

NCAP Bolivia Workplan – September 2004, Project Duration – 33 Months -Edited Summary-

Project Summary

The project aims to enhance understanding of the vulnerability and adaptive capacity of local communities in mountain semi arid regions of Bolivia which are considered vulnerable to climate change due to the precarity of human livelihoods and ecosystem fragility. Mountain regions are providers of major environmental services and support the major density of rural population in Bolivia. In these regions the levels of rural poverty are higher than 70% and even though poverty reduction measures have been carried out, the levels of human vulnerability may be enhanced due to climate change. The project aims to assess and enhance the adaptive capacity of local livelihoods through participatory approaches at local level by exploring the outstanding vulnerability issues of food systems and human health in selected regions, and by developing adaptation measures.

The study will contribute to an initial understanding of major climate change and variability risk and trends in mountain regions, develop a cost effective methodology for rapid appraisal and monitoring of climate change vulnerability, initiate adaptation measures in coordination with local stakeholders and contribute to local and national policy making and to the global climate change discussion.

Approach/Methodologies/Tools

The Project consider following principles suggested in UNDP - GEF (Adaptation Policy Framework 2003) as central:

- Adaptation to short-term climate variability and extreme events as a basis for reducing vulnerability to longer-term climate change;
- Adaptation policy and measures assessed in a developmental context
- Adaptation occurs at different levels in society, including the local level;
- The adaptation strategy and the process by which it is implemented are equally important

In addition the approach here presented suggests one methodological principle:

The assessment of current vulnerability and the perception of this run parallel to the assessment of adaptive capacity and therefore to the visualization and design of adaptive options from the beginning.

The project will principally use a combination of a vulnerability and adaptive capacity approach to include traditional knowledge and expontane (exogenous) adaptation into the assessment.

Those conceptual frameworks are well systematized in the current discussion (Scientific literature, IPCC, UNDP-APF).

As described in the project summary the project will contribute to the understanding of the outstanding issues of mountain semiarid regions in Bolivia. The principal focus of the project are food security and human health in the context of human livelihoods and human vulnerability and adaptataion.

Food systems in mountain regions are particularly vulnerable to climate change and variability due to low access to technology, land tenure arrangements and the low level of economic

diversification. This is reflected in high levels of undernutrition in women and children high levels of child mortality. Climate change is presumably modifying human health conditions in mountain regions, which is indicated by the emergence of vector borne diseases, in particular malaria and chagas, and increasing incidences of contagious diseases.

Although the principal focus of the project is human livelihoods, semiarid regions are suffering the consequences of water constraints and therefore water use will be one of the mayor foci of the project, in particular in regions where drastic changes in local hydrology are expected, due to glacier withdrawal and environmental damage.

In this context the project will use a combination of quantitative methods such as multicriteria analysis and scenario analysis. The project will also test rapid appraisals methods for participatory assessment and stakeholder consultations for vulnerability and adaptation baseline construction.

Participatory tools for assessment and planning are well known in Bolivia due to the process of decentralization that began in 1994 with the *Participación Popular* law that encourages municipalities and local administrative bodies to consult with people concerning their priorities and expectations. Participatory tools for monitoring are also well known and can be adapted to the aims of the project.

A GIS application and vulnerability indicators will be developed for supporting the base line scenario construction wich will describe current vulnerability and the level of adaptation.

Adaptation measures will be designed in consultation with local and national stakeholders with the use of participatory planning tools. The results of the project will be used to complement and supplement current policies and measures carried out at local and national levels. The project will also explore synergies with current policies and measures carried out in the context of watershed management, rural development and public health.