

OIE Collaborating Centre for Integrated Training in Livestock and Wildlife Health and Management

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Introduction

Since May 2009, the World Organization for Animal Health (OIE) has recognized the Department of Veterinary Tropical Diseases (DVTD) and its consortium partners [University of Pretoria (Centre for Veterinary Wildlife Studies, Department of Animal and Wildlife Sciences, Department of Agricultural Economics, Extension and Rural Development); Onderstepoort Veterinary Institute (OVI), SA; Animal Health Department of the Institute of Tropical Medicine (ITM), Antwerp, Belgium; National Institute for Communicable Diseases, SA; Department of Agriculture, Fisheries and Forestry, SA] as a Collaborating Centre for Training in Integrated Livestock and Wildlife Health and Management. One of the major roles of the Collaborating Centre is to assist the OIE in developing and offering training in the management and health of livestock and wildlife with particular reference to sub-Saharan Africa.

Focus and objectives of the Centre

Within the veterinary context, agriculture and conservation are important. Both these domains have been identified as major drivers of regional economic development: agriculture by means of sufficient and safe food for internal use and, eventually for the export market, and conservation of natural resources as a driver of ecotourism. Livestock is one of the key components of integrated agriculture in Africa and contributes significantly to overall economies and the livelihoods of many rural households. These livelihoods remain fragile because of frequent droughts and disease outbreaks. The production and productivity of livestock for most agro-pastoralists and pastoralists are constrained - particularly by an increasing prevalence of important transboundary animal diseases (TADs) that affect livestock, agriculture and rural development in different ways. These diseases cause high levels of mortality in livestock species that are critical to livelihoods, affect market access/quality of livestock products, and constrain improvements in productivity. There is increasing evidence that many of these diseases prevalent in the Region are disseminated and/or sustained by wildlife.

More recently, the development of a number of Trans-frontier Parks (TFPs) and Trans-frontier Conservation

Areas (TFCAs) (both also referred to as 'Peace Parks') driven at SADC Presidential level is seen as a future additional major economic driver. The veterinary issues pertaining to the establishment of Peace Parks are not limited to these developments. Diseases in particular threaten the delicate balance at the interface with a potential pronounced negative impact on human livelihoods, animal and human health, and conservation. Pathogens are important components of the human/livestock/wildlife interface. What is more important though, is the bi-directional transmission of infectious disease between wildlife and domesticated animals with negative effects on both cohorts, depending on the disease that is being dealt with. The final major issue is the role of wildlife in emerging diseases in humans. It is estimated that about 60% of infectious diseases of humans are zoonoses, and that more than 80% of recent emerging diseases of humans are of wildlife origin.

It is clear from the above that the primary focus of the Centre is the 'One Health' concept: the promotion of health in animals (livestock and wildlife), humans and ecosystems, through integrated training.

The overall objectives of the Collaborating Centre are to support quality livelihoods, optimal animal health and production, rural development, ecosystem health, biodiversity, food security and sustainability.

Development of the Centre

In order to reach these objectives, the Collaborating Centre will address the main aspects outlined above on an integrated basis specifically to facilitate the development of capacity and coordinated implementation on a regional basis. The emphasis of the activities will focus in an integrated way on the needs of the livestock agricultural sector (commercial and subsistence), the wildlife sector (conservation and commercial game ranching) and their impact on the livelihoods and health of humans. As a result of the needs of the various sectors the Centre will also focus on the dynamics between these sectors and land-use options.

Given the scope and complexity of the activities required and the expertise involved to address the various issues,

the activities of the Centre will be phased in over a period of time to also give the opportunity to expand the related activities, and increase the number of institutions involved on a regional basis. It is envisaged that the expanded list of participants will include those institutions with capacity in livestock agriculture, wildlife and human health. It would be important to not only include research and educational institutions, but also governmental agencies responsible for the various fields of activity (agriculture, environment, conservation and human health and livelihoods).

Given the lack of skills and knowledge pertaining to these issues in the sub-Saharan Region, the first phase of the development of the Centre focuses on training at various levels (veterinarians, para-veterinarians, and related scientific disciplines) within a number of Member States of SADC. The training that will be provided by the proposed collaborating Centre will follow an integrated approach linking animal and human health, animal production, marketing and trade of animals and their products, land-use options, rural development, conservation and environmental health relevant particularly to SADC. The main areas of training will include the following:

- Livestock health, management and production
- Wildlife health, management and production
- Emerging and re-emerging diseases
- Zoonoses
- Environmental health
- Arthropod vectors
- Veterinary public health and food safety
- Trade and marketing of animal commodities and products
- Welfare
- Health Management tools, including laboratory diagnostics, surveillance, risk analysis and biosecurity.

The information used for the training will be partly based on the material currently used in the successful web-based MSc programme in Veterinary Tropical Diseases that is organized jointly by the DVTD and ITM's Animal Health Department. This training material will be re-packaged in appropriate formats to support undergraduate and postgraduate training as well as Continuing Professional Development (CPD).

To improve access to important veterinary information, the training material will be presented on an interactive electronic delivery platform or "Hub" which will include blogs, interactive course material, videos, quizzes and online discussions. The information will be presented free of charge at an introductory level. More detailed online certificated courses and courses for CPD will be available after registration and payment of a fee. Where accreditation for CPD or a certificate is required, content experts will be involved in evaluating quizzes, participating in discussion forums and rewarding credit points.

The Hub is currently being developed and it is envisaged that the first stage will be launched in March 2011.