## <u>United Nations Framework Convention on Climate Change</u> <u>Subsidiary Body for Scientific and Technological Advice (SBSTA)</u>

## Issues related to agriculture ARGENTINA

- 1. At its 38<sup>th</sup> Session, the Subsidiary Body for Scientific and Technological Advice agreed on inviting Parties to present 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. This should take into account the diversity of the agricultural systems and the differences in scale as well as possible adaptation co-benefits".
- 2. Argentina appreciates the opportunity to present its comments and, therefore, submits the elements that, in our understanding, must be taken into account in the SBSTA in relation to the vulnerability of the agricultural sector to climate change, taking into consideration as a general framework the principles and provisions of the United Nations Framework Convention on Climate Change (UNFCCC).
- 3. In this respect, the relationship between the agricultural sector and climate change must be analyzed considering the particularities and importance of agriculture. This is due to the fact that a great share of the population of many developing countries depends on agriculture for its livelihood, and that this sector is of fundamental importance to safeguard food security as well as for economic, social and rural development.
- 4. Latin America and the Caribbean is a region particularly vulnerable to the adverse effects of climate change. According to the IPCC, climate variability and extreme meteorological phenomena have strongly affected the region during the last few years, and important changes in precipitations and temperature rise have been observed at the regional level.<sup>1</sup> Additionally, in the region the agricultural sector is at the core of the achievement of economic and social development and poverty eradication. In this context, it is also important to highlight its relevance in terms of safeguarding food security in a region where, according to the Intergovernmental Panel on Climate Change (IPCC) the number of people at risk of suffering from hunger will rise to 5, 26 and 85 million in 2020, 2050 and 2080, respectively.<sup>2</sup>
- 5. The agricultural sector faces important challenges in relation to climate change in view of its high vulnerability to this phenomenon. Thus, the sector will have to face one of the most important challenges in view of the need to feed a growing population in the next decades, which will result in the need to produce food under different climate conditions.

<sup>&</sup>lt;sup>1</sup> Intergovernmental Panel on Climate Change, Fourth report of Working Group II, Technical abstract, 2007, page 61 (Spanish version)

<sup>&</sup>lt;sup>2</sup> Intergovernmental Panel on Climate Change, Fourth report of Working Group II, Technical abstract, 2007, page 74 (Spanish version)

- 6. To do this, it will not only be necessary to increase the adaptive capacity of the agricultural sector but also that any assessment that is undertaken on this issue takes into account the local particularities as something of striking importance considering present and future implications that climate change could have on the sector.
- 7. Moreover, the work that could be taken forward shall aim at the strengthening of the agricultural sector. This includes its adaptation to the effects of climate change; the impacts of this phenomenon on food production; the strengthening of national capacities and international cooperation for endogenous development, as well as technology transfer that would result in the improvement of the adaptive capacity of productive systems.
- 8. On the other hand, and in addition to possible specific actions that could be undertaken, it must be taken into account that, in a global context, and within the framework of the appropriate multilateral fora, it will be necessary to discuss possible barriers to the transfer of technologies related to the protection of intellectual property rights. In this regard, there should be an exploration of ways to ensure the effective transfer of technologies to developing countries, particularly those that could contribute to increasing the adaptive capacity of agriculture, for instance through biotechnology.
- 9. Some of the issues that, in our understanding, could be studied in the SBSTA from the scientifically and technological points of view are the following:
  - Development of early warning systems and contingency plans.
  - Risk and vulnerability assessments of agricultural systems to extreme events, particularly, the effect of erosion processes on soil and the possibilities of soil control and recovery.
  - Impact assessment of climate change on pests and diseases, and also on the distribution of weeds that impact different productive systems.
  - Obtaining germplasm adapted to hydrological and thermal stress in crops like wheat, rice and corn.
  - Analysis of the impacts of different possible climate change scenarios on agricultural systems, taking into account the characteristics and diversity of countries and productive systems in the different regions.
  - Identification and analysis of extreme weather events (increase in quantity and magnitude) and their possible consequences on local and regional agroecosystems, favoring a consideration and assessment of the socioeconomic impact that would allow to address the present and future difficulties that the agricultural sector could face, as well as the development of adaptation actions to tackle the adverse effects of climate change.
  - Identification of specific technologies –already existing or under development-, with a special focus on the analysis of economic, technical, institutional, social and environmental barriers that impede or delay local development and/or the transfer of identified technologies, and the assessment of possible technological alternatives.