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Agroecology Scientific Day 2024 Workshop n°3, Session n°3

Title : Identification of the pathways of material and institutional dependence in the evolution of livestock

Abstract :

Livestock production systems, including pastoralism, face significant challenges within the global sustainability discourse. Climate change discussions often highlight livestock as major contributors to greenhouse gas (GHG) emissions, deforestation, and land degradation, posing threats to biodiversity and climate stability (FAO 2023). However, extensive livestock systems, particularly pastoralism, utilize more than half of the global terrestrial land and support over 2 billion people. These systems effectively use lands unsuitable for agriculture by converting grazing into food, fodder, and fiber while maintaining healthy ecosystems, preserving biodiversity, and upholding socio-cultural identities (Place 2024; Scoones 2022; Davies et al. 2012).

Pastoralism faces pressures from climate change, land tenure conflicts, and modern agricultural policies. It is essential to balance sustainable food production with environmental conservation and the livelihoods of pastoralists. Grasslands, rangelands, and drylands are crucial for livestock feed, wildlife habitat, environmental protection, carbon and water storage, and in-situ conservation of plant genetic resources (FAO 2024; Davies et al. 2012). With the global population rising, more food must be produced from the existing agricultural land base, including grasslands, as the total agricultural land area remains constant.

More than 35% of global grasslands are degraded or undergoing degradation. Agroecology and livestock production can synergize to promote sustainable agricultural practices, enhance ecosystem health, and address land degradation. Promoting agroecology in livestock systems, including pastoralism, requires coordinated efforts at national and global policy levels. This includes investing in research and education, providing incentives and subsidies for sustainable practices, addressing land tenure rights at the national level, and fostering international agreements that recognize and promote the importance of pastoralism. Additionally, it involves investing in sustainable rangeland products, lowering trade barriers through fair policies, and promoting accountability.

Bibliography (max 10) :

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