

The position of the Americas on agriculture within the agenda of the international climate negotiations

The idea that climate change issues fall only within the domain of environmental scientists and climate specialists has never been further from the truth. As humankind acquires a better understanding of the challenges posed by climate change, it is becoming increasingly clear that response measures need to involve all sectors of society at all levels, from the local to international.

Never before has there been such a high level of certainty regarding climate change. The most recent report from the Intergovernmental Panel on Climate Change (IPCC) states that it is extremely likely (95-100% certain) that more than half of the increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations (IPCC 2013).

Agriculture is a major contributor to global greenhouse gas emissions, accounting for 11-12% of the total.¹ Globally, agricultural methane (CH₄) and nitrous oxide (N₂O) emissions increased by nearly 17% from 1990 to 2005; developing countries recorded a 32% increase, and were, by 2005, responsible for about three-quarters of total emissions from the agricultural sector.² (Smith, P. et al., 2007).

The risks posed by climate change have a direct bearing on food security and the development of rural territories. Changes in rainfall patterns and higher temperatures could cause crop yields to fall 10-20% in the tropics and sub-tropics, where the world's poorest and most vulnerable populations are concentrated (Thornton, P., 2012).

¹ Medium agreement, medium evidence.

² High agreement, high evidence.



The agricultural sector is faced with the twin challenges of producing enough food for a growing population and ensuring the livelihoods of people whose subsistence depends on farming. Urgent action is needed to support the people most vulnerable to climate change and to adapt production systems. Developing measures to transform agriculture and guarantee food security without contributing further rises in the levels of emissions that affect the global climate system is crucial.

A wide variety of channels can be used to provide responses to the challenges at different levels and scales. The international negotiations of the United Nations Framework Convention on Climate Change (UNFCCC) are an important example.³

Historically, agriculture has not played a significant role within the UNFCCC framework. In recent years, however, a number of countries have been promoting the idea of establishing a working group on agriculture under the aegis of the Subsidiary Body for Scientific and Technological Advice (SBSTA). The SBSTA plays an important role by linking the scientific information provided by specialists, such as the Intergovernmental Panel on Climate Change, to the policy-oriented needs of the Conference of the Parties (COP) of the UNFCCC.

The creation of a working group on agriculture would be a significant development, inasmuch

as it would strengthen and link knowledge and technology on climate change and agriculture, raising the latter's profile within the technical and financial mechanisms of the Convention.

In 2011, the SBSTA was asked for the first time to consider the need to create a working group on agriculture. The countries were invited to submit their positions and arguments regarding the creation of such a group. Five countries in the Americas (Canada, the United States, Costa Rica, Bolivia and Uruguay) sent in individual submissions, while Mexico and Haiti responded collectively with other countries holding similar concerns.

In their submissions, the countries expressed the need for a working group but failed to propose approaches or define the priorities of the group clearly.

The issue of agriculture came to the fore again in June 2013, during the 38th session of the SBSTA, where the countries and observer organizations were asked to submit to the secretariat of the UNFCCC, by September 2, 2013, their views on *“the current state of scientific knowledge on how to enhance the adaptation of agriculture to climate change impacts while promoting rural development, sustainable development and productivity of agricultural systems and food security in all countries, particularly in developing countries, taking into account the diversity of the agricultural systems and the differences in scale as well as possible adaptation co-benefits”* (UNFCCC, 2013).

³ The objective of the United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1992, and any related legal instruments that the Conference of the Parties may adopt, “is to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner” (United Nations, 1992).



The SBSTA and Agriculture

2011 (COP 17, South Africa) The Ad hoc Working Group on Long-term Cooperative Action (AGW-LCA) requested the SBSTA to consider the possibility of establishing a work program on agriculture and asked countries for their views on the matter.

2012 (COP 18, Qatar) The SBSTA reviewed the countries' submissions and postponed a decision until the 38th session, in June 2013.

2013 (38th session of the SBSTA, Germany) The countries were again asked for submissions on the current state of scientific knowledge on how to enhance the adaptation of agriculture to climate change impacts.

The SBSTA also requested that the secretariat organize a workshop on the countries' submissions during the 39th session of the SBSTA (November 2013) and prepare a report on the workshop for the consideration of the SBSTA at its 40th session (June 2014).

Seventeen countries in the Americas responded to the request for submissions:⁴ Bolivia, Dominica, El Salvador, Nicaragua, Ecuador and Venezuela (in a joint position with the Like-Minded Developing

Countries (LMDC) negotiating group); Chile, Colombia, Costa Rica, Guatemala, Panama and Peru (in a joint position with the Association of Independent Latin American and Caribbean States [AILAC] negotiating group); and Haiti (in a joint position with the Least Developed Countries [LDC] negotiating group). Brazil, the United States, Uruguay and Argentina sent in individual submissions. The following is a summary of the common points raised in the positions submitted by the countries.

Core arguments

The countries set forth the principal arguments regarding the importance of, and key linkages between, agriculture and climate change in their submissions. The points highlighted most frequently were:

- The need for production systems to be capable of feeding a growing population, hence the importance of focusing on strategies that would enable the possibility of not only maintaining, but increasing food production in order to meet future needs in the face of climate change.
- Agriculture is closely linked to food security, thus measures should focus on guaranteeing the availability of and access to food.
- Adaptation options designed to support smallholders and the most vulnerable populations, including women and indigenous peoples, are required.

⁴ The submissions of all the countries that responded to the request can be found at the following link: http://unfccc.int/documentation/submissions_from_parties/items/5901.php



- Actions to adapt agriculture are extremely necessary as a large percentage of the population of developing countries depends on agriculture for its subsistence and agriculture is a very important sector from a socioeconomic standpoint. It is a tool for achieving sustainable development and reducing poverty.
- Natural resources are critical for agriculture. Large-scale implementation of sustainable agricultural practices that contribute to soil, water and biodiversity conservation will be important for the successful adaptation of agriculture to climate change.

In addition to the common arguments set forth in the submissions, only AILAC's position emphasizes the importance of taking mitigation into account as an adaptation co-benefit. It suggests incorporating the subject into an integrated landscape management approach. In their specific

request to the SBSTA working group, the AILAC countries also included the development of capacity for emissions monitoring, reporting and verification systems.

The United States' submission followed a logic that was substantially different from the rest. The position presented described the technological interventions used and lessons learned from reducing the crop losses caused by the 2012 drought.

Specific actions

The countries also suggested several principal activities for the SBSTA working group. The requests made by the countries can be grouped under four general headings, which are listed below along with the specific actions mentioned most frequently in the submissions from the Americas:

Evaluate the potential impacts of climate change on agriculture and improve the availability of regional models

- Quantify impacts on crop yields under different production systems and pastures, and with the spread of pests and diseases.
- Incorporate socioeconomic variables into impact assessments; differentiate impacts by gender and among the most vulnerable populations.
- Take the increase in extreme weather events into account when analyzing impacts.
- Regionalize and better downscale climate models.



Strengthen research to evaluate the vulnerability of agriculture to climate change and the best technologies for agricultural adaptation

- Take into account practices and technologies focused on the conservation of natural resources (water, soil, biodiversity).
- Identify the factors that contribute to sensitivity and adaptive capacity, particularly for the most vulnerable populations.
- Integrate traditional and indigenous knowledge into the technology development and implementation process.

Develop and improve climate information systems and their linkage to decision-making processes in agriculture

- Include tools for compiling and interpreting climate information; use this information to assess risk and develop early warning systems.
- Design mechanisms for analyzing, interpreting and disseminating climate information to farmers and decision-makers.

Enhance the capacity for both technology transfer to farmers and knowledge for the adaptation of agriculture to climate change

- Identify the barriers (technical and financial) that prevent farmers from accessing and implementing technologies.
- Design plans and networks for technology development and transfer.
- Create mechanisms for the management and exchange of knowledge in order to harmonize the different efforts and initiatives.



A call to intensify efforts to promote action

The process aimed at consolidating a SBSTA working group on agriculture is ongoing and it is essential that the countries of the Americas, particularly their ministries of agriculture, work closely with the national delegations that participate in the Conferences of the Parties to the UNFCCC. They should be aware of the windows of opportunity and take advantage of the spaces available to improve agriculture's positioning within the different mechanisms of the Convention.

International climate negotiations are not the only place where efforts should be made to generate concrete action related to agriculture and climate change. Many country-level initiatives are already underway. However, the negotiations afford a

key opportunity to define the most important ways to channel the knowledge, research, technical cooperation and the financing that countries require for strengthening the actions they take to address climate change.

Concrete proposals fully supported by many countries are needed to more convincingly and forcefully raise the profile of agriculture in the UNFCCC. The Inter-American Institute for Cooperation on Agriculture (IICA) stands ready to serve as a platform for dialogue, to support the consolidation of joint country positions, and to strengthen the capacity of the ministries of agriculture and the national delegations to better position agriculture in the international climate change negotiations.

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