



### RIO CONVENTIONS PAVILION HIGHLIGHTS: 2 DECEMBER 2015

The second day of the RCP convened on Wednesday, 2 December 2015, at UNFCCC COP21 in Paris, France, under the theme “Land Day: Land Degradation Neutrality as a Solution to Climate Change.”

Four sessions took place on: ecosystem-based adaptation (EbA); evergreen agriculture and land restoration; ecological rainfall infrastructure: a new perspective on how forests and trees matter for climate; and, desertification, land degradation and climate change - time to act!: lessons learned from the international civil society forum, Désertif’actions.

The day closed with a reception, entitled “Pursuing synergies in the implementation of the Rio Conventions in Namibia,” hosted by the Namibian Ministry of Environment and Tourism.

#### ECOSYSTEM-BASED ADAPTATION

Ravi Prabhu, Deputy Director General (DDG) Research, World Agroforestry Centre (ICRAF), introduced the session, noting it would address supporting mechanisms for EbA.

Dennis Garrity, UNCCD Drylands Ambassador, spoke on using EbA to reduce exposure and sensitivity to shocks, and increase coping capacity. He drew on examples in Southern and Western Africa where planting trees in farmer-managed natural regenerated systems has reduced negative climate change impacts, and increased resilience and coping capacity.

Lalisa Duguma, ICRAF, pointed to the linkages between ecosystems and climate change, outlining that by providing ecosystem services, exposure to climate change impacts



Dennis Garrity, UNCCD Drylands Ambassador

is reduced and adaptive capacity is enhanced. He called for restoring degraded areas, enhancing resilience through integrated adaptation and mitigation approaches, reducing pressure on ecosystems, facilitating sustainable ecosystem management, and investing in ecosystem management.

Meine van Noordwijk, ICRAF, described three pairs of topics separated in the climate change conversation and negotiations that should be discussed together: trees and farmers; climate and rainfall; and, climate change mitigation and adaptation. Focusing on climate and rainfall, van Noordwijk outlined how the hydrological cycle is connected to tree and vegetative



L-R: Margaret Kroma, ICRAF; Edmund Barrow, IUCN; Winnie Khaemba, ACTS; Larwanou Mahamane, African Forest Forum; and Lalisa Duguma, ICRAF



cover and climate. He underscored that within ecosystems and forests, water dimensions are more tangible and measurable than carbon, and an increased focus should be placed on the relationship between water and climate.

Edmund Barrow, IUCN, underscored that EbA processes must be owned by rural communities. He also noted that tree planting activities framed under EbA may seem to be business as usual, but are “climate smart” when planting suitable species for future climate conditions.

Larwanou Mahamane, African Forest Forum, stated that EbA should be backed by political will to be successful. He suggested greater incentives for EbA, including demonstrating its benefits. He pointed to EbA as providing a “guarantee” for natural capital, supporting local communities.

Winnie Khaemba, African Centre for Technology Studies (ACTS), underscored the role of education, information and communication technologies, and data in transforming EbA-driven agriculture in Africa. She called for EbA to have enhanced involvement with the private sector.

Margaret Kroma, ICRAF, spoke on how women’s voices, responsibilities, knowledge, and challenges should be a central part of policies addressing climate change vulnerability and ecosystem degradation.

Responding to a question from the audience, participants discussed the importance of drawing on evidence of successful EbA approaches to inform policy making. Discussions further touched on: competing demands for water, and the scale to examine hydrological cycle relationships with climate; the role of traditional knowledge in EbA, and mainstreaming traditional knowledge into policy; and, the role of public-private partnerships (PPP) in financing mechanisms for EbA and ecosystem management.

### **EVERGREEN AGRICULTURE AND LAND RESTORATION**

Louise Baker, UNCCD, presented on the LDN target, which was adopted at UNCCD COP12, held in October 2015. She called it “the first quantifiable target for the UNCCD,” underscoring that LDN will help UNCCD address climate



Ravi Prabhu, DDC Research, ICRAF

change. She defined LDN as a combination of prevention, good land management practices, and rehabilitation. Baker noted that LDN has multiple climate benefits, including carbon sequestration, and improved food security and water availability.

Stating that Africa has the world’s largest restoration potential, Dennis Garrity shared examples of working with farmers on reforestation, presenting cases from Rwanda, Niger, Ethiopia, and Malawi. He identified the benefits of such efforts, including improvements in microclimate buffering and soil fertility. Garrity described several large-scale activities in Africa, noting that 17 African countries are now involved in the EverGreen Agriculture Partnership, and referred to the African Restoration Initiative, which aims to restore 100 million hectares by 2030.

Ravi Prabhu underscored how agroforestry can contribute to food, energy, income, and livable environments, but noted challenges in convincing policy makers about these values, and crossing sectors to realize the benefits of integrated multifunctional landscapes.

Randall Purcell, World Food Programme (WFP), drew on the WFP’s approach in Kenya to support beneficiaries in adopting adaptive farming practices. Calling for organizations working in the same space to speak with a “coordinated voice,” he noted the need to look at natural, institutional, and “market” landscapes, respectively, for more effective delivery of benefits to beneficiaries.

Lori Pearson, Catholic Relief Services (CRS), called for changing the way of doing business and looking at how to incorporate policy design at the project level. She said that to scale initiatives, organizations need to meet in a “common space.”

Matthew Reddy, World Business Council for Sustainable Development (WBCSD), provided examples of companies already investing in sustainable farming practices, citing the evolving WBCSD action plan that includes commitments to deliver on solutions addressing degraded lands, in part through support for smallholder and land restoration activities.



Louise Baker, UNCCD Secretariat



L-R: Matthew Reddy, WBCSD; Mark Shepard, Restoration Agriculture Development; Lori Pearson, CRS; Randall Purcell, WFP; and Ravi Prabhu, DDG Research, ICRAF

Mark Shepard, Co-Founder, Restoration Agriculture Development, described restoration agriculture as “profitable ecological restoration,” providing examples of restoring degraded lands in East Africa while at the same time delivering livelihood and economic benefits.

Cheikh Mbow, ICRAF, drew on connections between food security, energy security, and livelihood transformation. He described how integrated landscape approaches, including evergreen agriculture and agroforestry practices, can address all three. Mbow highlighted the potential for large-scale investment in such practices across Africa.

During the discussion, participants addressed issues of traditional knowledge, the involvement of youth in agriculture, and market access. Prabhu, on a question of restoration in polluted areas, noted that phyto-remediation can remove soil pollutants. Purcell said that in some cases, programming could be modified to support improving households’ productive assets, rather than simply providing food.

### ***ECOLOGICAL RAINFALL INFRASTRUCTURE: A NEW PERSPECTIVE ON HOW FORESTS AND TREES MATTER FOR CLIMATE***

Peter Minang, ICRAF, moderated the session. Acknowledging that many farmers have long believed trees help generate rainfall, Dennis Garrity described emerging science exploring this relationship and referred to the “exciting conversation” developing between scientists and farmers.

Meine van Noordwijk introduced a policy brief, entitled “Ecological rainfall infrastructure: investment in trees for sustainable development.” Discussing evapotranspiration and circular water flows, he noted rainwater is influenced by both ocean and forest systems. Calling for further studies, he stated sufficient evidence exists to support initial policy discussions on how trees contribute to rainfall.

David Ellison, Swedish University of Agricultural Sciences, and, member, WeForest Scientific Steering Committee, called for examining the relationships between forests, water, energy, and climate. Stating, “If you take away forests, you take away rainfall,” he described how trees influence cooling, groundwater recharge, and up- and downwind interactions influencing rainfall. Ellison called for examining water systems at the continental scale, noting water management is often discussed at the catchment scale.

Daniel Murdiyarso, Center for International Forestry Research (CIFOR), presented on the importance of “icons” to communicate environmental issues and interactions, especially for the next generation. He provided five iconic examples of the relationship between forests and water systems, which included forests’ provision of ecosystem services to: generate precipitation; act as a natural cooling system; create wind transport of water vapor; improve groundwater recharge; and facilitate moderate flooding.

Ravi Prabhu, responding to panelist presentations, provided reflections on gaps and how to move forward. For research, he stated that there is a need to focus on biophysical and policy dimensions, and effectively communicate gaps and challenges. He stressed taking a “nexus perspective” to realize linkages between food, energy, water, and livelihoods.

In the ensuing discussion, participants addressed: linkages between global warming and rainfall systems; investment in areas with upwind interactions affecting rainfall; translation of forest knowledge as “powerful adaptation tools” to local communities on the ground; and the future geopolitics of climate change.



Patrice Burger, CARI



Pohamba Shifeta, Minister of Environment and Tourism, Namibia

***DESERTIFICATION, LAND DEGRADATION AND CLIMATE CHANGE - TIME TO ACT!: LESSONS LEARNED FROM THE INTERNATIONAL CIVIL SOCIETY FORUM DÉSERTIF' ACTIONS***

Patrice Burger, Centre d'Action et de Réalisations Internationales (CARI), presented a film from Désertif' actions 2015 held in Montpellier, France, in June 2015, in preparation for UNCCD COP12 and UNFCCC COP21.

The film addressed: challenges associated with land degradation, such as over production and pesticide use; the role of civil society in addressing the challenges of land degradation and climate change, such as through climate-smart agriculture (CSA) and reforestation; and, how land restoration can support biodiversity protection and carbon sequestration.

Burger described the international forum and civil society march, noting the development of a declaration to be delivered at UNFCCC COP21. He called the events “a global gathering of civil society involved with land and climate issues,” underscoring that the linkages between land and agriculture have been largely left out of the climate discussions.

Reflecting on the film presented, Marcus Montoiro, UNCCD, expressed gratitude for CARI's work. He stressed the importance of land and agriculture within climate change discussions and emphasized civil society's input to these processes.

Benoît Ivars, CARI, presented on the role agroecology can play in addressing the LDN goal and sustainable land management. He underscored the opportunity to draw on synergies between adaptation and mitigation to address development and climate change, and increase resilience.

Jean-Luc Chotte, L'Institut de Recherche pour le Développement (IRD), urged working with stakeholders to address land degradation, and underscored the benefits of LDN, including supporting carbon sequestration, food security, and climate change mitigation and adaptation. He encouraged additional research and studies to explore different ways of producing biomass, as it relates to supporting LDN.

Lauding civil society efforts to combat land degradation, Delfin Ganapin, Global Manager, GEF Small Grants Programme (SGP), stated that a community grant on agroecology had been established under the GEF SGP, which provides up to US\$50,000 per community activity.

Philippe Baret, Université catholique de Louvain, underscored the need to focus on resilience at different scales, from the plot or farm level, to the market level, highlighting the need for market penetration. He noted efforts to combat land degradation are often based on expensive technical systems, dependent on subsidies, which are out of reach for small farmers. He cautioned against a focus on “quick fixes” and called for a balance with long-term sustainable solutions and “slow and low-tech” solutions developed in partnership with farmers. He emphasized that by doing so, LDN solutions could benefit from farmer knowledge, while ensuring farmer ownership over such solutions.

Sylvain Berton, Agrisud International, spoke on the role of markets to support agroecology. He underscored drawing on complementarities between stakeholders, the three pillars of sustainability, parcel and territory scales, and climate change mitigation and adaptation.

Erdoğan Özevren, Ministry of Environment and Forestry, Turkey, reflected on the success of achieving an LDN target under the UNCCD. He lauded the work of NGOs such as CARI, and expressed the support of working with civil society.

***NAMIBIA - PURSUING SYNERGIES IN THE IMPLEMENTATION OF THE RIO CONVENTIONS***

Theo Nghitila, Department of Environment and Tourism, Namibia, facilitated the session. Malan Lindeque, Permanent Secretary of Environment and Tourism, Namibia, welcomed participants. Yukie Hori, UNCCD, lauded Namibia for implementing synergistic actions at the national level.

Pohamba Shifeta, Minister of the Environment and Tourism, Namibia, noted that the session aims to highlight the role of LDN to address climate change. He said that in pursuing LDN, Namibia has aimed to implement the Rio Conventions synergistically, and that the sustainable management and use of Namibia's natural resources is vital for ensuring the wellbeing of current and future generations. Minister Shifeta stated that impact of the severe drought currently being experienced underscores the extent of Namibia's dependence on land. He said Namibia's efforts in achieving LDN have been innovative, citing efforts such as allowing wildlife to co-exist with farmlands. Future efforts, he underscored, will look at scaling up approaches to broaden the successes achieved thus far.

Petrus Muteyauli, Ministry of Environment and Tourism, Namibia, gave an overview of the approaches taken by Namibia in the implementation of the Rio Conventions. He said one focal point has been established to address and coordinate implementation of the conventions. He described “on-the-ground” implementation, saying this has included CSA and the establishment of communal conservancies for wildlife tourism.