

Cátedra de Agroecología y Sistemas Alimentarios para la Transformación Social UNIVERSITAT DE VIC UNIVERSITAT CENTRAL DE CATALUNYA



Pastoral systems have existed for thousands of years (1)

There are an estimated 200 -**500** million pastoralists in the world today (2)



Highly efficient form of natural resource and land management (3)





Pastoralism is characterised by

Mobility

Adaptability



Social Cohesion

Cultural activities

 Traditional ecological knowledge (тек) (1)



More than just a form of production ➡ Defining role in landscape creation

 History of innovation



More than just a form of production

 Pastoral systems have been increasingly abandoned or marginalised (5)



Aim of the study

 Reframing the ES literature through a nature's contribution to people's (NCP's) lens

 How the literature has addressed linkages between NCP's and

Meta-analysis : Methods

⊷An analysis of the relationship between pastoralism and NCP's was missing in the literature

NCP's are the evolution of the ecosystem services framework (6)



Methods

A search string was created:

past* OR graz* OR agri OR extens* OR seminatural OR grasslands AND livestock AND ecosystem-services OR environmental-services OR socio-eco* OR ltk OR tek AND NOT intensive

:Preliminary Results

 608 peer review articles written in English

- 88 articles accepted from the original 608
- 6 more articles were then added after consulting relevant professionals in the field



Inclusion Criteria

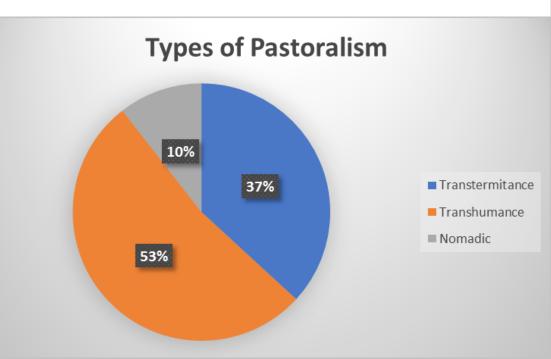
- ← Original research only
- System must be characterised by mobility
- NCP must be identifiable in the article
- Published before 2019



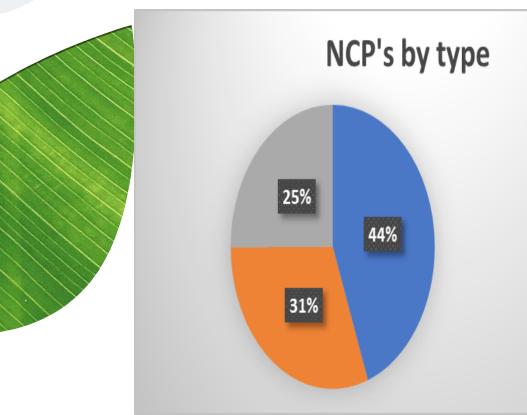
:Preliminary Results ⊷ The articles were compared across 37 different categories:

Study country, area and climate, If pastoralism had been defined, Traits of pastoralism, Type of pastoralism studied, Type of pastoral system, Main trend of pastoralism in the region, state of landownership, Main threats identified in the region to pastoralism, Is off-farm work discussed?, Is the role of women discussed?, Types of animals in the system, External drivers of pastoralism in the paper, Specialist product creation, Methodologies used, Is a definition of ecosystem services given?, What ecosystem services are discussed?, What NCP's are *discussed* (18 sub-groups)?, *Specific practises* of pastoralists mentioned

 Transtermitance and transhumance are the most common forms of pastoralism

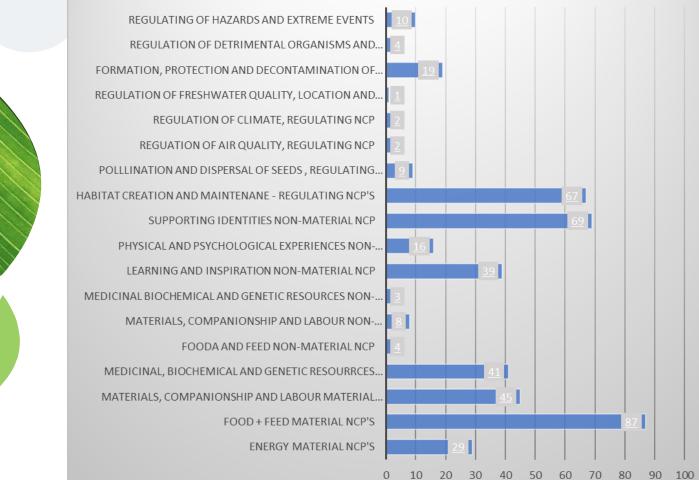


ALL NCP TYPES REPRESENTED



Material NCPs
Non-Material NCP's
Regulating NCP's

NCPs by Category







Meta-analysis: Discussion

 Confirmed the importance of pastoralism in providing a wide array of NCP's

 Expanding the recognition of NCP framework at a global scale



Meta-analysis: Discussion

 Over-representation of specific NCP's in the literature should be addressed

 Transhumance is under increasing pressure

 Transtermitance can be seen as a change in governance

Meta-analysis : Conclusions

 Literature referring to the NCP's framework in the context of pastoralism is quite narrow

 Insight into the practical use of the NCP's as a way to establish a picture of the status of pastoralism at a global scale using available



References

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- (2) Niamir-Fuller, M. 2016. "Towards Sustainability in the Extensive and Intensive Livestock Sectors." *Revue Scientifique et Technique de l'OIE* 35(2):371–87.
- (3) Fernández-Giménez, Maria E. 2015. "A Shepherd Has to Invent: Poetic Analysis of Social-Ecological Change in the Cultural Landscape of the Central Spanish Pyrenees." *Ecology and Society* 20(4):29.
- (4) Krätli, Saverio, and Nikolaus Schareika. 2010. "Living off Uncertainty: The Intelligent Animal Production of Dryland Pastoralists." *European Journal of Development Research* 22(5): 605–22. http://dx.doi.org/10.1057/ejdr.2010.41.
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