



Announcement NM-AIST 2024 International Conference

Tropical Horizons: Advancing Sustainability in Agriculture, Environment, and Technology

17-19 July 2024, Arusha – Tanzania

Conference Organised by:

The Nelson Mandela African Institution of Science and Technology (NM-AIST), Tanzania

Announcement: websites of partner institutions

Flemish Interuniversity Council (VLIR-UOS), Belgium: www.vliruos.be

Katholieke Universiteit Leuven (KU Leuven), Belgium: www.kuleuven.be

University of Brussels, Belgium (Vrije Universiteit Brussel): www.vub.be

University of Antwerp, Belgium: www.uantwerpen.be

Hasselt University, Belgium: www.uhasselt.be

Mwenge Catholic University, Tanzania: www.mwecau.ac.tz

Introduction to the Conference

Tropical ecosystems host an incredible array of biodiversity found in diverse habitats that exist in contrasting land use types. Aside from their inherent ecological value, these ecosystems and their biodiversity also provide significant ecosystem goods and services promoting economic and other livelihood opportunities. Despite these major benefits for humans in the form of ecosystem goods and services, ecosystem and landscape degradation by human activity and changes in land-use, climate and population do compromise their ecological functioning (Blake et al., 2018; Veldhuis et al., 2019; Ngondya and Munishi, 2022; Capitani et al., 2019; Kariuki et al., 2021; 2022; Simba et al., 2024; Scaini et al., 2024).

Using multiple lines of evidence and drawing on collective experience from multidisciplinary research works focused on the tropical landscapes, we find that it is such a high time we come together in a platform to identify the major challenges and opportunities for translating research from these landscapes into better-informed choices by individuals and policy-makers. This way, we expect that the dialogues and discussions in this conference will in turn provide a roadmap that can support transformation of tropical landscapes to a sustainable future especially across their vast network of degraded ecosystems (Blake et al., 2018; Simba et al., 2024; Scaini et al., 2024). We therefore invite and call upon conference participants to discuss together and find potential pathways to overcome these challenges including providing targeted options that may include for dissemination and outreach, and facilitate collaboration and coordination across different sites in ways that will realize sustainability and resilience of these ecosystems

Objectives of the Conference

- i. Present and discuss environmental and societal-associated drivers of within-and between-ecosystem change at landscape/catchment level as an important platform to build on useful resources needed for dialogue on environmental resource management and inform pathways to desirable and sustainable future changes.
- ii. Disseminate and discuss cutting edge interdisciplinary research on tropical ecosystems for enhancing sustainability and resilience in the tropical landscapes.
- iii. Discuss best practices for promoting evidence-based interdisciplinary research outputs for sustainable future.
- iv. Increase awareness of the importance of interdisciplinary evidence in promoting sustainable management of ecosystems a key for facilitating sustainable ecosystem functions and provision of services.

Conference Themes

Main Theme

Tropical Horizons: Advancing Sustainability in Agriculture, Environment, and Technology

Sub-Theme I - (Prof. Rony Swennen – Keynote Speaker)

Cultivating Sustainable Production: Harnessing Banana-Based Systems in the Tropics

Sub-Theme II - (Prof. Rob Marchant, Prof. Didas Kimaro - Keynote Speakers)

Harmonizing Landscapes: Strategies for Sustainable Land-Use Management

Sub-Theme III - (Prof. Luc Brendonck – Keynote Speaker)

Nurturing Aquatic Vitality: Resilience Strategies Amid Environmental Changes

Sub-Theme IV - (Prof. Karoli Njau - Keynote Speaker)

Tropic Clean: Advancing Water Purification and Sanitation for Sustainable Environments

Sub-Theme V - (TBD – Keynote Speaker)

Tech Harvest: Utilizing ICT for Agriculture and Environmental Advancements

Sub-Theme VI - (TBD - Keynote Speaker)

Innovations in Sustainability: Integrating Technology Transfer for Natural Resource Management

Conference Venue:

The three-day conference (17th - 19th July 2024) will take place in Arusha, Tanzania. The NM-AIST is a public Higher Learning Institution located in Arusha, a city in Northern Tanzania. It is situated about 40 kilometres west from Kilimanjaro International Airport (KIA).

Conference Excursion

There will be two excursion routes as outlined below:

Route One (20 July 2024 starting at 07:00 a.m.)

One day trip excursion to the escarpment of the Eastern Arm of East African Rift System with the stop over at Lake Manyara will be organised. Participants will be picked up in the morning from the accommodation centres in Arusha City with about two-hour drive to the Lake Manyara basin. On the way, participants will see different land uses and biodiversity, a typical characteristic of landscape-

level management system. At the escarpment of the East African Rift System, just near Lake Manyara National Park main Gate, participants will be introduced to the history of the area, geological formation of the landscape and the onset of man of the Genus Homo, climate, ecology, land use and biodiversity (flora and fauna) and threats in the landscape. Soon after the introductions, participants will start hiking through the edges of the escarpment and a walk to the shore of Lake Manyara. Alongside the impressive view of the Lake and tropical ground forest vegetation, participants will have the chance to catch a glimpse of lake, impressive avifauna, diversity of large mammals and community cultural practices. After 1-2-hour nature walk in East African Rift system, participants will settle at the famous Mto Wa Mbu town, where they will have a well-earned rest and lunch. After lunch they will have a chance to bike around this cultural town (30 minutes route), where they can see and enjoy wonderful people from the community and their livelihood practices. More details on the tour will be given in the tour guide book.

Route two (Date: 20 July 2024 starting at 08:00 am)

A one-day trip excursion that will involve a visit to the tissue culture lab and banana research field at the Nelson Mandela African Institution of Science and Technology (NM-AIST) to appreciate efforts invested in the banana breeding program. While on the NM-AIST campus, participants also will have the opportunity to visit the constructed wetland for waste-water treatment reuse for banana irrigation. After that, participants will visit Olorien's Banana Investment Ltd., a banana wine industry with waste treatment to recover biogas for energy use to witness how banana cultivation can revolutionize the rural economy and provide employment. The participants will then visit the community on the southeast slopes of Mount Meru, one of the Tanzania's highest mountain, which is only second to Kilimanjaro, where they will be able to see the original set-up of banana-based home gardens in real time and space. On the way back, participants will have the chance to view cultural heritage at Sanawari ya Juu, which features the beautiful Lorovan waterfalls.

Accommodation

Contact the conference organisers in case you need assistance with hotel booking: conference2024@nm-aist.ac.tz Alternatively, ensure your own single or double room in one of the many hotels within Arusha city. The costs for accommodation in Arusha range from US\$15-150. Alternatively,

Pre-and/or post-conference tours

Arusha city, popularly known as the “Geneva of Africa” is a hub of tourism activities in Tanzania, with a number of nearby tourism attractions including Arusha National Park, Kilimanjaro National Park, Tarangire National Park, Lake Manyara National Park, Ngorongoro Conservation Area and Serengeti National Park; also some cultural tourism centers etc. Participants interested to participate in tourism activities before or after the conference should contact our conference organizing committee using conference2024@nm-aist.ac.tz

Call for Abstracts

Categories

At this conference, it is possible to submit an abstract for contributions in the following categories:

- i. Paper presentation
- ii. Poster presentation

Guidelines and requirements for submission:

Abstracts should be submitted by the deadlines for consideration. The abstracts for the **paper presentation** should have the following structure: short title, authors' names and affiliations (list multiple affiliations one below the other) and mark each with a superscript “1” “2”, etc. Mark the name of the corresponding author with an asterisk (*). Provide the Email address of the corresponding author. The abstract should not exceed 200 words in correct English. Font style and size should be

Times New Roman 12, line spacing of 1.5, in continuous text without subtitles or paragraph numbering. The abstracts will be reviewed for acceptance by the Scientific Committee and upon acceptance, they shall be inserted in the “Book of Abstracts”.

The abstract practical workshop must have a maximum of 300 words and contain a title, theme/problem area, contextualize the workshop, keywords, name and institution, desired technical needs, and maximum number of participants. The time frame will be 60 minutes. Likewise, abstracts for **poster presentations** can be submitted under the same conditions. The posters should be in A1 format and of sufficient layout and graphical quality.

The time frame for all the paper and poster presentations mentioned above is 15 minutes + 5 minutes to questions.

Submission of full papers for publication in peer-review journals

We have secured slots in special issues that will be able to publish quality papers from our conference themes. To make this possible, abstracts accepted for Oral or poster presentations at the conference will be subject to submission of full manuscripts. Deadline for submission of full manuscripts will be communicated at later stage in 2024. Instructions to authors during preparation of full papers will be shown in the conference time table. Successful papers from this conference are expected to be published in the special issues of journals below

- *Discover Sustainability* (ISSN 2662-9984, Impact Factor 2.6)
<https://link.springer.com/journal/43621>

Timeline

- First announcement: 10th January 2024
- Deadline for submission of abstracts: 1st April 2024
- Notification of abstract acceptance: 30th April 2024
- Full Paper Submission: 1st June 2024
- Early bird registration: 30th May 2024
- Ultimate registration: 16th July 2024

Contact Email

All conference emails, enquiries and correspondences that include submission of abstracts for oral and poster presentations and full papers should be sent to conference2024@nm-aist.ac.tz

Virtual participation and Video Presentation

Virtual video-presentation for those who will not manage to travel to Tanzania will be organized. During this time presenters should be online present or in case of some communication/internet connections which may hinder the video/sound, presenters will be allowed to be online, listening, and after the presentation participants will have an opportunity to ask questions to the presenter. Allocated time will be 15 minutes for video presentation and 5 minutes for discussion. All virtual presenters will have to send their recorded videos before conference dates through conference2024@nm-aist.ac.tz and will have to include: Title, name of the author/presenter and Institutional affiliation.

Registration

Registration will be open from February. Check our conference webpage. Candidates signalling their interest to the conference organisers will receive official link when available.

Conference Fees

Categories	Early <i>bird</i> conference registration fee	Late conference registration fee
Students	TZS 100,000	TZS 150,000
National participants	TZS 200,000	TZS 250,000
International participants	US \$ 200	US \$ 250

The Conference fees include registration, refreshments, lunch, and Book of Abstracts.

Please deposit your payment on one of the following Bank account numbers:

1. USD ACC NO: 0250047604203
2. TZS ACC NO: 0150047604203

Name of the account holder: NM-AIST PROGRAMME

Bank address: CRDB BANK PLC, P.O. BOX, 355, Usa River Branch, Arusha, TANZANIA;
SWIFT CODE: CORUTZTZ

Conference Administration & Secretariat

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