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UNCERTAIN LANDSCAPES

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theme 1

**VULNERABILITIES, WEAKNESSES AND
CONFLICTS.**

PASTORAL LANDSCAPES IN NORTH-EASTERN PORTUGAL: DROUGHT, CHANGES, AND VULNERABILITIES

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Climate change and resulting drought are significantly impacting the livelihoods of pastoralists in Trás-os-Montes (Portugal). This work explores the daily uncertain landscapes of pastoralists and their challenges in adapting to these changing conditions. Using a transdisciplinary approach, we appeal to the intersections between agronomy and anthropology and the practices and methodologies used to address the issue of climate change and its impact on the lives of pastoralists. We draw on the discussions and knowledge of the six pastoralists and their families, whom the PASTO praxis researchers have followed seasonally on their daily journeys and environmental relations, to critically reflect on the problematic axes of the landscape and its multiple uses. We used agronomic and anthropological methodologies, such as remote sensing and geolocation systems, to determine the use of the landscape and open or semi-structured interviews to interpret the decision-making system in the use of the landscape by the shepherds. Preliminary results indicate adaptation practices, such as involving the whole family, replacing traditional fodder crops, and reinforcing watering systems. Women's involvement adds value to pastoral products like cheese production and encourages the whole family to work towards the sustainability of their livelihood, creating a stronger and more cohesive community. Cultivating sorghum can replace traditional maize as it is more drought-resistant and less attractive to wildlife. Agronomy and anthropology identified and deepened the relevance of these practices, highlighting the importance of interdisciplinarity in approaching sustainable agricultural systems. The research examines the different perspectives over the project's first two years and seeks to find common ground and new areas of reference in addressing the challenges of climate change. The presentation also

explores the best management practices and policy strategies needed to respond to the new climatic and social emergencies that pastoralists are facing. We conclude by highlighting the importance of a transdisciplinary approach in addressing the challenges of uncertain landscapes and their implications for the future.

Keywords: *Uncertainty, Parque Natural de Montesinho, Adaptation, Walking Ethnography.*

FLOOD ADAPTATION: SYSTEMATIZING PREVIOUSLY ESTABLISHED PARAMETERS OF ADDRESSING FLOODS

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Cities are increasingly becoming vulnerable to climate change, particularly the coastal areas where a significant portion of the population lives. Floods stand out as the most prevalent hazard. Published reports notes the grim prognosis for coastal systems and low-lying areas in the 21st century and beyond, foreseeing submergence, flooding, and erosion as enduring consequences of sea level rise. Human responses to such flooding challenges vary considerably in multi-dimensional parameters based on type, scale, response or time, phases, role or function, intent etc. This paper introduces research aiming to bring order and structure to the complex array of flood adaptation parameters previously established. Employing a state-of-the-art assessment methodology, this study embarks on an exploratory journey, leveraging existing knowledge to identify and systematize these parameters. Moreover, the research categorizes and conceptualizes these parameters within the context of flood adaptation measures and built elements. The systematization of flood adaptation measures based on different parameters, the new order, provide a base for enabling the formulation of different combinations with overlapping conceptualizations which can, for a given location, collectively be deployed to enhance the adaptive capacity of the area under consideration. The study forms the grounding for preparing a transformative toolkit of flood adaptation.

Keywords: *Adaptive Capacity; Coastal Vulnerability; Flood Adaptation Parameters; Flood Hazards; Resilience*