



## **Research link with Peru**

Over the past few years Pwllpeiran has been developing a research partnership with animal scientists and rangeland scientists at Universidad Nacional Agraria La Molina (UNALM); one of the most important higher education institutions in Peru. Due to a lack of funding from the Peruvian government few universities there conduct research, but UNALM is one of 10







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out of 80 universities to do so. Initial networking funding from UKRI's Global Challenges Research Fund (GCRF) was used to host a workshop at UNALM that brought together key regional stakeholders from across the wider Andean region (including Bolivia and Ecuador) to discuss and agree priorities for collaborative innovation.

Building on this, subsequent research visits and desktop studies funded by GCRF plus a BBSRC International Institutional Partnership award have focussed on three key areas for development: i) benchmarking of livestock performance and emissions, ii) sustainable improvement of grasslands through reseeding, and iii) adoption of new technologies to support data-driven management decisions.

Livestock production in Peru is diverse. UNALM has research facilities for sheep, cattle, pigs, poultry, goats, alpacas, guinea pigs and rabbits, with our collaborative work focussing on sheep and alpacas. Until recently sheep were bred primarily for their wool, but falling wool prices mean that attention is turning to improving fertility, lamb survival and performance, and nutrient use efficiency. Data collected from over 37,000 ewes found weaning percentages ranged from 43% to 62%. However, farmers receive no financial support of any kind in Peru, and covering any additional costs in terms of e.g. pasture improvement and/or vaccination programmes will be a challenge. It is also important that any reseeding is done with plants and varieties the demonstrate good establishment and persistency without high rates of inorganic nutrient inputs, such as nitrogen fertiliser.

Researchers from Pwllpeiran are also working with UNALM staff and students to quantify methane emissions from alpacas, especially when fed high fibre diets representative of the poorer grasslands they graze in the Andes.

