

SBSTA 36 RESEARCH DIALOGUE

Saturday, 19 May 2012 , 15:00-18:00

Summary report by the SBSTA Chair

- This year's SBSTA **research dialogue** took place on Saturday, 19 May 2012 in the afternoon, which I had the pleasure to chair for most of the time.
- There was good representation from regional and international research programmes and organizations active in climate change research, the IPCC, as well as Parties, including from all major Party groups.
- Prior to the dialogue, views from Parties were received on specific themes to be addressed at the dialogue, including information on technical and scientific aspects of GHGs from coastal and marine ecosystems.¹
- Similarly, following an invitation extended by SBSTA 35, we have received from regional and international climate change research programmes and organizations, information on developments in research activities relevant to the needs of the Convention, including on the long-term global goal and on technical and scientific aspects of GHGs from coastal and marine ecosystems.²
- Taking into account the information received prior to the session, the research dialogue was organized around three major themes: (1) Updates from recent climate change research on aspects relevant to the long-term global goal, including emission pathways, new scenarios and global and regional emission trends; (2) Greenhouse gas (GHG) sources, sinks and reservoirs relevant to coastal and marine ecosystems; and (3) Updates from recent climate change research on other areas of relevance to the Convention, including research-related capacity building.
- We had excellent contributions and representation from the climate change research community, including the Intergovernmental Panel on Climate Change (**IPCC**), the Earth System Science Partnership (**ESSP**) on behalf of its member programmes (**DIVERSITAS**, the International Geosphere–Biosphere Programme (**IGBP**), the International Human Dimensions Programme on Global Environmental Change (**IHDP**), the World Climate Research Programme (**WCRP**)) and **START** (Global Change System for Analysis, Research and Training), the Asia Pacific Network for Global Change Research (**APN**), the Inter-American Institute for Global Change Research (**IAI**), the 7th Framework Programme of the EU (**FP7**), and **PROVIA** (Programme of Research on Climate Change Vulnerability, Impacts and Adaptation).

¹ See FCCC/SBSTA/2012/MISC.2, Add.1 - Add.2.

² See FCCC/SBSTA/2012/MISC.3.

- In addition, contributions in form of presentations were made by a number of Parties or groups of Parties, including the **Coalition for Rainforest Nations, Nauru on behalf of AOSIS, Japan and Switzerland**.
- At the same time, there was an opportunity for Parties to ask questions and to convey their views on research needs and priorities to the representatives of the research community.
- The following provides a brief overview of the contributions made at the research dialogue:
 - In relation to the group of themes related to **updates from recent climate change research on aspects relevant to the long-term global goal**, a representative of the IPCC reported on low stabilization and new long term scenarios from the IPCC special report on renewables (SRREN), including information on a new set of scenarios that have become available since the Fourth Assessment Report of the IPCC (AR4) for considering the full mitigation portfolio, and on factors which play a role in reaching more ambitious CO₂ stabilization goals. This was followed by information on recent developments in and the state of the community-driven scenario process, in particular the new framework for future scenario development for the Fifth Assessment Report of the IPCC (AR5). The **ESSP and its partner programmes** highlighted recent results on observed and projected global temperature; global water cycle; arctic sea ice extent; changes in global sea level; climate extremes; carbon budget and CO₂ emissions and concentrations; as well as on recent understanding on emission pathways and implications to reaching the long term global goal. This was complemented by further results from a climate model intercomparison project developed by **WCRP**. A presentation by the **EU FP7** demonstrated results from selected projects that have studied the impacts and costs of climate change under different scenarios.
 - During the session focusing on **GHGs from coastal and marine ecosystems**, a representative of the **Coalition for Rainforest Nations** provided findings on technical and scientific aspects of sources, sinks and reservoirs of all GHGs for coastal and marine ecosystems, including mangroves, tidal salt marshes, wetlands and sea grass meadows. The presentation highlighted the role of these ecosystems as carbon stocks, for ecosystem services, for mitigation and adaptation, and current threats to and estimated carbon releases from those ecosystems. A presentation by the **IAI** outlined emerging findings in marine sciences in South America from its multinational Consortium for the study of ocean related global and climate changes in South America (SACC), focusing on the case of the Patagonia Shelf and the mechanisms and linkages between productivity of ocean and marine ecosystems, nutrient supply, and carbon uptake in the oceans. The **ESSP** provided a number of results from coastal and marine ecosystems-related research by its partner programmes, including findings on heat content of the oceans; fate of anthropogenic emissions and trends in carbon sinks, in particular

the oceans; large-scale carbon release (e.g. from permafrost thawing) as a warming feedback; and on impacts of ocean acidification on coral reefs.

- The session addressing **updates from climate change research on other areas of relevance to the Convention, including research-related capacity building**, included an overview by the **ESSP**, addressing, *inter alia*, efforts by **START** to engage the scientific communities of developing regions in international collaborative scientific research related to global change, especially in Africa and South-East Asia, for example, through **START**'s Fellowship Programmes and education opportunities for young scientists. Further **ESSP**-reported information included joint efforts with the Consultative Group on International Agricultural Research (**CGIAR**) on agriculture; research activities on the global carbon cycle, water security, indexes for measuring wealth, and others. The presentation also addressed the recent major scientific conference Planet Under Pressure (London, UK, March 2012), and the new international research initiative Future Earth on research for global sustainability.
- A representative of the **APN** presented capacity building initiatives in the Asia-Pacific region, aimed to improve scientific and technical capacities of nations in the region. Examples included the 2011 Climate Synthesis Report in the Asia Pacific, activities for developing capacity to enhance the understanding of science to inform policy making, especially for local level adaptation activities, and other recent initiatives in support of developing countries, e.g. the **APN**'s Low Carbon Initiative. The representative of **EU's FP 7** outlined recent findings on observed changes in the climate system, highlighting results from the Ice2Sea project on estimating the future contribution of continental ice to global sea level rise, and providing an outlook to **PAGE21**, a research initiative to study changes in the permafrost in the Arctic.
- A representative of **Japan** presented recent findings from the **GOSAT** project and current outcomes and future perspectives on **GHG** monitoring from outer space, contributing, *inter alia*, to the estimation of global carbon fluxes, **GHG** concentrations and their distribution. A representative from **Switzerland** reported on real-world emission verification of halogenated greenhouse gases as an example of atmospheric measurements for emission estimation, showing also comparisons between inventory-based **GHG** emission estimates and emissions estimated based on measurements.
- A representative of **Nauru, on behalf of AOSIS**, provided views by **AOSIS** on needs for research, especially on slow onset events, including sea level rise, and research priorities relevant to assessing implications of climate change, including impacts, costs, damages, loss and adaptation needs, particularly for **SIDS**. A representative of **PROVIA** provided an update on **PROVIA**'s recent activities, in particular the development of a prioritised international agenda for research on impacts, vulnerability and adaptation.

- Overall, the quality and richness of the presentations, and participation by Parties, have contributed to another successful research dialogue, helping us to **enhance our understanding and knowledge on scientific issues in support of the Convention**. It has marked another important step in the implementation of decision **9/CP.11**, as well as **decision 16/CP.17 adopted in Durban**, which stipulates the use of the research dialogue as a **forum for conveying research findings from the research programmes and organizations** and for **discussing needs for climate change research** and research-related capacity building, particularly those of developing countries.
- I would like to thank all Parties that participated in and contributed to the dialogue, and use this opportunity to convey our appreciation to the representatives of the research programmes and organizations and the IPCC for their active participation and excellent contributions.
- This concludes my report on the research dialogue of the 36th session of the SBSTA.

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