

# Veterinary Education in Africa

Mweene A. S.

School of Veterinary Medicine, University of Zambia, Department of Disease Control, Member of the OIE *ad hoc* Group on Veterinary Education, P.O. Box 32379, Lusaka 10101, Zambia asmweene04@yahoo.com

---

## Summary

The demand to control livestock diseases prompted the establishment of veterinary schools in Africa beginning with the Faculty of Veterinary Medicine of Cairo University in Egypt in 1836. The other existing ones were established after 1960 as public and national institutions. The Inter-State School of Veterinary Science and Medicine of Dakar has 15 French-speaking countries participating from West, Central and East Africa. Initially, the curricula aimed at producing veterinarians with the competencies for general practice. Due to minimal collaboration among the veterinary educational establishments (VEEs), the knowledge and skills acquired varied. The 5 to 6-year programmes, with an entry requirement of high school certificates or relevant diploma, lead to a Bachelor of Veterinary Medicine or Doctor of Veterinary Medicine degree. The number of graduates ranges from 15 to 200 per year per institution with women representing 5%.

Considering that veterinary education is critical for the quality of Veterinary Services, the World Organisation for Animal Health (OIE), with the mandate given to it by the Member Countries, has assumed a global leadership position in the formulation of the basic Veterinary Education requirements for veterinarians. In 2010, the deans of VEEs in the Southern African Development Community (SADC) and Kenya formed the "Southern and Eastern Africa Association of VEE (SEAAVEE)" supported by the OIE. The SEAAVEE meets annually working towards the harmonisation of veterinary education among VEEs in the SADC. It also works with the South African Veterinary Council for regional accreditation. In North Africa, the Mediterranean Network of Establishments for Veterinary Education (REEV-Med) was created in 2012 to reinforce the collaborations among VEEs on both shores, and to implement an evaluation of VEEs similar to that applied by the European Association of Establishments for Veterinary Education consistent with OIE Day 1 Competencies.

Veterinary para-professionals (VPPs) play a pivotal role in the synergism of the delivery of quality veterinary services. In Zambia, the categories of VPPs include those involved in animal health and in food hygiene activities as well as community animal health workers. They may undertake certificate (2 yr study) and diploma (3 Yr Study) level, though soon all will be required to undertake a 3yr study for the purpose of enhancing their competencies. The training institutions are public and the facilities, including their curricula, are certified by the Veterinary Council of Zambia. The VPPs are registered by the Veterinary Council of Zambia and participate in public and private sector veterinary services.

A questionnaire revealed that all the VEEs which responded had already started or were in the process of modifying their curricula to reflect the OIE Day 1 Competencies. Most VEEs across Africa face serious challenges, both in budget and qualified human resources, hence there is a need for sustainable coordinated effort and investment in networking/partnerships, such as the SEAAVEE, REEV-MED and twinning for the optimal use of resources required for implementation of OIE Day 1 Competencies.

**Key words:** Day 1 competencies – veterinary education – Africa – curricula.

## Introduction

Veterinary education in Africa began with the establishment of the Faculty of Veterinary Medicine of Cairo University in Egypt in 1836, for the purpose of combating devastating livestock diseases. Currently, there are 47 Veterinary Education Establishments (VEEs) most of which are public and national institutions except for the Inter-State School of Veterinary Science and Medicine of Dakar (EISMV) that has 15-member French-speaking countries participating. The curricula has evolved from producing veterinarians with the

competencies for general practice of veterinary medicine to ones which will satisfy the demands of economic and societal needs for improved human and animal health (1). The 5 to 6-year programmes, with an entry requirement of high school certificates or relevant diploma, lead to a Bachelor of Veterinary Medicine, Master or Doctor of Veterinary Medicine degrees. The number of graduates ranges from 15 to 135 per year per institution with a paltry 5% representation of women (2).

### **Current trends in curriculum development**

To enhance collaboration between regional VEEs, harmonisation of the veterinary curricula was needed. Considering that veterinary education is critical for the quality of Delivery of Veterinary Services, the World Organisation for Animal Health (OIE), with the mandate given by the Member Countries, has assumed a global leadership in the formulation of the basic Veterinary Education requirements for veterinarians. In this regard, the OIE developed the tools on the Recommendations on the Competencies of Graduating Veterinarians (3) and Veterinary Education Core Curriculum OIE Guidelines (4). In this regard, since 2009, the deans of VEEs in the Southern African Development Community (SADC) with the inclusion of those of Kenya and Uganda in 2013, have been meeting and have formed the “Southern and Eastern Africa Association of VEE (SEAAVEE) supported by the OIE (Veterinary Educational Establishments (5). The SEAAVEE meets annually to enhance regional cooperation and harmonisation of veterinary curricula. It also works with the South African Veterinary Council for regional accreditation. In North Africa, the Mediterranean Network of Establishments for Veterinary Education (REEV-Med) was created in 2012 to reinforce collaboration among VEEs on both shores and to implement an evaluation of VEEs similar to that applied by the European Association of Establishments for Veterinary Education consistent with the OIE Day 1 Competencies (6).

### **Assessment of status of implementation of OIE Day 1 Competencies**

A questionnaire sent to most VEEs across Africa was answered by some VEEs in North, West, Central, Eastern and southern Africa, and thus provided comprehensive insights on the status of implementation of the OIE Day 1 Competencies. It was found that all the VEEs which responded had already started modifying their curricula to reflect the OIE Day 1 Competencies.

### **Challenges in the implementation of OIE Day 1 Competencies**

Some of the VEEs cited challenges in providing students with sufficient field practical exposure. One VEE mentioned that due to several traditional habits, the application of animal welfare standards were difficult to implement at the moment. Budget has been a challenge, particularly for field work and linkages with communities and TADs practices within the interface zones (wildlife-human-livestock). The inadequate or lack of persistent means to fund curriculum development and reviews was expressed by all the VEEs, especially the funds necessary to achieve the field practical work/internships, as well as for hiring qualified staff.

### **Quality assurance**

Approval of programmes in most VEEs is by national bodies such as Veterinary Statutory Bodies or the ministries responsible for higher education. External accreditation is provided to the VEEs by the South African Veterinary Council and the Namibian Veterinary Council while those in the REEV-MED will also be evaluated at the end of this year by the European Association of Establishments for Veterinary Education. A participating VEE in the SEAAVEE stated that current graduates and students have more and broader jurisdiction in relation to the diversification of their courses and an increase in subsequent working hours. The industry is increasingly receptive to veterinary students and graduates due to their enhanced competencies in terms of research and animal health.

### **Role of Veterinary para-professionals**

Veterinary para-professionals (VPPs) play a pivotal role in the synergy of the delivery of quality veterinary services. In Zambia, the categories of VPPs include those involved in animal health and in food hygiene activities as well as community animal health workers. The VPPs are registered by the Veterinary Council of Zambia and participate in public and private sector veterinary services.

They undertake certificate (2 yr study) and diploma (3 Yr Study) level, though soon all will be required to undertake a 3yr study for the purpose of enhancing their competencies. The training institutions are public and the facilities, including their curricula, are certified by the Veterinary Council of Zambia. The School of Veterinary Medicine, University of Zambia is directly and indirectly involved in training of the VPPS.

### **Conclusion and recommendations**

Considering that most VEEs face serious challenges, both in budget and qualified human resources, there is a need for investment in networking/partnerships for the optimal use of resources in Africa. Regional initiatives, like the SEAAVEE and REEV-MED including twinning, should be encouraged as they have the potential to effectively stimulate collaboration, networking, and partnerships to cost-effectively solve issues in the implementation of the OIE Day 1 Competencies in Africa.

### **References**

1. SWAN G.E. & KRIEK N.P.J. (2009). - Veterinary education in Africa: Current and future Perspectives. *Onderstepoort J. Vet.*, **76**:105–114
2. Pangui L. J. & Bakou S.N. (2013). - Global Conference on Veterinary Education and the Role of the Veterinary Statutory Body. 4-6 December 2013, Foz de Iguazu (Brazil). Available at: [http://www.oie.int/eng/A\\_EDUVSB2013/presentations.htm](http://www.oie.int/eng/A_EDUVSB2013/presentations.htm). (Accessed on 15 May, 2016).
3. World Organisation for Animal Health (OIE) (2012). - OIE recommendations on the Competencies of graduating veterinarians ('Day 1 graduates') to assure National Veterinary Services of quality. Available at: [http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/Vet\\_Edu\\_AHG/DAY\\_1/DAYONE-B-ang-vC.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/Vet_Edu_AHG/DAY_1/DAYONE-B-ang-vC.pdf). (Accessed on 23 March, 2016).
4. World Organisation for Animal Health (OIE) (2013). - Veterinary Education Core Curriculum OIE Guidelines. Available at: [http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/Vet\\_Edu\\_AHG/formation\\_initiale/Core-ENG-v6.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/Vet_Edu_AHG/formation_initiale/Core-ENG-v6.pdf). (accessed on 23 March, 2016)
5. World Organisation for Animal Health (OIE) (2015). - Veterinary Educational Establishments Available at: [http://www.rr-africa.oie.int/projects/VETGOV/en\\_index.html](http://www.rr-africa.oie.int/projects/VETGOV/en_index.html). (Accessed 25th May, 2016)
6. Tligui N., Parodi A. L., Bouguedour R. & Brioudes V. -The creation of the Mediterranean Network of Establishments for Veterinary Education (REEV-Med). Available at: <http://www.rr-africa.oie.int/docspdf/poster-REEV-Med.pdf>. (Accessed on 02 April, 2016)