



Pastoralist women's initiatives in self-organisation and co-innovation for a sustainable future

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Abstract

On rangelands, which cover over half the Earth's land surface, pastoralists produce food and other products from livestock. Not only have rangelands and pastoralists received less investment in research and development; often, women's critical roles in pastoral systems are overlooked or undermined by development interventions. There are only a few examples where herdswomen and rangeland scientists have worked together to jointly understand the rangelands and possible futures.

The United Nations declared 2026 as the International Year of Rangelands and Pastoralists (IYRP). This paper draws on own experiences of members of the IYRP Working Group on Pastoralism and Gender (WG)¹⁸ in their work with pastoralist women as well as from a desk study, which is underway, of publications and grey literature related to pastoralist women's initiatives in endogenous development and co-innovation, in self-organisation to have more influence in public spheres, and in the women's collaboration with scientists.

The paper brings some findings from this desk study, here specifically related to experiences in Argentina, Hungary, India, Eastern Africa and Spain, which will be used in the lead-up to and during the IYRP2026 to raise awareness globally about the strengths and potentials of pastoralist women. The findings will also feed into a global gathering of women pastoralists and researchers, designed to bring together their respective knowledge systems and intensify transdisciplinary collaboration in research and development in the rangelands.

Introduction

On rangelands covering over half the Earth's land surface, pastoralists produce food and other products from livestock (UNCCD 2024). About half of the pastoralists can be assumed to be women and girls. Not only have rangelands and pastoralists received less investment in research and development (Johnsen et al. 2019); often, women's critical roles in pastoral systems are overlooked or undermined by development interventions (Hodgson

¹⁸ The Working Group on Pastoralism & Gender is one of several Working Groups of the IYRP Global Alliance.

2000, Wangui 2008, Yurco 2024). Despite having been highlighted for decades in development cooperation, gender issues are still often overlooked in rangeland and pastoralist development interventions.

The United Nations has declared 2026 as the International Year of Rangelands and Pastoralists (IYRP). In the lead-up to 2026, the IYRP Working Group on Pastoralism & Gender (WG) seeks to generate better understanding of gender issues related to rangelands and pastoralism, to advance gender equity regarding access to resources and inclusion in decision-making about pastoral management and governance issues, and to give greater visibility and voice to pastoralist women and girls at subnational, national, regional and global level. It also seeks to bring together knowledge systems of women pastoralists and scientists and to intensify transdisciplinary collaboration in research and development in the rangelands.

In all pastoralist societies, women play crucial roles in livestock husbandry and rangeland management. Their knowledge, expertise and labour related to animals, plants and water are essential to pastoralism, as is their work caring for homes and families and cultivating good social relationships within and between communities (e.g. Fernández-Giménez et al. 2024). Their roles in building social capital and ensuring the sustainable use and sharing of resources within the family and community help to maintain social cohesion and to navigate potential crises for pastoralists' survival. Pastoralist women are also keepers of the cultural heritage of pastoralism, ensuring that this vital knowledge, including ethnoveterinary knowledge, is shared in the community – particularly from women to women and girls – and thus passed on to younger generations.

Pastoralist societies throughout the world differ as to who can purchase, inherit or otherwise gain access to livestock; who decides about livestock management; who sells animals and their products; and who controls the income from sales. Most pastoralist women do not have the same opportunity as men to gain access to production resources such as livestock, land, credit, technologies and services.

In decision-making processes above the family level, pastoralist women often have only indirect ways of influencing decisions through male members of the community, instead of participating directly and meaningfully in decision-making entities themselves. Development initiatives and community governance institutions are often designed in ways that constrain pastoralist women from taking active part in addition to their productive (e.g. livestock care) and reproductive (e.g. childbearing and childcare, homemaking, care of the elderly) labour. These continuing obstructions to equity restrict women's potential and critically important contributions to development.

However, in many areas, pastoralist women are taking their own initiatives to deal with new problems and opportunities. For example, in Isiolo County in northern Kenya, some Somali women who were trading individually in camel milk formed the Anolei Women's Camel Dairy Cooperative for collecting, processing and selling the milk. They expanded local sales of dairy products into larger and further-reaching operations, as far as Nairobi 270 km away. Development agencies then provided support to these women by strengthening their business analytical capacities and helping them to reduce milk wastage and to add value to the milk products through joint market research and consumer-awareness activities (Po et al. 2023). Research in Eastern Africa showed that pastoralist women are more willing than men to experiment with options for commercial enterprises and diversification and are more likely to form groups to reduce risk and increase profits, although they have greater difficulties than men to access credit and assets (Stites 2024).

Methods

The almost 60 members of the WG, who come from various countries across the world, are collecting and analysing examples where pastoralist women have taken initiatives to form their own groups at national and regional level so as to improve their social, economic and political status. Likewise, the WG members are collecting and analysing examples of pastoralist women's own socio-economic initiatives on an individual or community basis and their collaboration with scientists in processes of transdisciplinary research and development,

building on the women's initiatives. The examples are related mainly to the knowledge and innovation of pastoralist women in livestock production, animal healthcare, managing natural resources and governance of rangelands. These examples are drawn from the WG members' own experiences working with pastoralist women as well as from the above-mentioned inventory, which is still underway, of publications and grey literature related to pastoralist women's initiatives. These examples are to be used in the lead-up to and during the IYRP in 2026 to raise awareness globally about the strengths and potentials of pastoralist women. Further analysis will reveal how local initiatives can be supported and pastoralist women can exert more influence on decisions about research and development in the rangelands.

Results

The examples gathered from the different countries and pastoralist communities are diverse. Thus far, there are only a few examples where herdswomen and rangeland scientists have worked together to jointly understand the rangelands and possible futures. In the Argentine Puna, pastoralist women have collaborated with scientists to explore "mutual breeding" that integrates animals, people and the rangelands (Quiroga et al 2018). In India, the Van Gujjar, and Dhangar communities are working with ecologists and other scientists to understand better how rangelands function and are threatened and what needs to be done for their sustainable management (Anthra 2024). Some herdswomen are forming organisations to make their voices heard in policy dialogue and public events, also about research, and engaging in transdisciplinary research, e.g. in Hungary and Spain (Lelea et al 2024).

In 2010, about 100 women from over 30 countries met in Mera village in Gujarat State, India, in a Global Gathering of Women Pastoralist (IYRP). In their Mera Declaration, they called for recognition of their professionalism as women pastoralists and of pastoral mobility as a basic right. They demanded better access to land and other productive resources, markets, technologies, information and services, and incorporation of their expertise in interventions aimed at sustainable rangeland management. The Pastoral Women's Alliance that emerged from this event now includes about 3000 women. Another global gathering, Mera+15, is planned in 2025 to assess what has changed since the 2010 gathering.

Also in other countries, pastoralist women have taken initiatives to form national or subnational networks, such as the Pastoral Women's Council in Tanzania (PWC) and *Ganaderas en Red* (GER / Women Pastoralists Network) in Spain, with 200 members. In 2021, *Nők a pásztorságban* (Women in Pastoralism) was formed in Hungary with the aim of mutual help and knowledge sharing. Its members (now over 60 in number) also take part in festivals, events and international conferences. The women in such networks meet in person and virtually, exchange knowledge and learn from each other. This helps them overcome social isolation, nurtures pride in their identity and empowers them to work together towards sustainable development of their communities (Lelea et al. 2024).

In Argentina in 2006, the "Gender Area" of *Red Puna* (an Indigenous higher-level organisation in northwest Argentina) was formed to improve women's self-care and influence, combat domestic violence and help women achieve greater economic independence, e.g. through producing handicrafts made of llama fibre. For this purpose, the Indigenous women formed a subgroup *Las Artesanas* (Women Artisans). Women technicians, extensionists and researchers supported the entire process. The *Las Artesanas* members (now 120 women and 5 men) share their experiences and opportunities with new members and other women's organisations (Martínez 2013). Also in the Argentine Puna, pastoralist women and researchers share knowledge on grazing management and "mutual breeding" based on integrating animals, people and the environment. This work valorises women's knowledge and skills in managing herds and the relationships between livestock, pasture and the watershed, seeking to strengthen sustainability of the entire ecosystem (Quiroga Mendiola et al. 2018).

Amongst several pastoralist communities in India, when men left the community to seek jobs outside of pastoralism, the women dealt with this change by starting to manage the herds themselves, in addition to their regular tasks of caring for offspring and processing milk into different products for sale (Ghotge 2020). The *Van*

Gujjar Yuva Sanghatan (VGYS / Van Gujjar Youth Movement) – a group of young male and female Van Gujjar buffalo herders in the lower Himalayas – came together to address the challenges they face. The young women in this group have realised that formal education is needed to be able to navigate a future for themselves and their animals. Further south in Maharashtra State, women from the Dhangar pastoralist community are working with the team at the Indian NGO Anthra to understand the rapid changes in their ecosystems and the impact of climate change on their livestock and their livelihoods (Anthra 2024).

Women pastoralists in Europe, Africa and Asia are also using their networks to raise wider awareness in the general public and to influence policymakers by creatively conveying their messages through various media, including song and film, also participatory video (e.g. Maasai women in Tanzania: <https://www.youtube.com/watch?v=BRvRRxoDggQ>).

Pastoralism, especially highly mobile forms of it, makes collective action, organisation and even meetings difficult; however, modern technology in the form of mobile phones and apps have facilitated sharing and exchange. For example, in Spain, GER members use a communication tool called Slack, a free app installed on their mobile phones, to communicate and share knowledge. This group also brought out a cookbook of local recipes and uses songs, podcasts, films and social media to share messages about themselves and the work they do (cf. *Ganaderas en Red*).

Discussion and implications

There are many examples around the world that pastoralist women are organising themselves and innovating, also in collaboration with other research and development actors. The examples underline that cooperation and coexistence are important elements for pastoralist livelihoods, whether it be with the rangeland vegetation and landscape, with wildlife, with other communities living in and using the same natural resources, with research and development actors or with the State.

Women pastoralists have shown themselves to be passionate advocates for rangelands and pastoralism, defending pastoralists' mobility and land rights in the face of rangeland appropriation, commodification and conversion to other uses. Lack of formal education, health and social services suited for mobile pastoralists disproportionately impacts on the women and girls. Governments often justify initiatives to settle pastoralists with arguments about providing better services, yet pastoralists know that staying in one place reduces livestock productivity, degrades rangelands and water-points, and raises vulnerability to climate extremes, thus increasing poverty and compromising sustainability. Women pastoralists therefore call for services adapted to their mobile lifestyles.

Many of the women's organisations have given women a chance to develop new skills, take pride in their role as pastoralists and gain confidence to reach for their dreams. It is necessary to reinforce pastoralist women's efforts to advocate at all governance levels by supporting women-only and women-led groups to further strengthen women's confidence and capacities, educating women leaders and creating leadership opportunities for them, and funding their participation in international policy processes. Support is needed for pastoralist women's networks and international gatherings and for incorporating these networks into all initiatives related to rangelands and pastoralism, including those related to the IYRP 2026. It is also important to integrate pastoralist women into transdisciplinary action research and to build their capacities to carry out their own research on pastoralism and rangeland issues, building on their own specific knowledge, innovations and initiatives.

Pastoral animal husbandry, far from becoming obsolete in the face of industrial food systems, continues to thrive worldwide and is gradually becoming recognised as a more sustainable alternative to interventions in rangeland areas that require high levels of inputs based on fossil fuels. The knowledge-intensive practices of mobile pastoralists – men and women – make use of spatially and temporally variable vegetation and hold promise for a climate-friendly future. Pastoralist women's tasks are changing, largely due to their initiatives to address emerging

problems and opportunities. The women are making deliberate efforts to increase their voice and influence also beyond their communities. It is time to make their vital traditional and new roles more visible so that they are better recognised in their own countries and globally and can contribute even more to wellbeing.

There is much to be learned from pastoralist women about their ability and determination to care for their animals, their families and the land that supports them; about their ability to face adversity and come together in innovative ways to face new challenges and grasp new opportunities; about their contribution to peace-keeping among multiple stakeholders in land use; and about their desire to continue as pastoralists and advocate for their way of life within their country and globally. These and more examples will be used in the lead-up to and during the IYRP in 2026 to raise awareness about the strengths and potentials of pastoralist women. Further analysis of pastoralist women's initiatives will reveal ways in which these can be meaningfully supported and ways in which pastoralist women can exert more influence on decisions regarding research and development in the rangelands.

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