

Sub Theme 2: Harmonizing Landscapes: Strategies for Sustainable Land-Use Management

Background: Global land use systems (including protected areas) are experiencing extensive transformation and degradation, due to unsustainable practices threatening biodiversity and ecosystem services around the world. Tropical (terrestrial and aquatic) ecosystems harbour rich natural resources and host key biodiversity hotspots. Land use in tropical ecosystems yields competitive advantages over other use types, with resulting unsustainable practices and other undesirable consequences. Within and across these LUS are varied population, climatic and anthropogenic pressures that threaten their functionality, productivity, services to society and sustainability.

Many scientists and stakeholders experience challenges to conceptualise and manage problems arising from pressures in different LUS. The effectiveness and sustainability of LUS can hardly be achieved if pressures and threats are not well addressed and managed. Yet, existing land management (and conservation) strategies do not adequately address their threats.

Objective: This theme welcomes papers with evidence on improved concepts, practices and standards that better describe land use in order to build sustainable land use and management information systems. We welcome papers with LU information and evidence, demonstrating how the integration of natural and social sciences has supported community-led change in sustainable management of different LUS.

We invite a diverse range of experts from natural and social science disciplines to discuss these evidence and implementation gaps between scientists, decision-makers and practitioners using tropical ecosystems of various types and scales as case studies and explore their distinct configurations according to their land use perspective, management and other unprecedented pressures. We are, therefore, inviting papers and presentations around the following areas:

- Land use planning and management for socio-ecological resilience
- Prioritizing Ecosystem services for sustainable land management
- Payment for ecosystem services as incentives to SLM
- Land use planning and sustainable land management
- landscape connectivity and sustainable land management
- Emerging techniques and approaches to sustainable land management futures Integrated land management as a tool to sustainable land management

We hope that these presentations will catalyze discussions that can enable practitioners to start co-designing potential solutions, increasing their sense of efficacy and willingness to transform change and promote sustainable practices on socio-ecological systems (SES) surrounding LUSs. These discussions and papers are expected to provide a platform to generate a valuable conceptual framework around which pathways can be attained to sustainable SES within and across LUS and how challenges for sustainable land management in tropical ecosystems can be addressed.

Keywords: Land use; ecosystem services; sustainability; ecosystem connectivity; socio-ecological systems

Invited speaker(s): Keynote speakers: **Prof. Didas Kimaro** and **Prof. Rob Marchant**.