

SBSTA 38 RESEARCH DIALOGUE

Tuesday, 4 June 2013, 15:00-18:00

Summary Report by the SBSTA Chair

- This year's SBSTA research dialogue was held on Tuesday 4 June 2013, from 15:00 to 18:00 at the Hotel Maritim in Bonn, which I had the pleasure to chair for most of the time.¹
- This SBSTA 38 research dialogue enjoyed broad participation, including from all major Parties' groups, and was characterised by a wealth of information provided on scientific developments relevant to the Convention and good dialogue between representatives of Parties and of the research community during the question and answer and discussion sessions.
- Prior to the dialogue, numerous views of Parties were received on possible items for consideration as part of the research dialogue and information on technical and scientific aspects of greenhouse gases from terrestrial ecosystems,² which provided the basis to develop the agenda of this year's research dialogue, taking also into account the conclusions of SBSTA 37 on this matter.³
- Similarly, regional and international research programmes and organisations active in climate change research have made significant contributions prior to the dialogue, by providing information on their research activities relevant to the needs of the Convention and on technical and scientific aspects of greenhouse gases from terrestrial ecosystems.⁴
- The dialogue was organized in three main parts:
 - I. Recent developments in global climate information
 - II. Emerging scientific findings: Ecosystems and GHG emissions and removals from sources, sinks and reservoirs, including terrestrial ecosystems
 - III. Needs for climate change research and developments in research-related capacity-building
- The dialogue benefitted from contributions and presentations made by the climate change research community, including from the Intergovernmental Panel on Climate Change (**IPCC**), the International Geosphere-Biosphere Programme (**IGBP**), the World Climate Research Programme (**WCRP**), the International Human Dimensions Programme on Global Environmental

¹ The agenda, presentations and related information on the SBSTA 38 research dialogue is available at: <http://unfccc.int/7663.php>

² Views from Parties can be found in FCCC/SBSTA/2013/MISC.4.

³ FCCC/SBSTA/2012/5, paragraph 52.

⁴ Submissions received by regional and international research programmes and organizations can be found in FCCC/SBSTA/2013/MISC.5 and Add.1.

Change (**IHDP**), **DIVERSITAS**, the Inter-American Institute for Global Change Research (**IAI**), the Asia-Pacific Network for Global Change Research (**APN**) and the Programme on Research on Climate Change Vulnerability, Impacts and Adaptation (**PROVIA**).

- Likewise, this year's dialogue also benefited from speakers from representatives of Parties, i.e. by the **Russian Federation** and **Japan**.
- Each part allowed for questions and answers and discussion, allowing Parties to provide feedback and communicate to the research programmes and organizations their views on needs and priorities for climate change research and related activities.

The following briefly summarizes the contributions made at the research dialogue:

Part I: Recent developments in global climate information

The IPCC provided information on the latest developments by IPCC towards the upcoming Fifth Assessment Report (AR5). From an organisational perspective, the representative of the **IPCC** highlighted the schedule for the publications of the Working Group Reports and the Synthesis Report. More substantively, the unprecedented increase of CO₂ daily concentrations was reiterated, and trends in global mean surface temperature, as well as the increasing loss in Arctic sea-ice extent and sea-level rise due to thermal expansion were presented. As regards the content of AR5 major improvements are expected, such as, provision of regional information, a better integration of mitigation and adaptation, consideration of sustainable development and of emerging issues, and improved communication of uncertainties.

The contribution by the representative of IGBP on behalf of **IGBP**, **WCRP** and **IHDP** on global science updates from international research programmes and organisations, included highlights on global and regional climate patterns, including on global carbon budget, regional climate patterns, sea-level rise, climate predictions, as well as black carbon, and the fact that concentrations of CO₂ in the atmosphere have reached the 400ppm. The findings from several research groups on regional reconstructions about past climate changes showed the unprecedented temperature rise after pre-industrial times. The presentation further stressed the benefits of tackling short-lived pollutants such as black carbon to also address climate change. Finally, the contribution pointed to the Inclusive Wealth Report 2012, presenting an approach to value capital assets beyond GDP, and the impacts of climate change on those capitals.

Part II: Ecosystems and GHG emissions and removals from sources, sinks and reservoirs, including from terrestrial ecosystems

A representative of the **Russian Federation** focused in his contribution on management of different terrestrial ecosystems under a changing climate on carbon fluxes from tundra, steppe, and on the diverse peatland ecosystems. The presentation indicated the need for, inter alia, assessments of carbon balance in different ecosystems by considering various human impacts, and development of methods and techniques for the monitoring of GHG emissions and carbon losses in these ecosystems. The presentation by a representative of **Japan** showcased the results of a

joint Japanese-Indonesian project on tropical peatlands, giving detailed insights on the parameters, methods and tools to measure and monitor carbon fluxes and CO₂ emissions from fire, losses through water, including through the use of satellite data. The representative of IGBP, on behalf of **IGBP**, **IHDP** and **DIVERSITAS** outlined findings from international research programmes and organisations on ecosystems and climate, including on coastal marine ecosystems, such as seagrass habitats and their decline, losses in biomass due to urban expansion, and the integration of biodiversity and ecosystems into climate modelling, taking into account species' responses to changing climatic conditions. The contribution by the representative of the **IAI** focused on tropical dry forest CO₂ fluxes and the evaluation of this ecosystem's response to climate change in the arid and semi-arid regions in the Americas. Innovative technologies to monitor and interpret environmental data were outlined, such as the distribution of sensors in ecosystems.

Part III: Needs for climate change research and developments in research-related capacity-building

The representative of **APN** outlined new opportunities for developing countries, in particular APN's new activities on climate adaptation, especially the climate adaptation framework, and its science-policy dialogues on a sub-regional level. Another important and new activity is the APN Low Carbon Initiative, which includes activities on regional research, capacity-building and networking/communication to enhance researchers-policy dialogue. Important needs highlighted in this context include action-oriented research and risk management to deal with uncertainty. The presentation by **IGBP**, **WCRP** and **START** addressed capacity development and the use of climate information at the regional level, providing latest improvements on regional downscaling, especially CORDEX Africa, and related training workshops. The presentation further demonstrated how climate information tools can be used for agriculture, food security and adaptation planning. Special emphasis was given to recent activities by **START**, including its African Climate Change Fellowship Programme, and related capacity-building activities to support knowledge generation and dissemination of information to support policy-making in Africa and the Asia-Pacific. The representative of **PROVIA** reported on the outcome of PROVIA's study on research priorities for vulnerability, impacts and adaptation, following-up from last year's research dialogue at which PROVIA presented the framework for carrying out that study, and which now has identified 33 priority topics.

- The research dialogue has once more provided a unique opportunity to Parties to hear on **latest developments from science** and, at the same time, **to inform the scientific community of what our research needs and priorities** are to base our decision-making on scientifically sound information.
- This year's event has demonstrated once again that the research dialogue constitutes an important **vehicle to enhance the communication between the science community and Parties**, and to disseminate scientific information important to policy-makers in our process.

- I thank all the Parties that participated and contributed to a **successful dialogue**, and also take this opportunity to **convey our appreciation** to the representatives of the research community for their active participation and excellent contributions.
- This concludes my report on the research dialogue to the closing of the 38th session of the SBSTA.
