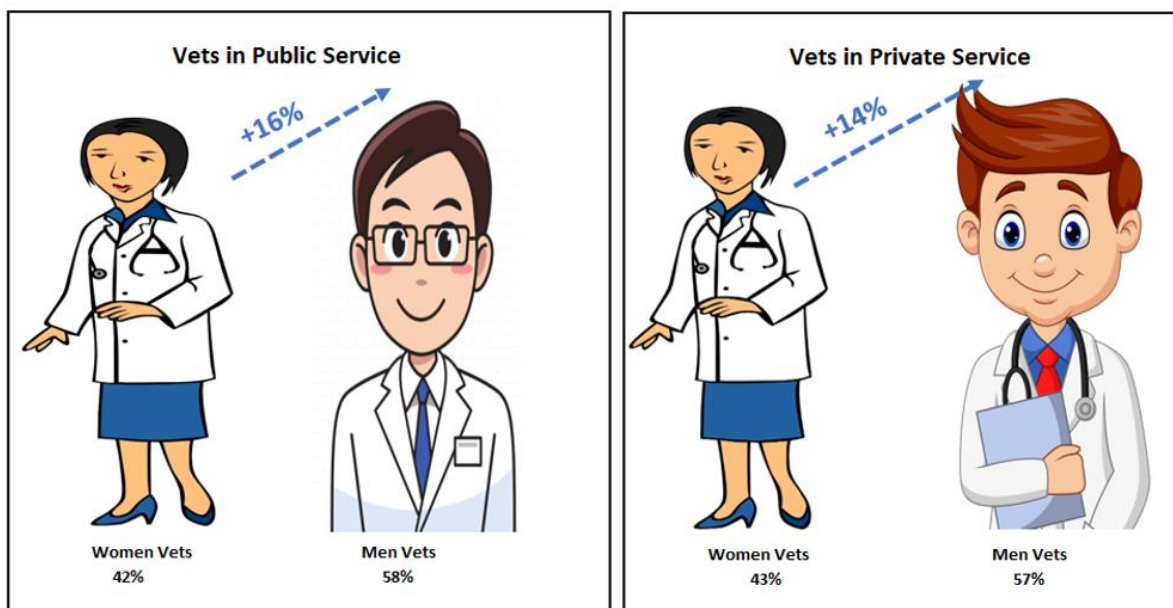


Figure 13 The workforce situation

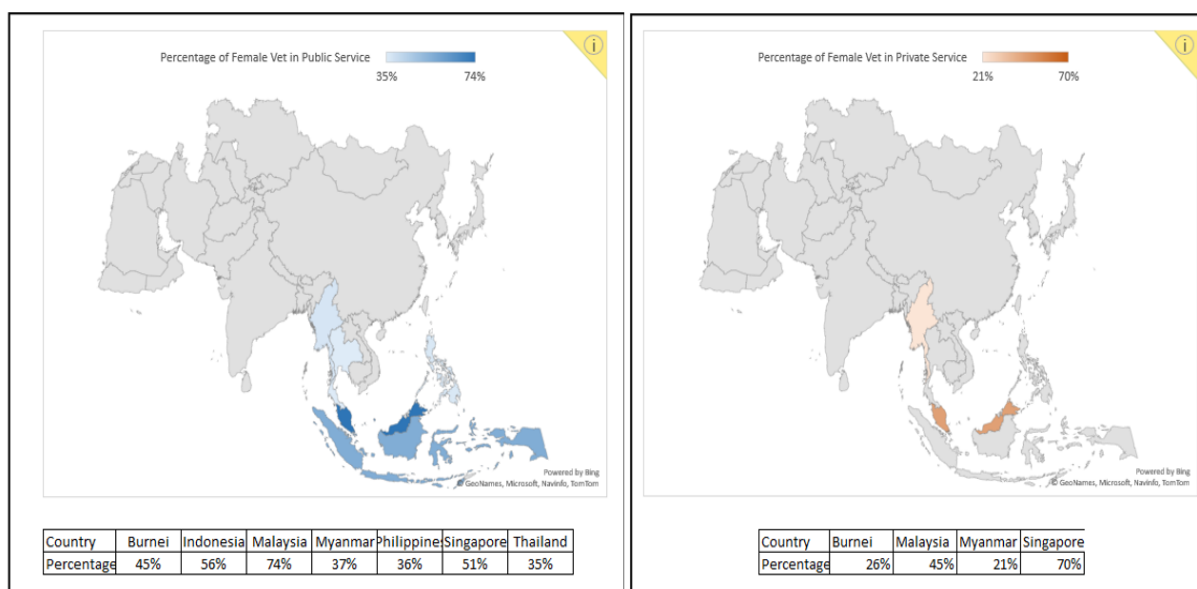
An ideal workforce is balanced (representative of all skill categories) and mixed. The survey explored the status of women in the veterinary workforce. The findings of the OIE gender assessment of veterinary services in South-East Asia (December 2015) indicated that women's participation in the workforce is not equal to men's, and the situation is slightly better in the private sector (Figure 14).



Data source: Rapid glimpse of OIE Gender assessment of veterinary services in South-East Asia (December 2015)

Figure 14 Participation of Women Veterinarians in the workforce, 2015)

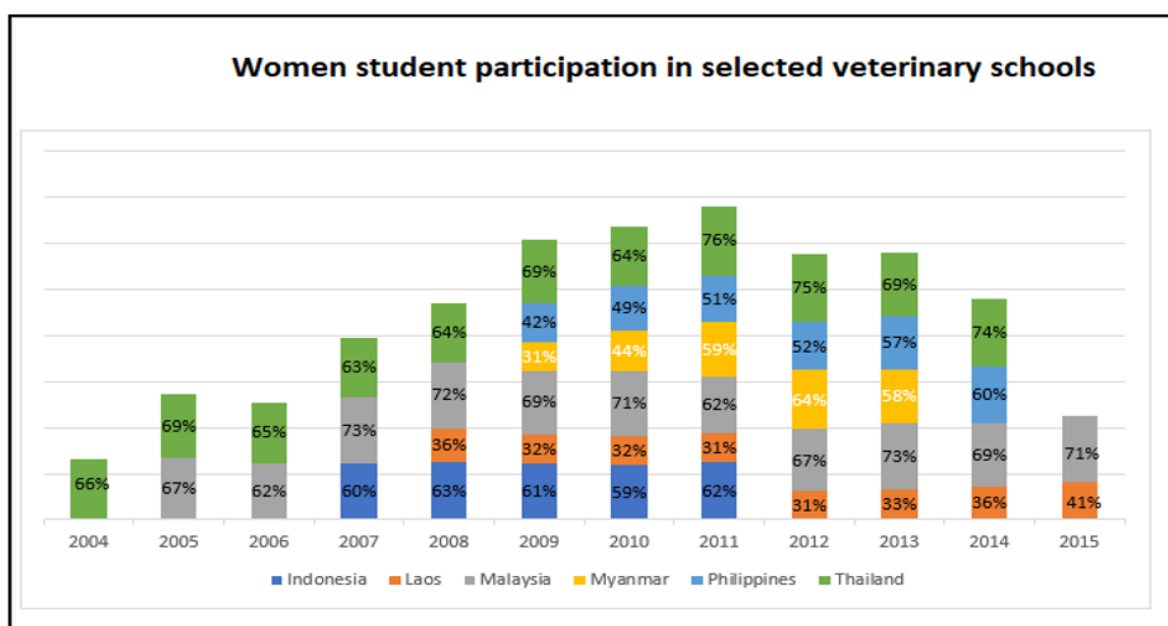
Among the participating seven countries of the 2015 study, female veterinarians' participation in public service varies from 35 to 74%, and for private, 21% to 70% (Figure 15). The involvement of women in the workforce is likely to differ significantly amongst the countries. Each country needs to explore ways to address various factors specific to their country to ensure the appropriate participation of women in the workforce.



Data source: Rapid glimpse of OIE Gender assessment of veterinary services in South-East Asia (December 2015)

Figure 15 A glimpse of women participation in individual countries of SEA region, 2015

A new dimension of the 2015 survey was analyzing the women student participation in selected veterinary schools. The percentage of women in vet schools in countries like Thailand reached 76% in 2011. Except for the People's Democratic Republic of Laos, more women vet students joined veterinary school than men in all other six countries. (Figure 16)



Data source: Rapid glimpse of OIE Gender assessment of veterinary services in South-East Asia (December 2015)

Note: Data are missing for those years where countries are not indicated.,

Figure 16 Women student participation in selected veterinary schools of SEA, 2015

The pre-workshop survey aimed at additionally understanding women's participation in the workforce and access to decision-making roles. As high as 86% of countries within the region have observed increased women's participation in Veterinary Services. Interestingly, for 27% of countries, this growth is important (Figure 17)

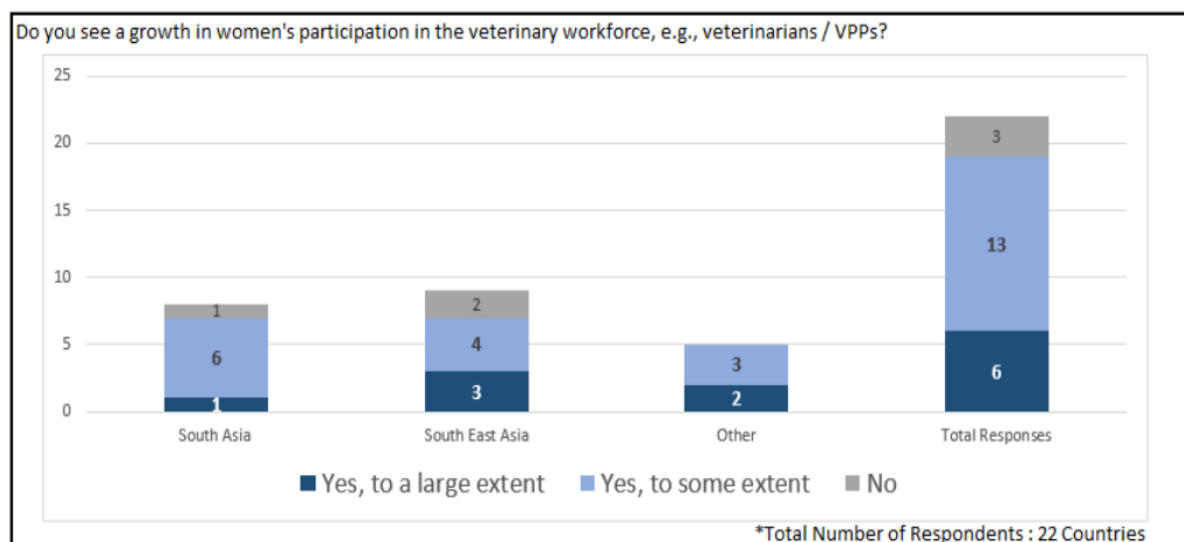


Figure 17 Growth of women participation in veterinary workforce

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. The significant findings indicate that 64% (14/22) of countries legally recognize VPP in the public sector, whereas 27% (6/22) recognize VPPs for assistance in the private sector. In 10/22 countries, VPPs are required to operate under the supervision of

veterinarians. In 5 (23%) countries, the legal framework allows the registration of VPPs under VSBs. (Figure 18)

It is interesting to note that the legal framework for training and continuing education of VPPs is missing in most countries.

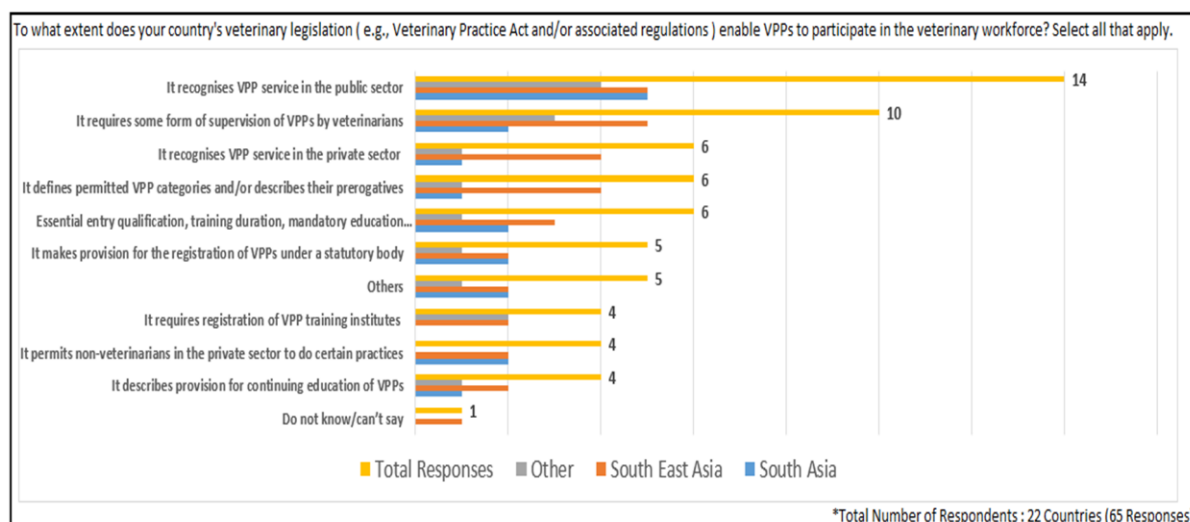


Figure 18 Legal enabling environment of VPPs within the veterinary workforce

A more detailed analysis of 65 responses from 22 countries to see respondents' preferences vis à vis various legal enabling factors indicates that the top addressed enabling element is recognition in the public sector. The least managed one relates to VPP training (Figure 19)

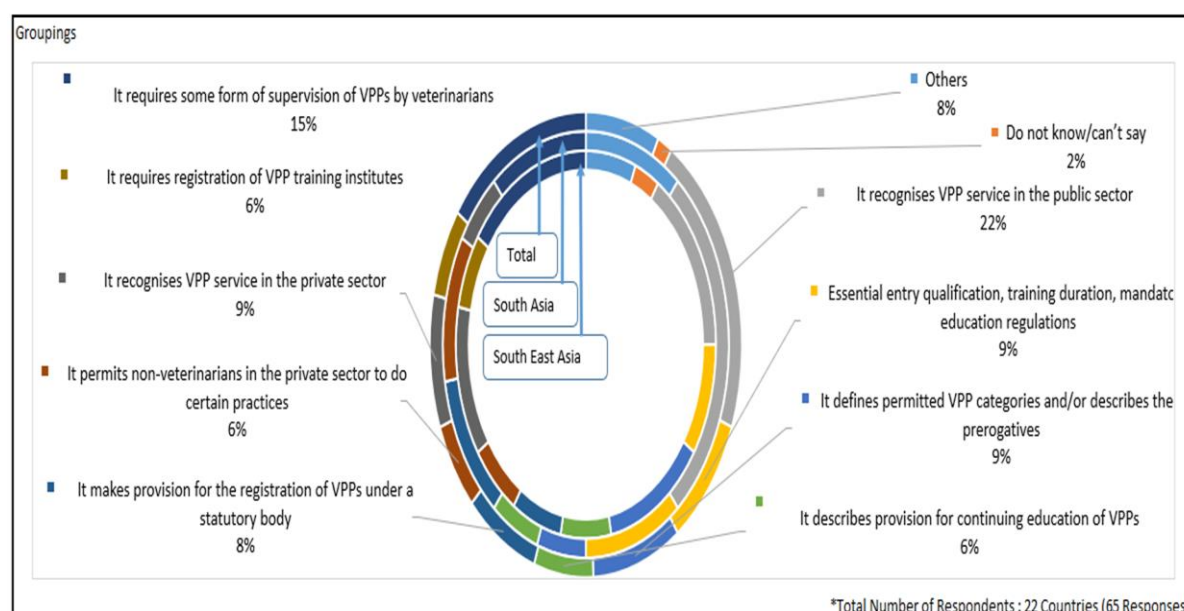


Figure 19 Detail analysis of legal enabling environment for VPPs in veterinary workforce

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 statutory body can be critical action areas depending on country context.

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. (Figure 20)

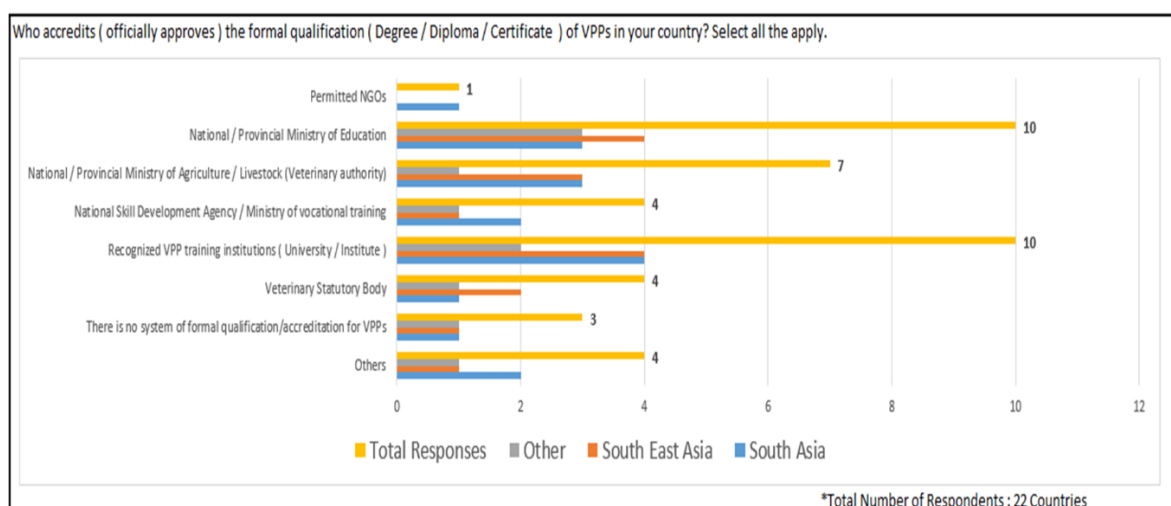
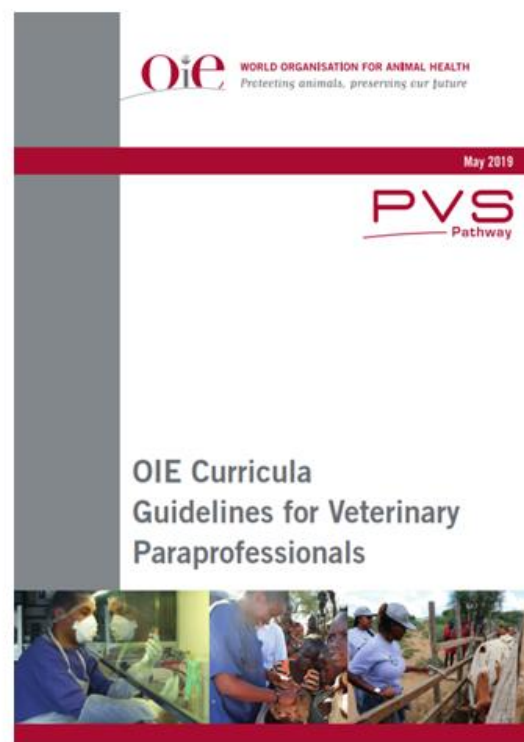
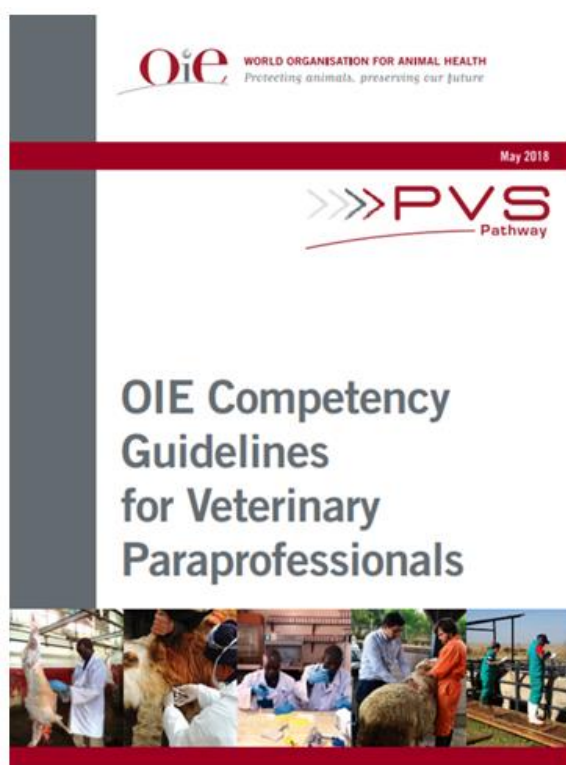


Figure 20 Stakeholders involved in recognition of VPP training

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



The country responses

The survey finding indicated that 41% 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. For SEA countries, this is 44%, and for South Asia, this is 43% (Figure 21). It is important to note that besides workforce numbers, the distribution, the composition of the workforce, etc. are also essential aspects. The OIE encourages countries to regularly review their human resource needs and intends to provide access to necessary tools to review requirements more systematically.

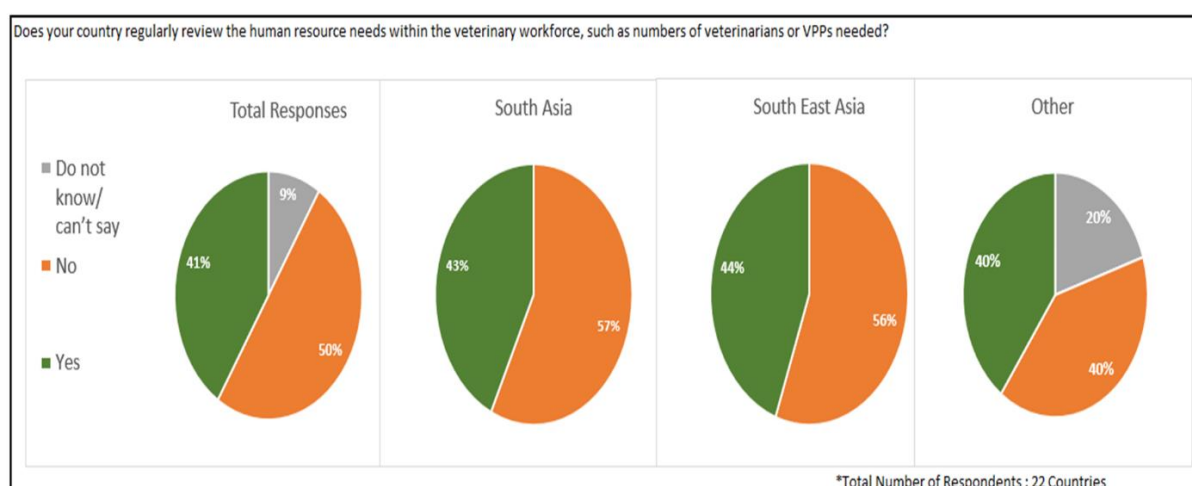


Figure 21 Countries reviewing human resources

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. 9/22 countries (41%) respondents are considering this option to meet the workforce needs in the public sector. This is more

common in South East Asia, where 44% of respondents undertake contracting of private veterinarians/VPPs. (Figure 22)

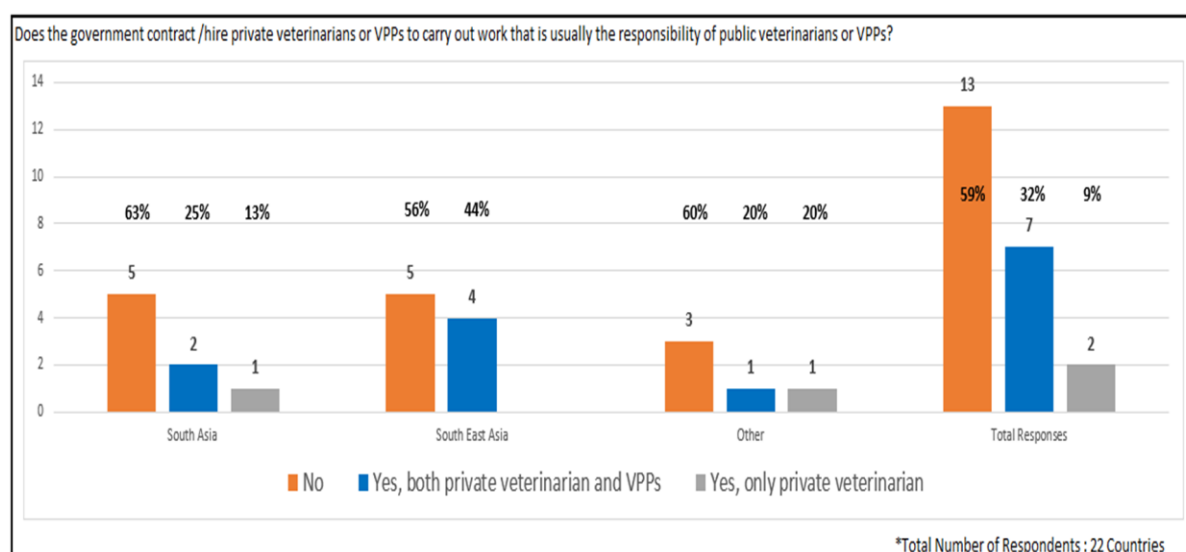


Figure 22 Countries opting to contract private veterinarians and VPPs

A way to ensure availability and access to services to smallholders in remote areas can be the augmentation 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. The survey participants recorded their response to whether their country government/donors / NGOs or other programs support private VPPs to be self-employed. Only 6/22 or 27% of countries have programs that support the self-employment of VPPs (Figure 23). 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 Handbook¹. 2019). Member countries can explore if 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 the regulations to safeguard against public health, food safety, and animal welfare-related threats.

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

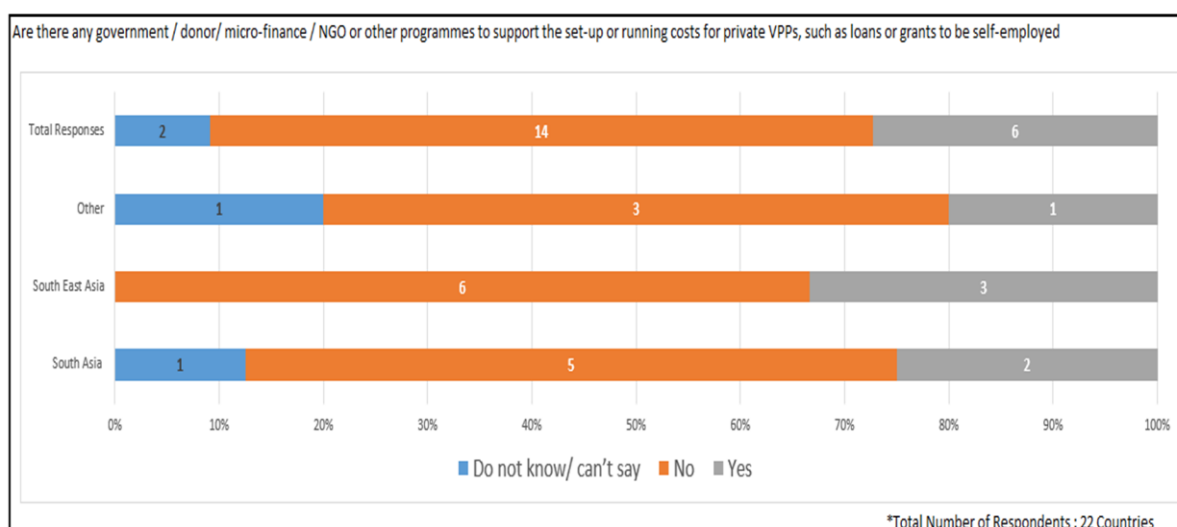


Figure 23 Countries with the program for the promotion of self-employment of VPPs

The previous discussion on the workforce situation mentioned that 7/22 countries have reported that young people are not interested in joining the veterinary profession. The survey asked the participating government representative if they target young people to meet the workforce needs such as scholarships or subsidies to study or to conduct any school awareness programs to attract young people. The finding indicated that 55% of countries are encouraging young people to join the profession. More countries in SEA are doing this (67%) than in SA (50%). (Figure 24)

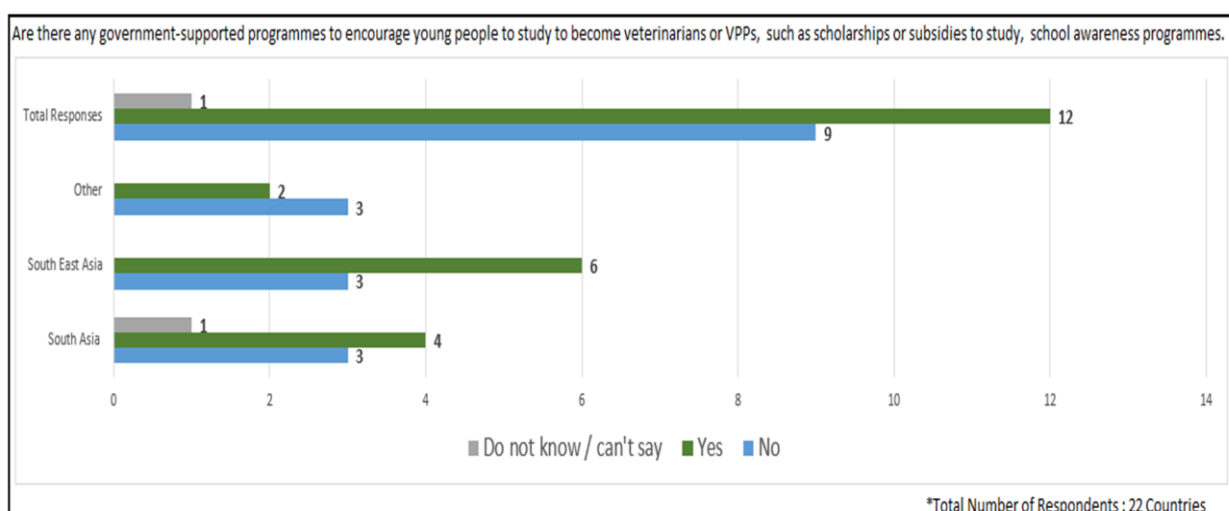


Figure 24 Countries with programs to support young people to become Veterinarian or VPPs

The response of participating member countries to empower women in veterinary services is evident because 50% of countries that participated in the survey informed that their government makes formal efforts to promote women in the veterinary workforce towards decision-making roles (Figure 25). 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.

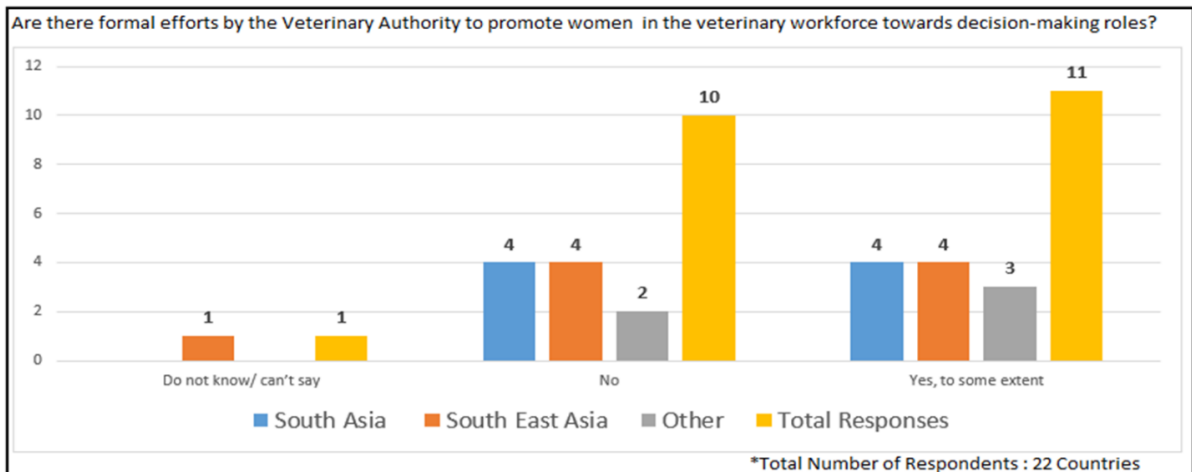


Figure 25 Formal effort by Veterinary authority to promote women towards decision making roles

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. The survey indicated that 64% of the participating countries already use the OIE competency and curriculum guidelines, with three countries reporting in-depth use of the guidelines (Figure 26). It is important to note that the OIE recognizes the diversity of the VPP situation in various member countries, and the developed documents are, therefore, only guidelines.

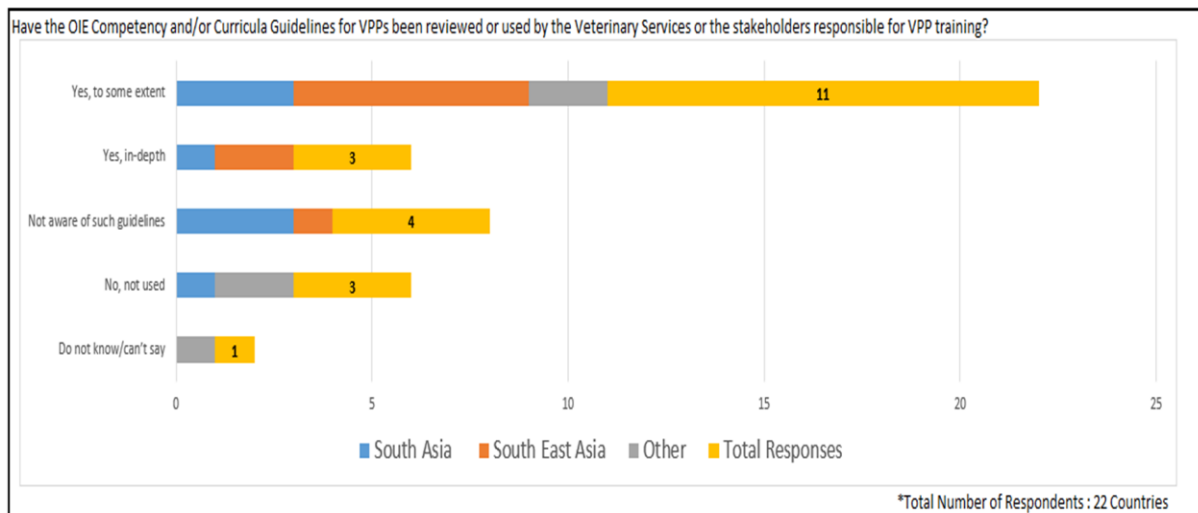


Figure 26 Use of OIE competency/curriculum guideline by Veterinary Services

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 Asia and the Pacific, 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 OIE 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 OIE 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/>