

IYRP WORKING GROUP ON RANGELANDS, PASTORALISTS & CLIMATE CHANGE



CONCEPT NOTE

Introduction

The International Year of Rangelands and Pastoralists (IYRP) will be observed in 2026 to increase worldwide understanding of the importance of rangelands and pastoralists for global food security and environmental services, and to direct attention to the relevance of their improved management for better development outcomes. These objectives will be reached through diverse activities by and with key stakeholders at local, regional and global levels aimed at generating, collating and disseminating knowledge, as well as engaging in dialogue with others on the importance, opportunities and challenges of rangelands and pastoralists with regard to sustainable development.

In the run-up to the IYRP, several Working Groups (WGs) are being constituted to spearhead research, analysis, knowledge exchange and advocacy on different issues important to reaching its objectives. The WGs are critical platforms for mobilising, creating awareness and networking among key stakeholders both within and beyond the rangelands. These include rangeland communities, governments, researchers, civil society, the private sector, funding bodies and UN agencies. The WGs are expected to influence programmes, processes and policies, as well as support cross-sectoral engagement to ensure success of the IYRP. Activities of the WGs and their outputs will feed into the 12 monthly themes that actors shall engage with during the IYRP.

Background

Communications and narratives around greenhouse gas (GHG) emissions produced by livestock and rangelands are misleading and misled. While it is true that rangelands and ruminant animals, including livestock, have played and will continue to play a significant role in both the emission and sequestration of atmospheric gases, they have also been vital contributors to biosphere's planetary feedback mechanisms and climatic stability.

Humanity has come to realise its capacity of changing the Earth's climate, presenting both a grave danger but a valuable opportunity. This recognition underscores the importance of protecting the viability of the systems that contribute to stability. Well-informed, objective discussions about rangelands, livestock and pastoralist livelihoods are therefore of paramount importance. This group seeks to bring clarity and common sense to the international conversation on these matters.

This concept note outlines the ways in which the WG on Rangelands, Pastoralists & Climate Change intends to do this to achieve its goals.

Objectives

- To provide accurate, objective and informed information on climate change, rangelands and pastoralist communities.
- To develop products targeted at policymakers and stakeholders who are not experts in agriculture, ecology, economics, chemistry or climate change.
- To relay highly complex subjects in simple, straightforward language.
- To compare alternatives, opportunities and options to determine what delivery formats are most effective, given limited resources and time of the WG's volunteers.

Thematic issues

TOPICS	PERSPECTIVE FOR DISCUSSION & CLARIFICATION WITHIN THE WG
<p>Misconceptions around the role/function of rangeland/grassland emissions</p>	<p>GHG emissions from rangelands/grasslands are naturally occurring and vital parts of the Earth’s climatic regulatory systems. Removing livestock from rangeland, grassland or other environments and allowing wild herbivores to perform the function of maintaining ecological health is unlikely to reduce GHG emissions from these lands or to achieve significant recovery of plant diversity. Large herbivore herds, whether wild or domestic, need to graze and interact with the world’s grasslands and rangelands to maintain their health and their contributions to climatic stability and biodiversity.</p>
<p>Emissions from natural sources shouldn’t be compared to those from mined hydrocarbons or intensive livestock operations</p>	<p>When managed correctly, livestock function similarly to wild herds in maintaining ecological functions and productivity, with no significant changes in atmosphere gas exchange of grasslands. The seasonal changing of nature and frequency of fire did mean that the exchange of atmospheric gases could be cyclical but, overall, the contribution and the role of vast wild herbivore herds and rangeland/grassland communities to climatic stability were positive and natural. Therefore, rangeland/grassland emissions are natural, herbivores form a vital role in their health, and extensive models of grazing that promote ecological recovery, mineral cycling, water retention and biodiversity should not be compared with other less sustainable forms of emissions.</p>
<p>Capacity of rangelands in GHG sequestration and storage</p>	<p>While soils or woody vegetation have limits on the amount of carbon they can sequester and store and rangelands typically sequester lower rates than other land systems, rangeland carbon is almost exclusively stored in the soil, protected from carbon losses through fires, and has the potential capacity to significantly contribute to sequestration and drawdown of GHGs when herbivores are properly managed.</p>
<p>Fire’s role in methane accumulation in the atmosphere and role of herbivores (and grazing management by pastoralists) in flammable biomass reduction</p>	<p>Wildfires also release methane – although in lower quantities than do ruminants – and also a large amount of carbon monoxide, which acts to increase the time that methane exists in the atmosphere and contributes to global warming. Livestock reduce flammable biomass and fire intensity and have been shown to cost-effectively reduce the intensity and risk of fire. It is worth also commenting on fire as a natural process in arid environments, which is part of the background carbon cycle, and showing how livestock grazing can be a way to alleviate or manage natural fires.</p>
<p>Management of feeding practices to reduce enteric methane emissions yield/intensity from ruminant in agropastoral systems in sub-Saharan Africa</p>	<p>Developing husbandry practices to enhance productivity can generate higher yields of meat, milk and fibre per animal and per year. This can lead to a reduction in the carbon footprint per unit of output. Technologies that reduce enteric methane emissions may have potential to further mitigate the contribution of pastoral livestock to climate change.</p>
<p>Implications of climate change investments and policies for pastoralists – this could be part of the preamble to highlight that</p>	<p>Large-scale renewable energy projects (e.g. wind farms) and tree planting initiatives (see the WG on Afforestation in Rangelands), causing dispossession of pastoralists’ land and exacerbating conflict, poverty and vulnerability.</p>

<p>pastoralists are not only among the most at risk to climate change, but also at risk because of climate change projects</p>	
<p>Impact of climate change on pastoralists and factors that influence pastoral adaptation</p>	<p>This could relate to the theme above on climate change projects. Pastoralists have management practices and behaviours that can help adapt to climate change, but those measures are being constrained. Need to understand the merits of pastoralism so that we can support adaptation (progression) of pastoralism and pastoralists, rather than promoting complete change of the pastoral system into something different (such as turning pastoralists into crop farmers)</p>

Composition

The WG is open to the public, with special relevance of the following groups:

- Pastoralists, and organisations representing pastoralists, including all types of land tenure and production systems involving livestock or rangeland/grassland-based livelihoods
- Academic and research organisations
- Non-profit organisations
- Governmental institutions and inter-governmental agencies
- General public with interest in the topic of climate change and the narrative around rangelands and their role and impact from changing climate.

Possible outputs

- A series of 1-page documents on each of the topics outlined in the table above, with room for more to be added over the course of 2024 and 2025
- An 8-page brochure capturing the various 1-page documents outlined above, similar to [this document](#), but with a clear focus on climate change
- Mapping of current climate change discussion and focal points.

Meetings

Meetings will be organised online as agreed within the WG.

Resources

- Members of the WG on Rangelands, Pastoralists & Climate Change
- IYRP support staff and volunteers
- Organisations involved in the IYRP network