

**EGERTON UNIVERSITY  
14<sup>TH</sup> BIENNIAL INTERNATIONAL  
CONFERENCE**

**Theme:  
RESEARCH AND INNOVATIONS FOR  
RESILIENCE IN A CHANGING ENVIRONMENT**

**PROGRAMME AND BOOK OF ABSTRACTS**

**23<sup>RD</sup> – 25<sup>TH</sup> MARCH, 2022**

**CONFERENCE VIA ZOOM**

## CONFERENCE DAY ONE WEDNESDAY 23<sup>RD</sup> MARCH 2022

<b>Programme Coordinators: Prof. Mwangi Ndirangu/Prof. Nancy Mungai</b>			
<b>MORNING SESSION</b>		<b>ACTIVITY</b>	
7 <sup>th</sup> - 25 <sup>th</sup> March 2022		E-REGISTRATION: Zoom Link/ <a href="http://euconference.egerton.ac.ke">euconference.egerton.ac.ke</a>	
0800hrs-0815hrs EAT	Participants log in and Online Reception Networking via Chat Room	Prof. Wilkister Moturi Mr. Peter Kiganda	
0815hrs-0830hrs	<b>Opening Session</b> <ul style="list-style-type: none"> <li>National, EAC, Egerton University Anthems</li> <li>Prayer, Housekeeping announcements</li> <li>Introduction of Partners/Sponsors/Participants by Country and Organisation</li> </ul>	Prof. Nancy W. Mungai, <i>Ag. Director</i> (Research & Extension)	
0830hrs-0840hrs	<b>Welcoming Remarks: Prof. Bockline O. Bebe</b> , Ag. Deputy Vice-Chancellor (Research and Extension)		
0840hrs-0850hrs	<b>Prof. Isaac O. Kibwage</b> Vice-Chancellor (Egerton University)		
0850hrs-0915hrs	<b>Keynote Address: Dr. Tonny K. Omwansa</b> , <i>Chief Executive Officer, Kenya National Innovation Agency</i> Effective Research Innovations Framework for Sustainable Development		
0915hrs-0940hrs	<b>Keynote Address: Prof. Isaiah I. C. Wakindiki</b> , PhD., Pr.Sci.Nat. <i>Vice Chancellor &amp; CEO, KCA University, Nairobi</i> Sustainable agri-food systems: Greening smallholder agri-food value chains		
0940hrs-1000hrs	<b>Q &amp; A</b>		
1000hrs-1035hrs	<b>BREAKOUT SESSIONS, NETWORKING AND HEALTH BREAK</b>		
<b>SUB-THEMES</b>	<b>TRANSFORMATIVE AGRIFOOD</b>	<b>INNOVATIONS IN CLIMATE CHANGE &amp; NATURAL RES. MANAGEMENT</b>	<b>TRANSFORMATIVE AGRIFOOD</b>
Topics	Plant Science/Crop Production/ Soil Science	Biodiversity	Food Science /Technology
Moderator	Prof. Ouma, J.	Prof. Ogendi G.	Prof. Omwamba M.
Rapporteur	Dr. Karwitha, M.	Dr. Donde O.	Dr. Anyango, J. O.
1035hrs-1050hrs	Development of somatic hybridization protocol for taro ( <i>Colocasia esculeneta esculeneta</i> (L) Schott. and <i>Colocasia antiquorum</i> (L) Schott.) to address difficulty in cross-pollination <b>M. Chungwa, R. Gesimba &amp; S. I. Abwao</b>	Eel fishery along Kenyan east flowing rivers exposes lacunae in Kenyan fisheries management: Preliminary Results <b>C.M. Kihia, E.K. Mbaru, G. O'Brien &amp; C. Hanzen</b>	Nutritional composition and sensory properties of wheat muffins enriched with <i>Gonimbrasia zambesina</i> caterpillar flour <b>F. Opondo, A. Nakhumicha, &amp; J. Anyango</b>

1050hrs-1105hrs	Integrated management of root-knot nematode ( <i>Meloidogyne</i> Spp) using fresh manure and cropping regime for improved growth and yield of tomato <b>J. N. Munywoki, Mwanarusi S. &amp; J. O. Ogweno</b>	River connectivity and eel migrations <b>Van der Merwe, A &amp; O'Brien, G</b>	Rheological properties of composite flours and physico-chemical properties of wheat, cassava and bamboo shoot composite bread <b>D. A. Nyamai, J. O. Anyango, &amp; M. Omwamba</b>
1105hrs-1120hrs	Peanut ( <i>Arachis hypogea</i> ) accessions express low accumulation of aflatoxin upon infection: implications for aflatoxin mitigation <b>E. N. Salano, R. M.S. Mulwa &amp; M. A. Obonyo</b>	Occurrence and recruitment of juvenile anguillids into the Sabaki and Ramisi estuary <b>L. M. Gitonga, C. Kihia Maina, M. C. Mwatete, T. Mkare, C. Hanzen, E. Mbaru, &amp; G. O'Brien</b>	The effect of pre-gelatinization conditions on the physico-chemical and functional properties of taro ( <i>Colocasia esculenta</i> ) flour <b>I. R. Oyim, J. O. Anyango, &amp; M. Omwamba</b>
1120hrs-1135hrs	Assessing the efficacy of commercial phosphorus products for improving maize production in two regions in Kenya <b>N.W. Mungai, &amp; H. Korir,</b>	Contribution of anguillids to fish habitat conservation value at two Kenyan east-flowing rivers <b>J. K. Tembo, C. K. Maina, N. K. Kitaka, G. O'Brien, C. Hanzen &amp; E. Mbaru</b>	Optimization of protein, total minerals and vitamin a content of orange-fleshed sweet potato, amaranth seed and soybean flour blends <b>J. Nkesiga, J. O. Anyango, &amp; P. M. N. Ngoda</b>
1135hrs-1150hrs	Land suitability, production and utilization of cowpea ( <i>Vigna unguiculata</i> L.) In selected counties of Kenya <b>S.C. Kipnetich, H. Korir, A.M. Opiyo, J.M. Mironga &amp; N.W. Mungai</b>	Channel network structure determines genetic connectivity of landward-seaward <i>Avicennia Marina</i> populations in a tropical bay <b>A. A. Allela</b>	The sesame ( <i>Sesamum indicum</i> L.) Value chain and microbiological quality of crude sesame oil, a case study in Western Tigray, Ethiopia <b>A. F. Gebremeskel, P. N. Ngoda, E. W. Kamau-Mbuthia &amp; S.M. Mahungu</b>
1150hrs-1205hrs	Effects of water hyacinth ( <i>Eichhornia crassipes</i> ) compost on soil properties and maize ( <i>Zea mays</i> L.) Growth and yield in Lake Victoria Basin, Kenya <b>K. Obondo, J. Lelei &amp; S. Mwonga</b>	Ecological outcomes of the community conservancy model: A case study of Naibunga Community conservancy, Laikipia County, Kenya <b>K. O. Oburah, C. Lenachuru &amp; W. O. Odadi</b>	Probiotic properties and safety profiling of <i>Lactobacillus plantarum</i> isolated from spontaneously fermented milk, <b>A. Amaruraru, M. M. Katiku, J. W. Matofari &amp; J. M. Nduko</b>

1205hrs-1220hrs	Lignocellulose component of potential fodder sorghum genotypes as influenced by genotype, stage and environment <b>L. A. Ouma, E. K. Cheruyiot, &amp; J. O. Ogendo</b>	Nesting and habitat characteristics of white-browed sparrow-weavers ( <i>Plocepasser mahali</i> , Smith) at Chemeron, Baringo South, Kenya <b>R. Ondieki &amp; Ogendi G. M.</b>	Determination of aflatoxin levels in groundnuts ( <i>Arachis hypogaea</i> L.) from Kerio Valley <b>Karanja</b>
1220hrs-1235hrs	Rapid multiplication techniques in seed potato production in Kenya: prospects, opportunities and challenges <b>W.W. Chebet, A. Opiyo &amp; S. Githeng'u</b>		Maintaining postharvest quality and extending shelf life of bell pepper ( <i>Capsicum annum</i> L. cv. California wonder) using cactus ( <i>Opuntia stricta</i> L.) mucilage coating <b>M. A. Aloo, A. M. Opiyo &amp; M. Saidi</b>
1235hrs-1250hrs	Bioactivity of selected biopesticides against Fall armyworm ( <i>Spodoptera frugiperda</i> ) in sorghum ( <i>Sorghum bicolor</i> ) In Kenya <b>N.W Njogu, A. Kamau, P.K. Kimurto, E. Manyasa, J.G. Nyaanga, M.K Charimbu &amp; B.K. Towett</b>		Crickets production for human consumption <b>C.K. Okongo, E.O. Obura &amp; C.O. Odira</b>
0100hrs-0200hrs	<b>NETWORKING AND LUNCH BREAK</b>		
<b>SUB-THEMES</b>	<b>TRANSFORMATIVE AGRIFOOD SYSTEMS</b>	<b>INNOVATIONS IN CLIMATE CHANGE &amp; NATURAL RES. MGMT</b>	<b>TRANSFORMATIVE AGRIFOOD SYSTEMS</b>
<b>Topics</b>	<b>Plant Science/Crop Production/Soil Science</b>	<b>Environment and Society</b>	<b>Animal Production</b>
<b>Moderator</b>	<b>Dr. Okwiri P.</b>	<b>Prof. Ondimu K.</b>	<b>Prof. Ambula M.</b>
<b>Rapporteur</b>	<b>Dr. Mafura J.</b>	<b>Dr. Obulinji H.</b>	<b>Dr. Ngeno K.</b>
0200hrs-0215hrs	Fall armyworm ( <i>Spodoptera frugiperda</i> ) infestation and grain yield loss in advanced sorghum genotypes in arid and semi-arid areas in Kenya <b>N.W. Njogu, A. Kamau, P.K. Kimurto, E. Manyasa, B.K Towett, J.G. Nyaanga &amp; M. K. Charimbu</b>	Poverty eradication interventions in Kenya: a mirage or an achievable dream <b>D. K. Mutunga</b>	Impact of probiotics on volatile fatty acid production and methane emission of lactating dairy cows <b>B. Kembabazi, P. K. Migwi, J.O. Ondiek &amp; N. Kibitok</b>

0215hrs -0230hrs	Evaluation of finger millet ( <i>Eleusine coracana</i> L.) Genotypes for blast disease resistance and grain yield <b>L. Jeptanui, M. Charimbu &amp; H. Ojulong</b>	Factors influencing the level of acceptance of off-season diversified vertical vegetable gardening through secondary school-based agricultural extension approach <b>T. Avoga, J. M. Ombati, S. M. Mwonga &amp; L. Waswa</b>	Formulating an appropriate enzyme cocktail for effective dry matter digestibility of maize stover <b>M.P. Mdziniso, J.K. Tuitoek, J.O. Ondiek &amp; P.S. Muliro</b>
0230hrs-0245hrs	Effects of growth media in stimulating nodulation in common bean <b>N. P. Nthakanio</b>	Direct-use of ecosystem services by rural households: case study of <i>sagla parks</i> , Homa Bay County, Kenya <b>E. Obura &amp; M. Ogoma</b>	Effect of enzyme pre-treatment period of maize stover on in vitro dry matter digestibility <b>M.P. Mdziniso, J.K. Tuitoek, J.O Ondiek &amp; P.S. Muliro</b>
0245hrs-0300hrs	Efficacy of selected biopesticides on pod borer management and yield performance of pigeon pea ( <i>Cajanus cajan</i> millsp.) in arid and semi-arid areas of Kenya <b>S. Jepkosgei, P. Kimurto, M. Charimbu, J.J. Cheboi &amp; R. N. Gangarao</b>	Flood vulnerability mapping in Tana river county, Kenya <b>A. Koskei, T. Watanabe, D. L. Makanji &amp; G. W. Eshiamwata</b>	194 Fixed effects and genetic parameters on feed efficiency and growth traits of Boran cattle in Kenya <b>A. M. Majoya, J.O. Khobondo, S. Tura &amp; T.K. Muasya</b>
0300hrs-0315hrs	Minimum tillage and productivity of smallholder sorghum cropping systems of Kenya <b>C. M. Musafiri, Milka Kiboi, J. Macharia, O. K. Ng'etich, David K. Kosgei, B. Mulianga, M Okoti &amp; F.KNgetich</b>	Insecticidal properties of neem seed extracts: A Review <b>E. K. Mutua, L. Gaoqiong &amp; M. Mwangi</b>	Digestibility and <i>in-vitro</i> methane gas emission of indigenous and introduced grasses in the rangeland ecosystems of South Eastern Kenya <b>A. N. Maweu, B. O Bebe, S. G. Kuria &amp; O. B. Kashongwe</b>
0315hrs-0330hrs	Performance of different storage systems on physico-chemical quality of ware potato in Elgeyo Marakwet County, Kenya <b>E. K. Lelmen &amp; J. K. Makatiani</b>	University based strategies for driving application and uptake of grain legumes and dry land cereals innovations by farmers: student led extension program <b>H. Korir, S.C. Kipnetich, A. M. Opiyo &amp; Mungai N.W.</b>	

0330hrs-0345hrs	Influence of nitrogen and spacing on growth and yield of chia ( <i>Salvia hispanica</i> ) in upper-midland zone of Meru County <b>M. Njoka</b>	An analysis of entrepreneurial intent among rural youths in Njoro sub-county, Kenya <b>N. Nyakapene, J. K. Langat &amp; E. Mutandwa</b>	
0345hrs-0400hrs	Evaluation of rice ( <i>Oryza sativa</i> L.) genotypes for yield and resistance to blast disease ( <i>Magnaporthe oryzae</i> ) in Kenya <b>G. Ruiru, P. Kimurto, M. Charimbu &amp; J. Kimani</b>		
0400hrs-0415hrs	Effect of biochar on growth, yield and quality of beetroot <b>E. Kwizera, A.M. Opiyo &amp; N. W. Mungai</b>		
0415hrs-0430hrs	Evaluation of maize ( <i>Zea mays</i> ) inbred lines for grey leaf spot ( <i>Cercospora Zeae-maydis</i> ) resistance under artificial inoculation in Kenya <b>N. Lagat, J. Owuoche, M. E. Oyoo, &amp; V. W. Woyengo</b>		
0430hrs-0445hrs	Occurrence of Aflatoxins in Groundnuts ( <i>Arachis hypogaea</i> L.): A Case Study of Four Counties in Kenya <b>P. Sitienei, P. Kimurto, I. Wagara &amp; M. Obonyo</b>		

## END OF DAY ONE

## CONFERENCE DAY TWO THURSDAY 24<sup>TH</sup> MARCH 2022

MORNING SESSION	ACTIVITY		
7 <sup>th</sup> - 18 <sup>th</sup> March 2022	<b>E-REGISTRATION: Zoom Link/ <a href="http://euconference.egerton.ac.ke">euconference.egerton.ac.ke</a></b>		
0800hrs-0815hrs <b>EAT</b>	Participants log in and Online Reception Networking via Chat Room		<b>Dr. Dishon Kweya</b> <b>Mr. Kiganda Peter</b>
0815hrs-0830hrs	<b>Opening Session</b> <ul style="list-style-type: none"> <li>• National, EAC, Egerton University Anthems</li> <li>• Prayer, Housekeeping announcements</li> <li>• Introduction of Partners/Sponsors/Participants by Country and Organisation</li> <li>• <b>Day One Recap</b></li> </ul>		<b>Dr. Toroitich Faith</b>
0830hrs-0840hrs	<b>Welcoming Remarks: Prof. Bockline O. Bebe, Ag. Deputy Vice-Chancellor (Research &amp; Extension)</b>		
0840hrs-0905hrs	<b>Keynote Address: Prof. Josphat Matasyoh, Department of Chemistry, Egerton University</b> The search for bioactive molecules for the control of human, animal and crop disease pathogens and vectors		
0905hrs-0935hrs	<b>Keynote Speaker: Prof. Lize Kriel</b> <i>University of Pretoria, South Africa</i> Strangers in Mamabolo stories as captured in German Missionary Ethnography, Northern South Africa, C.1904 – 1934		
0935hrs-1010hrs	<b>Q &amp; A</b>		
1010hrs-1030hrs	<b>BREAKOUT SESSIONS, NETWORKING AND HEALTH BREAK</b>		
<b>SUB-THEMES</b>	<b>TRANSFORMATIVE AGRI FOOD SYSTEMS</b>	<b>HEALTH SYSTEMS, SCIENCE AND TECHNOLOGY</b>	<b>HEALTH SYSTEMS, SCIENCE AND TECHNOLOGY</b>
Topic	<b>Agribusiness Management/ Agricultural Economics</b>	<b>Health and Nutrition</b>	<b>Physical Science, Engineering and Technology</b>
Moderator	<b>Prof. Bett H.</b>	<b>Prof. Obonyo, M.</b>	<b>Dr. Wambua R.</b>
Rapporteur	<b>Dr. Kariuki M.</b>	<b>Dr. Waswa L.</b>	<b>Ms. Matheri N.</b>
1030hrs-1045hrs	Consumer preference for selected roots and tubers among urban households of Nakuru Town East Sub-County, Kenya <b>F. O. Nuani, E. O. Gido &amp; O. I. Ayuya</b>	The role of distributed ledger technology in provision of Universal Health Coverage <b>D. Bundi, D. Kirongo &amp; A. Kirongo</b>	Real-time monitoring of water quality in Lake Nakuru using wireless sensor technology <b>J. K. Kipkemboi, F. M. M. Manene, S. K. Rotich, R. K. Rop &amp; F. Omengo</b>
1045hrs-1100hrs	Influence of institutional arrangements on the choice of vertical coordination strategic options in the sorghum supply chain in Kisumu County, Kenya <b>J. S. Nyamambaa, O. I.</b>	Towards a sustainable hospital generated sharps management program: Lessons from Migori County, Kenya <b>L. Wandolo, P. Apamo, B. Olalo &amp; A. Bosire</b>	Optimization of design parameters for portable common beans ( <i>Phaseolus vulgaris</i> L) thresher using viiveli method <b>P. W. Wamalwa, C. L. Kanali, E. K. Ronoh &amp;</b>

	<b>Ayuya &amp; K. W. Sibikob</b>		<b>G. M. Kituu</b>
<b>1100hrs-1115hrs</b>	Determinants of side selling behaviour in emerging sorghum supply chains in Kisumu County, Kenya <b>J. S. Nyamambaa, O. I. Ayuya &amp; K. W. Sibikoba</b>	Psychological effects of the covid-19 pandemic on the mental wellbeing among secondary school students in Kenya <b>G. Malala &amp; P. Onyango</b>	On viiiivelihoos functions and optimization in viiiivelihoos spaces <b>B. Okelo</b>
<b>1115hrs-1130hrs</b>	Effect of credit on income among youth tomato farmers in Mvomero District, Tanzania <b>H. C. Too, M. Ngigi, E. Gathungu, V. Manyong, &amp; M. Yami</b>	The future of covid-19, at least immunologically <b>S. Nyamweya</b>	Magnetism in reduced graphene oxide-germanium quantum dot nanocomposite <b>T. A. Amollo</b>
<b>1130hrs-1145hrs</b>	Exploring risk perceptions in agro-food waste viiiivelihoodviii among urban agro-producer households <b>C. Karani &amp; Gido E.</b>	Comparison of the Bethesda System (TBS) and Richart Score (RS) in the evaluation of cervical cancer lesions among women attending Machakos Level Five County Hospital in Kenya <b>E. Muitta &amp; N. Munyoki</b>	Investigating mechanical properties of leather treated with aloe barbadensis miller and carrageenan using existing theoretical models <b>K. M. Nalyanya</b>
			<b>15mins change over</b>
			<b>BIO SCIENCES</b>
			<b>Moderator: Dr. Muia W. A.</b>
			<b>Rapporteur: Dr. Mang'era C.</b>
<b>1145hrs-1200hrs</b>	To enhance profitability of maize beans production among small scale farmers in Mbooni West Sub County, Makueni County <b>D. K. Mutune</b>	Review: Current trends in leishmaniasis treatment in Kenya <b>M. D. Chepkemoi &amp; O.R. Odhiambo</b>	Genetic and chemical methods of ascertaining aflatoxigenicity give discordant results: A case of <i>aspergillus</i> species from Eastern Kenya <b>M. K. Lagat, F. J. Toroitich, H. M. Makonde &amp; M. A. Obonyo</b>



1200hrs-1215hrs	Effects of cash transfers on household resilience to climate shocks in the arid and semi-arid counties of Northern Kenya <b>J. Matata, M. Ngigi &amp; H. Bett</b>	Use of generalized linear mixed effects model in the analysis of wasting among under five years children in Marsabit County, Kenya <b>J. Koech, B. Rop &amp; A. Otieno</b>	Aflatoxigenicity in <i>Aspergillus</i> species: cultural, molecular and analytical analysis <b>P. K. Rono, M. A. Obonyo &amp; E. K. Lelmen</b>
1215hrs-1230hrs	Clustering smallholder cage fish farmers in the Lake Victoria – Uganda <b>J. L. Mutyaba, M. Wanjiru Ngigi &amp; O. I. Ayuya</b>	An assessment of factors influencing consumption of sun-dried vegetables among households <b>A. Itaru, L. M. Waswa, E. Kretz, I. Jordan &amp; M. G. Glas</b>	The efficacy of essential oils on growth inhibition and morphogenesis of soil-borne aflatoxigenic <i>Aspergillus</i> species <b>Z.C. Maiyo, F. J. Toroitich, J. Matasyoh &amp; A.M. Obonyo</b>
1230hrs-1245hrs	Status of production and marketing of African indigenous in Vihiga County <b>E. Minyatta, J. Ombati &amp; M. Mutuku</b>	Determinants of knowledge about aflatoxin and fumonisin contamination in sorghum and post-harvest practices among caregivers of children aged 6-59 months in Kerio Valley, Kenya <b>Lesuuda L., M. A. Obonyo &amp; M. J. Cheserek</b>	Cytotoxic compounds from the stem bark of two subsp. Of <i>Bersama abyssinica</i> <b>D. K. Nyamboki, K. G. Bedane, K. Hassan, L. Brieger C., Strohmman, M. Spitteller &amp; J. C. Matasyoh</b>
1245hrs-0100hrs	Addressing the agricultural labor burden in Kenya: Evaluating using human-centered design to improve farmers' agricultural tools <b>M. K. Charimbu, S. Wyche, J. Olson &amp; P. Kimurto</b>	Eat a different vegetable each day in a week: facilitating and hindering factors among small-holder farm households in Teso-South Sub-County, Kenya And Kapchorwa District, Uganda <b>L. M. Waswa, E. C. Kretz, A. Itaru, P. Kossmann, D. Alum, M. G. Glas, S. Fischer, S. M. Mwonga, M. Kabahenda, T. Pircher, T. Hilger &amp; I. Jordan</b>	Botryosphaeria canker and dieback a threat to domestication of baobab ( <i>ixiveliho digitata</i> L.) and marula ( <i>sclerocarya birrea</i> a. Rich.) In agroforestry systems in Kenya <b>S. Cherotich, J. Njuguna, J. Muthamia, A. Muchugi, D. Otaye, I. Graziosi &amp; Z. Kinyanjui</b>
0100hrs-0200hrs	<b>BREAKOUT SESSIONS, NETWORKING AND LUNCH BREAK</b>		

SUB-THEMES	TRANSFORMATIVE AGRI FOOD SYSTEMS	INNOVATIONS IN CLIMATE CHANGE & NATURAL RES. MANAGEMENT	LITERATURE, HISTORY AND CULTURE
Topics	<b>Agribusiness Management/ Agricultural Economics</b>	<b>Environment and Technology</b>	
Moderator	<b>Dr. Gitau R.</b>	<b>Prof. Maranga E.</b>	<b>Prof. Ilieva E.</b>
Rapporteur	<b>Dr. Gathungu E.</b>	<b>Dr. Inoti S.</b>	<b>Prof. Wako. F.</b>
0200hrs-0215hrs	Organic and conventional farming systems impacts on weed seed bank, density and dominance in Muranga and Tharaka Nithi counties, Kenya. <b>O. M. Maina</b>	Ameliorative effects of natural products on serum biochemistry and histopathological changes of broilers fed aflatoxin contaminated feeds <b>Gitonga P G, Tuitoek J K, King'ori A M &amp; Obonyo M A</b>	University of Embu dams as potential sinks of microplastics in river Rupingazi system <b>Ogunah J.</b>
0215hrs-0230hrs	Knowledge, attributes and experiences of beekeepers in non-traditional beekeeping communities: A case of Siaya County, Kenya <b>F. J. Toroitich, S. M. Kagio, S. M. Mwangi &amp; F. O. Odera</b>	Integrating cattle manure with sugarcane bagasse ash or lime in maize (Zea mays L.) field enhances maize growth and yield <b>T. D. T. Bidai, J. J. Lelei &amp; J.P Ouma</b>	Dialogic re-construction of covid-19 messaging through animation and popular music <b>J. Omuteche &amp; J. Kituu</b>
0230hrs-0245hrs		Can gendered work patterns in soil and water conservation improve soils and transform agriculture? A mixed method approach <b>I. Musafili, O. I. Ayuya, E. A. Birachi &amp; J. C. Ngabitsinze</b>	Kipsigis cultural values as sources of resilience as reflected during debates at the county assembly of Bomet <b>H. Rotich, P. Bartoo, &amp; L. Wathika</b>

<b>SUB-THEMES</b>	<b>15mins change over</b>  <b>INNOVATIONS IN CLIMATE CHANGE &amp; NATURAL RES. MANAGEMENT</b>	Characterization and biochemical analysis of municipal solid waste (msw) to generate clean alternative biomass energy for improvement of livelihood in informal settlement, Nairobi County	Festivity, inanity and discourses of the body as embodied knowledge in the Bukusu circumcision ritual <b>J. K. Changalwa, D. Kweya, &amp; F. Wako</b>
<b>Topics</b>	<b>Environment and Agriculture</b>		
<b>Moderator</b>	<b>Prof. Obwoyere G.</b>		
<b>Rapporteur</b>	<b>Dr. Lenachuru C.</b>		
<b>0245hrs-0300hrs</b>	Agronomic and financial benefits of phosphate rock use in acidic soils of the upper eastern Kenya <b>E. Ndeleko-Barasa</b>	<b>G. Nyambati, Obuola W., M. Rotich, Moturi W. N., Ogur E., Makoyoto M., K. Anne &amp; H. Koech</b>	
<b>0300hrs-0315hrs</b>	Influence of secondary succession on species diversity: A case study of Mau Forest, Kenya <b>Achieng J. O. &amp; Inoti S. K.</b>	Optimization of selected pyrolysis parameters in pyrolytic acid production rate and quality from acacia twigs <b>B. S. Doti, S. Nyakach, J. Nyaanga, O. Ingasia &amp; D. Nyaanga</b>	Historian on the margins: Aggrey Indimuli Anduuru and the invention of community history for a modern Ebunyole <b>D. G. Kweya</b>
<b>0315hrs-0330hrs</b>	Covering materials use in the management of greenhouse aphids in vegetable production- a review <b>A. Emaru &amp; L. Gaoqiong</b>	Forecasting of hydrological drought using surface water supply index and streamflow drought index at Malewa River Catchment, Naivasha, Kenya <b>E.W. Nyokabi, R. M. Wambua, &amp; R.O. Okwany</b>	The challenge of framing climate change stories in selected vernacular radio stations in Western Kenya <b>M. H. Chakava &amp; E. Kirui</b>
<b>0330hrs-0345hrs</b>	Drivers of deforestation and forest degradation and their impact to the livelihoods of people and the environment, Huye District, Rwanda <b>V. Nyiramvuyekure &amp; J. Nduwamungu</b>	Mitigating the formation of Cr(VI) in leather using aloe <i>barbadensis</i> miller mixed with carrageenan <b>K.M. Nalyanya</b>	Covid- 19 guidelines and conflicts with the Kenyan cultural practices <b>C. Kitetu, R. Gacheiya, M. Atieno &amp; G. Rono</b>

0345hrs-0400hrs	Determinants of farmers' knowledge on soil and water conservation technologies in the dry zones of the Central Highlands of Kenya <b>M. W. Njenga, J. N. Mugwe, H. Mogaka, G. Nyabuga, N. Oduor &amp; M. Kiboi F. Ngetich, M. Mucheru-Muna, I. Sijali, D. Mugendi</b>	Effect of selected briquetting techniques on stove performance properties <b>W. Okwara, D. Nyaanga &amp; P. Kabok</b>	Collapsing seams: the search for truth as an ethical obligation in the montage of voices in <i>country of my skull</i> and <i>the cry of Winnie Mandela</i> <b>R. Rotich, E. V. Iliava, D. G. Kweya &amp; J. Ogude</b>
0400hrs-0415hrs	Yield and yield components of sorghum, soil chemical properties and nutrient use efficiency as affected by integrated soil fertility, and soil and water management practices in Tharaka-Nithi County <b>Oduor, O. N., Mugendi, N. D., Mucheru-Muna, M., Mugwe, N. J., Sijali, I., R. Merckx &amp; D. Jan</b>		The death deodorant: a frame analysis of selected obituaries in Kenya's print media <b>R. M. Gacheiya C. W. Kitetu &amp; F. Chai</b>
0415hrs-0430hrs	Effects of treating <i>prosopis juliflora</i> pods with multi-enzyme, with and without bacterial cultures on in-vitro dry matter digestibility (ivdmd), fermentation kinetics and performance of growing pigs <b>D. Marii, O. Kashongwe, &amp; A. Kingori</b>		Doctors" and "Professors" conceptualization of social problems in Kenya; evidence from the streets of three Kenyan cities and its policy implications <b>O. E. Okumu</b>

## END OF DAY TWO

## CONFERENCE DAY THREE FRIDAY 25<sup>TH</sup> MARCH 2022

MORNING SESSION		ACTIVITY	
7 <sup>th</sup> - 18 <sup>th</sup> March 2022		E-REGISTRATION: Zoom Link/ <a href="http://euconference.egerton.ac.ke">euconference.egerton.ac.ke</a>	
0800hrs-0815hrs EAT	Participants log in and Online Reception Networking via Chat Room	Prof. Moturi Wilkister Mr. Kiganda Peter	
0815hrs-0830hrs	<b>Opening Session</b> <ul style="list-style-type: none"> <li>National, EAC, Egerton University Anthems</li> <li>Prayer, Housekeeping announcements</li> <li>Introduction of Partners/Sponsors/Participants by Country and Organisation</li> <li><b>Recap of Day Two</b></li> </ul>	Prof. Mwangi Ndirangu,	
0830hrs-0840hrs	<b>Welcoming Remarks: Prof. Bockline O. Bebe,</b> Ag. Deputy Vice-Chancellor (Research & Extension)		
0840hrs-0905hrs	<b>Keynote Address: Ms. Jane W. Muriu</b> <i>Department of Water, Environment Energy &amp; Natural Resources (Nakuru County)</i> Nakuru County Environmental Related Strategies to Enhance Resilience and Sustainability of Natural Resources		
0905hrs-0925hrs	<b>Q and A</b>		
0925hrs-1000hrs	<b>BREAKOUT SESSIONS, NETWORKING AND HEALTH BREAK</b>		
<b>SUB-THEMES</b>	<b>INNOVATIONS IN CLIMATE CHANGE &amp; NATURAL RES. MANAGEMENT</b>	<b>TRANSFORMATIVE EDUCATION FOR SOCIAL –ECONOMIC ADAPTABILITY</b>	<b>ENTREPRENEURSHIP, BUSINESS AND TRADE</b>
Topics	<b>Climate Change</b>		
Moderator	Prof. Makenzi P.	Dr. Ndeke G.	Dr. Kombo H.
Rapporteur	Dr. Kirui B.	Dr. Barmao A.	Dr. Bosire M.
1000hrs-1015hrs	Impact of climate change mitigation strategies on small holder farmers' agricultural production in arid and semi-arid regions in Kenya <b>G. V. Khisa</b>	A theoretical model for predicting undergraduate students' adoption of e-learning in Kenya's public universities <b>D. M. Getuno, F. N. Keraro, E. K. Maritim &amp; K. O. Hadulo</b>	Analysis of the value chain to reduce post –harvest losses through value addition activities by smallholders' mango farmers in Kitui County, Kenya <b>E. Mugure, M. W. Ngigi &amp; J. Ochieng</b>
1015hrs – 1030hrs	Influence of indigenous knowledge-based climate change coping strategies on household food security in Baringo County, Kenya <b>S. K. Cheplogoi, M. O. Udoto &amp; J. M. Ombati</b>	Role of technical and non-technical skills on employability and job progression of Egerton university graduates of 2009-2019	Analysis of internal and external factors influencing agripreneurial orientation of cassava based small and medium agripreneurs in Kenya <b>G.M. Sambrumo, M.W.</b>

		<i>P. Wambugu, A. King'ori, A. Opiyo, J. Mafurah, M. Kyule, J. J. Mbudzya, J. M. Kanyua, P. M. Wafula &amp; N. W. Mungai</i>	<i>Ngigi, B. K. Mutai &amp; J.K. Lagat</i>
1030hrs-1045hrs	Comparative profitability and relative risk in implemented climate-smart soil practices among farmers in selected counties in Western Kenya <i>B. O. Mogaka, S. K. Ng'ang'a &amp; H. K. Bett</i>	Influence of non-governmental organizations' education interventions' on community empowerment in Nakuru County, Kenya <i>M.W. Mutiga, M.M. Mutuku, A. A. Olubandwa &amp; L.N. Kinuthia</i>	Indicators of decent work compliance in coffee production and primary processing in Kenya <i>J.M. Munyentwari, H.K. Bett &amp; R. Jerop</i>
1045hrs-1100hrs	Crop choice portfolio response to climate risks: evidence from smallholder farmers in Kisumu County, Kenya <i>H. A. Awiti, E. O. Gido &amp; G. A. Obare</i>	An investigative study on the impact of covid-19 on the preparedness of candidates for the ECDE 2020 examination: a case study of Samburu County in Kenya <i>E. Kubai</i>	Digital taxation in tackling illicit financial flow in Kenya <i>N. Ngunjiri</i>
1100hrs-1115hrs	Impact of climate change on the spread of late blight of tomato <i>C. Otieno, S. Nyalala &amp; J. Ogwenyo</i>	Influence of coronavirus on marital relationship in Kenya <i>J. Birech &amp; P. Onyango</i>	<b>15mins change over</b> <b>RESILIENCE AND RUPTURES IN GOVERNANCE AND GEOPOLITICS IN AFRICA</b> <b>Moderator</b> Dr. Onyancha B. K. <b>Rapporteur</b> Dr. Nderitu D.
1115hrs-1130hrs	Whole farm soil greenhouse gas fluxes among smallholders cropping systems in Upper Eastern Kenya <i>S. E. Lemarpe, C. M. Musafiri, J. M. Macharia, M. N. Kiboi, O., K. Ng'etich, C. Shisanya, J. Okeyo, E. A. Okwuosa, &amp; F. K. Ngetich</i>	Towards a digital transformation agenda for teaching, learning and assessment in higher education: the case of Egerton University, Kenya <i>D. M. Getuno</i>	'Woe unto to you evil scholars': Rhetorics of religious authority delegitimization in a jihadi magazine in East Africa <i>H. A. Wario</i>

1130hrs-1145hrs	The effects of land utilization types in soil greenhouse gas emissions in Western Kenya <b>E. Kibet, C. M. Musafiri, Milka Kiboi, J. Macharia, O. K Ng'etich, D. Kosgei, B. Mulianga, M. Okoti &amp; F.K Ngetich</b>	Communicative competence in African higher education classrooms: A Kenyan university case study <b>J. S. Mukuni &amp; D. M. Getuno</b>	Content analysis of Mombasa County action plan for countering violent extremism <b>E. I. Tsuma</b>
1145hrs-1200hrs		Quality education and parents' socio-economic capabilities: a perspective from secondary schools in Kiambu County, Kenya <b>N. W. K. Kihang'a, N. J. Kathuri &amp; P. M. Gichohi</b>	Geo-political impact of Kenya-USA partnership on counter-terrorism in the horn of Africa <b>S. K. Sitienei</b>
1200hrs-1215hrs			Interpreting Contemporary Embu-Mbeere Politics in the Lens of Sibling Rivalry, 1906-2021 <b>Kanyingi B., J. Mwaruvie &amp; J. Osamba</b>
1215hrs-1230hrs			The strengthening of gender responsive mechanisms for effective rehabilitation for women prisoners <b>J. Birech</b>
1230hrs-0100hrs	<b>CLOSING CEREMONY</b> <b>Closing Remarks - Prof. Bockline O. Bebe,</b> <i>Ag. Deputy Vice-Chancellor (Research and Extension)</i>  <b>Closing Address – Prof. Benard Aduda,</b> <i>Deputy Vice-Chancellor (Academic Affairs)</i>		
	<b>END OF CONFERENCE</b>		