

Rio Conventions Pavilion Bulletin

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RIO CONVENTIONS PAVILION HIGHLIGHTS: THURSDAY, 11 OCTOBER 2012

The Rio Conventions Pavilion (RCP) continued on Thursday, 11 October, convening for Tree Diversity Day. The day began with a keynote speech by M.S. Swaminathan, M.S. Swaminathan Research Foundation. During the morning, a panel also convened on tree diversity - its role in CBD programmes for agriculture and forest biodiversity and synergies with other global conventions. In the afternoon, panels convened on: benefits of diversifying and restoring landscape mosaics in the tropics by harnessing tree diversity: diversity for development - human benefits from tree diversity for food, health and nutrition; climate change and biodiversity interfering mitigations and biodiversity interfacing mitigation and adaptation; maintaining diversity from genes to landscapes through conservation and sustainable use; and a synthesis session.



L-R: CBD Executive Secretary Braulio Ferreira de Souza Dias; Robert Nasi, CGIAR; Ravi Prabhu, ICRAF; and Pablo Eyzaguirre, Bioversity, sign MOUs for agroforestry

TREE DIVERSITY AT THE INTERFACE OF THE THREE RIO CONVENTIONS

Meine Van Noordwijk, World Agroforestry Centre (ICRAF), introduced Tree Diversity Day with a dialogue recital from "The Lorax," by Dr. Seuss. He highlighted that tree diversity lies at the nexus of the Rio Conventions, noting the important role of trees in landscapes and microclimates, and in mitigating climate change impacts. He explained trees: shape vegetation; form habitats; are long lived and adapt slowly resulting in vulnerability; and provide important ecosystem services. He stressed tree diversity unites the Aichi Biodiversity Targets and connects people to biodiversity.

A keynote address was given by M.S. Swaminathan, M.S. Swaminathan Research Foundation. He presented on agroforestry in the context of the CBD, saying that agroforestry

The sky is held up by tree If the forest disappears, th sky which is the roof of th Tree Diversity Day Moderator Caroline Neeley, ICRAF

is a "science by itself and has to maintain its identity." After a brief historical overview, he stressed the importance of agroforestry to overcoming nutritional challenges. Swaminathan highlighted multiple benefits of agroforestry, including combatting climate change through carbon sequestration.

Swaminathan also noted opportunities to avoid natural catastrophes, such as soil erosion, and stressed that agro-aqua farming with seawater is not receiving enough attention. He highlighted a seawater-farming project and a genetic garden of halophytes, or salt-tolerant plants, in India, as having improved productivity without ecological harm. He also discussed his new book "From Green to Evergreen Revolution."

Participants noted the importance of microbiological diversity to discussions about tree diversity and sustainable forestry, as well as the issue of renewable energy, including wind, solar, biomass and biogas.



The Rio Conventions Pavilion Bulletin is a publication of the International Institute for Sustainable Development (IISD) <info@iisd.ca>, publishers of the Earth Negotiations Bulletin © <enb@iisd.org>. This issue was written and edited by Beate Antonich, Nicole de Paula Domingos and Anna Schulz. The Photographer is Manu Kabahizi. The Editor is Robynne Boyd <robynne@iisd.org>. The Director of IISD Reporting Services is Langston James "Kimo" Goree VI <kimo@iisd.org>. Funding for coverage of this meeting has been provided by the Rio Conventions Pavilion. IISD can be contacted at 161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba R3B 0Y4, Canada; tel: +1-204-958-7700; fax: +1-204-958-7710. The opinions expressed in the Bulletin are those of the authors and do not necessarily reflect the views of IISD. Excerpts from the Bulletin may be used in other publications with appropriate academic citation. Electronic versions of the *Bulletin* are sent to e-mail distribution lists (in HTML and PDF format) and can be found on the Linkages WWW-server at http://www.iisd.ca/. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at http://www.iisd.ca/. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at http://www.iisd.ca/. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at https://www.iisd.ca/. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at https://www.iisd.ca/. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at https://www.iisd.ca/. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at https://www.iisd.ca/. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at https://www.iisd.ca/. For information on the *Bulletin*, including requests to provide reporting services, and the services at https://www.iisd.ca/. For information on the *Bulletin* are sent to e-mail distribution lists to provide reporting services, and the services at https://www.iisd.ca/.



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L-R: Robert Nasi, CGIAR; Sergio Zelaya, UNCCD Secretariat; Balakrishna Pisupati, NBA, India; Ivonne Higuero, UNEP; Santiago Carrizosa, UNDP; Oudara Souvannavong, FAO; and Heikki Taivanen, Finnish Environment Institute.

TREE DIVERSITY: ITS ROLE IN CBD PROGRAMMES AND FOREST BIODIVERSITY AND SYNERGIES WITH OTHER GLOBAL CONVENTIONS

Robert Nasi, CGIAR, said "forests and trees bind the Rio Conventions," highlighting that CGIAR has long collaborated on: promoting equitable sharing of biodiversity benefits; supporting biodiversity conservation; and supporting productive landscapes for food security, poverty eradication and sustainable development.

Neil Pratt, CBD Secretariat, highlighted the increasing importance of agroforestry for biodiversity resilience, in particular for coping with changing environmental conditions. He recalled that CBD parties have long recognized the importance of agroforestry.

Sergio Zelaya, UNCCD Secretariat, called for rethinking forests, looking beyond rainforests to dry-land forests, which do not receive enough conservation attention. He stressed the goal of building a land-degradation neutral world and achieving zero-net land degradation by 2030.

Ivonne Higuero, UNEP, reported on UNEP's work on the Aichi Biodiversity Targets, looking at different sectors, including forests, to understand how to recognize natural capital in policies.

Balakrishna Pisupati, National Biodiversity Authority (NBA), India, said India has focused on agroforestry practices for local community benefits and stressed the need to capture successful experiences in order to replicate them.



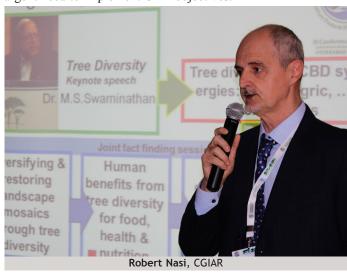
Peter Bridgewater, UK, asks a question to the panel.

Santiago Carrizosa, UNDP, said tree diversity and the UNDP have a "bright future." He emphasized the unique position of UNDP to promote biodiversity principles in development policies.

Oudara Souvannavong, FAO, stressed that biodiversity and tree diversity conservation is a dynamic solution to address uncertainty, variability and change. He noted sound forest management has long relied on tree diversity, including genetic diversity, as a buffer to changes in environmental and management conditions, which can be important during the life cycle of species.

Heikki Taivanen, Finnish Environment Institute, highlighted the evolution of Finnish forest conservation programmes, and mentioned the role of the Tropical Resources Institute, based in Helsinki, as a channel for mainstreaming agroforestry practices.

Nasi, Ravi Prabhu, ICRAF, Pablo Eyzaguirre, Bioversity, and CBD Executive Secretary Dias then signed two memorandums of understanding (MOU), one between the CBD Secretariat and ICRAF and another between the CBD Secretariat, Bioversity International, the Center for International Forestry Research (CIFOR), ICRAF and the International Centre for Tropical Agriculture as partners in the CGIAR Research Programme 6 on Forests, Trees and Agroforestry. Executive Secretary Dias welcomed the MOUs, underscoring the importance of CGIAR's practical on-the-ground knowledge. The ceremony closed with partners welcoming the agreement and promising to convey the urgent need to implement CBD objectives.



BENEFITS OF DIVERSIFYING AND RESTORING LANDSCAPE MOSAICS IN THE TROPICS BY HARNESSING TREE DIVERSITY

Judy Loo, Bioversity International, introduced the panel and spoke about genetic diversity studies and mapping in South America, an area with highly diverse tree species. She noted knowledge gaps, including lack of documentation on distribution of tree species and limited understanding about reproduction of many tree species. She highlighted the Mapping Forest Genetic Resources (MAPFORGEN) project, which evaluates the conservation status of and threats to tree species.

Roeland Kindt, ICRAF, explained vegetation maps and their contribution to guiding tree-planting efforts. Emphasizing the importance of choosing "the right trees for the right place," he stressed the prominence of vegetation maps as decision-support tools for species selection to improve sustainability.

Santiago Carrizosa, UNDP, discussed a Colombian project, addressing the threats of unsustainable land-use and conversion to high yield coffee schemes. He explained that the project aims to harness social, economic and environmental benefits from sustainable coffee landscapes through carbon sequestration, coffee certification and the promotion of financial sustainability through green credit lines.

Kaoru Ichikawa, UN University-Institute of Advanced Studies, presented the International Partnership for the Satoyama Initiative, saying it aims to facilitate international cooperation on social-ecological production landscapes and seascapes (SEPLS). She noted tree diversity in SEPLS in the tropics provides multiple benefits, including protection of endangered species and increased habitat connectivity.

Raman Sukumar, India Institute of Science, discussed diversifying and restoring landscape mosaics in the Western Ghats, India, through incentive-based models involving local communities. He presented a recent report of the Western Ghats Ecology Expert Panel that examined ecological sensitivity and landscapes, with a focus on vegetation and land use. He explained the benefits of restoring landscape mosaics in the Western Ghats, include increased ecological resilience, adaptive capacity and climate change mitigation through carbon sequestration.

BIODIVERSITY FOR DEVELOPMENT: HUMAN BENEFITS FROM TREE DIVERSITY FOR FOOD, HEALTH AND NUTRITION

Ramni Jamnadass, ICRAF, introduced the panel and discussed the benefits of agroforestry for livelihoods. She highlighted the functions of tree diversity, including: fruits; firewood; medicine; income; sawn wood; fodder; and ecosystem services. She underscored the "future of trees are on farms," noting the need for high quality planting material. She emphasized the importance of fruits for improved nutrition and health, saying fruit production is very low in many developing countries, in part due to lack of improved, high-yield varieties.

Amy Ickowitz, ICRAF, described a study on trees and child nutrition in Africa that suggests a positive relationship between tree coverage and two nutritional measures, dietary diversity and increased fruit and vegetable consumption, among 140000 sampled children in 21 African countries. She noted no relationship was found between tree coverage and a third nutritional measure, animal source foods.

Hugo Lamers, Bioversity International, highlighted community biodiversity management (CBM), a process level approach, which aims to ensure local community ownership over their natural resources. He said farmers are key partners in implementing CBM and discussed examples linking local communities with higher policymaking levels, such as the case of the Western Ghats, India.

Navin Sharma, ITC India, discussed "bioeconomy: from sustenance to value creation," noting that the bioeconomy is fast growing and has large revenue potentials. Focusing on the biodiesel sub-sector, Sharma observed that in contrast to the US, Brazil, the EU and China, India has unique biodiesel targets, allowing for "various" crop sources, rather than specifying only a few. Sharma also illustrated a "value ladder" that points to scaling from volume to value with intellectual property at the top of the ladder.

During discussions, participants underscored the continued insufficient return of conservation benefits to local communities, particularly in schemes involving access and benefits sharing (ABS) rules.

CLIMATE CHANGE AND BIODIVERSITY: INTERFACING MITIGATION AND ADAPTATION

Eike Luedeling, ICRAF, introduced the panel and noted that climate change affects all elements of landscapes. He discussed how trees contribute to mitigation and specifically adaptation, through: micro-climate effects benefiting people, animals and crops; rainbow water effects, closing the hydrological cycle by recycling water through terrestrial evapotranspiration; and enhancing soil fertility and reducing livelihood risks. Reflecting on international climate change negotiations, he observed in discussion on reducing emissions from deforestation and forest degradation in developing countries (REDD) difficulty in defining forests, and highlighted the evolution of ideas from REDD to agriculture, forestry and land use

Tim Christophersen, UNEP, underscored lack of attention to restoration in wider landscapes under REDD+. On CBD agriculture initiatives, he emphasized avoiding duplication of other UN programmes. He outlined three opportunities to enhance synergies among stakeholders, including: financing through the Green Climate Fund; increasing private sector interest in linking financial and ecological resilience; and deriving innovative solutions to the increased pressure on natural resources.



A participant at the Rio Conventions Pavilion addresses the panel.



L-R: Eike Luedeling, ICRAF; Tim Christophersen, UNEP; Hesti Lestari Tata, Ministry of Forestry, Indonesia; and P.P. Bhojvaid, FRI, India

Hesti Lestari Tata, Ministry of Forestry, Indonesia, reported that peatlands are legally protected in Indonesia. She noted the benefits of growing native peatland species, such as jelutong, on farms include increased farm income from seeds and seedlings, and increased the export volume and value of jelutong latex.

P.P. Bhojvaid, Forest Research Institute (FRI), India, explained the multiple benefits of trees for local communities and supported the use of agroforestry to combat climate change. He underscored the value of indigenous knowledge in order to avoid reductionist approaches to conservation.

Responding to questions, Luedeling emphasized that farmers grow profitable species and that subsidies are required to get them to grow those that do not directly benefit them. Christophersen suggested Kenya could benefit from planting timber forests rather than importing lumber from the Democratic Republic of the Congo.

Maintaining Diversity From Genes to Landscapes Through Conservation and Sustainable Use

Manuel Guariguata, CIFOR, introduced the panel and called for coherent thinking about how to manage complex landscapes. He said it is easy to define targets, but it is much more complex to determine "how" to achieve those targets.

Juliana Santilli, University of Brasilia, Brazil, discussed legal instruments affecting agroforestry and agro-biodiversity. Recalling the pioneering role of the International Treaty on



Plant Genetic Resources (ITPGRFA) in establishing an ABS mechanism, she noted recognition in the ITPGRFA of farmer's rights and their capacity to promote conservation *in situ*. She highlighted the growing importance of conservation, under the UN Educational, Scientific and Cultural Organization, of intangible cultural heritage. On seeds law, she noted that new legislation might be detrimental to small producers, due to compliance challenges.

Guariguata noted most forests are managed by governments and welcomed increasing participation by local communities and indigenous peoples. He listed challenges for multi-use forests, including: technical and managerial capacities differ across forest products and market opportunities; local communities and small-scale operators struggle to adjust their practices to meet official regulations; and spatial planning for long-term production is usually disregarded.

Terence Sunderland, CIFOR, presented the results of six years of research by CIFOR and partners based on a "long term consultative approach," which aimed to redefine landscape approaches. He discussed the "ten commandments" of their new landscape approach, *inter alia*: adaptive management; multi-functionality; multi-stakeholder; negotiated and transparent change; clarification of rights and principles; and participatory and user-friendly monitoring.

R. Ganesan, Ashoka Trust for Research in Ecology and the Environment, discussed lessons learned from monitoring tree diversity and estimating ecosystem services values in India. He recommended restoring tree diversity using participatory approaches, beginning with understanding and enhancing the role of tree diversity in livelihoods.

Tree Diversity Day Synthesis Session

Reflecting on Tree Diversity Day, Robert Nasi, CIFOR, emphasized there is no one-size fits all solution. Meine Van Noordwijk, ICRAF, said the Rio Conventions are "tree conventions," noting the approaches highlighted at Tree Diversity Day are all integrated solutions. He called for a more active dialogue between scientists and policymakers.