

Regional (Europe) Seminar for OIE National Focal Points for Communication
(dates to be confirmed)
Latvia

Regional (Middle East) Seminar for OIE National Focal Points for Veterinary Products
10–12 October
Amman, Jordan

Global Conference on Biothreat Reduction
31 October – 2 November
Ottawa, Canada

November

GF-TADs Global Steering Committee Meeting
(dates to be confirmed)
Rome, Italy

30th Conference of the OIE Regional Commission for Asia, the Far East and Oceania
(dates to be confirmed)
Kuching, Malaysia

9th meeting of the OIE Platform on Animal Welfare for Europe
(dates to be confirmed)
Turkey

Seminar of the American Committee Veterinary Medicinal Products (CAMEVET) on Harmonization of Registration and Control of Veterinary Medicines in the Americas
(dates to be confirmed)
Paraguay

OIE Sub-Regional (SADC) Seminar on Veterinary Statutory Bodies
14–16 November
Victoria, Seychelles

December

Regional (Africa) Seminar for OIE National Focal Points for Veterinary Products (in English)
5–7 December
Mbabane/Manzini, Swaziland

OIE World Conference on Antimicrobial Resistance
(dates to be confirmed)
South Africa

2018

January

Regional (Africa) Seminar for OIE National Focal Points for Veterinary Products (in French)
(dates to be confirmed)
(venue to be confirmed)

Regional (Africa) Seminar on the implementation of OIE standards (in English)
23–25 January
(venue to be confirmed)

May

86th General Session of the OIE World Assembly of Delegates
20–25 May
Paris, France

miscellaneo

The first OIE global list of veterinary education establishments

A quick look at the global situation

Tomoko Ishibashi

Senior Manager, Horizontal Coordination and Special Projects, World Organisation for Animal Health (OIE)
E-mail: t.ishibashi@oie.int

Keywords

Veterinary education – Veterinary Education Establishment (VEE).

The OIE Global List of Veterinary Education Establishments (VEEs) 2015 was established on the basis of the reports of 157 Member Countries and incorporates information on 553 VEEs throughout the world. The list has been made publicly available on the OIE website¹. Principal findings were presented, region by region, at the 4th OIE Global Conference in June 2016². This paper presents a global overview and brief discussion of the major findings.





Background

The 3rd OIE Global Conference on Veterinary Education, in December 2013, identified the fact that reliable knowledge of the number of, and basic information on, existing Veterinary Education Establishments (VEEs) is critical for achieving the established educational goals promoted by the OIE.

In response to the recommendation adopted at that Conference, the OIE decided to establish a global list of VEEs and requested all Member Countries to provide information by replying to a questionnaire.

Summary

A questionnaire was subsequently developed, composed of 16 questions, some of which requested free description and others tick-box responses. Some of the tick-box questions allowed multiple answers (Fig. 1).

The overall response rate by 180 Member Countries was 87%, which is reasonable in comparison to the various other surveys the OIE conducts in Member Countries. For example, the response rate for the WAHIS six-monthly report on terrestrial animal diseases for the first semester of 2015, as of 22 March 2016, was 82%³. This suggests progress among Member Countries in appreciating the importance of veterinary education as an element of national Veterinary Services. However, a close look at the reports revealed that several Member Countries reported only on some of the VEEs in their country, not on all. At this stage, it is not possible to determine whether this simply reflects a lack of close communication between veterinary authorities and VEEs or indicates recognition of only certain VEEs by the veterinary authorities.

1. Number of VEEs, distribution and growth

A total of 157 Member Countries responded: 553 VEEs were reported by 114 Member Countries, while 43 Member Countries reported no VEEs within their borders (Table I). A higher concentration is observed in most, but not all, Member Countries in the Americas, Western Europe and Asia (Fig. 2).

Since the initial creation of VEEs in the 18th century, Europe has had a proud tradition of veterinary education. The first VEE outside Europe was reportedly founded in 1836 in Egypt. In the latter half of the 19th century, the presence of VEEs expanded to some countries in the Americas, Oceania and Asia. In 1900, however, 28 out of the global total of 52 VEEs were still in Europe. The global expansion of VEEs became noticeable in the 1930s, and the steady rate of creation that continues into the present century has led to a global number of 553 in 2015 (Fig. 3). Some noteworthy points include the growth of VEEs in Africa since the 1960s, and that 44% of VEEs newly created in the present century are in the Americas.

2. Characteristics/profiles of VEEs

For reported VEEs, the number of years of veterinary education ranges from four to seven years. A majority of VEEs (321) require five years, followed by six years (156), accounting for 86% of the reported VEEs (Table II). Among the 73 VEEs that require only four years, a majority require pre-veterinary science education as an admission qualification, notably all VEEs in the USA and Canada. There are 28 VEEs with four-year curricula that accept students with only 'high school university entrance qualification', and these are mostly in Asia. Three VEEs, one each in Guatemala, Azerbaijan and Slovenia, were reported to require seven years of professional veterinary education.

The question about the class size (average annual graduates) provided five response options. About

1 www.oie.int/en/support-to-oie-members/veterinary-education/oie-global-list-of-vees/

2 www.oie.int/eng/vet-education-conf2016/introduction.html

3 *Current animal health situation worldwide: analysis of events and trends* (document 84SG/2, OIE, 2016)





© USDA



- a. Name of VEE
- b. Hosting academic institution (where relevant)
- c. Address of VEE
- d. Country of VEE
- e. Website (URL)
- f. Institution type: public / private / both
- g. Year of creation
- h. Veterinary degree(s) granted:
 - Specific Veterinary Diploma / Bachelor / Master / Doctor / PhD / Other
- i. Number of years of veterinary education required for Veterinary Statutory Body (VSB) (or equivalent) registration
- j. Average number of veterinary students per class within the establishment
- k. Average number of veterinary graduates per year from the establishment
- l. Minimum education required for admission to the establishment
 - High school university entrance qualification
 - Pre-veterinary science diploma
 - Pre-veterinary science degree
 - Other specific VEE entrance qualifications
- m. Is there a selection procedure at National level, State level or Establishment level?
- n. National accreditation/certification/approval: Yes or No
- o. Regional accreditation/certification/approval: Yes or No
- p. International accreditation/certification/approval: Yes or No

Fig. 1
List of questions

Table I
Number of veterinary education establishments (VEEs) reported by Member Countries

OIE Region	OIE Members	Number of Members reported as having VEE	Number of Members reported as having no VEE	Total number of VEEs in the region
Africa	54	25	20	51
Americas	29	21	5	180
Asia-Pacific	32	21	9	162
Europe	53	41	7	145
Middle East	12	6	2	15
Total	180	114	43	553



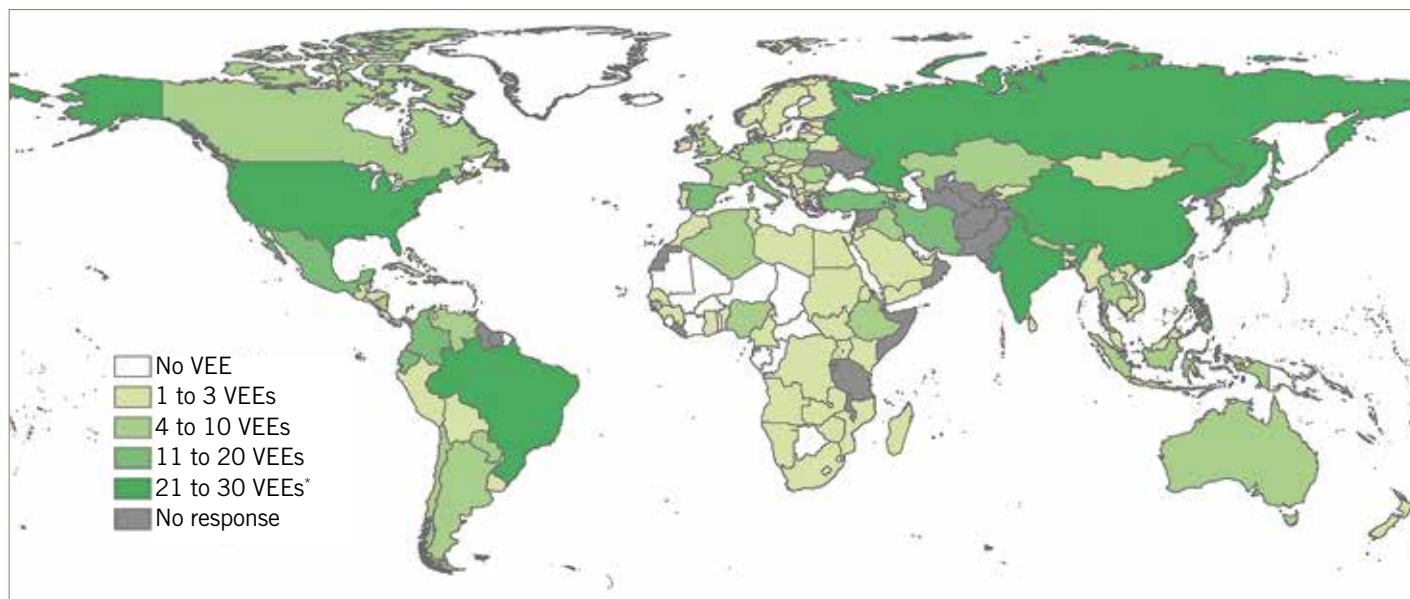


43% VEEs are in the category of ‘up to 50 graduates per year’, which is the most common size for all regions except Europe, followed by the categories of ‘51–100’ and ‘101–150’ (Table III). The 43 VEEs with more than 150 annual graduates are found in Europe (21), mainly in northern and Eastern Europe, as well as in Asia, most notably China (13).

Close to 90% (487/553) of the VEEs are reported as being public institutions. Private institutions (63) are more prevalent in the Americas (42/180, 23%), especially in Chile (7/8, 88%), Nicaragua (5/7, 71%), Colombia (12/20, 60%) and the USA (9/31, 29%), compared to the global ratio of 11% for private institutions. Outside the Americas, Japan has a relatively high proportion of private VEEs (5/16, 31%). In the Middle East, all reported VEEs are public and in Africa there is only one private VEE, in Cameroon. Three VEEs, one in Cuba and two in Nepal, were ticked for institution type as ‘both’.

Class size was analysed against the type of institution for four regions where private institutions were reported (Table IV). Defining VEEs having more than 100 average annual graduates as ‘large’, the category of public institutions shows a much higher percentage of large VEEs than the category of private institutions in the Americas. In Europe and Africa, no private VEE has more than 100 annual graduates. The situation is reversed in Asia and the Pacific, but it is notable that all four large private institutions are in Japan.

A third of VEEs (190) have an establishment-level selection procedure, either alone or in combination with national- and/or state-level selection, most notably in North America (all but one VEE in the USA and Canada), the Far East (all VEEs in Japan, Republic of Korea and Mongolia) and Oceania (all in the sub-region, except one VEE in Australia) (Table V). The majority of VEEs

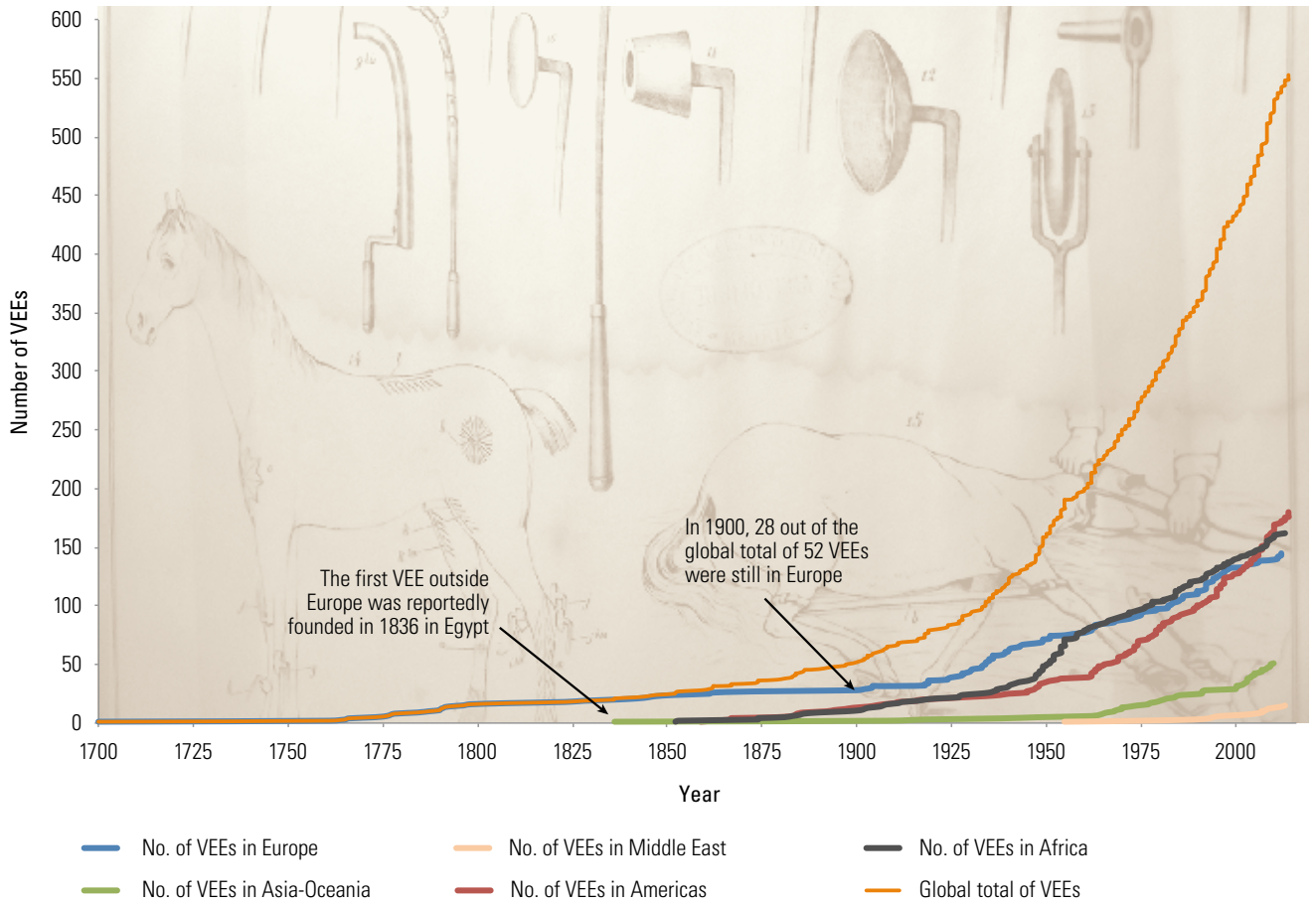


* No Member Country reported having more than 20 but fewer than 31 VEEs

Fig. 2
Global distribution of veterinary education establishments (VEEs)



© USDA



The growth of VEEs in the five OIE regions and globally

Fig. 3
Growth of veterinary education establishments (VEEs), by region

Table II
Duration of veterinary education

OIE Region	Number of VEEs	Number of VEEs with...			
		4-year education	5-year education	6-year education	7-year education
Africa	51	4	15	32	0
Americas	180	36	126	17	1
Asia-Pacific	162	30	69	63	0
Europe	145	3	97	43	2
Middle East	15	0	14	1	0
Total	553	73	321	156	3





(306) select new students by utilising a selection mechanism at either national or state level, or both, without a VEE-level selection process. For 10% of VEEs (57), including all 38 reported VEEs in Russia and 8 VEEs in Argentina, there was no tick of any of three choices of selection procedure, i.e. national level, state level or establishment level, the meaning of which is unknown.

3. Quality assurance mechanism

Nearly 80% of VEEs (429/553) are reported to be accredited, certified or approved by at least one recognition body at the national, regional or international level. The remaining 124 VEEs replied 'No' to all questions related to accreditation/

certification/approval, and are spread over 36 Member Countries in all regions, but with a higher percentage in the Middle East and Far East, where regional accreditation mechanisms have yet to be developed (Table VI). Judging from the names of the accreditation bodies indicated in the replies, however, it seems that these questions invited different interpretations of the meaning of both 'accreditation/certification/approval' and 'national/regional/international'.

Conclusion

It is a significant achievement to establish the first global list of VEEs with a consistent set of information about their education systems. While, in some respects,

Table III

VEEs stratified by the number of graduates per year

OIE Region	Number of graduates per year				
	0-50	51-100	101-150	151-200	> 200
Africa	34	11	4	0	2
Americas	82	66	26	3	3
Asia-Pacific	71	55	23	6	7
Europe	38	53	33	11	10
Middle East	12	2	0	1	0
Total	237	187	86	21	22

Table IV

Public and private VEEs stratified by the number of graduates per year

OIE Region	Type	Number of graduates per year					% with >100
		0-50	51-100	101-150	151-200	>200	
Africa	Public	33	11	4	0	2	12.0
	Private	1	0	0	0	0	0.0
Americas	Public	53	55	23	3	3	21.2
	Private	28	11	3	0	0	7.1
Asia-Pacific	Public	62	51	20	5	7	22.1
	Private	7	4	3	1	0	26.7
Europe	Public	36	50	33	11	10	38.6
	Private	2	3	0	0	0	0.0





© USDA

Table V
Student selection procedure

OIE Region	Total number of VEEs reported in the region	VEEs with establishment-level selection procedure	VEEs with national- and/or state-level selection procedure only	VEEs without any selection procedure indicated
Africa	51	16	33	2
Americas	180	73	96	11
Asia–Pacific	162	64	95	3
Europe	145	34	70	41
Middle East	15	3	12	0
Total	553	190	306	57

the analysis was not valid because some questions had apparently invited differing interpretations, the survey and database nevertheless provide a global overview of the growth, distribution and basic characteristics of VEEs. With the reports hopefully to come from the remaining 23 Member Countries and additional provision of information about yet-to-be-reported VEEs, it is hoped that, in the near future, this OIE global list will be used as the recognised source of such information.

The author expresses her appreciation to Dr Ron DeHaven, Chairman of the OIE *Ad hoc* Group on Veterinary Education, for his kind advice in developing this paper. She also thanks Dr Takeshi Haga, Dr Ana Bravo, Dr Francisco Trigo, Dr Aaron Mweene and Dr Ehab Abu-Basha for providing regional views. Finally, it should be noted that two interns at the OIE, Dr Gowoon Jung and Dr Harry Kwok, greatly contributed to the work through data compilation.

Table VI
Granting of recognition

OIE Region	Total number of VEEs reported in the region	VEEs without any type of recognition
Africa	51	13
Americas	180	31
Asia–Pacific	162	50
Europe	145	16
Middle East	15	14
Total	553	124

<http://dx.doi.org/10.20506/bull.2017.1.2603>

