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## INVENTORY

### Best Practices for Adaptation to Climate Change in Rural Latin America: Options and Lessons from the Sustainable Livelihoods Approach

**This summary** sets out the main ideas that are considered in the inventory of adaptation to climate change measures, used by 55 projects in EUROCLIMA's participating countries. The inventory is organised in such a way that usage and spatial management levels are linked with rural community's resources, providing thereby sets of adaptation measures relevant to local livelihoods, instead of isolated and unrelated options.

In this study, knowledge generated in the scientific literature on historical trends is summarised as well as predictions of change in climatic variables, with an emphasis on precipitation and temperature. Moreover, it synthesizes the evidence given in the literature on the impacts of the change in the climatic variables on agriculture, water resources and biodiversity. The analysis is presented with reference to large geographical regions (Mexico and Central America, South America) and sub-regions (Amazonia, Rio de la Plata Basin, Andes).

Additionally, a systematization is presented of lessons learnt during the implementation of the reviewed initiatives in adaptation to climate change. This systematization considers different steps in the local adaptation

and gives illustrative examples of the projects: the perception of climate change and its impacts, the reaction to the impact of climate change, the identification of possible adaptation actions and decision making, and the implementation of the decisions and sustainability over time. There are three criteria used to organise the options:

- The spatial level (plot, farm, water usage systems, basin) in addition to an institutional level.
- The different community resources analysed from the sustainable livelihood approach.
- The corresponding type of region, grouped as wet lowlands, arid and semi-arid lowlands and high altitude areas, due to the similarity of the climate change impacts that they face.



Furthermore, development policies, plans, programmes are also identified that could interfere with the implementation of the adaptation actions. An example is given from research carried out in contrasting scenarios, such as Argentina and Mexico. These show that without intervention by the public sector, it is probable that adaptation to climate change will be inequitable and rural populations will be even more vulnerable, as it is likely that they would increasingly choose strategies such as renting land, the sale of labour or migration, which would involve profound social, economic and cultural changes.

Similarly, measures were identified that should be adopted by private and public sectors to form part of a National Plan for Adaptation to Climate Change.

Finally, recommendations were formulated to make the design of adaptation plans more efficient and specific in the identification of objectives, work teams, and the processes of elaboration, dissemination and implementation. The recommendations are based on all the sections of this study and the review of the technical literature relating to this topic.

## CONCLUSIONS:

- The effects of climate change are evident in different dimensions of rural Latin America. These effects are especially significant in the primary sector (agriculture) and in the maintenance of the supply of ecosystem services (water).
- Currently (2012), the greater part of adaptation options is focussed on the reduction of social vulnerability through the development of capabilities, or on the use of traditional knowledge and practices.
- There are fewer strategies focussed on the reduction of climate vulnerability that promote response mechanisms to specific impacts of climatic change; for example, reconversion of crops and types of livestock.
- The initiatives for adaptation to climate change conducted in the region's rural areas are a key source of information for the proposal of viable and sustainable adaptation processes, validating the results of research-action projects and placing a value on local knowledge.
- A major effort in the evaluation of the cost-benefit and of systemization is necessary to take advantage of government efforts and international cooperation invested in these processes.

### Thematic study N° 4: Inventory

**Study objective:** To contribute to the reduction in physical and socio-economic vulnerability at basin level in the face of climate change in Latin America, through the systemization of experiences in adaptation to climate change in rural areas, considering the basin as a natural geographical unit for the analysis of social, environmental, economic and cultural dimensions of adaptation.

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**The Focal Points** in the 18 countries that participate in the Programme, defined the topics and objectives of these thematic studies according to their needs as policy makers; they also provided key data, reviewed and corrected reports.

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The EUROCLIMA thematic series can be downloaded at: [www.euroclima.org](http://www.euroclima.org)

*The points of view expressed are those of the authors and do not necessarily reflect the points of view of the European Commission.*



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