Adaptive Capacity to Climate Change of Farming Communities in the Peruvian Andes

Our project aimed to gain a better understanding of the challenges faced by communities living with climate change, and the opportunities afforded through appropriate adaptive strategies.

The programme of research in the Cordillera Negra and Cordillera Blanca was designed to: evaluate ancient and current water management systems to identify the current and past water sources, and the adaptive management strategies for dealing with water stress; characterise the challenges and opportunities faced by current and past communities practising farming; assess the implications of these findings for future policy and practice in the Ancash region, and the wider implications for the Peruvian Andes (Visit: https://arcg.is/0rLeXm)

Key findings/learning/outcomes

Hydrology:
- Crops are not grown at their potential yield
- Poor water harvesting methods practiced by local communities
- Irrigation requirements are projected to become higher due to climate change
- Greater demand on available water

Social science: Challenges include lack of water for agricultural use, increasing temperatures and glacier retreat; soil degradation, pests and agrochemicals; lack of agricultural land for local families; conflicts within and between local communities, and weakening of social bonds and cohesion; lack of state intervention

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Where?

Peruvian Andes: Ancash, and Ayacucho and Apurimac Regions

Project partners/funders

Adaptive Capacity to Climate Change of Farming Communities in the Peruvian Andes (ACCESS): British Academy; 12 month project; £50K; Finished June 2020; UoR: Branch, Meddens, Wade; Overseas: Argentina, Colombia, Peru; NGOs

Climate Resilience and Food Production in Peru (CROPP): Royal Academy of Engineering; 3 year project; £300K; Started March 2020; UoR: Singarayer, Branch, Meddens, Wade; Overseas: Argentina, Colombia, Peru; NGOs

Development challenges and opportunities for agro-ecosystems and rural farming communities in the Peruvian Andes: Arts and Humanities Research Council; 14 month project; £200K; Starts 2021; UoR: Branch, Collins, Goodman, Meddens, Wade; UK: Bristol, St Andrews, UCL; Overseas: Argentina, Brazil, Colombia, Peru; NGOs