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RIO CONVENTIONS PAVILION HIGHLIGHTS: 5 DECEMBER 2016

The Rio Conventions Pavilion (RCP) opened on Monday, 5 December 2016, at the UN Biodiversity Conference, in Cancún, Mexico. The first thematic day, Landscape Day, was chosen as part of the celebrations for World Soil Day 2016 and focused on the linkages between soils, biodiversity, land degradation and climate change.

Presentations and discussions centered on generating a better understanding of research findings and policies to promote landscape connectivity, improving knowledge on the state and trend of landscapes, and connecting people with soil and raising awareness of its critical importance. Landscape Day was co-organized by FAO, and Germany's Institute for Biodiversity and Helmholtz Centre for Environmental Research. The governments of Mexico and Germany were contributing organizers.

OPENING

David Cooper, Deputy Executive Secretary, CBD Secretariat, opened the session explaining that the Rio Conventions Pavilion was created to promote greater integration of the three Rio Conventions, and the adoption of the 2030 Development Agenda for Sustainable Development and Paris Agreement on Climate Change would reinforce this. Eva Muller, FAO, said her organization looks at the agriculture sector from a landscape perspective and called for enhanced dialogue on soil and



Eva Ursula Müller, FAO

biodiversity. Ulrich Apel, GEF Secretariat, explained that a key focus of GEF's activities is on integrating the Rio Conventions in order to achieve multiple benefits for the global environment.

Peter Moll, Helmholtz Centre for Environmental Research, Germany, presented a new publication "Making Sense of Research for Sustainable Land Management," which synthesizes place-based research on sustainable land management from 12 regional projects. Among the lessons learned, he highlighted the importance of: adopting a nexus perspective; creating "win-win-win" situations for all project participants; reserving



David Cooper, Deputy Executive Secretary, CBD



Stefan Hotes, Philipps University of Marburg, Germany



The publication “Making sense of research for sustainable land management” was launched during the session

15-20% of the overall project budget for communication and implementation-oriented work; and promoting “open knowledge.”

Stefan Hotes, Philipps Universität Marburg, Germany, presented a case study on rice production in the Philippines and Viet Nam. Arne Cierjacks, Technical University of Berlin, Germany, outlined a case study on irrigation farming, livestock rearing and aquaculture in Brazil. Manuel Krauss, University of Stuttgart-Hohenheim, Germany, presented a case study on rubber plantations in China.

The case studies highlighted technology solutions, stakeholders’ involvement and model optimization approaches. On stakeholders’ involvement, the panelists stressed capacity building, environmental education and improved management of stakeholders’ committees. On technology solutions, they discussed, among other things, intercropping, biological pest control, planting flowering plants that attract pollinators, and adapted herbicide and pesticide management, to reduce pollution and side effect of their application on biological control agents. On model approaches, they emphasized model-based combined with stakeholder drivers optimization.

In conclusion, Hotes said that sustainable land management contributes to achieving different and multiple Aichi Targets, open knowledge could be used in different parts of the world, and a broad nexus perspective is needed.

POLICY COHERENCE ACROSS A LANDSCAPE OF DIVERSE CONCEPTS AND INTERESTS

Alexander Buck, International Union of Forest Research Organizations, moderated the session. In his opening remarks Gustavo Fonseca, GEF, noted that for project proposals, countries are “blurring the lines” by seeking funding in a more integrated manner and the new frameworks like the Paris Agreement and the 2030 Agenda provide an opportunity to bring synergies to the Rio Conventions.

Eva Müller, FAO, presented the Voluntary Guidelines for Responsible Governance of Tenure of Land, Fisheries and Forestry in the Context of National Food Security. She emphasized that the guidelines are a tool for mainstreaming as they take an integrated approach and are implemented through multi-stakeholder platforms.

Citing the IUCN study on Restoration of Forest Ecosystems and Landscapes as Contribution to the Aichi Biodiversity Targets, Blasié, Bodin, CBD, discussed policy coherence across national level commitments for ecosystem restoration. He noted that planning for restoration action is an opportunity to strengthen implementation of a range of Aichi Targets and data on degradation and carbon stocks is lacking especially in ecosystems other than forests.



Gustavo Fonseca, GEF



Alexander Buck, IUFRO



Elsa Nickel, Federal Ministry for the Environment, Germany

QUANTIFYING THE EFFECTS OF AGRICULTURAL INTENSIFICATION ON PRODUCTIVITY AND BIODIVERSITY

Axel Paulsch, Institute for Biodiversity, Germany, moderated this session. Elsa Nickel, Federal Ministry for the Environment, Germany, opened by highlighting a sustainable land management project that Germany has co-financed with partner countries. The project looks at applied research generating local solutions that might be used to tackle similar challenges in other countries.

Ralf Seppelt, Helmholtz Centre for Environmental Research (UFZ), highlighted research focused on the biodiversity-agricultural production relationship. He said the research suggests that halting biodiversity loss requires carefully managing land use intensity, and finding solutions requires adapting to regional conditions and working with regional actors. He said the research indicates that increasing agricultural yields is possible while preventing further biodiversity loss. Seppelt underscored the necessity of openness in sharing scientific knowledge and adopting appropriate framework conditions.

In response to an audience question, Seppelt agreed that the Intergovernmental Panel on Climate Change (IPPC) call for increased production of bioenergy and greater use of carbon storage might affect the balance between agricultural production and biodiversity conservation. In response to another question, Axel agreed there is greater need to reconcile data collection and reporting demands made by different conventions and processes. Muller pointed out recent efforts toward this end through the development of a core set of sustainable forest management indicators to be used by all forest-related processes.

Discussions then addressed the impact of market fluctuations on reduced crop diversity and increased erosion, noting this increases the vulnerability of farmers and communities. Highlighting that minor changes in the market have direct impacts on the ground, they stressed the need to understand land resources as a common resource.

Participants also highlighted the importance of crop and production diversification as a solution, and the importance of proposing economically viable alternatives for farmers to adopt, but that market fluctuations make this difficult.

On the science and policy interface, discussions noted that researchers need guidance on the type of research required, and that people on the ground should be involved. Highlighting that open nexus, open data and open science are necessary, Seppelt noted the importance of considering how to measure targets when establishing them.

CELEBRATION OF THE WORLD SOIL DAY AT COP13

Irene Hoffmann, FAO, said there is an urgent need to raise awareness on soils, their biology and proper management. She underscored the importance of the work of the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity and Global Soil Partnership.

Braulio Dias, Executive Secretary, CBD Secretariat, stressed the need to enhance joint cooperation efforts to restore degraded soils and prevent continued soil degradation.



Irene Hoffmann, FAO



Braulio Ferreira de Souza Dias, Executive Secretary, CBD

Humberto Delgado-Rosa, European Commission, suggested that the 2030 Agenda provides a good opportunity for work on soils in that it commits global society to land degradation neutrality. He noted EU support for the production of the first Status of the World's Soil Resources report in 2015.

Chencho Norbu, Secretary, National Environment Commission, Bhutan, lauded the Global Soil Partnership, but emphasized the need for acting locally. He discussed his country's efforts to manage soil restoration and encourage integrated land management.

Hesiquio Benítez, National Commission for the Knowledge and Use of Biodiversity, Mexico, expressed appreciation for the recognition by the Biodiversity Conference's High Level Segment of conservation and sustainable management of soil as a living ecosystem. He described Mexico's efforts to work with the agriculture and forestry sectors in the sound management and recovery of soils.

Chikelu Mba, FAO presented a new FAO flagship publication, "Soils and Pulses – Symbiosis for life," aimed at promoting sustainable soil management to achieve food security worldwide. He emphasized that: growing pulses can lead to the restoration of degraded soils; it is important to mainstream all the benefits



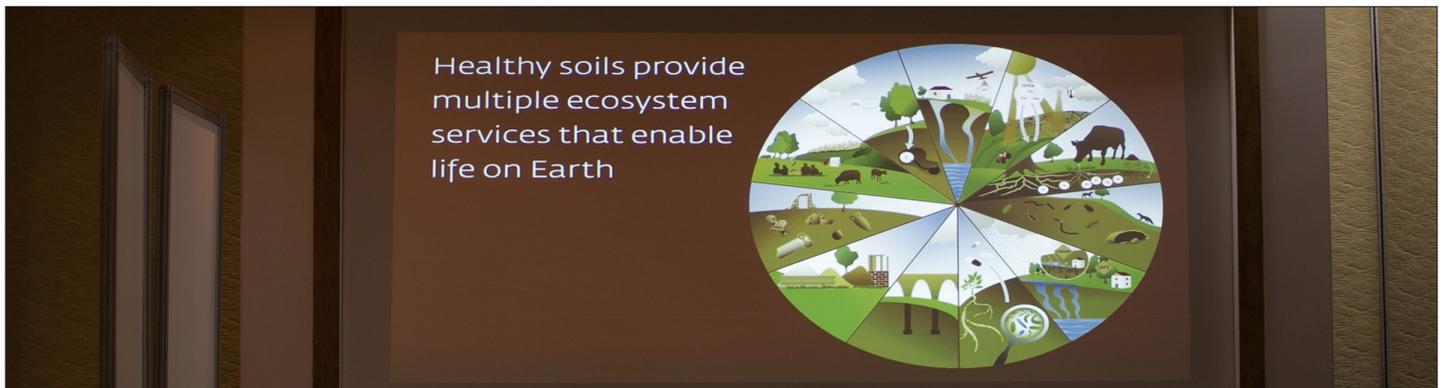
Chencho Norbu, National Environment Commission, Bhutan

identified that arise from the cultivation of pulses; and that the Voluntary Guidelines for Soil Management are going to be important going forward.

In the ensuing question and answer session, Hoffmann highlighted the need to move to solutions and raise awareness among policy makers on how to better use soils, and for countries to translate the Guidelines into tools that are useful at the country level.

On ecosystem services, a participant highlighted the need for greater understanding of nitrogen fixation systems. Hoffmann noted the need to also consider the entire farming system, including other sectors and other nutrient cycles, and to take into consideration the need of farmers. Ferreira de Souza Dias discussed nitrogen-fixing bacteria seed inoculation technologies for sustainable production that could lead to US\$1 billion savings in Brazil.

Final remarks highlighted the need for: taxonomical work to document species inhabiting the soil; better, desegregated data, and improved monitoring and indicators; and financial support. Hoffmann noted that support provided depends on each country's priorities and expressed hope that many countries will make the request for more integrated way of producing. On capacity building, farmer-to-farmer exchanges and farmer field schools were discussed.



Participants watch a video titled "Soil & Pulses: symbiosis for life" produced by the FAO, in celebration of World Soil Day 2016