

## DM2009 Project Summary

Project Number: 1630      Booth Number: 18

Indigenous Wisdom and Biomathematics: Amazonians Tackle Climate Change

COUNTRY: Peru

ORGANIZATION: Native Community  
Kechwa Copal Sacha

FUNDING REQUEST: \$199,888

**OBJECTIVE:** To validate a replicable model of adaptation to climatic change, thanks to the design and participative implementation of a plan that will involve over 1,500 people in four communities and 12,671 hectares of indigenous land, supported by a biomathematical simulation model (software), a GIS base of ecological-economic micro-zoning, and a methodology to record, evaluate, and interpret bioclimatic variables; to improve sustainable agricultural production; and to validate alternative commercialization channels to increase family income by 15 percent.

**RATIONALE:** Accelerated climate change will severely affect production systems in Amazonian indigenous populations, particularly in four kechwa-lamista communities in Peru. A community resilient to climatic change must have the capacities to efficiently take advantage of ecological variability, sustainably manage strategic natural resources in its territory, and minimize the negative impacts of the dependence of their production systems on market factors and risks. The current development of these capacities has been limited by the inadequacy of available knowledge and technological tools to orient appropriate management in this area of high bioecological complexity. Another challenge has been the weakness of the indigenous production systems and distributing products through conventional commercialization channels. This has resulted in high production costs because of the use of inappropriate technologies and low product quality.

**INNOVATION:** A new production system will be developed that is efficient, inexpensive and integrates ancestral and scientific knowledge for economic ordering. It will also increase the detection of ecological changes in the territory, provide production support; and disseminate novel information processes within the community to support alternative commercialization strategies and channels.

**CONTACT:** Carlos Daniel Vecco Giove  
carvec2@yahoo.es