



FINNISH NATIONAL
AGENCY FOR EDUCATION

HEI ICI

Higher Education Institutions Institutional Cooperation Instrument

HEI-ICI PECOLO

Native Crops for Innovative and Sustainable Food Futures in Peru and Colombia

Academic Disciplines Food and agricultural sciences

Project Budget (MFA Funding and Total) MFA: 609 153€ Total: 761 441€

Project Duration April 2017-September 2019

Coordinating Institution Turun yliopisto

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Partner Institutions and Countries

Affiliate Partners:

University of Turku's Finland Futures Research Centre (coordinator), Functional Foods Forum and Department of Biochemistry

Universidad El Bosque, Colombia

Universidad Agraria la Molina, Peru



ULKOASIAINMINISTERIÖ
UTRIKESMINISTERIET



Description of the Project

The Andean region is exceptionally rich in biodiversity, harbouring an important centre of domestication of global food crops, such as potato, quinoa, corn, peanut and tomato. Such biodiversity provides a great potential to re-discover nutritionally rich local varieties and utilize them to develop innovative food applications. Utilization of native plant crops provide promising solutions to address the wider sustainability goals while providing local source of nutritious food. Diversification of the local diets enables better nutrition and can contribute in food security in areas where food production is threatened by climate change. Local research and development efforts are needed to understand the potential of local crop varieties and to develop them as truly desirable commercial products. Development of the traditional, often complex value chains, can contribute to better income opportunities for rural agricultural households and more sustainable supply chains. In addition, the food loss and food waste, and circular economy in food systems are opportunities to build sustainable food systems.

Investments in education, research and development is the key for innovations and long-term growth. Despite the economic growth, per capita expenditure in higher education, R&D and innovations in both Colombia and Peru remain low compared to the international levels. The national strategies highlight the need to develop the local innovation environments where academia has a stronger role as a provider of new knowledge.

Capacity building efforts are targeted in food science, such as functional foods, nutrigenomics, food chemistry analytics, the effects of global regulatory issues in local food chains and sustainable value chains. The project will use future research methodologies as novel tools for developing the innovation environments and to assess the long-term changes and impacts for the development of the society. The project involves PhD student exchanges from Colombia and Peru to Finland, as well as between Colombia and Peru.

Key Results to be Achieved:

1. *Improved quality of higher education and research environment*
2. *Strengthened role and relevance of higher education in development of society*

Project Website No website set up yet. Project description:

<https://www.utu.fi/en/units/ffrc/research/projects/energy/Pages/pecolo.aspx>