The Rio Conventions Pavilion continued on Sunday, 17 June 2012, focusing on the theme of securing healthy soils and stopping land degradation within a generation, as well as global observance of the World Day to Combat Desertification. The event commenced with a high-level round table on what sustainable land and soil management can do to achieve the Millennium Development Goals (MDGs). Panels addressed: towards a zero net land and soil degradation world; the Global Soil Partnership; and the economics of land degradation. The day concluded with global observance of the World Day to Combat Desertification and a Land for Life Award reception. The Land for Life Award was presented to Sustainable Organic Integrated Livelihoods (SOIL), Haiti, in a ceremony headlined by UNCCD Drylands Ambassador and Miss Universe Leila Lopez. SOIL works in some of the poorest areas of Haiti to promote an integrated approach to the issues of inadequate sanitation, declining soil fertility and extensive erosion.

What Sustainable Land and Soil Management Can Do to Achieve the MDGs

Land day commenced with two high-level opening statements from Paulo Cabral, Ministry of Environment, Brazil, and Luc Gnacadja, UNCCD Executive Secretary.

Cabral provided an overview of ongoing efforts to implement Brazil’s National Action Programme to combat land degradation, underlining the need for innovative and integrated approaches to advance the sustainable use of natural resources, poverty alleviation and social inclusion.

UNCCD Executive Secretary Gnacadja enumerated achievements of the UNCCD, highlighting the mobilization of the scientific community to develop impact indicators for measuring drought, land degradation and desertification and the development of a robust monitoring framework that is delivering policy-relevant recommendations to UNCCD decision-making bodies. Lamenting the lack of awareness that reversing land degradation is achievable, he stressed the need to capitalize on success stories on the ground to help bridge the gap between science, policy and practice. He called on Rio+20 to “give us a common goal and target to guide action,” by adopting the target of zero net land degradation.

Don Koo Lee, Minister, Korea Forest Service, Republic of Korea, chaired the high-level panel and welcomed this discussion underscoring that sustainable land and soil management is crucial to achieve the MDGs. The session was moderated by Martin Frick, Ambassador to the UN, Germany.

Jan McAlpine, Director, UN Forum on Forests, said “soil is like blood in our veins - without it nothing on the planet will survive.” She countered pessimism about Rio+20 and media focus on failures over the last 20 years, emphasizing that cross-sectorial and cross-institutional dialogues on soil management are occurring. Jochen Flashbarth, President, German Federal Environment Agency, noted that soil is still inappropriately seen as a domestic issue, when 12 million hectares of soil are lost globally every year. He highlighted the need to provide scientific advise to politicians and improve regulation at the global scale.

Kanayo Nwanze, President, International Fund for Agricultural Development (IFAD), warned against viewing small local farmers, herders and foresters as contributors to land degradation, calling for seeing them as the greatest managers of land and biodiversity. He said empowering them through access to technology and finance will move them towards improved sustainable land use and livelihoods.
Alexander Mueller, UN Food and Agricultural Organization (FAO), welcomed alliances between scientists, governments, NGOs and farmers to provide sustainable alternatives and improve soil management. He emphasized that soil degradation is not just a problem in developing countries, pointing out that the US is also losing fertile soil at a very high rate.

Emphasizing that soil and climate are closely interlinked, Mannava Sivakumar, World Meteorological Organization (WMO), highlighted initiatives to provide farmers with up-to-date meteorological information to enhance land management.

Braulio Ferreira de Souza Dias, CBD Executive Secretary, noted the close link between the UNCCD and CBD, observing that half of the targets in the CBD 10-year strategy touch on sustainable land management (SLM). Emphasizing that soils are living systems, he called for increased attention to biodiversity conservation on farms.

Stressing that land degradation “is not just an African issue,” Timo Makela, Directorate-General for the Environment (DG-Environment), European Commission, highlighted EU efforts towards a strong Rio+20 outcome on SLM and its links to access to finance and markets for smallholders.

During discussions, participants highlighted, inter alia: linking grassroots and higher-level actions; the need for a clear signal from Rio+20 on the centrality of SLM to the three pillars of sustainable development; removing subsidies that undermine sustainable land use; recognizing links between land and sea pollution; and enhancing institutional collaboration.

He highlighted ongoing work to explore the feasibility of a UNCCD science-policy platform to harness and disseminate knowledge on drylands issues.

Dennis Garrity, World Agroforestry Centre (ICRAF), emphasized that achieving zero net land degradation is feasible. He recommended the implementation of national and local regeneration measures and a transformation towards climate smart agriculture systems, highlighting ongoing programmes in Malawi and Zambia.

Veerle Vandeweerd, UN Development Programme (UNDP), noted that the sustainable development challenge is particularly acute in drylands, home of the “forgotten billion.” She said the UNDP Integrated Drylands Development Programme aims to support developing countries to move from policy to implementation by mainstreaming drylands development into national development programmes.

Craig Hanson, World Resources Institute (WRI), responded to the panel noting that regeneration through increasing total plant growth is only one of many alternative solutions to land degradation.

Ben Boer, Wuhan University, supported taking an integrated approach, including science, economics, policy and institutional frameworks both at the global and local level, suggesting integrating law in addition, which could “glue” the various issues together. He advocated a zero net...
land degradation protocol under the UNCCD, with enabling instruments such as finance and a set of guidelines for national implementation.

In the ensuing discussion, participants highlighted the need for clear indicators to monitor the zero net land degradation target. Garrity noted efforts by the CST to develop robust indicators at different scales and that countries would be encouraged to adapt global targets to their own contexts. One participant stressed that research and development should respond to the needs of local communities and called for stronger involvement of civil society actors in this. Other speakers highlighted the need for secure land tenure and investing in long-term capacity building for SLM.

**GLOBAL SOIL PARTNERSHIP**

This session was moderated by Luca Marmo, DG-Environment, European Commission. Noting that soil degradation reduces ecosystem capacity to produce key environmental services, Manuel Gerardo Pedro Pulgar-Vidal Otálora, Minister of Environment, Peru, said the Peruvian government established a national programme to combat desertification and soil degradation. He stressed the value of indigenous peoples’ knowledge for land management and underscored the importance of this issue at Rio+20 because “healthy soils sustain lives.”

Carlos Clérici, Ministry of Livestock, Agriculture and Fisheries, Uruguay, and Eugenio González Aguiló, Center for Information on Natural Resources, Chile, presented on government initiatives to combat soil erosion in their respective countries. They described how national research and development programmes demonstrate good soil management practices and are backed up by incentives and legal enforcement for upscaling and sustainability.

Diana Wall, Colorado State University, US, highlighted the work of the Global Soil Biodiversity Partnership, which aims to codify and disseminate available scientific knowledge on soil biodiversity to foster sustainable management of soil biodiversity and ecosystem services.

Alexander Mueller, FAO, presented the Global Soil Partnership, which includes several regional soil partnerships developed in response to the urgent need for a transition to SLM. He noted findings from Somalia where an average of 100 tonnes per hectare of topsoil is lost annually, while formation of 2-2.5 cm of topsoil takes 1000 years. He underscored action should improve: soil data, knowledge and research; increase awareness and investment in soil management; and establishing adequate, compatible and coordinated soil policies.

Discussant Moises Quispe, Asociacion Nacional de Productores Ecologicos del Peru, said soil in Peru is degraded by: soil contamination from the overuse of toxics, chemical pesticides and fertilizers that damage soil and microorganisms; climate change resulting in soil erosion due to weather changes; and accelerating urbanization. He also presented sustainable farming practices used in Peruvian communities including crop rotation, organic farming, soil conservation and restoration and underscored the benefits of sharing information and best practices.

Discussant Luca Montanarella, JRC, European Commission, welcomed the Global Soil Partnership, which, with a focus on food security, serves as a platform and identifies synergies between the three Rio Conventions, and brings together regional, national and local initiatives.

Responding to participants’ views, the panel embraced the idea of soil as “environmental stock” or “natural capital” from which environmental services can be generated thereby moving away from the perception of soil as merely a “resource to be exploited.” With regard to a question about new technologies,
Wall said one should apply holistic thinking to the introduction of new technologies in agricultural systems and noted how genetic modified plants can disrupt ecological systems.

The Economics of Land Degradation

This panel was moderated by Sergio Zelaya, UNCCD Secretariat. Blessing Manale, Department of Environmental Affairs, South Africa, highlighted ongoing efforts to achieve the green economy. Noting the UNCCD provides a framework for harmonizing national policies, he underscored the growing recognition of the need for “business unusual” approaches that link agricultural finance with community empowerment, employment generation and land productivity.

Ibrahim Thiaw, UN Environment Programme (UNEP), preferred the term “economics of arid lands” since it does not connote that things are not going well in drylands. Noting that while drylands face constraints, such as droughts, he emphasized that investments that are compatible with dryland ecology can help arid lands transition to a green economy.

Kook Hyun Moon, Chair, SLM Business Forum, stated that environmental issues cannot be solved by government and civil society alone, calling for inclusion of the business sector to address land degradation, in order to reverse that trend and develop innovative technology.

Noting that the EU’s aim is to “protect soil functions, not soils as such,” Luca Montanarella, JRC, European Commission, highlighted the Commission’s contribution to economic assessments of soil and land management, through initiatives such as the World Atlas on Desertification and Regional Soil Atlases. He noted that this body of work supports the UNCCD’s efforts to communicate the importance of reversing land degradation to the public and policymakers.

In discussion, Andre Leu, President, International Foundation for Organic Agriculture Movements (IFOAM), explained that most agriculture in the world is rain fed and that it is essential to increase rain capture efficiency. He discussed how organic agricultural systems recycle organic matter, which absorbs extra water from rain events that can be stored to help overcome droughts.

Julien Dominic Publio Dias, Cervejaria Grupo Petropolis, Brazil, sought clarification on how to balance meeting rising demand for food, water and energy, and ensuring environmental sustainability. Thiaw highlighted the need to respect natural carrying capacities of land, noting pastoralist land management is much better adapted to drylands than intensive agriculture. Montanarella stressed accounting for the full value of soil services and involving upstream and downstream users in finding solutions. Moon called for better use of advertising resources to promote social messages and enhancing ownership and innovation along the entire business value chain.

Following reports by moderators of the three panel sessions, UNCCD Executive Secretary Gnacadja summarized key messages to Rio+20. He noted the day’s discussions had highlighted that while zero net land degradation is an ambitious target, it is timely and achievable. He emphasized that this target would empower the UNCCD to monitor “our land and soil in drylands” and to encourage all stakeholders to move away from business as usual to “business unusual.”