



GF-TADs Sub-Regional Meeting on Camel Diseases

14-16 February 2016, Abu Dhabi - U.A.E.

Purpose of the meeting

With increased interest in the camel as a multipurpose animal, more research into the etiology and pathology of camel diseases is required to better detect, manage and control such diseases. Camels were formerly thought to be resistant to most of the diseases commonly affecting livestock, but new data has confirmed that camels are susceptible to a large number of pathogenic agents; in addition the possibility of camels being a link in the transmission of several trans-boundary animal diseases like Bluetongue, PPR, Rift Valley and West Nile Fever also requires further investigation.

However, most of the laboratory techniques used for the diagnosis of diseases in camels have not been validated for the species. Furthermore, specific protocols for camel vaccination against disease of economical interest are not available.

Considering the importance of camelids in the Middle East Region and the lack of knowledge of camelid pathology, OIE set up an *ad hoc* Group to improve diagnosis capacity and to elucidate the role of bacterial, viral and parasitic pathogens in the epidemiology and pathogenesis of diseases in camelids. The *ad hoc* Group met and listed reported pathologies as significant diseases or diseases for which camelids are only potential carriers. Diagnosis and prevention for each disease have been reported and the available antigen detection methods and serological tests described. The group recommended encouraging epidemiological study and surveillance systems, promoting applied research on camel diseases, improving and validating diagnosis techniques and defining specific vaccination protocols.

Considering the above factors, the need to establish a network of laboratories for diseases of camelids was expressed by the OIE *ad hoc* group and confirmed by the OIE Biological Standards Commission. The network should build up processes and tools to facilitate the fight

against the most important diseases of camelids, exchange information and standardize and validate diagnostic tests according to the OIE Terrestrial Manual.



Under the auspices of the OIE/FAO GF TADs and the support of the Abou Dhabi Food Control Authority (ADFCA), a sub regional meeting on camel diseases was held in Abou Dhabi, UAE, on 14-16 February 2016 aiming at:

- Announcing the launch of the OIE twinning signed between ADFCA and the IZS reference centres network of Teramo, Palermo and Brescia, in Italy, in May 2015 for 5 years, for establishing an OIE collaborating center for the epidemiology and diagnostic of camel diseases;
- Proposing the creation of a pilot sub-regional camel disease network for the Gulf and neighboring camel rearing countries, CAMENET, which could later be extended to other countries in the NENA region;
- Describing the epidemiology of major camel diseases affecting the region, including zoonosis and emergent diseases.

Outcomes and deliverables

RATIONALE

1. Fast growing population of camels worldwide (28 M), 8% living in the sub-region (GCC, Iraq, Jordan and Yemen).
2. Higher risk of TADs with growing international trade of camels, especially from the Horn of Africa.
3. Need for specific diagnostic tests and vaccines to better investigate and control the camel diseases (recommendation of the OIE AHG on camel diseases).
4. Overview of the major camel diseases in the region :
 - Internal parasites : gastrointestinal, surra
 - Skin diseases : mange, contagious ecthyma, camelpox, ringworm
 - Multifactorial diseases: calves diarrhea, respiratory syndrome
 - Endemic Zoonosis : Brucellosis, RVF, rabies, tuberculosis
 - Disease of economic impact
 - Pandemic threats of animal origin: MERS-CoV
5. Importance of husbandry practices, production systems and trade as potential risk factors for disease occurrence, spread and transmission.

ACTION PLAN TO ADDRESS THESE CAMEL CONCERNS IN THE SUB-REGION

1. **Implementation of an OIE TWINNING ADFCA/IZS (2015-2020) for establishing an OIE collaborating center for the epidemiology and diagnostic of camel diseases** (will be first one in the world).
2. **Creation of CAMENET**: sub-regional camel disease network in the Gulf and neighboring camel rearing countries as a pilot initiative to be extended in the future to the NENA region.

OBJECTIVES AND SCOPE OF CAMENET

Promote the development of camel sector in the sub-region by:

1. **Improving scientific and technological capacities in epidemiology and diagnostic of camel diseases** in the sub-region;
2. **Coordinating the support of international organizations (OIE/FAO/WHO) to the national authorities** (including the veterinary services) of the member countries in their surveillance and control of camel diseases including emerging diseases;
3. **Facilitating collaboration between the national, regional and international institutions and FAO/OIE reference laboratories and collaborating centers** for capacity building and exchange of expertise and cooperation;

4. **Contributing to the development, standardization and validation of specific reference methods** for major camel diseases according to OIE standards and procedures
5. **Promoting specific studies** on husbandry practices, socio-economic and other risk factors at the animal-human- environment interface.

STEPS FORWARDS FOR CAMENET

1. **Before 15 March 2016:** Concept note detailing the objectives and the terms of reference of the CAMELNET potential members country (GCC, Yemen, Jordan, Iraq) will be sent by GF TADs Secretariat to the national veterinary authorities.
2. **Before 15 April 2016:** Participating member countries notify to the FAO/OIE GF TADs Secretariat, the references of their national laboratories involved in the CAMENET and the references of 3 focal points for epidemiology, laboratory and husbandry.
3. **Before June 2016:** planification of the input of international organizations to countries for:
 - Capacity building for collection of samples;
 - Capacity building for epidemiology, laboratory and husbandry;
 - Roadmap for the functioning of the network, including national and regional programme of surveillance and control of priority camel diseases.
4. **2nd semester 2016:** Collection of samples and epidemiological data in member countries in coordination with ADFCA/Camel disease center and the IZS OIE reference laboratories.