



IYRP Affiliated Session at UNFSS Pre-Summit, 26 July 2021 Executive Summary

Mobile pastoralism valuing rangeland variability: a game-changing idea for sustainable consumption and production from the livestock sector

This virtual session, hosted by several partners of the International Support Group (ISG) for the International Year of Rangelands & Pastoralists ([IYRP](#)), brought voices of pastoralists and those who support them from around the globe to the UNFSS and called on it to adopt the [game-changing global initiative](#) that values mobile pastoralism and rangeland variability (Action Track 5, Cluster 5.3.1). **Jürgen Hoth** (FUNBA) moderated the presentations. **Ann Waters-Bayer** (CELEP) and **Cynthia Mugo** (ILRI) moderated the chats and **Maryam Niamir-Fuller** (ISG) drew the conclusions. There were 148 participants, and 100% of poll-takers endorsed the game-changer. See the [video recording and full report](#).

Food system sustainability and rangeland variability

The session started with the film "[Pastoralism is the future](#)": man-made climate change is increasingly creating conditions of variability and unpredictability, but pastoralists use variability to their advantage.

Antonio Rota (IFAD) noted that pastoralists are stewards of rangelands and that the products and services they provide are essential for food system sustainability. For **Jonathan Davies** (IUCN), the tragedy of rangelands is that variability and pastoralists' adaptation to it are poorly understood, which has led to policies and investments that undermine this adaptation.

These food systems are operated by about half a billion pastoralists today, on grasslands, tundra, mountain meadows and other ecosystems grouped into the definition of 'rangeland'. They cover an estimated 54% of the world's land surface, said **Fiona Flintan** (ILRI) according to the recently launched global [Rangeland Atlas](#).

Rangelands are often seen as valueless and degraded, but can harbour high levels of biodiversity. In fact, some attain the highest diversity records, said **Carlos Martorell** (National Autonomous University of Mexico). Moreover, rangelands provide other important ecosystem services, such as carbon storage and water infiltration, frequently at levels comparable to forests. Conversion of rangeland ecosystems to forest or cropland is unsustainable and misguided.

Engin Yilmaz (Yolda Initiative) stressed that rangeland ecosystem services have been nurtured over millennia by pastoralists moving their livestock, giving benefits such as seed dispersal, patch mosaics and spreading of dung and thus organic matter and nutrients. Mobility of livestock even helps the survival of insects and scavengers. Movements of livestock are analogous to those of wild herbivore species, with very similar effects on ecosystems, but driven by land-management choices made by mobile pastoralists.

Ian Scoones (University of Sussex) highlighted the urgent need for a new science of variability in agriculture and food systems, rooted in mobility and flexibility and centred on pastoralists' own knowledge. He pointed out that the Green Revolution model of agricultural science, focused on stability and control, is simply not appropriate for pastoral areas. A participant remarked that the notion of 'rewilding' now in vogue fails to understand the true value of mobile pastoralism.

Hijaba Ykhanbai (Environment and Development Association/JASIL) described mobility as the most effective strategy in pastoral agriculture. It leads to natural regeneration of the rangelands. In Mongolia, there are now more than 90,000 herder families that operate on a total of about 30 million hectares of rangeland. They co-manage rangelands, clarify pasture-use rights of herder families through land-use agreements and monitor activities together with local government authorities.

Ken Otieno (Resource Conflict Institute/RECONCILE) gave an example of the successful use of participatory resource management in Eastern Africa for enhancing food systems sustainability, ecosystem restoration and food security for rangelands users. He noted the importance of county spatial planning and community land registration, rather than land privatization, as tools for ensuring livestock mobility.

Sustainable consumption and nature-based livestock products

Ilse Koehler-Rollefson (Camel Charisma India) gave statistics to show the large contribution of pastoralists to national and local economies, pointing out that they produce food without fossil fuels and external chemical inputs. “Animals move, not their inputs”. Because of the biodiversity of forage plants eaten by moving animals, the food is very rich in micro-nutrients that most modern diets lack.

Pablo Manzano (University of Helsinki) gave an example: pastoral products display better fat profiles, namely more polyunsaturated fatty acids and better Omega 3/Omega 6 ratios. High-value protein in the products of nature-based, mobile livestock systems improves the nutrition of the vast majority of people in the world. He highlighted that most statistics, including nutrition ones, do not distinguish pastoralist systems from intensive, confined livestock systems – “not all meat is bad”.

Both Ilse and Pablo proposed that we should aim for a label or certification for products from pastoralist systems. Clear labelling and product tracing are being demanded by today’s knowledgeable public. Ykhanbai reported that such a system already exists in Mongolia.

Sarah Frazee (Meat Naturally) added that market barriers not only block huge development opportunities for rural poor but also create perverse food systems that benefit a few rather than the majority. In South Africa, for example, half the national herd is held in collective traditional authority but 95% of the meat in formal markets comes from private land. She urged governments to pass national policies and legislation to support new technologies such as virtual/mobile livestock auctions and mobile humane abattoirs.

Innovative policies and technologies for a changing paradigm

If pastoral systems are to take their sustainable strategies into the future, a fundamental change in attitudes, perceptions and policies is needed.

Damdindorj Batmunkh (Director General of the Policy and Coordination for Livestock Husbandry Department, Government of Mongolia) showed how governments can do so, giving the example of Mongolia's long-term development policy of preserving “traditional nomadic heritage, ecologically friendly, sustainable and organic animal husbandry, and promoting nomadic animal heritage to the world”. He called for support to the IYRP.



Pastoralists continue to innovate to ensure sustainable production and consumption. **Concha Salguero** (Transhumancia y Naturaleza) explained how TyN has helped 50 pastoral families in Spain understand that today’s transhumant seasonal movement from lowland plains to mountain meadows is a key ‘retro-innovation’ tool for tackling the environmental, sanitary and economic crises faced by modern society.

Igshaan Samuels (Agricultural Research Council) showcased the innovation of pastoralists with different forms of herd mobility in South Africa: traditional mobile pastoralists are starting to use redistributed lands so as to be able to move their herds over larger areas; some commercial farmers have now adopted herding and herd mobility as their main grazing-management approach; and private ranchers often negotiate and make agreements with other ranchers sometimes more than 1000 km away to move their animals to escape drought. He called for South African policies affecting pastoralists and rangelands to be harmonised with the realities on the ground.

One participant raised the issue of food safety, wondering how the remoteness of pastoral systems can overcome such challenges. Pablo said that food safety is guaranteed more easily through transformation of products *in situ* (see [“Improvements in livestock disease management”](#)). Sarah gave the example of pastoralist training and independent checks at potential contamination points (see [The Herding Academy](#)).

Another participant asked about the impact of conventional education systems on pastoralists. Pablo said that conventional education that promotes sedentarization of pastoralists has been a major force in destroying mobile pastoralism. We need to expand the successful experiences of mobile schools and encourage professionals such as doctors and lawyers to service mobile communities. Concha concurred and gave the example of Shepherd Schools in Spain, but noted that these are still outside the formal education structure.

Overgrazing can be misunderstood

Engin responded to the issue of overgrazing and rangeland degradation raised by several participants, giving the example of Turkey: between 1940 and 2000, the country lost 70% of its rangeland through expansion of crop farming. Mobile pastoralists were not responsible for this shrinking but had to graze their animals in much smaller areas, which led to overgrazing. We must investigate the root causes of these problems so as to develop sustainable solutions. Pablo pointed out that overgrazing is most commonly linked to economic, not management, factors (see "[Toward a holistic understanding of pastoralism](#)"). Carlos added that removing livestock completely is not the solution: undergrazing of rangelands can be just as bad as overgrazing.

Maryam Niamir-Fuller summarized that rangelands are vital ecosystems for food production, biodiversity conservation and climate-change mitigation. Conversion of rangelands to growing crops, feed or forest is not sustainable and should be avoided. Mobility of livestock is vital for the success of pastoralism in sustainably producing nutrient-dense food and can help restore and ensure healthy rangelands. Innovations and supportive policies to enhance this mobility must be encouraged. The proposed IYRP will help raise awareness about this.

To round off the session, the film "[Pastoralism: a sustainable and nature-positive production system](#)" showed how pastoralism is a sustainable and nature-positive production system in Sardinia, Abruzzo and the Alps of Italy.



This report has been edited by Maryam Niamir-Fuller, Jürgen Hoth and Ann Waters-Bayer and can be found on the following website: <https://iyrp.info>