MULTICRITERIA ANALYSIS TO OPERATIONALIZE AGRI-FOOD SYSTEMS SUSTEINABILITY TRANSITIONS IN THE WEF-BIODIVERSITY NEXUS

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1. INTRODUCTION

Agroecological efficiency in natural resources use and access equally conservation and enhancement of supporting, regulating, and cultural ecosystem services have been identified as central challenges for agri-food systems in Colombia.

Siecha River micro-basin in Guasca- Cundinamarca - Colombia (2068,16 Ha). Eastern Cordillera and High Andean Paramo

2. MATERIALS AND METHODS

Three methodological phases were developed through a multicriteria spatial analysis using the ArcGIS Pro software and Corine Land Cover methodology in 2022 based on available cartographic information in Colombia:

Landscape prioritization based on the identification of criteria. **(11)**	Baseline of prioritized landscapes **(5)**	Selection of areas in transition towards the sustainability of agri-food systems in rural landscapes **(7)**

Image 2. Three methodological phases were developed through a multicriteria spatial analysis (Authors, 2023)

3. RESULTS

In the Siecha landscape, the majority of land uses/covers may have a high compatibility or relationship with agricultural uses. A greater part of its area is excluded (42.94%) because it is located in the paramo ecosystem.
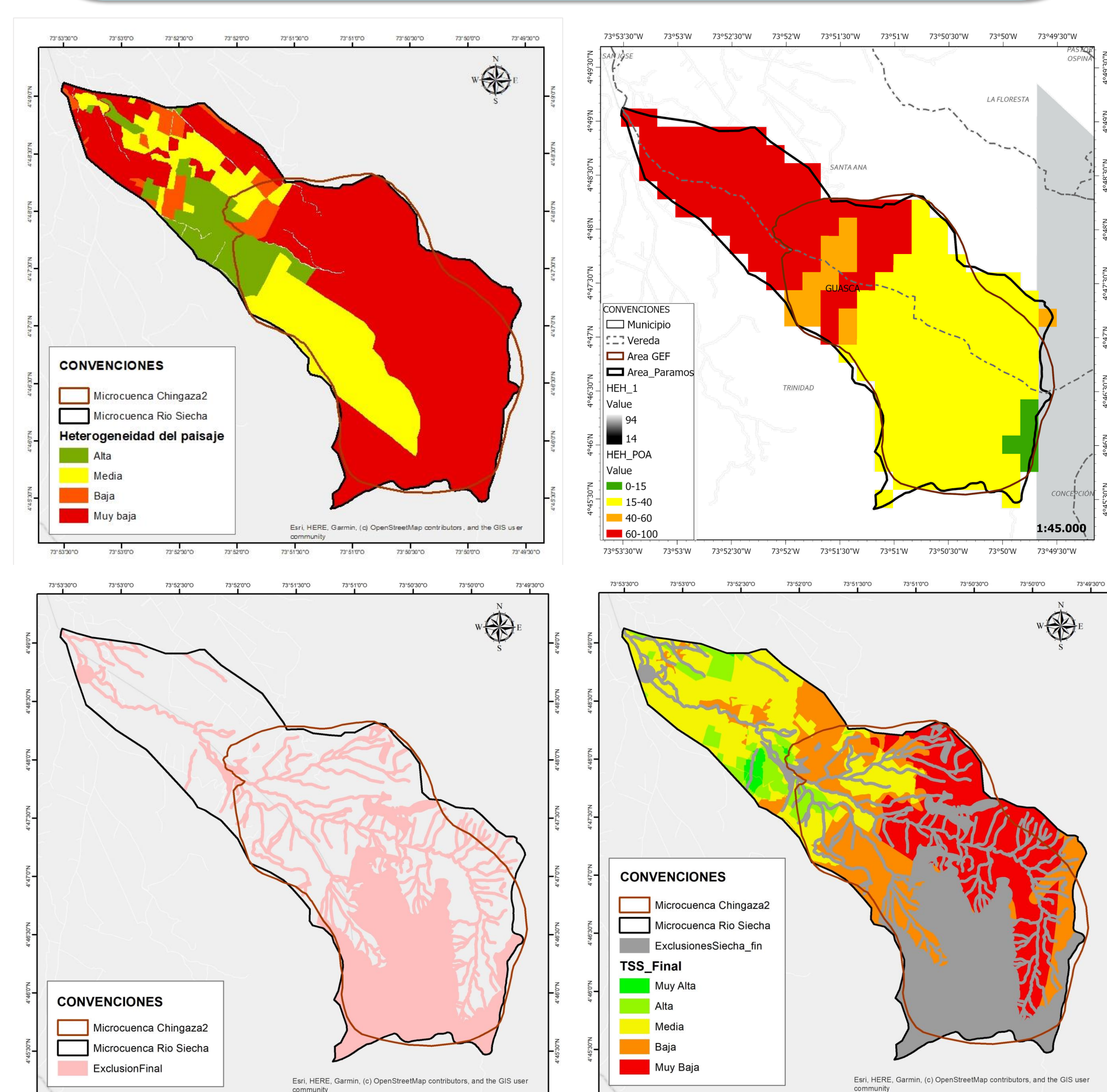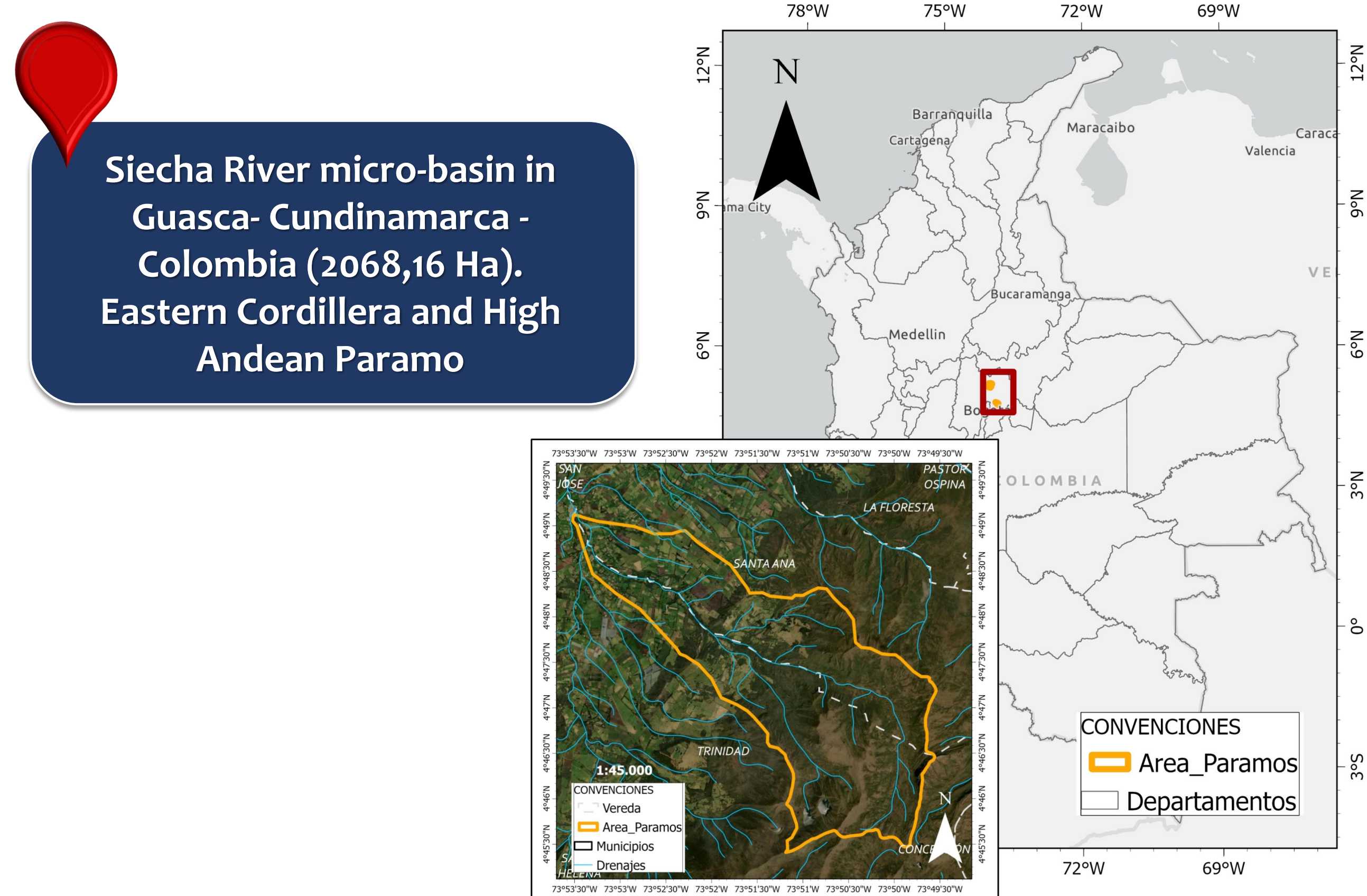

Image 3. Areas in productive reconversion and in transition towards sustainability in the rural landscape (Authors based on Colombian spatial information, 2023)

4. CONCLUTIONS

❑ The spatial indicator of priority areas for productive reconversion is an important tool that allows supporting and scaling the socio-ecological transition towards sustainability in agricultural systems.

❑ Multi-criteria analysis supports decision-making in the context of multiple spheres (multi-actor), the multifunctionality of the landscape and management of nature.