

40th session

## European Commission on Agriculture

27-28 September 2017 | Budapest, Hungary

SIDE EVENT 1.

## The effect of climate change on animal diseases, trade and food security in the REU region

(linked to agenda item 3 and ECA document ECA/40/17/3)

Date/time: 27 Sep 2017 / 13:45 h - 15:00 h

Through a number of examples and case studies the side event will review some of the major challenges of TADs in the region and how climate change will further affect distribution and intensities patterns. Presenters will highlight the need for integrated and interdisciplinary approaches which also take into account the environmental and social contexts. Participants will discuss future collaboration and approaches in addressing future regional challenges.

## Proposed leading questions for the discussion

- What are your main constraints in addressing TADs, where are the key areas of FAO support?
- What should a regional mechanism/product contain in regards to TADs monitoring and assessing the impacts of climate change?
- How can interregional collaboration be developed, what are the building blocks that already exists?

Time	Agenda item	Speaker
13:45 to 13:50 (5 mins)	Introduction to the objectives of the side event	Andriy Rozstalnyy (FAO REU)
13:50 to 14:00 (10 mins)	Ecological dynamics of discrete activation of pathogens: the cases of <i>Yersinia pestis, Francisella tularensis</i> , Filoviridae.	Dmitry Nikolaenko (Kiev International University)
14:00 to 14:10 (10 mins)	Modelling the impact of climate change on bluetongue disease	Matthew Baylis (Liverpool University)
14:10 - 14:55 (45 mins)	Discussion	Moderator
14:55- 15:00 (5 mins)	Session close	Andriy Rozstalnyy (FAO REU)

Side event will have English and Russian translation.

## **Executive Summary**

The world population is expected to grow by 33% by 2050 to 9.6 billion, leading to 70% increased demand for food, particularly livestock products. Concerns will grow for food security as one third of the cereal harvest will be used for animal feed.

Current headlines for the global climate are: 2016 was the hottest year on record, by 0.5oC over a 30 year average and this is the greatest ten year change since the 1800's; 12% of land is in drought with low levels of ground water; this year was the largest ever annual increase in CO2 and other Greenhouse gases (GHGs). The average increase in temperature of 0.45 – 0.56oC each year in the past three years is unlikely to be a random event; atmospheric pollution caused by sand storms and forest fires is reducing the length of the growing season; Africa, South America and Europe are all becoming drier while SE and W Asia are becoming wetter.

With climate change, the occurrence of trans-boundary animal diseases (TADs) will change due to alteration of vector, pathogen and host distribution patterns. Climate change-associated increases in TADs will also impact on trade, and conversely changes in trade flows as an adaptation measure may increase the risk of TADs.

The REU region is principally one of rural communities and smallholders. Climate change is likely to cause temperature and precipitation changes (FAO 2017a) in the region which could impact on crop production, livestock health and welfare and livelihoods. The region also faces challenges for trade caused by political and economic barriers.

FAO brings multi-disciplinary expertise (from animal health and production, food and feed safety, plant health and production, fisheries and aquaculture, water and land use, legislation and governance, laboratory aspects etc.) that is needed to address this cross-sectoral issue.