makers to consider how these interacting attributes shape adaptation governance. In conclusion, the paper argues for an approach that embraces uncertainty while building the capacities of decision-makers to connect responses and relationships across scales to produce more effective adaptation governance.

## **Presentation 2** 2:20-2:40 p.m.

Do the protected areas improve the well-being of the local communities? A study case from Andalusia (Spain)

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Andalusian Center for Environmental Research; ajperez@ugr.es, fjbonet@ugr.es There is an active debate about socioeconomic impacts of protected areas, but there is not a main conclusion that explains the impact of protected areas on socioeconomic features. In this work we present a long-term analysis to assess the impact of protecting areas on well-being (measured as an aggregation of different indicators) in a developed, highly populated and bio diverse Mediterranean region (Andalusia, SE Spain). The main objectives were: (i) to compare the evolution of well-being in all the Andalusian municipalities from 1989 (when most of Natural Parks were declared in this region) to 2009; (ii) to compare the well-being index among protected and non-protected municipalities. Our main hypothesis states that the wellbeing is higher in municipalities located in a protected area. Well-being were quantified using an aggregated index that considers both economic and social indicators. For each municipality we computed the well-being in 1989 (before of the declaration of natural protected area) and 2009 by aggregation of more than 20 socioeconomic indicators. We found a significant change in well-being for municipalities of Andalusia between 1989 and 2009, with higher values for 2009 than 1989. The well-being index in 1989 was similar in the protected and non-protected municipalities, but the increment was higher in protected municipalities than in non-protected municipalities

## Presentation 3 2:40-3 p.m.

## Community forest management and ecosystem conservation in the Vicos Recuayhuanca microbasin, Ancash, Peru

## Erica Castro

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During the last years communities around the world are playing a more central role in the management of local forest and ecosystem conservation. In the Andes communities have a long tradition in managing the forest based on a particular worldview. This research contributes to the understanding of the management and conservations strategies of local forest by the community of Vicus. The research aimed to shed light on the engineering and social practices, and on the strategies of organizational management at community level. The methodology applied is qualitative. Peasants, public agency officers and local NGOs representatives were interviewed. The research concludes that social practices such as