



TANZANIA SOCIETY OF ANIMAL PRODUCTION (TSAP)

48th Annual Scientific Conference Olasit Garden Hotel, Arusha

From Wednesday 24th to Friday 26th September 2025

THEME

**INCLUSIVE COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS
FOR INCREASED NUTRITION AND ECONOMIC BENEFITS**



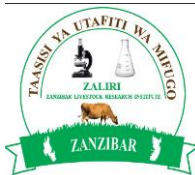
AFRI FARM

ASAS
Dairy Farm Ltd

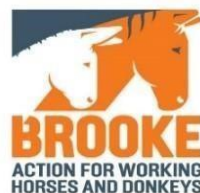


TIB DEVELOPMENT BANK
Your Partner for Growth

TADB
Tanzania Agricultural Development Bank
"The Farmers' Bank"



INADES-Formation Tanzania
Serving the common good - Utumishi kwa ustawi wa wote



Maziwa Faida Tanzania

Greening the Dairy Value Chain in Tanzania

Institutional Relationships and Innovations for Sustainable Milk Production 2021 to 2025

Lead Partners



Supported by



Funded by:



Government of Ireland
International Development Programme





TANZANIA SOCIETY OF ANIMAL PRODUCTION (TSAP)
48th Scientific Conference (Wednesday 24th – Friday 26th September 2025)

**INCLUSIVE COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS
FOR INCREASED NUTRITION AND ECONOMIC BENEFITS**

CONFERENCE PROGRAM

IMPORTANT NOTICE AND CONTACTS FOR THE 48th CONFERENCE

- Society matters e.g. membership: Dr Zabron Nziku +255 742 808 703 czabronn@gmail.com;
- Program, logistics, and accommodation: Ms Asha Maulidi +255 741 997 003 ashaitwanga@gmail.com, Ms Neema Kinyankwi +255 689 179 446 kinyankwineema12@gmail.com, Mr Gilbert Msuta +255 655 420 703 gmsuta@gmail.com;
- Registration: Dr Athuman Nguluma +255 755 528 687, Ms Patricia Ngoda +255 682 594 294 peterpatricia78@yahoo.com, Ms Laura Mahava +255 759 625 811 lauramahava@gmail.com;
- Conference recommendations: Dr Augustine Mwandya; Dr Eliamon Lyatuu; Dr Salim Nandonde; Mr Jeremiah Temu; Mr Hamdu Maulid.

DAY 1 Wednesday 24th September 2025

SESSION 1: OPENING CEREMONY

Chairperson: DR JONAS KIZIMA **Vice-Chairperson:** DR AUGUSTINE MWANDYA

Rapporteurs: Dr Zabron Nziku; Mr Gilbert Msuta

Time	Activity/Title	Responsible Person(s)
0830 – 0845	Arrival of Guest of Honour at Olasit Garden Hotels	TSAP Chairperson and Vice Chairperson
0845 – 0855	Briefing about TSAP, the 48 th Conference and brief introductions	TSAP Chairperson and Vice Chairperson
0855 – 0900	Arriving in the conference venue and start of opening session	TSAP Chairperson and Vice Chairperson
0900 – 0915	Welcome Remarks, Introductions, Chairperson's address, and inviting guest of honour	TSAP Chairperson and Secretary General
0915 – 0920	Stakeholders and sponsors remarks	Vice Chairperson (TSAP), TADB, CRDB, ASAS Dairies
0920 – 0925	Remarks from Ministry of Livestock and Fisheries	Director of Animal Production and Marketing/Patron
0925 – 0935	Remarks from Arusha Regional Commissioner's office	Regional Commissioner/Representative
0935 – 1000	Speech of Guest of Honour and Opening	GUEST OF HONOUR
1000 – 1030	Group Photograph/COFFEE/TEA BREAK	ALL

SESSION 2: PLENARY PRESENTATIONS

Chairperson: DR AUGUSTINE MWANDYA **Rapporteurs:** Ms Martha Jilala, Mr Fadhili Chamwazi

Time	Activity/Title	Responsible Person(s)
1030 – 1045	Plenary I: A need for an impactful Livestock Sector of Tanzania: Review of the past, touch base with the present, and foreseeing the future	GC Kifaro Professor of Animal Breeding at SUA
1045 – 1100	Plenary 2: Framing the national food system within the Agricultural Sector Development Programme (ASDP II): Implementation Outlook for 2025/2026	S Nandonde, Coordinator of ASDP II, Office of the Prime Minister, Tanzania
1100 – 1110	Discussion	Session Chairperson/Presenters

SESSION 3: PAPER PRESENTATIONS

Chairperson: DR RUTH WAINEINA **Rapporteurs:** Ms Shangwe Fabian; Ms Neema Kelya

SUB-THEME 1: PRODUCTION FACTORS AND ENABLING ENVIRONMENT TO ACCELERATE COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS		
Time/Duration	Presentation Title	Presenting Author
1110 – 1120	GL Chasama, HF Massawe, N Felix, AC Mwang'imba, CJ Niyoifasha, AN Francis, P Rukiko, WV Kikoti, AR Kamugisha Investigation of breeding objective for Tanzania cattle: A case of Ankole herd at TALIRI – Mabuki	GL Chasama
1120 – 1130	JM Mwabili, TK Muasya, CB Wasike Genetic and phenotypic correlations among lactation curve traits in Sahiwal cattle	JM Mwabili
1130 – 1140	CB Wasike Does Studbook registration process confer improved milk production performance in dairy cattle populations in Kenya?	CB Wasike
1140 – 1150	DK Mulupi, F Chelangat, PBK Mose, CB Wasike Regenerative agricultural practices and their adoption levels in dairy farming systems in Kenya	DK Mulupi
1150 – 1200	A Michael, CY Masagati Nutritional quality differences in wild and farmed Tilapia in Tanzania: Impacts of feed type and habitat variation	A Michael
1200 – 1210	F Kabi, P Lutakome Effect of harvesting Gliricidia sepium at different cutting intervals on quantity and quality of herbage biomass for dairy cattle nutrition	F Kabi
1210 – 1240	Discussion	Session Chairperson/Presenters
1250 – 1400	LUNCH BREAK	ALL

SESSION 4: 49th ANNUAL GENERAL MEETING/SELF TOUR OF ARUSHA

Chairperson: DR JONAS KIZIMA **Secretary General:** Prof George Msalya; **Assistant Secretary General:** Dr Zabron Nziku

Time/Duration	Activity/Title	Responsible Person(S)
1400 – 1700	ANNUAL GENERAL MEETING/Tour of Arusha for non-members	TSAP Chairperson, Vice Chairperson, EXCO, AGM Members, [Tour (non-members)]
1700 – 1730	EVENING COFFEE/TEA BREAK/END OF DAY 1	ALL

DAY 2 Thursday 25th September 2025

EDUCATIONAL AND RECREATIONAL TOUR: 07:00 AM – 06:00 PM (WHOLE DAY INCLUDING BREAK)

SOCIETY DINNER: 1800 – 2100

OLASIT GARDEN HOTEL

DAY 3 Friday 26th September 2025

EXERCISE: 0600 – 0700

OLASIT GARDEN HOTEL

SESSION 5: PAPER PRESENTATIONS

Chairperson: DR CHRILUKOVIAN WASIKE **Rapporteurs:** Ms Asha Maulidi, Ms Neema Kinyankwi

SUB-THEME 1: PRODUCTION FACTORS AND ENABLING ENVIRONMENT TO ACCELERATE COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS		
Time/Duration	Presentation Title	Presenting Author
0830 – 0840	J Kizima, Z Nziku, V Urassa, W Manesho, S Mngulu, S Kafuku, H Lugundi, P French, M Kabululu Assessment of growth performance and nutritional quality of promising forage species in Tanga Region, Tanzania	J Kizima
0840 – 0850	RW Waineina, SI Mwangi, JM Mwabili, SM Mbuku Influence of Breed, Parity, and Lactation Stage on Milk Composition in Dairy Cows under a Semi-Intensive Production System in Kenya	RW Waineina
SUB-THEME 2: DIGITALIZATION AND TECHNOLOGICAL NEEDS FOR COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS		
0850 – 0900	M Mwanibanza, F Guni, E Goromela, M Chando, F Thabiti Quantifying semen production and fertility rates in poultry breeding at TALIRI Naliendele	F Thabiti
0900 – 0910	AB Burilo, IP Kashoma, MM Kichuki	AB Burilo

	Exploration of semen cryopreservation protocol for Horasi chicken ecotype	
0910 – 0920	AI Hoka1, M Gicheru2, S Otieno2, E Owiro1 Physiological status of Friesian dairy cows and the implications on conception rates after synchronization	AI Hoka
0920 – 0930	SF Mhanga, AW Mwandya Costs and benefits Analysis of solar tent, raised racks and bare sand methods for drying dagaa along Lake Victoria, Tanzania and potential market trend	AW Mwandya
0930 – 1000	Discussion	Session Chairperson/Presenters
1000 – 1030	COFFEE/TEA BREAK	ALL

SESSION 6: PAPER PRESENTATION (PARALLEL SESSION)

Chairperson: PROF FRED KABI **Rapporteurs:** Frida Mlowe; Joyce Oscar

SUB-THEME 2: DIGITALIZATION AND TECHNOLOGICAL NEEDS FOR COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS		
Time/Duration	Presentation Title	Presenting Author
1030 – 1040	WC Wilson Application of Feed Calculator Mobile App in feed gap analysis in locally-formulated chicken feeds in the Southern Highlands of Tanzania	WC Wilson
1040 – 1050	ET Lyatuu, E Komba, G Msuta, N Kelya, R Mrode, J Ojango The future of Tanzania dairy farming in the digital economy	ET Lyatuu
1050 – 1100	N Kelya, E Komba, G Msuta, ET Lyatuu, J Ojango, R Mrode, G. Gebreyohanes Evaluating a mobile platform for digital transformation in the Dairy Sector: A case study of the AADGG App in Tanzania	N Kelya
SUB-THEME 3: CHANGING PERCEPTIONS OF STAKEHOLDERS TO IMPROVE NUTRITION AND ECONOMIC GAIN		
1100 – 1110	J Nicodemus, BM Masuruli, C Bukula, G Pharles, M Kivuyo Livestock commercialization and the African Union's ban on donkey trade	J Nicodemus
SUB-THEME 4: CROSS-CUTTING ISSUES AND THEIR ROLES IN COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS		
1110 – 1120	ET Lyatuu, E Komba, G Msuta, N Kelya, R Mrode The economic impact of methane production on dairy farming in Tanzania	ET Lyatuu
1120 – 1130	FO Agutu, MM Mugendy, SM Mbuku The impact of utilizing forage-based technologies in climate resilience among smallholder dairy farmers in Nakuru and Nyandarua counties	FO Agutu

1130 – 1140	NS Urassa, Z Nziku, S Kafuku, W Mangesho, A Majoya, V Urassa, F Urassa, H Ihagura Maziwa Faida Dairy Project leaves no one behind	NS Urassa
1140 – 1200	Discussion	Session Chairperson/Presenters
1200 – 1400	LUNCH BREAK	ALL

SESSION 7: PAPER PRESENTATION (PARALLEL SESSION)

Chairperson: DR RENALDA MUNUBI **Rapporteurs:** Ms Asha Maulidi, Ms Neema Kinyankwi

SUB-THEME 4: CROSS-CUTTING ISSUES AND THEIR ROLES IN COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS		
Time/Duration	Presentation Title	Presenting Author
1030 – 1040	MM Mugendy, FO Agutu, SM Mbuku Socio-economic drivers and constraints in climate-smart forage-based dairy systems: Baseline evidence from smallholder farmers in Kenya	MM Mugendy
1040 – 1050	K Geremew, MS Chelangat, O Ouko, T Yemane, VO Ouko, A Odiwour, PA Alaru, S Mbuku, T Dessie Dietary diversity of women in Kakamega and Bomet Counties, Kenya	MS Chelangat
1050 – 1100	GK Korir, PB Mose, CC Wambui Factors influencing the willingness of dairy farmers to adopt climate resilient nutrient-rich forages in Kenya	PB Mose
1100 – 1110	CB Wasike, F Chelangat Protein and fat percentage vary between dairy cattle of different breeds exposed to thermal stress	CB Wasike
1110 – 1120	M Mwanibanza, E Lyatuu, D Komwihangilo, R Mrode, G Msuta, A Ngesi, S Dawite, N Kelya, E Komba, F Guni Seasonal trends in methane emissions and milk production in urban and peri-urban dairy systems of Northern Tanzania	M Mwanibanza
SUB-THEME 2: DIGITALIZATION AND TECHNOLOGICAL NEEDS FOR COMMERCIALIZATION OF LIVESTOCK AND FISH VALUE CHAINS		
1120 – 1130	A Nguluma, R Loina, R Pelle, C Tiambo Complementary phenotypic and SNP-Based characterization of indigenous goat populations in Tanzania: Implications for breeding and conservation	A Nguluma
1130 – 1200	Discussion	Session Chairperson/Presenters
1200 – 1400	LUNCH BREAK	ALL

SESSION 8: SPONSORS AND EXHIBITIONS SESSION (PARALLEL TO SCIENTIFIC SESSIONS) 1030 – 1200

Chairperson: DR ZABRON NZIKU **Rapporteurs:** Frida Mlowe; Joyce Oscar

Time/Duration	Presentation Title	Presenting Author
1030 – 1130	CRDB BANK, ASAS DAIRIES, TIB Bank, UTT AMIS, INADES-Formation	Sponsors
1130 – 1200	Discussion	Session Chairperson/Presenters
1200 – 1400	LUNCH BREAK	ALL

SESSION 9: OFFICIAL CLOSING

Chairperson: DR JONAS KIZIMA **Rapporteurs:** Dr Zabron Nziku; Mr Gilbert Msuta

Time/Duration	Activity Title	Responsible Person(S)
1400 – 1415	Arrival of Guest of Honour at Olasit Garden Hotel	TSAP Chairperson and Vice Chairperson
1415 – 1425	Briefing about TSAP, the 48 th Conference, and introductions	TSAP Chairperson and Vice Chairperson
1425 – 1435	Introductions, Chairperson's address, and inviting guest of honour	TSAP Chairperson
1435 – 1445	Remarks from Sponsors (TADB and ASAS Dairies), and International Participants,	Sponsors and International Participants
1445 – 1505	Remarks from TSAP, Arusha RS and Ministry of Livestock and Fisheries	RAS/Representative, other Representatives
1505 – 1510	Remarks from Ministry of Livestock and Fisheries and welcome Guest of Honour	Ministry of Livestock and Fisheries
1510 – 1540	Speech of Guest of Honour and Closing of the conference	GUEST OF HONOUR
1540 – 1545	Award of Best Papers	Guest of Honour
1545 – 1550	Group Photographs	ALL
FREE TIME IN ARUSHA FOR ALL PARTICIPANTS		

SESSION 10: EXTRA ORDINARY MEETING OF EXCO

Chairperson: DR JONAS KIZIMA **Secretary General:** Prof George Msalya; **Assistant Secretary General:** Dr Zabron Nziku

Time/Duration	Activity/Title	Responsible Person(S)
16:30 – 17:30	EXTRA ORDINARY MEETING OF EXCO	TSAP Chairperson, Vice Chairperson, EXCO Members, Zonal Representatives and New Leaders

UTT SIM INVEST
Uwekezaji Umerahisishwa

• Kufungua akaunti mpya • Thamani ya kipande
• Nunua kipande • Taarifa fupi ya akaunti • Uliza salio

Mshirika Hakika Katika Uwekezaji

PIGA *150*82#

UTT AMIS

BIOGRAPHIES OF CHAIRS OF SCIENTIFIC SESSIONS



Dr. Ruth Waineina, a results-driven research scientist with over 25 years of research and consulting expertise. She holds a Doctor of Animal Science degree from Egerton University in Kenya majoring in Animal Breeding and Genomics, and MSc. in Animal Sciences from Wageningen University, The Netherlands, specializing in two areas: Animal Breeding and Genetics and Livestock Production Systems. She holds a BSc. degree in Animal Production from Egerton University, Kenya. Her research interests include the goal of functional genomics and productivity in tropical livestock systems. Dr Waineina is a Chief Research Scientist at Kenya Agricultural and Livestock Research Organization (KALRO) – Dairy Research Institute (DRI), Naivasha, Kenya. She is the head of Small Ruminant Research Programme (SRRP) and National Sahiwal Stud (NSS) in DRI. She has worked with a wide range of stakeholders along the agricultural product value chain, from farm to market to consumers. Her involvement in R&D has resulted in increased animal's productivity among livestock keeping communities in numerous counties. Dr. Waineina has consulted for various organizations among them International Fund for Agricultural Development (IFAD). She has presented in various scientific fora among them the World Congress on Genetics Applied to Livestock Production, International Goat Association conference, and Tanzania Society of Animal Production. She has (co)authored over 20 publications in scientific peer reviewed journals and conference proceedings. Dr Ruth is a member of Animal Production Society of Kenya.



Dr Chrilukovian Wasike, is a results-oriented research scientist and academician with over 20 years of experience in teaching, research, consultancy, and community outreach. He holds a Doctor of Agricultural Science (Dr. rer. Agr.) Degree from Humboldt-Universität zu Berlin in Germany, with a bias in Animal Genetics and Breeding. He is a Norman Borlaug research fellow, having taken a research stay fellowship at Langston University. His research interests include the genetics of functional efficiency and productivity in tropical livestock. Currently, he is evaluating the genetics of (re)productive and functional efficiency in indigenous chicken, cattle, and dairy goat populations in Kenya and is also the country lead scientist for NORPART project that aims to build capacity for advancement of climate-smart agricultural practices in East and Southern Africa. Dr Wasike is a Senior Lecturer and Dean of the School of Agriculture, Food Security and Environmental Sciences, Maseno University. He is also part of the national panel of experts (NPOE) for the National Value Chain Development Project (NAVCDP). Dr. Wasike is a trained curriculum developer with competencies in the development of e-learning content and competency/problem-based learning. He has consulted for various organizations, among them the International Livestock Research Institute (ILRI), FARA, GIZ, and the State Department of Livestock Development (SDLD – LRC). He is an external examiner and journal reviewer, and has participated in the development and publication of two sourcebooks for management of Sahiwal cattle and dairy goats, and the National agricultural extension manual. He has presented papers in various scientific fora and (co) – authored over 45 publications in scientific peer-reviewed journals. Dr Wasike is a member of Prolinnova network, American Society of Animal Science (ASAS) and is a DAAD and Norman Borlaug fellow.



Prof Fred Kabi, Fred Kabi is one of the leading animal nutritionists at the Department of Animal and Range Sciences, at Makerere University, Uganda. Through public private partnerships (PPP) and collaborations with the United Nations (UN) World Food Program (WFP), International Livestock Research Institute, Michigan State University, Ghent University, Swedish University of

Agricultural Sciences (SLU), Ento Organic Uganda Ltd. Fred has been majorly focusing on research, innovation and entrepreneurship with the youth geared towards elimination of extreme poverty and hunger (SDG1 and SDG2) as well as addressing Industrial innovation, climate action, responsible consumption while creating cleaner cities. Currently Fred, through PhD and masters' students, is working on harnessing circular and carbon-sequestering local feed resources to close the nutrition gap of cross-bred dairy cattle in Uganda supported by metabolic biomarkers in blood spot samples. This research is aimed at developing specialized gluconeogenic diets for intensive and semi-intensive dairy cattle to close the nutrient gap during the transition period in order to reduce ketogenesis. Fred has worked on strategies to use atomic nuclear science for food production rather than for war. Specifically, targeting cuticular n alkanes and their enrichment with stable carbon 13 isotopes. This is also targeted to support estimation of required supplementation of cattle grazing heterogeneous pastures in order to accurately close the nutrient gap of grazing cattle. Fred is currently working with trans-disciplinary teams of youth on disentangling secrets of biology, engineering and ICT for linking local organic agricultural business to the global market place worth over 140 billion USD annually. An all-inclusive KeBERA Organic Farming Certification Model hinged on participatory guarantee system (PGS) has been innovated using a human centered design approach. Here, emphasis has been put on the geolocation and geo-mapping of organic farmers for product traceability, e-commerce as well using dry chemistry through a digital ware (Digware) to test authenticity of organic food for safety or contamination with inorganic contaminants as a complement to the more expensive third-Party certification. This innovation is ready for launching and patenting.



Dr Renalda Munubi, is a senior lecturer at Sokoine University of Agriculture (SUA), where she conducts research and extension activities related to aquaculture. Her PhD study was on Lake Tanganyika's cichlid fish and she assessed the relationship between climatic changes, algal quality and herbivorous cichlid fish growth, behavior and wellbeing. She is passionate in research and teaching on fish ecology and the changing ecosystem. At the moment, she is instructing students on different aquaculture production techniques both in marine and freshwater. Furthermore, Dr Munubi has professional experience in consultancies, and provision of extension services in the field of agriculture, aquaculture, climate change and beekeeping for poverty alleviation. Her background working on both local and international projects has given her skills in fish pond construction, feed formulation, water quality management, and value addition in order to boost fish productivity and income which in turn enhances food security.

Dr Augustine Mwandya, is currently a Vice-chairperson of TSAP and Senior Lecturer at SUA. Dr Mwandya has over 15 years' experience in teaching both undergraduate and postgraduate students, research and outreach activities mostly on aspects related to Fisheries and Aquaculture. He has a PhD in Fisheries Biology, MSc in integrated Mariculture systems, and BSc in Chemistry and Marine Biology. He has supervised a number of undergraduate and postgraduate students pursuing BSc. And MSc. Degree in Aquaculture and Fisheries. Has undertaken several research projects, outreach and consultancy activities either as Principal Investigator or as team member.

Executive Committee

Dr Jonas Kizima (TALIRI)
 Dr Augustine Mwandya (SUA)
 Prof George Msalya (TDB)
 Dr Athumani Nguluma (SUA)
 Dr Zabron Nziku (TALIRI)
 Mr Gilbert Msuta (TALIRI)
 Ms Theodora Baziwe (Temeke MC)

Zonal Representatives

Mr Msafiri Kalloka (TVLA)
 Ms Winfrida Joseph (RAS Arusha)
 Mr John Diyu (TALIRI Dodoma)
 Ms Joyce Oscar (Dar es Salaam)
 Mr Mpoki Alinanuswe (TMB)
 Mr Kalori Msaki (Rombo DC)
 Mr Rajab Juma (MAINL)

Prof Said Mbagu (SUA)
Mr Maulid Hamdu (ZALIRI)
Mr Walter Mangesho (TALIRI)
Mr Waziri Mahimbo (Morogoro RS)

Mr Salum Kafuku (TALIRI Tanga)
Mr Dionis Gustav (RS Shinyanga)
Mr Luoga Thadei (Njombe TC)
Mr Joseph Kulwa (TMB)

CONTACTS

SECRETARY GENERAL,
PO Box 3004,
MOROGORO – TANZANIA

E-Mail: tsapsociety@yahoo.com
Mobile: +255 763 550 246
+255 742 808 703

