Vulnerability and Resilience of Livestock Farming Systems Facing Global Changes

Jean F. Tourrand

1Shikui DONG (Beijing Normal University, China) – China
2Mona ABD EL ZAHER (Agriculture Research Centre (ARC), Egypt) – Egypt
3Liz WEDDERBURN (AgResearch, New Zealand) – New Zealand
4Valéria HOMEM (Ministry of Agriculture, Brazil) – Brazil
5Maureen WOODROW (University of Ottawa, Canada) – Canada

Abstract

As any sector of agriculture, the livestock farming systems are impacted by the different components of the global change along the last decades. The change has always made part of the factors which lead the breeders strategies, especially the mobility and savings. However, may be it has never been so important and diversified in such a short time. Moreover, the combination of different factors of changes increases the complexity of the processes and therefore the responses in terms of practices and policies.

In arid areas, the rainfall reduction, the global warning and high frequency of hazards force breeders to adapt the management practices of the pastures. The strong urban development and new lifestyle require different resources as for example land, water and food, impacting the countryside and the breeding areas. New technologies of information and communication, especially mobile phone and transport, help the breeders to have a better knowledge about the price of the products and the dynamic of the market. During the last decade, the globalization of the economy gets high the animal product prices, as it never happened. The social demand, mainly young people and women, requires significant transformations in terms of living conditions and relationships between the generations and the traditional governance. The new social and environmental awareness at different level result in new rules and practices in natural resource management and sustainable development.

The breeders have to face important changes in the same time, have to take decisions, frequently in a short time and may be leading to irreversible modifications of their livestock farming systems, their living conditions, with risks for their sustainability. In this global change context and according to the differences between the biomes and regions of livestock activities, what are the main differences and common issues in adaptive strategies and resilience process at farm and local level, especially in management of the pasture, the feed and the herd, land-use, labor organization, long-term farming trajectories and public policies.

Based on contrasted study cases in different biomes, the session will focus on the three following themes:

- What does global change mean at the local level?
- What are the main adaptive strategies at farm and local level?

- What about the resilience of the livestock farming systems in harsh conditions?
We are waiting for at least presentations and paper from 8-12 study cases: The Qilian Mountains, Tibetan Plateau, in China (R.Long & L.Dong); North Western Coast Zone in Egypt (M/Abd El Zaher & I.Daoud); Gharb Plain in Morocco (MT.Srairi); North Senegal (C.Corniaux), North Uruguay (H.Morales), South Patagonia in Argentina (F.Coronato), Western Brazilian Amazon (L.Navegantes), Special Areas in Western Canada (P.Strankmann), New Zealand (L.Wedderburn), Mountains areas in France (J.Lasseur), ...

**Keywords:** Livestock Farming Systems, Vulnerability, Adaptation and Resilience, Global and local