









2ND FIVE UNIVERSITY CONSORTIUM SCIENTIFIC CONFERENC



2nd Annual Conference of Five University

Conference Program

CONFERENCE THEME







Beyond Survival:
"Building Inclusive and Climate-Resilient
Societies"

Location: Sokoine University of Agriculture, Cate Convention Centre, Morogoro, Tanzania

Date: 30th September - 2nd October 2025

For more information, please contact

Professor Japhet Kashaigili, Sokoine University of Agriculture Chairperson, Organizing Committee, Mob: +255 754 2075 117

Time (24)	Event/ Activity	Responsible	-
07:00 - 9:30	Arrival and registration of participants	Secretariat	-
09:30 - 09:45	Arrival of the Guest of Honor –	PS., MoEST	
	Prof. Carolyne Nombo, Permanent Secretary, Ministry of Education, Science & Technology (MoEST)	Prof. Carolyne Nombo	
09:45 – 09:55	Introductory Remarks and Update on the 5UC Achievements — Chairperson, Organizing Committee, Professor Japhet Kashaigili	Conference Organizing Committee	
09:55 – 10:10	Welcome Remarks - Vice Chancellor, Sokoine University of Agriculture, Prof. Raphael Tihelwa Chibunda	VC, SUA	
10:10 – 10:30	Remarks by Vice Chancellors 1010 – 1015 Aga Khan University 1015 – 1020 Simon Fraser University 1020 – 1025 University of Dar Es Salaam 1025 – 1030 Nelson Mandela African Institution of Science and Technology	VCs/ Presidents of AKU, SFU, UDSM & NM-AIST	MC
10:30 – 10:35	Remarks by the High Commission of Canada to Tanzania	Ms. Carol Mundle, Chargé d'Affaires and Head of Cooperation	
10:35 – 10:50	Remarks by the Guest of Honour	Prof. Carolyne Nombo Permanent Secretary, Ministry of Education, Science & Technology	Aided by: Mr. Salim Mkolwe
10:50 – 11:00	Vote of Thanks – AKU Board of Trustee	His Exc. Amin Mawji	-
11:00 – 11:30	Group Photo / Morning Snacks & Tea/ Coffee	Conference Organizing Committee	
11:30 – 13:00	Five University Consortium Executive Meeting:	Executive Committee	
	High-level discussions to define the roadmap for joint projects, academic exchanges, and future collaborations.		
11:30	End of Conference Opening Session		

Time(24)	Room 1	Chairperson:	Dr. Happiness Moshi (AKU)
11:30 – 12:15	KEYNOTE SPEAKER: Conference Theme 1 (Health Systems)	Prof. Pascal Ruggajo (AKU)	
	Title: Adaptive Policies & Practices in Building Responsive & Resilient Public Health Systems Against Emerging & Re-emerging Diseases, NCDs and Health Access Inequities: A case of Tanzania		
	(30 mins presentation and 15 mins Q&A)		
	Room 1	Chairperson:	Dr. Happiness Moshi (AKU)
	(10 mins presentation and 5 min Q&A per presenter)		
12:15 – 12:30	Paper 1: Influenza a viral rna sequence visually detected by a paper strip sensor	Dr. Paul C. H. Li	
	defected by a paper strip sensor	(SFU)	
12:30 - 12:45	Paper 2: Molecular Detection and Characterization of Rotavirus from Wastewater Treatment Plants in Morogoro, Tanzania	Ms. Alice Syomiti Kilonzi (SUA)	
12:45 – 13:00	Paper 3: Early Childhood Development in changing times: lessons from Monduli, Tanzania	Dr. Fortidas Bakuza	
	on resilience and coping with environmental and climatic changes.	(AKU)	
	Room 2	Chairperson:	Dr. Robinson Mdegela (SUA)
	(10 mins presentation and 5 min Q&A per presenter)		
12:15 – 12:30	Paper 4: Determinants of Knowledge in Hypertension and Type 2 Diabetes among	Ms. Biiru, Levitas	
	PLWHIV: A Cross-sectional Study	(SUA)	
12:30 – 12:45	Paper 5: Building Inclusive and Resilient Health Systems: Patient Knowledge of Radiation Risks in Southern Tanzania	Dr. Theresia Estomih Nkya (UDSM)	
12:45 – 13:00	Paper 6: Dietary Intake and Physical Activity in the Management of Type 2 Diabetes Mellitus Patients: A Cross-Sectional Analysis	Brenda B. Temba	
		A.II	
13:00 – 14:00	Lunch break	All	

Time (24)	Room 1 (10 mins presentation and 5 min Q&A per presenter)	Chairperson:	Dr. Mussa Dida (NM-AIST)
14:00 – 14:15	Paper 7: Disability and Livelihoods: Lessons from Local Government Interest-Free loan scheme in Tanzania	Mr. Gamariel Mboya (AKU)	-
14:15 – 14:30	Paper 8: Inclusivity and Community Resilience in Cardiovascular Disease Decision-Making in the Southern Highlands of Tanzania: Prevalence, Risk Factors, and Knowledge Gaps	Dr. Hortensia Nondoli (UDSM)	-
14:30 – 14:45	Paper 9: Dietary risk assessment of organophosphorous pesticides in tomatoes from Morogoro: A case study of Mlali and Doma divisions in Mvomero	Alex Wenaty (SUA)	-
14:45 – 15:00	Paper 10: Harnessing Artificial Intelligence for Malaria Vector Control in High Malaria-Burden Sub-Saharan African Countries	Dr. Theresia Estomih Nkya (UDSM	-
15:00 – 15:15	Paper 11: From survival to safety: Assessing the potential for integrating Manual Emptying in Citywide Sanitation Systems	Dr. Fides J. Izdori (UDSM)	_
15:15 – 15:30	Paper 12: Exploring Quality of Life among postoperative Rheumatic Heart Disease patients at the Jakaya Kikwete Cardiac Institute	Magreth Justine (AKU)	
	Room 2 (10 mins presentation and 5 min Q&A per presenter)	Chairperson:	Dr. Esther Kimaro (NM-AIST)
14:00 – 14:15	Paper 13: Bridging the Knowledge—Practice Gap: Improving Cervical Cancer Screening Uptake in the Southern Highlands of Tanzania, for Stronger and More Inclusive Health Systems	Dr. Hortensia Nondoli (UDSM)	
14:15 – 14:30	Paper 14: Building Climate Resilient Health Infrastructure: The Tanzanian Societies under Survival Siege	Samwel Manyele (UDSM)	
14:30 – 14:45	Paper 15: People, Water, and Health in the Era of Climate Change	Dr. Emmanuel Sulle (AKU)	
14:45 – 15:00	Paper 16: Untapped nutritional gems: nutrient and micronutrient profiles of two indigenous Tanzania fruits	Dr. Hadijah A. Mbwana (SUA)	
15:00 – 15:15	Paper 17: Association Between Food Security and Dietary Practices in Urban Settings in the Era of Climate Change: A Cross-Sectional Study in Mbeya Urban	Dr. Christopher Hariri Mbotwa (UDSM)	
15:15 – 15:30	Paper 18: Fuzzy logic-based Al model for breast cancer classification and risk prediction in Tanzanian women: toward interpretable decision support in low-resource oncology settings	Dr. Linus Paul Rweyemamu (UDSM)	
15:30 – 16:00	Tee / Coffee Break Poster viewing and presentation	All	

Time (24)	Room 1 (10 mins presentation and 5 min Q&A per presenter)	Chairperson:	Dr. Bashir Adelodun(AKU)
16:00 – 16:45	KEYNOTE SPEAKER: Conference Theme 2 (Inclusivity and Community Resilience) Title: Decolonizing Food System Planning for Inclusivity and Community Resilience: A Photovoice Food Asset Map with Kitselas Nation (30 mins presentation and 15 mins Q&A)	Dr. Tammara Soma (SFU)	
	Room 1 (10 mins presentation and 5 min Q&A per presenter)	Chairperson:	Dr. Bashir Adelodu (AKU)
16:45 – 17:00	Paper 19: Empowering Students for a Sustainable Future: Integrating Climate Education into Tanzania's Learning Systems	Dr. Simon Peter Ngalomba (UDSM)	
17:00 – 17:15	Paper 20: Sustainable approaches to disease management on vegetable crops	Dr. Zamir K. Punja (SFU)	
17:15 – 17:30	Paper 21: The Afterlife Projects' Maintenance Dilemma in Tanzania	Suma Fahamu Kibonde (UDSM)	
17:30 – 17:45	Paper 22: Gender patterns in vegetable wholesale markets: experiences, constraints and opportunities	Dr. Victoria F. Gowele (SUA)	
17:45 – 18:00	Paper 23: Investigation of the Suitability of Waltheria indica L. (Sleepy Morning Plant) Root Extracts as Pathogen Removal Agent from Drinking Water.	Dr. Mwema Felix (NM-AIST)	
18:00 – 18:15	Paper 24: Effects of Climate Change on Indigenous Based Strategies that Improve Food Security in Serengeti District, Tanzania.	Donald Anthony Mwiturubani (UDSM)	
18:15 – 18:30	Paper 25: A Systematic Review of Digital Technologies and Innovations for Enhancing Inclusive Development in Tanzania	Nyinondi, P.S. (SUA)	
	Room 2 (10 mins presentation and 5 min Q&A per presenter)	Chairperson:	Dr. Beatus Lyimo (NM-AIST)
16:45 – 17:00	Paper 26: Enhancing Groundwater Management for Climate Resilience and Sustainable Water Supply in the Drylands of Tanzania	Dr. Japhet J. Kashaigili (SUA)	
17:00 – 17:15	Paper 27: Impacts of climate change on agricultural water scarcity risk and the effectiveness of adaptation strategies in the Kagera sub-basin	Nickson Tibangayuka (UDSM)	•
17:15 – 17:30	Paper 28: Factors influencing the adoption of agricultural innovations Among smallholder farmers in Morogoro, Tanzania	Ms. Jackline M. Martine (SUA)	
17:30 – 17:45	Paper 29: Strengthening Large-Scale Food Fortification (LSFF) Data Ecosystems in Kilifi County Kenya	Mr. Denis Owiti (AKU)	
17:45 – 18:00	Paper 30: What is it like to be a single parent and how does it impact children? A case in Kibaha town, Tanzania	Ms. Ambi Juma Chogo (SUA)	
18:00 – 18:15	Paper 31: Gendered Dynamics in Land Use Decision- Making: Insights from Rural Tanzania for Sustainable Food Systems	Ms. Victoria Kariathi (SUA)	
18:15 – 18:30	Paper 32: Assessment of Cedrela odorata seeds dispersal patterns in Kimboza nature forest reserve	Ms. Diana Tesha (SUA)	
18:30 – 19:00	Tea / Coffee Break / Poster viewing and presentation	All	
19:00 – 20:00	One-to-one interaction / networking / Cocktail	All	

Time (24)	Event/ Activity	Responsible
07:00 - 09:00	Arrival and registration of participants	Secretariat
	Room 1	Chairperson
	(10 mins presentation and 5 min Q&A per presenter)	
09:00 - 10:00	KEYNOTE SPEAKER: Conference Theme 3	Dr. Devotha Nyambo
	(Technological Innovation, Environmental Integrity and Climate Change)	(NM-AIST)
	Title: Community-Centered Al Tool for Environmental Surveillance: Battling Mosquito Breeding in the Face of Climate Change	
	(30 mins presentation and 15 mins Q&A)	
10:00 - 10:30	Tea / Coffee Break	All
	Room 1	Chairperson
	(10 mins presentation and 5 min Q&A per presenter)	
10:30 - 10:45	Paper 33: Predicting tree species distribution using MaxEnt model. A case study of Mazumbai Forest Reserve, Tanzania	Ms. Sarafina Masanja (SUA)
10:45 – 11:00	Paper 34: Transformative Agritech through AI and Sensor- Driven Innovations	Dr. Woo Soo Kim (SFU)
11:00 – 11:15	Paper 35: From Shelf to Impact: Enhancing Postgraduate Research Utilization through the NMU Innovation Hub	Dr. Mussa Ally Dida (NM-AIST)
11:15 – 11:30	Paper 36: Monitoring Nutrients Pollution and Climate Change Effects in Lake Tanganyika Coastal Waters using Citizen Science Approach	Dr. Happiness A. Moshi (AKU)
11:30 – 11:45	Paper 37: Dendroanatomy – A Potential Tool for Understanding Climate Variability in Tanzania	Mr. Sami D. Madundo (SUA)
11:45 – 12:00	Paper 38: Utilizing plant extracts on biosynthesis of silver- zinc oxide-activated carbon: A case study of Launaea cornuta (Wild lettuce)	Dr. Elizabeth Makauki (NM-AIST)
12:00 – 12:15	Paper 39: Assessment of woody species diversity and structure in natural forest patches at Sao hill forest plantation in Mufindi district, Tanzania	Sanga, Yaeli Yohana (SUA)
12:00 – 12:15	structure in natural forest patches at Sao hill forest	- '

Time (24)	Room 2 (10 mins presentation and 5 min Q&A per presenter)	Chairperson(s)	Dr. Mkunde Chachage (UDSM) / Dr. Leonard
10:30 - 10:45	Paper 40: Effects of Climate Variability and Change on Streamflow in the Bubu River Catchment, Tanzania	Mr. January J. Mlomo (SUA)	Binamungu (UDSM)
10:45 – 11:00	Paper 41: Heatflation and Food Security: Unpacking the Double Burden of Climate and Trade Shocks in African Food Systems	Dr. Bashir Adelodun (AKU)	
11:00 – 11:15	Paper 42: Green valorization of selected invasive plant biomass into cellulose feedstock for the fabrication of biodegradable cellulose-based superabsorbent polymers	Joshua A. Oyetade (NM- AIST)	_
11:15 – 11:30	Paper 43: Safeguarding the Lifeline of the Mara: Harnessing Biodiversity Conservation and Ecosystem Management for Sustainable development in Mara River Catchment, Tanzania	Safia M. Basawadi (SUA)	
11:30 – 11:45	Paper 44: From Pixels to Prescription: A Multimodal Learning Approach for Automated Plant Disease Detection and Guidance in Tanzania	Kadeghe Fue (SUA)	
11:45 – 12:00	Paper 45: The Role of Digital Influencers and Online Communities in Shaping Climate Change Discourse and Environmental Behaviour Among Secondary School Adolescents in Morogoro Municipality, Tanzania	Dr. Jamal Jumanr Athuman (SUA)	ne
12:00 – 12:15	Paper 46: Predicting Evapotranspiration Parameters in Tanzanian Irrigation Schemes: A Competitive Analysis of GraphCast, Pangu, SFNO, and DLESyM	Kadeghe Fue (SUA)	
	Room 1 (10 mins presentation and 5 min Q&A per presenter)	Chairperson	Dr. Zamir Punja (SFU)
12:15 – 13:00	KEYNOTE SPEAKER: Conference Theme 4 (Governance, Policies and Institutions)	Prof. Opportuna Kweka (UDSM)	
	Title: Role of policies and institutions in driving sustainable development: striking a balance between endogenous and Als knowledges		
	Room 2 (10 mins presentation and 5 min Q&A per presenter)	Chairpersons	Dr. Elizabeth Makauki (NM- AIST) / Dr. Woo Soo (SFU)
12:15 – 13:00	KEYNOTE SPEAKER: Conference Theme 5 (Sustainable Agriculture and Food Systems) Title: Towards Agroecology Intensification for Sustainable Agriculture, Food Systems and Nutrition in Tanzania: An Overview (30 mins presentation and 15 mins Q&A)	Prof. Kallunde Pilly Sibuga (SUA	Chairperson(s)
13:00 – 14:00	Lunch break	All	

Time (24)	Room 1 (10 mins presentation and 5 min Q&A per presenter)	Chairperson	Dr. Zamir Punja (SFU)
14:00 – 14:15	Paper 47: Uncovering Policy and Institutional Gaps in Lablab Production Across Central and Northen regions of Tanzania and Lessons from Sub-Saharan Africa.	Mr. Rajabu M. Said (SUA)	
14:30 – 14:30	Paper 48: Data-Driven Policy for Insecticide Resistance Management in Malaria Vectors in Tanzania Mainland	Dr. Theresia Estomih Nkya (UDSM)	_
14:30 – 14:45	Paper 49: Re-thinking laws and political will for inclusive and climate-resilient society: a review on restored balanced duty on environmental conservation in Tanzania	Dr. Mectrida Bonephace (SUA)	_
14:45 – 15:00	Paper 50: Diversity in farm production, household food security and women dietary diversity: results from a cross-sectional study among smallholders in rural Tanzania	Victoria F. Gowele (SUA)	_
15:00 – 15:15	Paper 51: Unmasking the Role of Institutional Support and Information Access in Adopting Climate-Smart Agriculture in Mvomero District, Tanzania	Nyamsabhi M. Nyamwero (SUA)	_
15:15 – 15:30	Paper 52: Situational Analysis of the Honeybee Products Market in Tabora Region in Tanzania	Mnkeni, H. (SUA)	_
	Room 2 (10 mins presentation and 5 min Q&A per presenter)	Chairpersons	Dr. Elizabeth Makauki (NM- AIST) / Dr. Woo Soo (SFU)
14:00 – 14:15	Paper 53: The Need for a Right to Food Approach: Transforming the food system by addressing the root causes of food loss on farms	Dr. Tammara Soma (SFU)	
14:30 – 14:30	Paper 54: Socio-economic determinants, production trends, and variability of legume yields among smallholder farmers in semi-arid Mkalama District, Tanzania	Supira Kaalai Simel (SUA)	
14:30 – 14:45	Paper 55: Nutrition-sensitive Agriculture – Is it Possible in Morogoro Rural District? Awareness and Practices among Farmers	Mr. Innocent Sanga (SUA)	_
14:45 – 15:00	Paper 56: Islands of Agriculture: Choices and challenges of small-scale farming at Songo Mnara, Tanzania	Dr. Sarah Walshaw (SFU)	_
15:00 – 15:15	Paper 57: Motivational Drivers Influencing the Consumption of Imported and Locally Made Apparel in Tanzania	Dr. Gudila A Kereth (SUA)	_
15:15 – 15:30	Paper 58: Entomopathogenic fungi associated with Spodoptera frugiperda in Tanzania maize farms	Regan M. Nyoni (NM-AIST)	_
15:30 – 16:30	Poster Presentations	Coordinators / Chairpersons	Dr. Theofrida Maginga (SUA) / Dr. Beatus Lyimo (NM-AIST)

16:30 - 16:40	VC SUA Welcomes Remarks for Closing Ceremony (Prof. Raphael Tihelwa Chibunda)	VC, SUA
16:40 – 16:50	Vote of thanks by 5UC representative, and group photo with guest of honor	President (AKU)
16:50 – 17:00	Closing ceremony speech from Guest of Honor –	Deputy PS., MoEST
	Deputy PS., Ministry of Education, Science, and Technology (MoEST)	Prof. Daniel Mushi
17:00 – 17:30	Group photo with guest of honor	All
17:30 – 18:30	Deliberations on way forward / Next cause of actions for 5UC Conference	All
18:00 – 20:00	Conference dinner with Live Band on the Stage & Networking	All
	END DAY TWO	

CONFERENCE DAY 03 | 02nd October 2025

Time (24)	Event/ Activity	Responsible
07:00 - 17:00	Excursion Trips / Workshop (45	Dr.
	mins)	Emmanuel
	Mikumi National Park	Kifaro
	END DAY THREE	

General Information

Venue and Dates

The 2nd Five University Consortium Scientific Conference takes place at the Sokoine University of Agriculture, Cate Convention Centre, Morogoro, Tanzania from 30th September – 2nd October 2025.

Contact Address

Sokoine University of Agriculture

P.O. Box 3000, Chuo Kikuu, Morogoro -Tanzania

Mob: +255 754 2075 117, Email: <u>jkashaigili@sua.ac.tz</u>; <u>second5UCC@sua.ac.tz</u>

Name badge

Your name badge is your entrance ticket to all sessions. Please, always remember to wear your badge throughout the conference. Participants without the name badges will be denied access to conference rooms/ sessions. If you lose your badge, a new one will be provided against proof of your original registration.

Conference registration hours

Tuesday: 30th Sept. 2025: 08:00 – 17:00 hrs Wednesday: 1st Oct. 2025: 08:00 – 17:00 hrs

Time Zone

The time zone in Morogoro, Tanzania is GMT +3 Hours.

Weather

The weather in Morogoro during this time of the year is usually warm and dry with afternoon temperatures typically range from 26°C to 29°C (79°F to 84°F), while nighttime temperatures can drop to around 14°C (57°F).

WiFi/Internet connections

Wi-Fi will be available to all delegates. Participants will be informed of Wi-Fi access points during the conference.

Lunch and Coffee Breaks

Lunch and coffee/tea is included in the registration fee and will be served daily in the conference area.

Accommodation

Cate Hotel

Excursion and sight-seeing

Mikumi National Park

Steering / Organizing Committee Members:

- 1. Prof. Japhet Kashaigili, Chairperson
- 2. Prof. Zamir Punja, Member
- 3. Dr. Emmanuel Sulle, Member
- 4. Dr. Bashir Adelodun, Member
- 5. Dr. Emmanuel Kifaro, Member
- 6. Ms. Mawuena Torkornoo, Member
- 7. Ms. Carol Zachs, Member
- 8. Ms. Shifa Thobani, Member
- 9. Ms. Fareena Feroze, Member
- 10. Mr. Daniel Stephen, Member
- 11. Dr. Musa Ally, Member
- 12. Dr. Grite Nelson, Member
- 13. Dr. Mkunde Chachage, Member
- 14. Dr. Aggrey Abinya, Member
- 15. Dr. Elizabeth Makauki, Member
- 16. Dr. Beatus Lyimo, Member
- 17. Dr. Happiness Moshi, Member
- 18. Dr. Robinson Mdegela, Member
- 19. Dr. Leonard Binamungu, Member

Venue Location

https://maps.app.goo.gl/tHhVBHcXqnWQ6sM97