

*Pastoralism Livestock Production in the Sahel: Research Actions and Partnerships
Workshop*

This workshop, a joint effort of the UF Feed the Future Innovation Lab for Livestock Systems and the Sahel Research Group, was held on 14 April 2021. It was organized and moderated by Dr. Renata Serra, faculty member in the Center for African Studies and the Feed the Future Innovation Lab. Dr Serra gave an introduction about the Sahel Research Group and described the purpose of the workshop: to hear about the Center for International Cooperation in Agricultural Research for Development - Mediterranean and Tropical Livestock Systems (CIRAD-SELMET) program as well as to deepen the collaborations between researchers and projects focusing on different aspects of pastoral production in the Sahel.

Dr. Gbola Adesogan, the Director of the Feed Future Innovation Lab for Livestock Systems, summarized the main objectives, study areas and projects undertaken by the lab since 2015.

Dr. Leonardo Villalón, Professor in Political Science and Dean of the International Center at UF, welcome everyone of behalf of the Sahel Research Group.

Three presentations followed.

Presentation 1- “CIRAD-SELMET: partnership and research actions in the Sahel” by Ibra Touré (GIS expert) and Guillaume Duteurtre (Ag. economist), both at CIRAD-SELMET.

The SELMET Research unit is a pluri-disciplinary joint research laboratory based in Montpellier (France). It involves around 100 permanent and contractual staff from *Institut National de la Recherche Agronomique* (INRAE) (40 staff), Montpellier Supagro (10 staff) and CIRAD (50 staff). The 3 main research fields and partnerships are West Africa, North Africa, and the Indian Ocean. Other partnerships include Vietnam and Amazonia. Researchers work in different fields, including biosciences, system approaches and social sciences. The objective is to understand, assess and support sustainable livestock transitions through innovative tools, such as agricultural transitions and digital technologies, towards a sustainable development that considers global changes, food systems and territories.

In the Sahel where pastoral livestock production is still a major way of life and a key production system in the arid zones of Africa, the CIRAD-SELMET and 3 Senegalese institutions - *Université Cheikh-Anta-Diop* (UCAD), *Institut Sénégalais de Recherche Agricole* (ISRA), *Centre de Suivi Écologique* (CSE)- have been developing a scientific interest group since 1999, called “Pole on Pastoralism and Drylands” (www.ppzs.org). This group examines the conditions for sustainable pastoral livestock production, one that is better integrated into national economies and articulated with other production systems in dry zones. Other projects include

Africa-Milk (Chad), Pastoral Livestock Reinforcement Program (PREPAS), Regional Sahel Pastoralism Support Project (PRAPS) (region-wide), Carbon Sequestration and greenhouse gas emissions in (agro) Sylvopastoral Ecosystems in the Sahelian CILSS States (region-wide) (CaSSECS).

Presentation 2- “(Agro)pastoral household economics in a shock-prone environment in the Sahel” by Abdrahmane Wane (CIRAD-SELMET and ILRI) and Alioune Ndiaye (Practical Action)

All over the Sahel, livestock is one main source of household revenue, and the Agropastoral system is highly diffused. This is a complex system, involving actors and resources at multiple spatiotemporal scales, and different interactions with the environment/climate. Shocks to the system stem from climate variability and overall uncertainty, including market shocks, recurrent social and ecological crises, political instability and health shocks. These result in multiple losses, which have profound qualitative and quantitative implications.

However, public and private-sector actors often overlook the importance and value of pastoral and agro-pastoral systems. The lack of consideration stems mainly from a lack of knowledge and awareness of the multifunctionality of pastoralism, particularly regarding its multilevel economic contribution and ability to cope with multifaceted shocks, despite persistent structural challenges (socioeconomic inequalities).

In the Sahel, agropastoralists are often believed not to be market oriented. Yet in fact, they have a strong understanding of how the market operates. The problem is that access to markets is restricted by a weak enabling environment.

(Agro)pastoral households generate wealth both at the micro level and for sectoral and national economies. This economic contribution is threatened by high inequalities due to asymmetric access to productive resources. Self-consumption and diversification (self-employment and wages) help attenuate income inequality.

(Agro)pastoralists operate in a shock-prone environment; they take advantage of it and prioritize strategies based on their resources: mobility, family labor, asset sales; however, these strategies remain insufficient when it comes to global shocks.

COVID-19 restrictions have heavily impacted the economic activities of (agro)pastoralists.

Presentation 3- “Livestock and dairy value chains in West Africa: key issues and research questions” by Christian Corniaux (agronomist and livestock scientist at CIRAD)

In West Africa, high population growth, particularly in urban areas, provides market opportunities for increased animal production and trade in a context of trade globalization.

Yes, it raises questions about the ability of West African producers and stakeholders to supply this market in sufficient quantity and quality and at competitive prices. The outcome will depend on the interaction between three main sets of factors: population growth and the opportunities for trade, poverty and the extent to which this will limit capacity for investments, and climate shocks in the Sahel. The presentation examined the role of these factors in the context of an ongoing project conducted by PPZS (*Pôle Pastoralisme et Zones Sèches*), which focuses on two key value chains (milk and meat), market access and actors' dynamics.

After the three presentations, a Q&A session gave participants the chance to directly interact with presenters. The workshop proved very fruitful for connecting researchers from diverse organizations in the U.S., France and West Africa. Resources and contact details were shared, as well as specific information on the diverse range of projects and institutions that participated in the event.

More information regarding the CIRAD-SELMET project can be found at <https://umr-selmet.cirad.fr/>.

More information regarding the Feed the Future Innovation Lab for Livestock Systems can be found at <https://livestocklab.ifas.ufl.edu/>.

More information regarding the Sahel Research Group can be found at <http://sahelresearch.africa.ufl.edu/>.