CONCEPT NOTE
Working Session
Ecosystem Management and Agricultural Practices

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<th>Schedule</th>
<th>Thursday, 25 May 2017, 17:00 – 18:30</th>
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<td>Room and Venue</td>
<td>Arena F</td>
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**Background and Rationale**

Poor land management, unsustainable use of natural resources and declining ecosystems have been counted among the most significant drivers of disaster risk that need to be tackled; this underscores how environmental conditions, including in areas under cultivation, contribute to natural hazards and how ecosystem health affects a community's exposure and vulnerability to those hazards.

To achieve the goals set forth in the Sendai Framework, governments prioritized actions such as: implementation of integrated environmental and natural resource management approaches; introducing disaster risk assessment and management into development planning; and supporting transboundary cooperation for the implementation of ecosystem-based approaches with regard to shared resources, such as within river basins and along coastlines to build resilience and reduce disaster risk, including epidemic and displacement risk.

The focus on ecosystems, natural resource management and agricultural practices can contribute directly to reduced risk, adaptation and enhanced resilience ---it can also show the way forward in integrated approaches that support achievement of the Sustainable Development Goals, the Paris Agreement on Climate Change and other international commitments such as the Aichi Targets, the Ramsar Convention, World Heritage Convention, and UNCCD decisions on Land Degradation Neutrality.

The role of ecosystems (including agro-ecosystems) in reducing disaster risk is well established. A recent study, for instance, found that more than $625 million in property losses were prevented during Hurricane Sandy by coastal habitats in the northeastern United States. The study further demonstrated how coastal wetlands can reduce average annual losses from coastal storms by 20% or more. Studies in the United Kingdom found that planting trees could reduce the height of flooding in towns by up to 20%. The agro-ecosystems play a vital role in reducing disaster risk as well; agriculture sectors, for instance, absorb an estimated 22% of total damage and losses caused by natural hazards in developing countries. Yet, despite compelling evidence, environmental, disaster risk and sectoral decision-
makers too often continue to pursue their own goals in isolation.

This is beginning to change – an increasing number of national and local governments and partners in civil society, science and the private sector are considering nature-based solutions to reducing disaster risk. Progress is further hastened by commitments such as the Bonn Challenge which is on track to meet its global target to restore 150 million hectares of the world’s deforested and degraded land by 2020 and 350 million hectares by 2030. To support the acceleration of these efforts at scale calls for cooperation in several areas:

- Assessing risk and identifying the risk reducing benefits of sustainable agricultural practices, natural infrastructure, and ecosystem restoration and protection at the landscape scale;
- Incorporating sustainable agricultural practices, natural infrastructure, and ecosystem restoration and protection in national and sub-national plans and strategies for disaster risk reduction, climate change and development; and
- Catalyzing investments/partnerships for sustainable agricultural practices, natural infrastructure, and ecosystem restoration and protection for disaster resilience in shared river basins and deltas.

This session will examine multi-stakeholder efforts to address these challenges and scale up investments in ecosystem based solutions that reduce disaster risk, address climate change and deliver on related goals of sustainable development including health.

**Session Objectives**

The Plenary Session will

1) Consider how chosen agricultural and natural resource management practices can build resilience or create risk;

2) Share lessons in how to reduce disaster risk and accrue other socio-economic benefits through sustainable agricultural practices, natural infrastructure, and ecosystem restoration and protection; and,

3) Identify practical measures to build multi-stakeholder partnerships and scale-up investments.

**Discussion questions**

- To what extent have you been able to integrate natural infrastructure, ecosystem restoration and protection, or sustainable agricultural practices into your disaster risk reduction strategies? (Or integrate disaster risk reduction into your environmental work?)
- What plans do you have to expand/bring this work to scale? What are the next steps?
- What is needed to boost the partnerships and investments needed to scale this work up?

**Expected outcomes**

- Identification of practical examples of actions that support scaled-up investment in ecosystem-based solutions for disaster risk reduction.
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| • Identification of incentives for increased investment and cooperation between disaster management and natural resource managers.  
  • Shared vision and new commitments.  
  • To assess risk and identify the risk-reducing benefits of sustainable agricultural practices, natural infrastructure, and ecosystem restoration and protection at the landscape scale;  
  • To incorporate sustainable agricultural practices, natural infrastructure, and ecosystem restoration and protection in national and sub-national plans and strategies for disaster risk reduction, climate change and development;  
  • To increase investment and build multi-stakeholder partnerships for sustainable agricultural practices, natural infrastructure, and ecosystem restoration and protection in shared river basins and deltas with the aim of reducing disaster risk.  |  
|  | • Sendai Framework for Disaster Risk Reduction 2015-2030  
  • 2030 Agenda for Sustainable Development  
  • Paris Agreement on Climate Change  
  • Top 15 Suggested Readings on Eco-DRR  
  • The impact of disasters on agriculture and food security  
  • Resilient Livelihoods – Disaster Risk Reduction for Food and Nutrition Security  
  • “Climate-Smart” Agriculture: Policies, Practices and Financing for Food Security, Adaptation and Mitigation  
  • The State of Food and Agriculture: climate change, agriculture and food security and agriculture  
  • The Agriculture Sectors in the INDCs: Analysis  
  • Biosphere Reserves: The Seville Strategy and Statutory Framework of the World Network  
  • Operational Guidelines for UNESCO Global Geoparks  
  • TICAD VI Plan Promoting resilient health systems for quality of life |