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Why and how address multifunctionality of pastoral farming systems?

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GASL – ACTION NETWORK “RESTORING VALUE TO GRASSLAND”

Proceeding of the Workshop
Multifunctionality of pastoralism:
linking global and local strategies through shared
visions and methods



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GLOBAL AGENDA FOR
SUSTAINABLE LIVESTOCK



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Proceeding of the Workshop
Multifunctionality of pastoralism:
linking global and local strategies through shared visions and methods

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Advertising: all views expressed are those of the individual authors and do not represent those of the editors, organizing committee and their institutions

Foreword

The World Bank, FAO, the Global Agenda for Sustainable Livestock (GASL), the LIFLOD network and TerrAfrica have organized a workshop held just prior to the start of the 2016 International Rangeland Congress in Canada in Saskatoon, 17-22 July 2016 to share current knowledge on the multifunctionality of pastoral systems and to identify development pathways that better articulate visions and perceptions of pastoralism stakeholders at different scales.

The objective of the workshop was to present the state of the art of international research and development work and how they address the multifunctionality of pastoralism at various scales. The three-half days of workshop were based on:

-case studies presentations dealing with a diversity of situations and contexts at the global level, to display the time and space variability and dynamics of the functions and values associated with pastoral systems, as well as the diversity of stakeholders involved.

- working group sessions helping us identifying needs for new knowledge taking into account the multifunctionality at different scales in pastoral development projects and contributing in building and agreeing on a generic conceptual model. The model integrate the different factors needed to answer the questions linked to livestock sustainable development at the local and global level.

These proceedings gather the articles and the posters abstracts presented during the workshop as well as the main output of the meeting.

Acknowledgment

We are grateful to organising committee at the 10th We are grateful to the organising committee of the 10th International Rangeland Congress for their help in the organisation of this workshop

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INTRODUCTION





Why and how address multifunctionality of pastoral farming systems?

By the Organising Committee of the workshop: A. Ickowicz, V. Blanfort, S. Forman, B. Hubert, J. Lasseur, C., Marguerat, J.F. Tourrand, G. VelascoGil, L. Wedderburn.



RATIONALE

While around one billion people in the world live from livestock farming, rangeland covers one third of the world land. The Livestock-Rangeland couple secures diverse functions for the human population in different livelihood domains including food supply and food security, rural income and savings, food trading and agro-industries, soil fertility and crop fertilizers, production of goods (wool, leather...), tillage and rural transportation, leisure, landscape, social relationship, medicine, etc.

Facing the new environmental challenge defined during the COP21, the Livestock-Rangeland couple has to tackle some impacts, at both the local and global scales, especially regarding greenhouse gases (GHG) emission, biodiversity loss and water pollution, in order to better contribute to sustainable development. (FAO, 2018)

Globally, the new environmental challenge focuses on biodiversity conservation and reducing deforestation, desertification, GHG emissions, pesticide consumption and fossil energy. The contribution of pastoral systems to food security and nutrition challenges is also at stake, considering the world demographic tendencies and the forecast of an increasing demand for animal source food in the emerging and developing countries. At the local scale, the main challenges are to face higher frequency of climatic events (droughts, overflows ...), low attractiveness of livestock and rural activity, especially for young people, adaptation to new standards and to a volatile and unpredictable market, and integration of new generic technologies.

However, in this complex global-local context, the impacts and contributions of pastoral and agro-pastoral systems are still poorly qualified and quantified and their perception still varies among different stakeholder groups (Ickowicz et al, 2010). Hence, these are strong limitations to the development and the adaptation of these systems.

The World Bank, the FAO, the Global Agenda for Sustainable Livestock (GASL), the LIFLOD network (with the support of Cirad and Inra) and TerrAfrica organized this workshop just prior to the start of the 2016 International Rangeland Congress in Canada in Saskatoon, 17-22 July 2016 to present and share current knowledge on the multi-functionality of pastoral and agro-pastoral systems in order to identify development pathways that better articulate visions and perceptions of pastoralism stakeholders at different scales.

PURPOSE

The objective of the workshop was to present the state of the art of international research and development work and how they address the multi-functionality of pastoralism at various scales. The workshop aimed at building and approving a generic conceptual model that integrates the different factors needed to answer the questions linked to livestock sustainable development at the local and global level with a special focus on (i) linking international policy debates (Food Security; Climate Change; Biodiversity) to local stakeholders expectations from livestock activities (ii) defining and characterizing the different functions of pastoral systems at different scales and in different agro-ecological and socioeconomic situations (iii) consolidating “innovation”, “knowledge issues” and “efficient support actions” to progress towards sustainable strategies and projects for pastoral systems.

By hypothesis, multifunctionality is built on:

- The agro-ecological, social and historical contexts within which livestock systems have developed;
- Heterogeneous stakeholders having developed diversified knowledge about local ecosystems and having different expectations for livestock activities (economic returns, local product, ecosystem services, cultural symbols...) and for herder's families (viability, security, sustainability...)
- A complex bundle of access and usage rights for natural resources, including land and water
- A specific environmental policy and a body of collective actions

- A complex network of livestock value chains specific to local products, traditional food habits, local commercial circuits or primary products flows oriented towards urban markets or export.

To address these hypothesis and develop a comprehensive state of the art, the workshop which gathered seventy nine colleagues from twenty nine countries around the world coming from different types of institutions (research, professional associations, ministries, environmental institutes, ...) was organized in four sessions :

- « Multifunctionality around the world » through presentations of case studies
- « Diverse perceptions of multifunctionality for a shared framework » presenting a database of success stories, films on perceptions of multifunctionality, and a test of a conceptual model on multifunctionality.
- Working groups with the aim to test, discuss and enrich the conceptual model
- A conclusion session with wrap-up and recommendations for future actions.

This workshop is part of the Action Plan of the "Restoring Value to Grassland" Action Network developed within the Multi-stakeholder Partnership "Global Agenda for Sustainable Livestock" (GASL) (<http://www.livestockdialogue.org>). The GASL platform is supported by FAO. The Global Agenda recognizes that for livestock to be sustainable, the sector needs to respond to the growing demand for livestock products and enhance its contribution to food and nutritional security; provide secure livelihoods and economic opportunities for hundreds of millions of pastoralists and smallholder farmers; use natural resources efficiently, address climate change and mitigate other environmental impacts; and enhance human, animal, and environmental health and welfare. The Global Agenda provides a multi-stakeholder global Partnership, to comprehensively address the sector's multiple challenges towards sustainable development. It facilitates global dialogue to foster local practice and policy change, focusing on innovation, capacity building, and incentive systems and enabling environments.

Focusing on grassland and rangeland livestock systems, the "Restoring Value to Grassland" Action Network of GASL aims **"To maintain, restore and enhance environmental and economic value of grasslands, while promoting their social and cultural functions globally"**. The main operational objective of this Action Network is then to promote the multiple functions of grassland livestock systems through developing assessment methods and sharing of information.

This workshop was initiated on behalf of the Global Agenda for Sustainable Livestock (GASL), and the World Bank under the auspices of the Livestock Global Alliance (LGA) and was the 3rd Workshop on Multifunctionality of Pastoralism, organized by the LiFlod Network.

Our first Workshop was held in Hohhot (China) as a side event of the VIIIth IRC in 2008. The second was in Rosario (Argentina) in 2011 linked to the IXth IRC. The proceedings of both workshops were disseminated (see below).

We are grateful to the donors who enabled us to organize this event: Cirad, Inra, Agropolis international, FAO-GASL, the World Bank, the LGA, the French Ministries of Agriculture and of Foreign Affairs.

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