



INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH

Designing a methodology to evaluate local knowledge on global change and its role in the construction of future land use scenarios by local actors (SGP-HD009)

How do American rural producers perceive and assimilate climate changes and incorporate this knowledge into their future scenarios? Which policies, both at the local and the regional level, will lead to improved environmental governance? This research group tests and validates local knowledge on global change and land-use scenarios in order to document people's perceptions of global environmental change and how such knowledge affects future land uses and decision making.

Goals

- Elaborate, test and validate a methodology to evaluate local knowledge on global change and how this may be used for the construction of future land use scenarios
- Contribute to increasing scientific understanding of local knowledge and expectations on land use using interdisciplinary approach of environmental and social sciences
- Transfer scientific global change related knowledge to communities and reinforce individual/community awareness
- Develop an interdisciplinary network on social & environmental aspects of global change based on participative methods in order to generate new scientific knowledge and foster capacity building including new tools for decision making

Results

- The project's main objective is the development of a methodology to evaluate local knowledge, the Local Knowledge Scenarios (LKS) method that combines field work with the application of Agent-Based Models for the participative construction of land use scenarios. Workshops and field work were held in all five project areas (Pampa in Uruguay; Amazonian Rainforest in Brazil; North Atlantic Coast in Newfoundland and Canada; Andean Mountain in Peru; North American Prairie in Canada) to elaborate, test and validate the method.
- The LKS method is being applied in the study sites and has generated first results. The complex policy challenge of global change is often difficult to address with local policies. In the Amazon, an increased awareness of the local population to hydrological changes and soil degradation due to deforestation is noted, but the application of environmental laws especially those related to deforestation, remains difficult, as they are not accepted by the local population. In the Change Islands, Canada, the goal to maintain a decent standard of living for the fishing community while diversifying into other sources of income such as tourism, cannot be reached without a national public policy that allows adaptation to specific situations.

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Links to other IAI projects

This project contributes with the Collaborative Research Network projects on **Land use change in the Rio de La Plata basin: linking biophysical and human factors to understand trends, assess impacts and support viable strategies for the future (CRN2031)** and **Caribbean coastal scenarios (CRN2061)**.

List of publications: <http://iaibr.liaii.int/bs/publications/SGPHD009.pdf>



Scheme of study area in Amazonia, Brazil



Amazonia, Brazil, May 2008



Huaraz, Peru



Change Islands, Canada