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## TICAD-VI Side-Event:

# Enhancing Resilience against Climate and Ecosystem Changes in Sub-Saharan Africa through Utilizing Indigenous and Local Knowledge

**Date:** 25 August 2016, 13:30-17:00

**Venue:** Room ED 213, Education Building (known as Confucius Institute), The University of Nairobi (main campus)

**Organizers:** United Nations University, The University of Nairobi, The University of Tokyo, and Kenyatta University

### **Background:**

In many parts of the world, people have developed ways to utilize and manage the natural environment to sustain their daily lives through production activities such as agriculture, forestry and fisheries. These production activities (and their management mechanisms) have created elaborate systems that support local communities by providing food, fuel, and other materials, nurturing traditions and culture, and maintaining ecosystems and biodiversity. More importantly they are often based on knowledge and practices locally accumulated through such human-nature interactions over a long time.

Such human-influenced natural environments can be conceptualized as Socio-Ecological Production Landscapes and Seascapes (SEPLS). The United Nations University has been promoting international collaborations for the conservation and restoration of SEPLS through their broader global recognition of their value as part of the Satoyama Initiative.

In many countries, SEPLS have been increasingly threatened by rapid socio-economic changes in recent years. For example, many such SEPLS have been converted into uniform, efficient and large-scale production systems that often cause environmental degradation and the loss of local cultures and traditions. Local communities and ecosystems in SEPLS may experience pressures and disturbances of different types and degrees. These can range from extreme weather events to market shocks and profound demographic and institutional changes.

While some of these changes may cause critical damage to ecosystems and human livelihoods, SEPLS vary in the degree to which their communities can absorb, resist and/or recover from these impacts. The ability of a SEPLS to absorb or recover – both in terms of ecosystem processes and socio-economic activity – from various pressures and disturbances without lasting damage is what we refer to as the “resilience” of the SEPLS. Maintaining resilience in SEPLS is crucial for securing the sustainable flow of ecosystem services in the long term, both benefiting local communities and contributing to the achievement of Sustainable Development Goals (SDGs).

This side-event will highlight recent research findings and best practices to enhance the resilience of different SEPLS against climate and ecosystem changes at various scales in Africa, by combining both indigenous and local knowledge and modern science and technologies.

**Objectives:**

1. Share recent research findings and best practices to enhance resilience of SEPLS against climate, ecosystem and socio-economic changes.
2. Strengthen international networks for further research and capacity development to implement relevant goals and targets indicated in the SDGs.
3. Discuss future action plans to promote collaborative research, capacity development, and social implementation.

**Programme:**

- 13:30-13:40 Opening remarks (Prof. Peter M. F. Mbithi, Vice Chancellor, University of Nairobi; Prof. Paul K. Wainaina, Vice Chancellor, Kenyatta University)
- 13:40-14:05 Keynote presentation 1 (Prof. Kazuhiko Takeuchi, United Nations University/The University of Tokyo): “Enhancing Resilience against Climate and Ecosystem Changes in Sub-saharan Region: Development and Application of Ghana Model”
- 14:05-14:30 Keynote presentation 2 (Dr. Noëline Raondry Rakotoarisoa, Chief of section on MAB networking, Division of Ecological and Earth Sciences, UNESCO): “Enhancing resilience of socio ecological systems against climate, ecosystem and socio economic changes in Sub-saharan countries : contribution of the UNESCO Man and the Biosphere Programme and its African Network of Biosphere Reserves”
- 14:30-16:00 Case studies session – 5 presentations from case studies in Africa (15min/presentation)
- Prof. Gordana Kranjac-Berisavljevic (University for Development Studies) and Dr. Kwabena Gyekye (University of Ghana): “Achievements and contributions of CECAR-Africa project”
  - Prof. James B. Kung'u (School of Environmental Studies, Kenyatta University): “Potential of forests in enhancing community resilience to climate change in Sub-Sahara Africa”
  - Dr. Lalisa A Duguma (World Agroforestry Centre (ICRAF) and ASB Partnership for the Tropical Forest Margins): “Restoring landscapes using local practices for fulfilling human needs and ensuring environmental sustainability: the case of drylands of Tanzania”
  - Dr. Kaoru Ichikawa (United Nations University) and Dr. Yaw Agyeman Bofo (The University of Tokyo): “Best Practices and Lessons from Socio-ecological Production Landscapes and Seascapes (SEPLS) in Africa”
  - Dr. Alexandros Gasparatos (The University of Tokyo): “Industrial Crop Expansion and Local Food Security in Africa: Emprical Evidence from the FICESSA project”
- 16:00-17:00 Panel Discussion – Lessons and future African way for sustainable development in harmony with nature  
Moderator: Prof. David N. Mungai, Wangari Maathai Institute for Peace and Environmental Studies, The University of Nairobi
- 17:00-18:30 Reception at Vice-Chancellor’s Parlour