

Statement from the Inter-American Institute for Global Change Research (IAI)

The Inter-American Institute for Global Change Research (IAI) welcomes this opportunity to provide an update of its activities since its participation at the Tenth Research Dialogue, to the forty-ninth meeting of the Subsidiary Body for Scientific and Technological Advice (SBSTA-49).

The Research Dialogue (RD10) focused on processes related to science and policy to support adaptation and mitigation action under the Paris Agreement based on the best available science. Science is the foundation of IAI activities. The data and information generated by its research networks are aimed to support evidence-based decision making the regional, national, local levels under the principles of open science and data.

As an intergovernmental organization, the IAI serves the needs of its Parties. It promotes regional cooperation for interdisciplinary research on aspects of global change related to the sciences of the land, ocean, atmosphere and the environment, with particular attention to ecosystems and the services they provide, socio-economic impacts and technologies associated with the mitigation of and adaptation to global change.

The IAI's goal to provide science for action by strengthening the link between the research community and activities under the Paris Agreement, and other multilateral environmental agreements, is an essential element of its work. Communication of science plays a key role in supporting efforts related to adaptation and mitigation in socio-economic and environmental sectors. Such efforts are buttressed by transdisciplinary research and by engagement with Parties and other stakeholders, specially through South-South, South-North and triangular cooperation, public-private partnerships and inclusion of concerns by civil society.

At the UNFCCC SBSTA-48, the IAI focused its messages to RD10 on the importance of the social dimensions that are at the core of adaptation strategies, such as having targeted approaches for the management and conservation of biodiversity, strengthening national adaptation plans, improving multi-level governance for climate change adaptation, building livelihood resilience to climate change, development of innovative technologies and communication to convert science into action.

An example given was the IAI research network working in the Southwestern Atlantic Ocean, a climate change hotspot that requires regional approaches to coordinate cooperation among countries. It also counts on long-term scientific programs and common policy goals to communicate sustainable management options for coastal management and fisheries. The lack of significant advance and implementation of coastal observatories in the Southwestern Atlantic Ocean are linked to the lack of long-term funding for sustained ocean observations for coordinated research to propel decision-making and action based on solid evidence.

Warming of the southwestern Atlantic Ocean warming is occurring at several times the average global rate. There is a long-term increase in sea surface temperature, sea level, onshore winds (intensity and frequency), extreme events, discharge of freshwater and coastal erosion. Critical effects on biodiversity and services include the impacts on shared fisheries in large marine ecosystems and small-scale fisheries with climate drivers affecting the vulnerability of local communities in Brazil, Uruguay and Argentina.

According to an article¹ published in Nature, governments display a keen interest in expanding marine research on climate priorities. In contrast to the past, when oceans received minimal attention in climate negotiations, 70% of 161 NDCs analysed by the authors included marine issues.

Given the above, The IAI supports regional-scale actions in light of the national priorities to facilitate communication of science for adaptation policies but much more regional cooperation is needed.

With respect to the UNFCCC Research Agenda, SBSTA-48 encouraged Parties and relevant organizations to address gaps and needs with regards to the role of the ocean in the global climate system, including for the global energy balance and carbon cycle, and impacts related to, inter alia, ocean acidification, sea level rise and ecosystem services.

SBSTA-48 also noted the urgency for enhanced science communication and the importance of regional institutions and networks to provide and exchanging knowledge at the regional, national and local levels. The SBSTA considered that regional initiatives on science communication would be valuable, organized in close collaboration with regional research organizations and networks and other relevant stakeholders, subject to the availability of financial resources and urged Parties to continue to engage with the scientific community.

In this regard, the IAI is pleased to announce the organization of a regional communication workshop on oceans in collaboration with the UNFCCC Secretariat to support science for action, facilitate dialogue at the regional level and help stakeholders reconcile views on ways forward based on the best available science.

This resolve also responds to a Decision adopted at the IAI's 26th Conference of the Parties in support of the organization of regional science communication initiatives to improve the provision of data and information to policy makers, and dissemination of scientific knowledge needed for the implementation of national, regional, and international policies in light of the Paris Agreement and other under multilateral environmental agreements.

Additionally, other work by IAI scientists aimed at developing usable quality-controlled regional climate datasets for southern South America. This initiative is the first collaborative effort to produce a consolidated set of climate data for the sub-region. In the past, each country had calculated drought indices using different methods making comparisons and holistic use of the information difficult. Through collaboration with the project's Regional Climate Center for Southern South America, the first regional drought index was implemented. This project set the stage for the implementation of a regional drought monitoring and assessment system and developed a consensus plan for a Drought Implementation System for South America, a regionally- coordinated drought monitoring, warning and mitigation system. The team of investigators from physical, biological, and social sciences along with a wide range of stakeholders (governmental

¹ Gallo, Natayla D., David G. Victor, Lisa A. Levin. 2017. Ocean commitment under the Paris Agreement. Nature Climate Change. <https://doi.org/10.1038/nclimate3422>.

agencies and nongovernmental organizations) from Argentina, Brazil, Paraguay, and the USA embody the type of collaborative work that the IAI promotes in the region.

At the Seventeenth session of the Regional Association III of the World Meteorological Organization, held from 21 to 23 November 2018 in Santiago, Chile, the IAI was considered an important collaborator in the region and is currently discussing the development of collaborative activities for the coming years.
