



# Rio Conventions Pavilion Bulletin

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## RIOCONVENTIONSPAVILION HIGHLIGHTS: 6 DECEMBER 2016

The theme for the Rio Conventions Pavilion (RCP) on Tuesday, 6 December, was Biodiversity and Climate Change. Presentations and discussions focused on biodiversity and climate change scenarios and the role of global land management strategies. Participants considered opportunities for promoting ecosystem-based approaches to climate mitigation and adaptation in light of the Paris Agreement, the Sendai Framework for Disaster Risk Reduction (DRR) and the Sustainable Development Goals (SDGs); and ecosystem-based approaches to climate change adaptation and DRR.

The event was organized by the CBD Secretariat, UNEP-World Conservation Monitoring Centre (WCMC), BirdLife International, Conservation International, Government of South Africa, the GEF, European Commission, Ramsar Convention Secretariat, IUCN, UNDP and GIZ.

### **CLIMATE, BIODIVERSITY AND SUSTAINABLE DEVELOPMENT-THE ROLE OF GLOBAL AND LAND MANAGEMENT STRATEGIES**

Wolfgang Cramer, Mediterranean Institute of Biodiversity and Marine and Continental Ecology (IMBE), France, introduced the session.

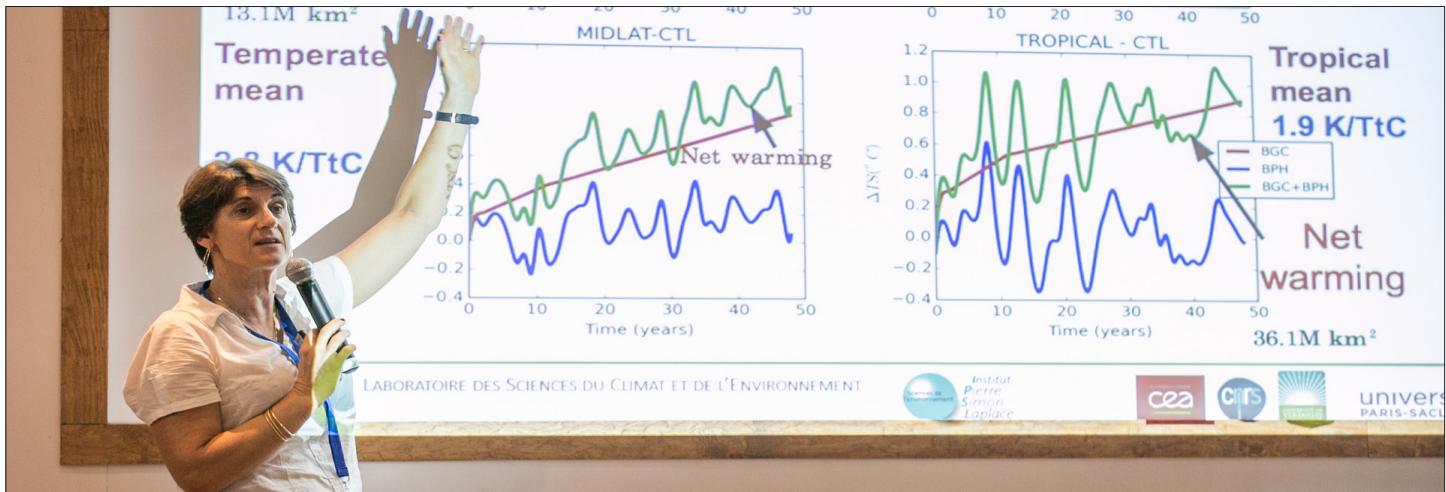
Nathalie de Noblet-Ducoudré, Laboratory of Climate and Environmental Sciences, France, discussed simulated temporal

responses to global and regional impacts of land-uses and land-cover changes. She outlined modelling findings on the sensitivity of the hydrological cycle to land use changes, direct and direct impacts of deforestation, and biophysical and biogeochemical feedbacks.

Almut Arneth, Institute of Meteorology and Climate Research, Karlsruhe Institute of Technology (KIT), presented on the impacts of afforestation and decreased deforestation on ecosystem properties, including climate regulation, food supply and water quality, and crop production, noting they can generate co-benefits but also trade-offs.

Mark Rounsevell, University of Edinburgh, presented results from model simulations of food supply and bioenergy production, showing it is possible to achieve food security in the context of population growth and within planetary boundaries, but not to double bioenergy production at the same time. He highlighted analysis of losses and wastes, including through food waste, diet, and consumption patterns, noting that nearly 98% of the planet's surface would be required if the entire world adopted US food consumption patterns.

Cordula Epple, UNEP-WCMC, highlighted findings of the report on the Contribution of Ecosystems (other than Forests) to Mitigation, citing examples from peatlands, grasslands and savannahs, vegetated coastal ecosystems, tundra and croplands. On lessons learned across all ecosystems, she observed that within the context of intended nationally determined contributions (INDCs), some countries are taking actions but



Nathalie de Noblet-Ducoudré, Laboratory of Climate and Environmental Sciences, France



**Wolfgang Cramer, IMBE**

these need to be scaled up and commitments quantified. Epple noted that optimum results can be achieved through landscape scale participatory planning and that reforming incentives could make the transition to more sustainable ecosystem management viable.

Paul Leadley, University Paris-Sud, France, discussed what science can deliver for the Intergovernmental Platform on Biodiversity and Ecosystem Services and the IPCC. He focused on three main research lines: improving measurement of status and trends; providing solution-focused scenarios, models and decision support tools; and improving understanding of potential tradeoffs and synergies.

Participants then broke into roundtable discussion groups to consider: land use and cover change modeling; food security and land use; and non-forest ecosystem-based mitigation.

Summarizing their discussions, the land-use and cover change modeling group suggested that improving dialogue with policy makers may mean “using their language,” by converting modeling results into monetary values. They called for developing metrics that convey regional variability. The food security and land use group stressed the importance of understanding human behavior underpinning models. The non-forest ecosystem-based mitigation group recommended developing and applying models for assessing impacts on ecosystem carbon stocks from activities in other sectors such as transport. The group also recommended quantifying ecosystem-based mitigation targets more consistently and making them more compatible with targets on biodiversity and ecosystem services.

Reflecting on the discussions, de Noblet-Ducoudré called for “co-building” indicators that are meaningful for everyone, not just scientists or policy makers. Leadley noted there are “tremendous opportunities” to look at national biodiversity action plans and INDCs together to see where the tradeoffs and synergies are. David Cooper, CBD, said the science-policy dialogue requires both sides to engage fully; most models are too focused on global rather than regional or local scale; and

that more work is needed on understanding the role of human behavior. José Sarukhán Kermez, CONABIO, highlighted the importance of involving citizens in producing local-level data, but also in absorbing the meaning of such data, leading to behavioral changes.

Melanie Heath, BirdLife International, presented “The Messengers” report, by BirdLife International and Audubon International, describing climate change threats such as distribution shifts; disrupted species interactions; mismatches in migration, breeding and food supply timing; and population declines. She noted that more than 2,300 bird species worldwide are highly vulnerable due to their sensitivity, low adaptability and exposure to climate change impacts.

Lee Hannah, Conservation International, addressed Protected Areas (PAs) and climate change, noting that while PAs are fixed in space, species move across landscapes and boundaries, often up-slope, in response to climate change. He underscored species and ecosystems movements predicting models and planning efforts tools, such as the Spatial Planning for Protected Areas Projects (SPARC), for decision-making on areas to protect and requisite financial support.

#### ***OPPORTUNITIES FOR PROMOTING ECOSYSTEM-BASED APPROACHES TO CLIMATE MITIGATION AND ADAPTATION IN LIGHT OF THE PARIS AGREEMENT AND SDGS***

Sakhile Koketso, CBD Secretariat, introduced the session. Humberto Delgado Rosa, European Commission, highlighted nature’s role in climate change mitigation, adding that ecosystems also provide climate resilience for DRR. He noted that solutions for ecosystem-based adaptation (EbA) exist, and are accessible, efficient, underpinned by traditional knowledge and that they deliver multiple benefits.

Gustavo Fronseca, GEF, observed that EbA is a low-cost, flexible solution for addressing climate change and that the GEF has invested US\$ 2.4 billion for the expansion of PAs. Drawing examples for the Caribbean small island developing States, he highlighted support aimed at tackling the vicious cycle of disasters, loss of economic output and increased debt



**Midori Paxton, UNDP**



**Braulio Ferreira de Souza Dias**, Executive Secretary, CBD

through investments and support for reforms, which strengthens resilience, contributes to development and reorients debt restructuring.

Cyrie Sendashonga, IUCN, highlighted her organization's work on the nature-based solutions agenda including the Bonn Challenge aimed at restoring 150 million hectares of degraded landscapes by 2020.

In order to translate the ecosystem-based approaches into action, Midori Paxton, UNDP, proposed: targeting opportunities for multiple benefits across the SDGs; defining pathways for scaling up on-the-ground efforts; and using economics to make the case for EbA.

Braulio Ferreira de Souza Dias, Executive Secretary, CBD, said "there is no excuse" not to push for a more integrated approach to meet the challenges addressed by the three Rio Conventions.

Cordula Epple, UNEP, introduced Friends of EbA, an international network of over 30 organizations that aims to collaborate and share knowledge on EbA.

#### **ECOSYSTEM-BASED ADAPTATION AND DRR**

Moderator Harald Lossack, GIZ, introduced the session. Elsa Nickel, BMUB, highlighted the BMUB International Climate Initiative (IKI) that finances climate and biodiversity projects in developing, newly industrialized and transition countries.

Tanja Gönner, CEO, GIZ, highlighted that GIZ supports over 75 partner countries to implement more than 100 EbA projects. She underscored IKI as an efficient information management system for both decision makers and practitioners, and noted the launch of the PANORAMA partnership in 2016 to provide a web-based knowledge sharing platform on replicable solutions to a range of conservation and development issues.

Arno Sckeyde, GIZ, noted that the EbA Solutions Portal, under PANORAMA, is a partnership with international organizations including IUCN, UNEP-WCMC, International Institute for Environment and Development, Conservation International, World Resources Institute, in collaboration with

key governmental partners from Mexico, Peru, South Africa, Philippines and Viet Nam.

Trevor Sandwith, IUCN, said the partnership aims to identify replicable core components, or building blocks, of successful approaches and feed them into a searchable global database, in such way as to connect people around success stories and scale them up, noting there are 270 solution providers, including NGOs, government and academia.

Mathias Bertram, GIZ, provided an interactive presentation of the functionalities of the EbA Solutions Portal. Ignacio March, National Commission of PAs (CONANP), Mexico, demonstrated how the portal works using an example involving increasing the resilience of mangroves in a Yucatan PA. His presentation was followed by the formal launch of the EbA Solutions Portal.

Naoya Furuta, IUCN, introduced the concept of ecosystem-based disaster risk reduction ("Eco-DRR"). Yuri Hayashi, Ministry of the Environment, Japan, discussed the application of Eco-DRR in her country, explaining that it is being used to avoid exposure and reduce vulnerability to climatic hazards, earthquakes and other disasters. She outlined how the concept has been embedded into national laws, policies and strategies, and highlighted a handbook for practitioners produced by the Ministry.

Naoya Furuta, IUCN, highlighted the RELIEF Kit Initiative funded by IUCN and Japan, aimed at documenting linkages between biodiversity and disasters and establishing capacity development knowledge products for policy makers, practitioners and other relevant stakeholders in six regions over three years.

Maria Pía Hernández, IUCN, provided a regional overview of the RELIEF Kit Initiative in Mexico, Central America and the Caribbean. She highlighted regional challenges in relation to vulnerabilities. She observed that: the environmental and risk reduction sectors do not communicate; strengthening governance is a priority; and responses to risk tend to be more reactive than proactive.

Xavier Moya, UNDP, discussed resilience tools for PAs and Mexico's efforts to increase landscape resilience by preserving biodiversity, highlighting the national climate change adaptation programme (PAC) as the main tool for DDR.



**Mathias Bertram**, GIZ

**ECOSYSTEM-BASED ADAPTATION AND DRR: HOW CAN EBA INVESTMENTS REDUCE DISASTER RISK AND CATALYZE SOCIAL, ECONOMIC AND ENVIRONMENTAL DIVIDENDS?**

Moderator Tim Scott, UNDP introduced the session, noting it would focus on the way EbA investments can reduce disaster risk and catalyze social, economic, and environmental dividends.

Karin Zaunberger, the European Commission, noted the potential of EbA for DRR in creating jobs and business opportunities, highlighting increasing post-disaster investments in ecological infrastructure, such as mangroves, and green infrastructure.

Martha Rojas-Urrego, Secretary-General, Ramsar Convention on Wetlands, stressed the importance of wetlands for DRR, in particular given that natural disasters, often water-related, have more than doubled in the last 25 years. She noted wetlands act as natural protection, increasing population resilience.

Marco Fritz, European Commission, presented the Commission's EbA DRR experience. He highlighted various approaches to DRR, including the EU Strategy on Green Infrastructure, noting that one of the main policy challenges is to give priority to these approaches. He noted the importance of catalogues and databases on good practices and nature-based solutions, and partnerships, citing as an example the project on the catchment based approaches for slope stability and flood control in Afghanistan. He stressed the need for hybrid solutions, using "grey approaches" and making them as green as possible, and to upscale solutions so they become the center of the mainstream agenda.

Amita Prasad, Ministry of Environment, Forest and Climate Change, India, underscored the importance of community involvement, traditional knowledge and local-based solutions. She described various integrated ecosystem management schemes in India involving: water resource management; integrated fire management; coastal management, including mangroves as effective methods for preserving coasts; and crop management, choosing crops that are resistant to drought. She stressed the need to address solid wastes and urban ecosystems and biodiversity.



**Martha Rojas-Urrego, Secretary-General, Ramsar Convention on Wetlands**

Ratita Bebe, Ministry of Environment, Land and Agriculture Development, Kiribati, discussed her country's efforts to promote EbA through "te buibui," the construction of a brush structure from local materials to catch sediment and allow dunes and beaches to rebuild. She also described a mangrove planting programme and a coastal ecosystem-based rehabilitation guide provided to communities in the local language.

Lyes Ferroukhi, UNDP, outlined Cuban efforts to reconcile traditional resilience strategies with nature-based solutions. He stressed the promotion of linkages between, and spatial alignment of priorities in, seven major programmes addressing PAs, mountain ecosystems, land degradation, water management, climate risk reduction, biodiversity conservation and invasive species.

In the ensuing discussion, participants addressed the way governments can implement EbA and DRR, noting that the GEF and the Green Climate Fund are placing emphasis on EbA, which opens spaces and funding for these activities. In closing, Rojas-Urrego said the challenge is now to scale-up, noting the need to prioritize, share information and practices, and for policy coherence to link wetlands and other agendas to the climate discussions.



Panel speakers during the session on Ecosystem-based Adaptation and Disaster Risk Reduction