

Countries covered by the LAKI in the Andean subregion





## **Andean subregion**

Partnership with the International Center for Tropical Agriculture (CIAT)

### Context

The Lima Adaptation Knowledge Initiative (LAKI) held its pilot priority-setting workshop from 24-26 September 2014 in Bogota, Colombia. The workshop facilitated the assessment and prioritization of knowledge gaps hindering climate adaptation action in five countries in the Andean subregion with a multi-stakeholder group (MSG) of 17 experts. MSG members were affiliated with national organizations from Colombia, Ecuador, Peru and Chile, and with regional organizations engaged in research and actions on adaptation to climate change in the Andean subregion.

## **Scoping paper**

A scoping paper summarizing existing literature was prepared in advance of the workshop with inputs from CIAT and MSG members. The paper identified 37 adaptation knowledge gaps in the subregion categorized into five thematic areas:

- > Scientific research and climate observation
- > Impacts on production sectors
- > Capacity-building and participation
- > Land use, planning and risk management
- > Public policies and institutions



### **Priority-setting workshop**

# **Refining** the pool of knowledge gaps

The MSG refined the gaps identified in the scoping paper by adding, deleting, amending and/or merging gaps and categorizing them into thematic groups. By doing so, the experts defined an initial pool of 50 adaptation knowledge gaps.



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## **Prioritizing** the knowledge gaps

To prioritize the adaptation knowledge gaps, the MSG agreed on a set of evaluation criteria and their individual weights (see annex I). Over the course of two Delphi rounds, 1 the MSG refined the list of gaps to 13 priority gaps (see Table 1). According to the evaluation criteria, closing these gaps would yield the most benefits for the subregion.

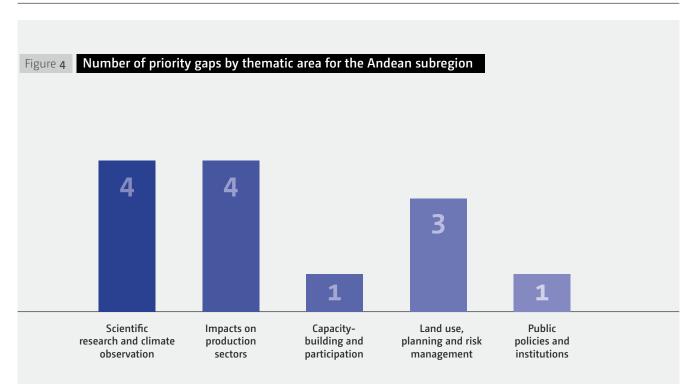
The distribution of these gaps by thematic area is illustrated in Figure 4. The highest number are related to scientific research and climate observation, and impacts on production sectors. Regarding knowledge gap type, almost half were deemed to be the result of a mix of factors. Five were considered to result from a lack of data (cluster 1).

### Step 3

# **Designing** possible response actions

The MSG suggested potential response actions for some gaps and identified organizations that were well placed to undertake these actions. For example, for gap three on scientific research and climate observation, experts recommended strengthening research on the effects of climatic variables on vector and water-borne diseases associated with climate change. For gaps four and six related to impacts on production sectors, suggested responses were conducting a cost-benefit analysis of adaptation measures based on national, sectorial, and subnational adaptation plans and creating an online database to store national socio-economic information for key sectors. Lastly, the MSG considered that existing networks and structures working with territorial planning and land use associations in local communities could help to address gaps 12 and 13.

<sup>1.</sup> The Delphi method is a technique used to structure research discussions and generate a group response to specific questions. Experts' individual responses are collected via a questionnaire (the LAKI workshops used a scorecard) and shared anonymously with the larger group. The process is repeated in rounds in order to arrive at a group consensus.



Thematic areas of priority gaps

### Implementing actions to close knowledge gaps

The outcomes of the priority-setting workshop for the Andean subregion, including the full workshop report, have been disseminated through the Adaptation knowledge portal<sup>2</sup> and regional and global events.

Science-policy-practice dialogues have also been convened to discuss response actions to close the knowledge gaps. These include events organized by GAN during the 2015 GAN meeting in Latin America<sup>3</sup> and during Adaptation Knowledge Day 2015 in Bonn, Germany.4

- 2. see: www4.unfccc.int/sites/NWP/Pages/LAKI-South-America.aspx
- $3. \ see: www.ctc-n.org/sites/default/files/GAN\_Workshop\_Report\_Final.pdf$
- 4. see: www.asiapacificadapt.net/sites/default/files/event/attach/AKD6.pdf

## Table 1 Priority knowledge gaps for the Andean subregion

No.	Thematic area	Gap description	Cluster	Knowledge user
1	Scientific research and climate observation	Gaps in integrated research on the effects of climate change on ecosystem services, and their relationship with the quality of life of populations	Lack of data, lack of actionable knowledge (e.g., in need of repackaging existing knowledge), lack of tools/methods [Mix]	Authorities and ministries for water and irrigation, human consumption, enterprises for drinking water and hydro-energy, ministries and agencies for planning, authorities for the environment, carbon markets, authorities for the environment, plant breeders
2	Land use, planning and risk management	Scarcity of mechanisms for including adaptation in current planning tools	Lack of tools/ methods [4]	National government (different parts of the government and different ministries), local governments, public institutions, academia, civil society (including non-governmental organizations), Andean regional entities
3	Scientific research and climate observation	Lack of data and information on health and associated variables, and on the impact of climate change on health in the Andean subregion	Lack of data [1]	National and subnational governments, universities, non-governmental organizations
4	Impacts on production sectors	Lack of economic information and cost-benefit analyses needs for adaptation	Lack of data, lack of tools/methods [Mix]	National and subnational governments, universities, non-governmental organizations
5	Land use, planning and risk management	Gaps in methodologies for promoting processes that facilitate multi-sectoral adaptation	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge), lack of tools/methods [Mix]	National and local governments
6	Impacts on production sectors	Gaps in socio-economic information for evaluating the impact of climate change	Lack of data, lack of access [Mix]	National government (different parts of the government and different ministries), local governments, public institutions, academia, civil society (including non-governmental organizations)
7	Impacts on production sectors	Scarcity of sectoral analyses on the costs of climate change and on the investment needs for adaptation	Lack of data [1]	National and local governments

No.	Thematic area	Gap description	Cluster	Knowledge user
8	Land use, planning and risk management	Gaps in information on tools for territorial planning and land use	Lack of data, lack of tools/methods [Mix]	National and local governments, academia: universities and relevant research centres, private sector: trade and associations, civil society, including non-governmental organizations, organizations for development cooperation
9	Scientific research and climate observation	Gaps in the analyses of social variables, and of supply and demand for water, associated with different climate change scenarios	Lack of data [1]	National and local governments
10	Impacts on production sectors	Scarcity of information and of analyses relating to the impact of climate change on agricultural and livestock production systems	Lack of data [1]	Regional governments, national government (different parts of the government and different ministries), local governments, public institutions, academia, civil society, including nongovernmental organizations
11	Scientific research and climate observation	Gaps in research and the exchange of knowledge on techniques, and in the optimization of technologies for managing hydric resources and adapting to the effects of climate change	Lack of data [1]	Authorities and ministries for water and irrigation, human consumption, enterprises for drinking water and hydroenergy, ministries and agencies for planning, authorities for the environment, carbon markets, plant breeders
12	Capacity-building and participation	Absence of mechanisms for the dissemination of knowledge on adaptation to local communities	Lack of access, lack of tools/methods [Mix]	Local governments, academia, universities, private sector; farmer associations, civil society, including non-governmental organizations
13	Public policies and institutions	Lack of tools to enhance systematization of existing experiences on adaptation	Lack of tools/methods [4]	n/a

For more information, see the full workshop report available via the Adaptation knowledge portal at http://www4.unfccc.int/sites/nwp/Pages/Home.aspx