Solution Search Finalist Spotlight

The Mountain Institute Peru

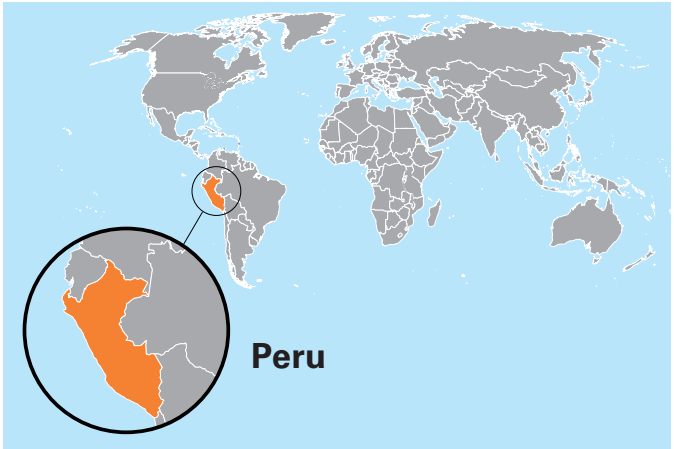
Ecosystem: Grasslands, Wetlands

Area Impacted: 221,268 ha

Production Quantity: 11,000 animals

People Employed: 4 full-time staff

Population Impacted: 9,600 people



The Situation

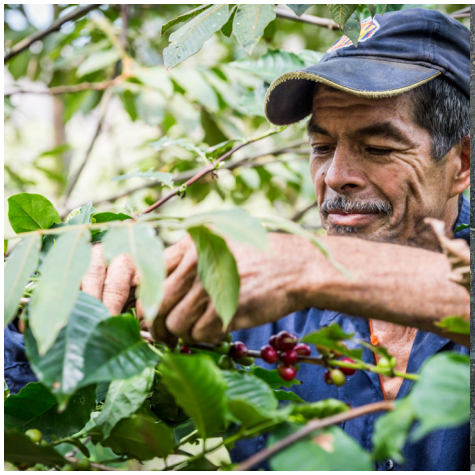
Over 3,000 years ago, pre-Incan civilizations began engineering Puna ecosystems in the Andes by using water technologies designed to slow the movement of water through grasses and soils. When these technologies were fully employed, the Puna retained more water locally, allowed biodiversity to flourish, buffered against flooding and drought, and provided fodder for sustainable sources of meat, cheese, and manure used to cultivate thousands of native potato, corn, tuber, and hard grain varieties.

Today, pastoralist livelihoods and the unique mountain biodiversity are at risk in the region. Climate change effects – such as glacier retreat and changes in precipitation – accompanied by shifts away from traditional practices and technologies have driven the degradation of Puna habitat. Drying Puna wetland have been forcing farmers to concentrate their herds in the few remaining wet areas, with few options for rotating grazing. These farmers understand that in the absence of solutions, Puna habitat will continue to degrade, livestock conditions will worsen, and the ecosystem itself will eventually collapse.

The Solution

In response to degradation of Puna habitat and declining livestock production, farmers in the Canchayllo and Miraflores communities identified solutions centering on the restoration of pre-Incan hydraulic systems. This ancient technology irrigates grasslands by capturing rainwater in canals and reservoirs and dispersing it across the grassland, thus improving soil moisture, vegetation cover and composition, and increasing infiltration for replenished aquifers and springs. Through the Mountain Ecosystem-Based Adaptation Programme, The Mountain Institute (TMI) has: 1 - Facilitated participatory action-research led by community groups who actively co-designed the solution with external experts, promoting collegial relationships, reinforcing community ownership, and building the foundation for continued innovation. 2 - Helped reconstruct abandoned ancient hydraulic infrastructure using green-grey hybrid solutions that conserve the underlying principles for sustaining Puna ecological services, while incorporating new materials, such as PVC, to improve functionality during low, dry-season base flow and to reduce the labor required for system maintenance. 3 - Strengthened the communities' institutional capacities to govern and manage their natural resources. The communities prepared grassland and water management plans that reinforce sustainable practices for improving the condition of the Puna and prevent future community conflicts.

For more information, please contact: summit@mountain.org



Farming for Biodiversity

Unsustainable agricultural practices remain one of the greatest threats to ecosystems and biodiversity. As the world population is expected to reach nine billion by 2050 and climate change further threatens livelihoods, we have to find ways of agricultural production that support farmers and the environment we all rely on.

The good news is these solutions already exist: From modern beekeepers who work on reviving ancient local wisdom to phone apps connecting rural farmers with urban consumers.

With Farming for Biodiversity, we are on a global mission to surface these local solutions, celebrate them and bring them to scale.

Our vision is to make these community-led initiatives shine and reach:

- Over 200 million globally through media impressions and publications
- Over 100,000 active website participants and readers of online publications
- 200 selected agriculture & biodiversity pioneers through eight technical and campaign trainings, hosted across the globe
- 800,000 farmers, conservationists and other land users at the community-level

STEP 1
Find what works

Through our crowd-sourcing contest Solution Search, we have identified over 300 innovative and replicable ideas that connect agriculture, livelihood and the environment. These selections were assessed by our renowned panel of expert judges from leading organizations around the world.

STEP 2
Demonstrate, scale and replicate solutions

Based on the solutions surfaced, we will host eight in-country workshops to introduce the most promising approaches to local influencers. Trainings will equip participants with the skills to implement locally driven solutions in their own communities. Longer term grants will provide an additional incentive to continue their work. These efforts will expand these approaches globally, reaching 800,000 people!

STEP 3
Feed local solutions into global policy

Throughout the project, we will gather, analyze and publish lessons learned. An online peer-to-peer network will connect all solution providers and facilitate interactive exchange across countries and themes. We will actively engage in global environment and agriculture policy processes – such as the Convention for Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC) and Sustainable Development Goals (SDG) meetings, drawing attention to community leaders and local champions.

Farming for Biodiversity runs through 2019 and is led by Rare together with IFOAM - Organics International and the Convention for Biological Diversity Secretariat (CBD). The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) supports this initiative on the basis of a decision adopted by the German Bundestag.

Photo Credits (from left to right): Jason Houston, Reliance Foundation, Ya'axché Conservation Trust