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He also holds a Post-graduate Certificate in Business Administration obtained in 1997 from the Faculty of Science and Management of the Cheick Anta Diop University, Dakar, Senegal. In addition, he is holder of two other Post-graduate Certificates; a Post-graduate Diploma in Animal Epidemiology obtained in 2006 from the National School of Veterinary Medicine, Alfort, France and a Master of Science in Tropical Animal Health obtained in 2009 from the Institute of Tropical Medicine Antwerp, Belgium.

He has 12 years (2000-2012) experience in animal diseases monitoring and particularly in the area of zoonoses and emerging diseases, fields in which he has dedicated 8 years (2000-2008) in wildlife diseases research, especially in the collection of data related to wildlife and primates, monkeys in particular. He has co-authored about a dozen of publications in this domain. He was the Animal World Health Organization (OIE) focal point for wildlife disease reporting in Cameroon for 2 years (2007-2008). Based on his rich experience in wildlife-related issues he conceived a National Multi-sectorial Program for the prevention and fight against emerging and re-emerging zoonoses and Cameroon's ONE HEALTH implementation Strategy. He is a member of the ad hoc committee in charge of developing the national program for prevention and control against emerging and re-emerging zoonotic diseases. He masters of several computer software programs (word, excel, power point and publisher) and some specialized statistics and Geographic Information System, GIS softwares (Stata, R, Sphinx, Arcviews, Manifold).

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Since 2010, he is the chief of service in charge of epidemiological surveys of animal diseases in the Ministry of Livestock, Fisheries and Animal Industries (MINEPIA) in his home Country. He is also the focal point for the program " Zoonoses and ONE HEALTH strategy" at the ministerial level and has unilaterally championed the implementation of the National Program for the prevention and fight against emerging and re-emerging diseases in Cameroon.

He serves as an interface between MINEPIA, other administrations and partners in the implementation of the program " Zoonoses and ONE HEALTH strategy" in Cameroon.

HOW TO FIND A COMMON GROUND?

The Development of the One Health Strategy and the National Program for the Prevention and Control of Emerging and Re-Emerging Zoonotic Diseases in Cameroun

Severin LOUL

BACKGROUND AND JUSTIFICATION

Cameroon is located in the Congo Basin, one of the five areas at high risk of disease emergence in the world. During the last decade, its animal and human populations have been at risk of or affected by several zoonotic diseases emerging or re-emerging. Some events mentioned below have been instrumental in leading the Government of Cameroon to better prepare for the emergence of zoonotic diseases. These events include:

- The fear of a possible occurrence of haemorrhagic fever virus such as Ebola and Marburg, already emerging in neighboring countries (Gabon, Congo and Democratic Republic of Congo) which share the same ecosystem with Cameroon (Congo Basin forest).

- The circulation of several simian immunodeficiency virus (SIV) in monkeys in Cameroon (Peeters. M.; 2002) and the discovery of the SIVcpztt in the chimpanzee (*Pan troglodytes troglodytes*) species have been speculated linked to the HIV pandemic

(Keele, BF, 2006). The occurrence of a fatal outbreak of anthrax in great apes (gorillas and chimpanzees) in late 2004 and early 2005 in the Dja Biosphere Reserve has also impressed the opinion of the public (Leendertz, F, 2006). This outbreak revealed the lack of coordination between animal health, human health and environmental health. As a result, it was recommended by the Government to improve the trans-sectoral collaboration for the response to such emergence and to put this supervision under the Prime Minister (Loul S. 2005).

In 2006 the detection of three H5N1 avian influenza outbreaks in the North of the country created panic (Baschirou, MD 2006). This was used as an opportunity for the Government to implement the "Limbé recommendations" for the control of avian influenza H5N1. A "strategic plan for the prevention and control of human and animal flu" was developed, supporting cross-sectoral actions (human health, animal and environmental health). A Common Fund Project (CFP) was created to support the implementation of the strategic plan.

The Steering Committee of the CFP was chaired by the Prime Minister and includes thirteen ministers as members. Avian Flu was rapidly controlled.

Building on the success in the control of Avian Influenza H5N1 and with the perspective to develop an approach to prevent and control all zoonotic diseases, the Prime Minister, Head of Government has established an Ad Hoc Committee (PM decree, 2008) in charge of the development of a “National Program for the prevention and the control of zoonoses”. This program is based on multisectoral and interdisciplinary connections between human, animal and environmental health and therefore the development of a National “One Health” Strategy was a prerequisite.

OBJECTIVES

The main objective of this paper is to describe the steps outlined to meet the animal health (domestic and wild), human health and environmental health sectors and to develop a participatory and consensual “One Health” National Strategy and the associated “National Program for the Prevention and Control of Emerging and Re-emerging Zoonoses”.

DEVELOPMENT OF THE PROGRAM FOR THE PREVENTION AND THE CONTROL OF ZOOONOTIC DISEASES

Context

In Cameroon, human health, animal health (domestic and wild) and environmental health are under the mandate of four different ministries: Minister of Health (MINSANTE), Minister of Animal Health (MINEPIA), Minister of Wildlife Conservation (MINFOF) and Minister for the Management of the

Environment (MINEPDED). Effective control of zoonoses requires a consensus between these main actors.

Building process

As Head of the Government, the Prime Minister has the power to bring together several ministries and to deliver guidance for harmonized action and collaboration between sectors. He has played an important role in the development of the OH strategy and the associated national program for prevention and fight against zoonoses. This development included six steps :

- The first step was the establishment of an Ad Hoc Inter-Ministerial Committee in charge of the development of the Programme for the Prevention and Fight against Zoonoses. The Committee was established through an Order from the Prime Minister. The eight ministries involved are: the Ministries in charge of Human Health (MINSANTE), Animal Health (MINEPIA), Wildlife (MINFOF), Environment (MINEPDED) Tourism (MINTOUR), Research (MINRESI), Economy (MINEPAT) and Finance (MINFI). Are also included in the Committee NGO on biodiversity conservation (WWF, WCS, IUCN) and regulatory bodies of doctors, pharmacists and veterinarians. The MINEPIA was mandated to chair this committee.
- The second step was to train and increase awareness of the members of the Committee on the OH approach. The objective was to provide minimum information on the concept so that the value of the multisectoral collaboration was understood and used for the development of the National Program for the Prevention and Control of Emerging

Re-emerging Zoonoses;

- The third step included the strengthening of the Committee through the creation of a Technical Secretariat in charge of the development of the strategy and associated National Program for the Prevention and Control of Emerging Re-emerging Zoonoses. Additional actors have been included at this: laboratories (CPC; CREMER; GVFI; LANAVET), Universities, other organizations such as USAID-EPT (MINEPIA, 2011b).
- The fourth step of the process was the adoption of a working method and a timetable. The main guiding points were:
 - a) the analysis of the situation: surveillance systems for animal and human diseases, regulatory texts in various departments and areas of collaboration between ministries;
 - b) the development of the National OH Strategy;
 - c) the development of the Program for the Prevention and Control of Emerging Re-emerging Zoonoses.
- The presentation of the results from the analysis and the identification of the key elements to guide the development of the OH strategy of "Health" and the Program for the Prevention and Control of Emerging Re-emerging Zoonoses were in the fifth step.
- Through a participatory and consensual process involving all stakeholders, a document was developed (step Six) which included:

- Preparation of a draft document of the national OH strategy;
- Preparation of a draft Program for the Prevention and Control of Emerging Re-emerging Zoonoses ;
- Pre-validation of the draft of the National Program for the Prevention and Control of Emerging Re-emerging Zoonoses (NPPFERZ)
- Validation of the National Program for the Prevention and Control of Emerging Re-emerging Zoonoses through the joint signing of four heads of key ministerial departments

At the end of this process, the Committee has successfully delivered two documents: the National OH Strategy chaired by the Prime Minister and with eleven ministers as members and the National Program for the Prevention and Control of Emerging and Re-emerging Zoonoses which is part of the implementation of the OH strategy (figure below).



LESSONS LEARNED

- A Coordination structure at a high level of decision (decision of the Prime Minister) facilitates the strengthening of multisectoral collaboration and process control;
 - A preliminary analysis of the scope and expectations of stakeholders was instrumental to develop a methodology for which the participation and inclusion of all stakeholders views was ensured.
 - A better understanding of the concept of “One Health” and its added value for policy makers and members of the Committee in charge of the process through training and awareness is a prerequisite to minimize divergences of views
 - The regulatory rules establishing the committee in charge of drafting the strategy and program should be flexible enough for adjustments when needed.;
 - The regular sessions between actors from different sectors facilitated the understanding of a common lexicon;
 - The involvement of laboratories, universities and training schools in the process has been beneficial
- the official agreement in March 2012, some preparatory activities were conducted to initiate the strengthening of the collaboration:
 - Endorsement of a cooperative agreement between the CPC and GVF laboratories and MINEPIA (previously limited to GVFI, MOH and MINFOF);
 - Investigation of two outbreaks of rabies by a joint team MINEPIA-MOH (Amban: Southern Region and Ntui: Central Region in August 2012):
 - Integrated public awareness actions between MOH and MINEPIA during the World Day against rabies (24-28 September 2012);
 - Designation of OH Focal Points in the Ministries in charge of Public Health, Livestock, Wildlife and Environment;
 - Development of the Joint Action Plan Health and Environment, validated the 19th of October 2012;

PERSPECTIVES FOR THE IMPLEMENTATION OF THE NATIONAL PROGRAM FOR THE PREVENTION AND CONTROL OF EMERGING AND RE-EMERGING ZOOSES

The launch of the program was planned for early 2013 with a specific budget line for each of the four main ministries. In the meantime, since

CONCLUSION

To launch the OH approach and implement the National Program for the Prevention and Control of Emerging and Re-emerging Zoonoses in 2013, the Government of Cameroon, through the MINEPIA, made available a budget of about \$ 225,000. Some of the priority activities are mentioned around the following pillars.

1. For the strengthening of the surveillance, early detection and rapid response:

- Develop an integrated approach for the monitoring for the collection, management, analysis and dissemination of data on zoonoses.
 - Establish a system for the surveillance of diseases in wildlife within the protected areas of the country;
 - Capacity building in risk analysis, surveillance, investigation and integrated response for zoonotic diseases
 - Practice exercises to develop and / or improve the preparedness plans
 - Carry out integrated activities for the prevention and control of rabies
2. For the strengthening of research on zoonoses, the objective is to promote basic research and operational activities:
- A study on the situation regarding zoonoses, establishing the list of priority zoonoses and mapping their area of risk;
 - Early detection of emerging zoonotic pathogens in wildlife from animals legally hunted;
- The establishment of a national network of laboratories in the human and animal sectors and the strengthening of intersectoral collaboration and exchange of information also with the authorities
3. Training of the actors for animal health, human and environment:
- Inclusion of OH approach related skills in the curricula of environmental health, animal and human training (technical schools, universities, etc.);
 - Increase of awareness of decentralized decision makers sectors (animal, human and environmental sectors) on the OH approach;
 - Increase of awareness of the OH concept in training schools (school of wildlife, forestry, veterinary schools, nursing, health administration, etc.) and universities for human and veterinary medicine.

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