



Rio Conventions Pavilion Bulletin

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RIO CONVENTIONS PAVILION HIGHLIGHTS: FRIDAY, 15 JUNE 2012

The Rio Conventions Pavilion continued on Friday, 15 June 2012, focusing on the theme of Ecosystem-based Adaptation (EBA). Events addressed: ecosystem based approaches to adaptation - from concept to action; economic valuation of land (EVL) - an approach to advance sustainable development in the context of a green economy; the Bonn Challenge - restoring 150 million hectares of degraded landscapes by 2020; and coastal climate change solutions - from principles to practice.



Jacqueline Alder, UNEP

ECOSYSTEM BASED APPROACHES TO ADAPTATION: FROM CONCEPT TO ACTION

Kate Brown, Global Island Partnership, introduced the panel. Veronica Lo, CBD Secretariat, presented on the value of ecosystem-based approaches (EBA). She noted EBA's advantages, including contributions to: climate change adaptation, generating societal benefits such as greater accessibility to the rural poor than "traditional" infrastructure and engineering actions; climate change mitigation by conserving carbon stocks and reducing emissions from ecosystem degradation and loss; and biodiversity conservation by enhancing carbon sequestration. On implementation of EBA, Lo emphasized the need for defining objectives as well as evaluating the effectiveness of adaptation activities.

Focusing on ways to move from principles to practice in EBA, Jacqueline Alder, UN Environment Programme (UNEP), presented on a decision support framework as a tool for

planning EBA for governments, including: setting the adaptation context; selecting appropriate options for adaptation; and design for change and adaptive implementation. She emphasized EBA should be: clear and context specific; measureable; embedded in existing policies; and considered against alternative options. Adler also discussed a pilot project at Lami Town, Fiji, where a cost-benefit analysis showed that ecosystem maintenance yields the highest benefit per dollar spent on implementation compared to engineering actions.

Didier Dogley, Special Advisor to the Minister of Environment and Energy, the Seychelles, presented on a project, supported by the Adaptation Fund, that aims to restore the hydrological balance and enhance resilience of the coastal ecosystem. He highlighted the main components of the project as reducing invasive species, restoring wetlands, regulating water flow in rivers, protecting the coastline from wave erosion, and monitoring and capacity building. He noted that an integrated approach that incorporates engineering solutions is needed.

Robert Nasi, Centre for International Forestry Research (CIFOR), highlighted six "stories" that emerged from a meta-analysis of the contribution of agroforestry and forest systems to EBA. He noted that while the benefits for increasing resilience and reducing vulnerability at the household and community level are clear, there is a lack of consensus on the impacts of forests in meso-level ecosystems such as watersheds, coasts or urban environments, as well as on regional climates. He noted that better science is critical for managing the inevitable trade-offs, such as between a regular base flow or less total water.

Sefanaia Nawadra, Secretariat of the Pacific Regional Environment Programme (SPREP), presented a case study on ecosystem-based management (EBM) in the Pacific in Fiji. Nawadra noted decisions to optimize adaptation measures led to integrated planning, sustainable resource management,



Veronica Lo, CBD Secretariat

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Panel (L-R): Jaime Webbe, CBD Secretariat; Jacqueline Alder, UNEP; Didier Dogley, Special Advisor to the Minister of Environment and Energy, the Seychelles; Robert Nasi, CIFOR; and Sefanaia Nawadra, Secretariat of the Pacific Regional Environment Programme (SPREP).

rehabilitation of degraded areas and soft coastal adaptation measures in Fiji while at the same time incorporating traditional practices and knowledge.

During discussions, Jaime Webbe, CBD Secretariat, pointed out that EBA is very project specific and that CBD has provided a database with over 600 case studies to encourage sharing of best practices and innovative experiences from different EBA projects and activities around the world.

EVL: AN APPROACH TO ADVANCE SUSTAINABLE DEVELOPMENT IN THE CONTEXT OF A GREEN ECONOMY

Introducing the session, Ed King, Climate Change TV, asked the panelists to start by explaining why it is important to value land. John Soussan, Offering Sustainable Land-Use Options (OSLO) Consortium, observed that deriving the full economic value of land is a prerequisite for sustainable land management (SLM). Simone Quatrini, Global Mechanism, added that many of the important functions that ecosystems provide are not captured by the current returns on investment measures, hence the aim is to unveil these hidden values in order to improve the metrics and provide the right decision-making tools to producers as well as investors.

Yuki Hori, UNCCD Secretariat, noted SLM is about achieving zero-net land degradation. Highlighting lessons from the Zambia study, Elija Phiri, University of Zambia, said the EVL methodology has helped to clarify the real value of various land uses. He cited the finding that carbon sequestration from the 6000 square kilometer pilot site could be worth as much as US\$ 3.5 billion.

With regard to financial flows, Quatrini noted that global investments in SLM currently account for less than 1% of Official Development Assistance at about US\$ 2 billion annually. Emphasizing that there is huge potential for growth due to the growing interest in green investments, he underscored the need for supportive policy environments for investors.

Soussan discussed the OSLO Consortium's experience in Cambodia making the case for investments in SLM and providing specific policy recommendations by showing the value of protecting the primary rainforest area, including measuring: the value of ecosystem and biodiversity services; carbon and water functions; and recreational tourism and cultural values. He emphasized how linking area protection to hydropower schemes serves not only investors' interests in the longevity of their infrastructure investments but also benefits local people by protecting their livelihoods from outside pressures. Soussan explained the OSLO Consortium helps make the economic case for investors to invest their funds into new areas for much longer terms.

Quatrini observed an increased appetite in capital markets for SLM projects as public awareness has led investors and corporations to seek to align themselves with the values of their customers. He explained the diverse options available to different investors, including banks and insurance companies, allow for investments in: SLM activities; water management; sustainable agricultural production; and the energy, construction and ecotourism sectors.

Pointing out that investments by local communities, such as terrace systems in mountainous regions or pastoral land management in drylands, are often unaccounted for, Soussan



Jaime Webbe, CBD Secretariat



Simone Quatrini, Global Mechanism



Panel (L-R): John Soussan, OSLO Consortium; Yuki Hori, UNCCD Secretariat; Ed King, Climate Change TV; Simone Quatrini, Global Mechanism; and Elijah Phiri, University of Zambia.

stressed that a key question should be how to sustain and improve traditional livelihood systems. Hori added that land users need incentives to change unsustainable practices.

On the way forward, Soussan highlighted land tenure issues and linking investors to producers. Quatrini underscored a three-pronged approach aimed at generating solid metrics to capture hidden values, improving science-policy linkages, and boosting the confidence of the business community to invest in SLM. Hori expressed hope that zero-net land degradation by 2030 would be included as one of the Sustainable Development Goals in the Rio+20 outcome document.

THE BONN CHALLENGE - RESTORING 150 MILLION HECTARES OF DEGRADED LANDSCAPES BY 2020

Moderated by Daniel Shaw, IUCN, the session highlighted the Bonn Challenge to restore degraded lands.

Mario Boccucci, UNEP, said the carbon sequestration benefit of restoring degraded lands is the “icing on the cake” to the main benefits of restoring provision of ecosystem services. He said the public sector must first address barriers to private sector investment in order to achieve the scale of resources required. Boccucci said the REDD regime can help facilitate public sector funding through the Green Climate Fund and this will reduce barriers to entry for the private sector. He highlighted green economy transitions as a means to address degraded lands and the food security challenge. On UN-REDD, he said it is using REDD as a catalyst for the green economy.

Clayton Ferreira Lino, Mata Atlântica Biosphere Reserve (RBMA), Brazil, discussed the Mata Atlântica Restoration Pact (PACTO), emphasizing the value of multi-stakeholder participation in forest restoration as in PACTO, which

brings together non-government organizations, governments, research institutions, private companies and landowners. He explained PACTO’s goal is to restore 15 million hectares of degraded lands in the Brazilian Atlantic forest by 2050 and to promote: conservation of biodiversity; job generation; income opportunities; and maintenance and protection of ecosystems. Lino highlighted the need to connect payments for agricultural services to conservation and carbon sequestration and the need for incentives for landowners to comply with the Brazilian forest code. Emphasizing the importance of monitoring projects, he noted PACTO has established an online project registry system, which covers 58000 hectares of ongoing restoration projects.

Carol Saint-Laurent, IUCN, explained basic principles about the forest and landscape restoration approach including: balancing local needs with national and global priorities; restoring entire landscapes not just individual sites; restoring functionality and ecosystems; scaling up and adopting new and working models; engaging local people and other stakeholders and avoiding a one-size fits all approach. Illustrating the potential for global forest restoration on a global map with the highest opportunities lying in Africa, South America and Asia, she pointed out that a quarter of global forest land has been deforested and another quarter has been degraded.

The session concluded with a short film on “plantapledge.com” an online initiative by IUCN and Airbus to rally public support for the Bonn Challenge. Responding to a question on how to mobilize smallholders in the initiative, Saint-Laurent highlighted the role of producer associations in raising awareness and generating scale. With regard to the role of the private sector, panelists noted this is not a single entity and the drivers for participating in landscape restoration may include securing access to new markets, developing new kinds of forest products, spreading risk, and philanthropic or corporate



Panel (L-R): Mario Boccucci, UNEP; Carole Saint-Laurent, IUCN; Clayton Lino, RBMA; and Daniel Shaw, IUCN.



Nelson Colmenares, UNEP Caribbean Environment Programme

social responsibility motivations. The role of the state in stimulating market demand through forestry policies, as well as social programmes, was also highlighted.

COASTAL CLIMATE CHANGE SOLUTIONS - FROM PRINCIPLES TO PRACTICE

Elaborating on an EBA decision support framework, session Facilitator Jacqueline Alder, UNEP, highlighted some operational challenges faced including: lack of robust information on EBA options compared to “traditional” technologies; unclear definitions, objectives and indicators of success; the need to extend EBA capacity building expertise to support on-the-ground decision making at the project level; and limited financing to establish baselines and regular monitoring activities. On “what next” steps, she mentioned plans to introduce pilot testing in a variety of ecosystem and decision contexts and develop a training package to support national adaptation programmes of action and national adaptation plan implementation in developing countries.

Lynne Zeitlin Hale, The Nature Conservancy, focused on examples of EBA solutions rather than hard infrastructure approaches, which can themselves present threats to coastal communities. She emphasized that meeting multiple management objectives including addressing community-, economic- and ecological-system vulnerability requires adaptation plans that minimize losses to human and natural communities. Hale discussed the importance of socioeconomic analysis to define the protection potential from natural infrastructure including: erosion resistance; storm defense; vertical accretion through sediment capture; and biomass accretion.

Hale said important co-benefits of these protective ecosystem services include: maintenance of fisheries as important food sources and thus livelihoods; tourism and recreation; and water filtration. Underscoring the cost effectiveness of EBA solutions she suggested that creating a dialogue between biologists and engineers can help move towards a natural infrastructure engineering approach.

Nelson Andrade Colmenares, UNEP Caribbean Environment Programme, spoke on initiatives in the wider Caribbean region. Lamenting that of the over 300 Marine Protected Areas (MPAs), only 6% are effective, Colmenares described steps to develop an integrated approach to enhance implementation of the Cartagena Convention and its Protocols, including: strengthening of MPA staff; introducing better practices and alternative livelihood options for fishing communities; and integrated watershed management focused on restoration,



Lynn Hale, The Nature Conservancy

pollution control and capacity building in 13 Small Island Developing States. Among the remaining challenges, he highlighted the need for more meaningful engagement of the business sector and wider application of EBM, outside MPAs.

Ahmed Senhoury, IUCN, presented on prospects and challenges in achieving climate change mitigation outcomes from coastal ecosystem management in the West African region. Among the opportunities he noted: carbon sequestration through reforestation; avoiding greenhouse gas (GHG) emissions through the protection of tidal marshlands and high carbon species; reducing GHG emissions through the production of clean energy from wind power, wave power and tidal energy; promoting innovation and deploying low carbon technologies in coastal and marine activities; as well as capturing and storing CO₂ from industrial sources.

Senhoury said developing countries face several challenges, including limited access to appropriate technologies and financial mechanisms as well as lack of knowledge and skills for a better understanding of “phenomena and interventions.” He noted how environmental impacts of some mitigation options, degradation of ecosystems and decline of coastal resources can worsen deprivation and poverty of coastal communities.

In response to a question on how to engage other actors, Hale noted efforts to involve the engineering and tourism sectors as well as municipal and local governments. Colmenares remarked that while there has been encouraging progress in working with governments and local communities concerted effort is needed to bring on board key tourism industry players.



Participants at the evening reception

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