

BOOK OF ABSTRACTS

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The impact of alternative land use scenarios in the sustainability of protected mountain forests

T1.15 Impacts of Global Change on Protective Forests in Mountain Areas

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Abstract

Native Forests in mountain regions are important elements for the tourism sector. Considering the ecosystem services provided, conservation in these forests is increasing popularity in the agenda of the governmental actors at different scales. In addition, combined housing crisis and tourism development impact in the real-estate market causing additional land-pressure into forestlands. In Argentina, the region of Patagonia is considered as one of the most attractive and visited tourism destinations in the country. Protected areas in this region are territories where conservation, tourism and traditional productive activities converge, increasing the pressure over the territory. In this context, our aim was to analyse the impact of different land-use future scenarios in a particular mountainous protected area in Patagonia as a case study. In order to do so, actors interests and power as well as sustainability indicators based on a pressure-state-response methodology using the SDGs targets as baselines, were used to develop a set of future scenarios based on the main land-use pressures affecting the territory: development of formal tourism, development of informal tourism, conservation intensification, forest sector growth and livestock expansion. Following a multivariate analysis we selected the main influencing indicators acting as tipping points to evaluate the level of sustainability of the hypothetical scenarios by developing land-use models. Results showed that the development of tourism can have different winners and losers depending on the formality of the activity and that the conservation scenario may not be the most sustainable if the cultural dimension of the study area is considered. Additionally, the optimal scenario for a high sustainable value may be a combination of characteristics of the different contrasting activities. Further, it is important to analyse the informal interests of actors since they may play a crucial role.