

Draft Conference Programme

DAY ONE

Wednesday 22nd November 2017

International Conference on Ecosystem Resilience and Agricultural Productivity (ICERAP)

Livelihood Pathways under Variable and Changing Climate in sub-Saharan
Africa

Wednesday 22nd November 2017	
08:00 - 09:00	Registration
09:00 - 10:30	<p>MAIN CONFERENCE HALL</p> <p>OPENING CEREMONY <i>Moderators: Professor Frank Kansiime and PRO Makerere University</i></p>
	09:00 – 09:05: Welcome – ICERAP Chairman - <i>Professor Samuel Kyamanywa</i>
	09:05 – 09:10: Welcome remarks – NIDIC Chair – Professor Hannington Oryem-Origa
	09:10 – 09:15: Welcome remarks – Principal CAES – <i>Professor Bernard Bashaasha</i>
	09:15 – 09:25: Welcome Address by Vice Chancellor, Makerere University - <i>Professor Barnabas Nawangwe</i>
	09:25 – 09:35: Remarks by the Norwegian Ambassador to Uganda <i>Ambassador Suzan Eckey</i>
	09:35 – 09:50: Welcome remarks - Director General of NORAD – <i>Mr. Jon Lomøy</i>
	09:50 – 10:00: Cultural Entertainment – School of Liberal and Performing Arts
	10:00 – 10:30: Speech and Official Opening of the Conference – Minister for Education and Sports – <i>Hon. Mrs. Janet Museveni</i>
	Group Photo
10:30 - 11:00	Coffee/ Tea
11:00 - 13:00 PLENARY SESSION 1	<p>MAIN CONFERENCE HALL</p> <p>P1: Climate Change and Risk Management <i>Chair - Assoc. Prof. Yazidhi Bamutaze and</i></p>

	<p style="text-align: center;"><i>Dr. Edward Mwavu</i> <i>Rapporteur – Mr. Kenneth Balikowa</i></p>
	<p>1) Keynote Speaker 1: Information and Communication Technologies (ICT) for development - <i>Professor Bjorn Pehrson (KTH Royal Institute of Technology. Stockholm)</i></p>
	<p style="text-align: center;">NORHED, Research Leadership and Capacity Building in Developing Countries</p> <p>2) Adaptive Leadership and Capacity Building in Multicultural Research Settings: Lessons from</p> <ol style="list-style-type: none"> a. CAPSNAC– <i>Samuel Kyamanywa</i> b. REDD-EA - <i>John Tabuti</i> c. WASO-Africa – <i>Edward Klrumira</i> d. WIMEA – <i>Julianne Sansa Otim</i> <p>3) Gender Concerns in NORHED projects at Makerere Univeristy: Emerging Issues and Lessons for Future Institutional Collaboration – <i>Gorettie Nabanoga</i></p> <p>4) NORAD and NORHED – Future Funding Processes, Thematic Areas and Collaborations – <i>Samuel Kyamanywa</i></p>
13:00 - 14:00	Lunch Break
	<p style="text-align: center;">Parallel Session 1 Main Conference Hall Adaptation(s) to Climate Change <i>Chair: Dr. Florence Birungi Kyazze</i> <i>Rapporteur: Mr. Lazarus Lugoi</i></p>
14:00-15:30 Parallel Sessions	<ol style="list-style-type: none"> 1. Farmer Technological Options to Adapt to Climate Variability among Small-Holder Farmers in Namutumba and Manafwa Districts, Eastern Uganda - <i>Kyazze, F.B., Mukwaya, P., Talwana, H. and Kyamanywa S.</i> 2. Determinants of Use of Strategies that Build Smallholder Farmers' Resilience to Rainfall Variability in Mt. Elgon Region, Eastern Uganda - <i>Narisi Mubangizi, Florence Birungi Kyazze and Paul Mukwaya</i> 3. Effectiveness of Climate Variability Adaptation Strategies and Farmer's Well-Being - <i>Allan, T, Urassa, J, K, and Jumanne, A. M.</i> 4. On Pathways and Transitions in Participatory Climate Change Policy Making and Development in Developing Countries: Drivers and Concerns in Uganda – <i>Paul Isolo Mukwaya</i>

	<p>5. Climate and Land Cover Change in Kapoeta, South Sudan: Implication for Livestock Grazing Resources - <i>Francis Alex Onono</i></p>
	<p style="text-align: center;">Parallel Session 2 Room/Hall 1 Meteorological Instrumentation and Computational Meteorology <i>Chair: Dr. Julianne Sansa Otim</i> <i>Rapporteur: Mr. Isaac Mugume</i></p>
	<ol style="list-style-type: none"> 1. Installation and Configuration of an Automatic Weather Station at Julius Nyerere International Airport - <i>Daudi Mboma, Ombeni Mnzava, Emmanuel Kondela, Amos Nungu and Joseph W Matiko</i> 2. Classical and Bayesian Markov Chain Monte Carlo Modeling of Extreme Rainfall in Dar es Salaam, Tanzania - <i>Imani Kapungu, Narsis Mtega, and Edwin Rutalebwa</i> 3. Comparative Approach Techniques for Computation Task Migration between High Performance Computing Nodes - <i>Selestine Justus and Joseph W Matiko</i> 4. A Comparative Analysis of Weather Data from Conventional and Automatic Weather Stations in Tanzania - <i>Odilia Macha, Ambele Mtafya, Sizah Mwalusepo, Habiba Mtongori, Amos Nungu, Joseph W Matiko</i> 5. Condition Monitoring and Reporting Framework for an Automatic Weather Station - <i>Mary Nsabagwa, Julianne Sansa Otim, Isaac Mugume, Yenusu Kiryamwibo, Robert Kasumba, Joshua Muhumuza</i>
	<p style="text-align: center;">Parallel Session 3 Room/Hall 2 Climate Change, Carbon and Forestry <i>Chair: Professor John Tabuti</i> <i>Rapporteur: Mr. Narisi Mubangizi and Ms. Esther Kemigisha</i></p>
	<ol style="list-style-type: none"> 1. The Potential of Agroforestry Farming Systems to Sequester Carbon for Small-Holder Farmers in Namutumba and Manafwa Districts, Eastern Uganda - <i>Nabanoga G., F. Birungi-Kyazze and J. Namaalwa</i> 2. A Model for Estimating Above-Ground Carbon Stock Changes in Mabira Central Forest Reserve – <i>Juma Katongole</i>

	<ol style="list-style-type: none"> 3. Determinants of household participation in forestry carbon projects in Uganda: Unlocking poor peoples’ potential for REDD+ uptake - <i>K. Aganyira, R. Kabumbuli, V. Muwanika, J.R.S. Tabutia and D. Sheilc</i> 4. Field Evidence on Greenhouse Gas Emission in Organic and Conventional Cotton Farming Systems in Tanzania - <i>Bwana, T. N., Amuri, N.A., Olesen, J.E. and Semu, E.</i> 5. The contribution of small-holder farmers to increasing tree cover in Kaliro District, Uganda - <i>Cory Whitney, Derrick Kisegu, David Kagaha and John R.S. Tabuti</i> 6. Free, prior and informed consent for a REDD+ pilot project: Implications for sustainability - <i>Philemon Kirunda Mukisa, David M. Tumusiime, Christian Webersik, Emma Liwenga and John RS Tabuti</i>
15:30 - 16:00	Coffee/Tea Break
16:00 – 17:00 Parallel Sessions	Parallel Session 4 Main Conference Hall Ecosystems Productivity <i>Chair: Dr. Asgeir Almas</i> <i>Rappoteur: Ms. Ellen Kayendeke</i>
	<ol style="list-style-type: none"> 1. Diversity of Large Mammals in Awash National Park and its Ecosystem Role and Biodiversity Conservation, Ethiopia - <i>Sintayehu W. Dejene</i> 2. Diversity and Biomass of Livestock Forage under Selected Tree Species in Open Grazing Systems in South Rangelands Agro-Ecological Zone of Uganda - <i>D. Nabasumba, G.Beyihayo Akiiki, R. Muzira, S. Natuha and G. Tugume</i> 3. Impact of Human Activities on Diversity and Distribution of Large Mammal in Nimule National Park –South Sudan - <i>Gordon S. Abdallah, Mwavu E and Kityo R.</i> 4. Seasonal Variability of Pasture Biomass Resources for Grazers in Karamoja Sub-Region - <i>Buyinza Ambrose and Shuaib Lwasa</i> 5. Ecology of the Savanna Elephant in Nimule National Park, South Sudan: Elephant Dung Plant Seeds Germination, Dung Beetle Community and Genetic Variation - <i>Lado, T. F., Stephen, A. A., Jibi, W. F. and Moilinga, P. T.</i>
	Parallel Session 5 Room/Hall 1 Weather and Climate Change Modeling

Chair: Assoc. Prof. Ssetumba Mukasa

Rapporteur: Narisi Mubangizi

1. Modelling Climate Trends across the East African region – *Yazidhi Bamutaze and Geoffrey Sabiiti*
2. Assessing the Influence of Indian Ocean Dipole on Monthly Rainfall - *Sam Ogwal and Isaac Mugume*
3. Climate Change Hotspots and Rain-fed Cropping Systems - L. P. Lugoi, Y. Bamutaze, V. Martinsen ; Ø. Dick, Å. R. Almås
4. Sensitivity of WRF Heavy Rainfall Simulations to Selected Cloud Microphysical Parameterization – *Ronald Opio, Isaac Mgume and Alex Nimusiima*

Parallel Session 6

Room/Hall 2

Gender, Climate Change and Resilient Livelihoods

Chair: Assoc. Prof. Gorettie Nabanoga

Rapporteur: Mr. Kenneth Balikowa

1. Gender Roles and Gendered Adaptation Strategies in Small Scale Fishery in Malawi under the impact of Climate Change - *Moses Majid Limuwa, Gry Synnevå*
2. Gender Stereotyping? Evidence from Gender Differentiated Household Vulnerability to Climate Change in Eastern Uganda - *Kenneth Balikoowa, Gorettie Nabanoga and David Mwesigye Tumusiime*
3. Gender Forest Management, Agro forestry and Climate Change Mitigation and Adaptation Measures - *Peter Fuuna*
4. Gender Roles in Climate Change Adaptation: A case study of the Livestock Water Provision in Wabinyonyi Sub-County, Nakasongola District: Uganda - *Prossy Nakibengo, Dauda Waiswa and Margaret Kyakuwa*
5. A Gender Analysis of Benefit Sharing Mechanisms in Climate Change Mitigation Efforts in Mt. Elgon Region in Uganda - *Batuusa Mariam and Prof. JRS. Tabuti*
6. Pathways of addressing Gender-based Constraints for Equitable and Sustainable Participation in Profitable Crop Value Chains. - *Mnimbo. T. S, Lyimo-Macha. J, Urassa, J.K and Mutabazi. K*
7. The Contribution of ASSP to Socio-economic Empowerment of Rural Women in Zanzibar, Tanzania - *Sikira, A.N and Fakhj, A*

Conference Cocktail

DAY TWO

Thursday 23rd November 2017
International Conference on Ecosystem Resilience and
Agricultural Productivity:
Livelihood Pathways under Variable and Changing Climate in sub-Saharan
Africa

Thursday 23 rd November 2017	
09:00 -10:30 Parallel Sessions	Parallel Session 7 Main Conference Hall Climate Change Information and Knowledge Management <i>Chair: Assoc. Prof. Herbert Talwana</i> <i>Rappoteur: Dr. Agnes Sirima</i>
	<ol style="list-style-type: none"> 1. Use of Indigenous Knowledge as a Strategy to Forecast Rainfall Patterns among Smallholder Farmers in Namutumba and Manafwa Districts, Eastern Uganda - <i>Kyazze, F.B., Mubangizi, N., Mukwaya, I. P. & Kyamanywa Samuel</i> 2. ICT for Weather Information Dissemination: The way to Improved Agricultural Productivity - <i>Doreen Tuheirwe-Mukasaa, Magne Haveraaenb, Julianne Sansa-Otima, Benjamin Kanagwaa, Kagwa Andrew-Juniora, Godfrey Rwamahe Mujunic</i> 3. Experiences and Challenges of Integrating Weather Information in a single Repository: A case of building a Weather Data Repository for Uganda, Tanzania and South Sudan - <i>Mwesigwa Andrew, Mary Nsabagwa, Julianne Sansa Otim, Joshua Muhumuza, Jovan Muteesasira, Martha Nakuwanda</i> 4. Effectiveness of Communication Channels on Knowledge and Adoption of Improved Common Bean Technologies among Smallholder Farmers' in Tanzania - <i>Charles Byalugaba Lugamara, Justin K. Urassa, Paul Martin Dontsop Nguezet and Cargele Masso</i> 5. Membership dynamics and Socio economic determinants in Forest User Group: Evidence from Collaborative Forest Management around Mabira Forest Reserve, Uganda – <i>Edmand Aryampika</i> 6. Natural and Socio-Economic Resource Base Assessment and Climate Change Adaptation and Mitigation in Wonchi District, Ethiopia: Reflections on Some Observed Gaps in Data

	<p>acquisition - <i>Tamrat Bekele, Zemedede Asfaw, Zerihun Woldu¹ and Habtamu Chekol</i></p>
	<p style="text-align: center;">Parallel Session 8 Room/Hall 1</p> <p style="text-align: center;">Soil Health and Natural Resource Management <i>Chair: Assoc. Prof. Twaha Basamba Ateenyi</i> <i>Rappoteur: Mr. Julius Bakadi</i></p>
	<ol style="list-style-type: none"> 1. Hydrocarbons in Crude-oil production sites of Sudd-region South-Sudan: Implication on soil fertility and plant species risk - <i>Ruley Jane Alexander, Alice Amondong, J.B.Tumuhairwe, Oryem-Origa</i> 2. Linkage of Soil Conservation in Small-Holder Farming Systems to Market Access - <i>R. Muzira, J.S. Tenywa, T. Basamba and B. Vanlauwe</i> 3. Phosphorous Use Efficiency and Factors Controlling the Fluxes and Deliveries of labile in Soil Solution - <i>Asgeir Rossebo Almas</i> 4. Soil Organic Carbon and Nitrogen Stocks under Different Land Uses in Ethiopia - <i>Bal Ram Singh and Aweke M. Gelaw</i> 5. Physical and Chemical Soil Properties that Favour to Cassava Yield in Central Uganda - <i>Omaidi, G.C., Kwebiha, A. and Mukasa, S.B.</i>
	<p style="text-align: center;">Parallel Session 9 Room/Hall 2</p> <p style="text-align: center;">People, Landscape Transformations and Land Management <i>Chair: Assoc. Prof. Edward Mwavu</i> <i>Rappoteur: Mr. Juma Obura</i></p>
	<ol style="list-style-type: none"> 1. Influence of Land use Patterns and Cover Change on Flow of Ecosystem Goods and Services - <i>Halima O. Mangi and Justin K. Urassa</i> 2. Dynamics of Land Use and Land Cover in a Commercial Sugar Cane Growing and Implications for Food Security: Case Study of Busoga Sub-Region- Eastern Uganda - <i>Nybong M. P. Ajang, Waiswa D and Mwavu E.</i> 3. Is small still beautiful? The farm size-productivity relationship revisited in Kenya - <i>Milu Muyanga and T.S. Jayne</i> 4. Natural Resources and Livelihood Sources in Wonchi District: Farmers' Perspectives Captured in Household Baseline Survey - <i>Zemedede Asfaw, Habtamu Chekol, Zerihun Woldu and Tamrat Bekele</i>

	5. Measuring Extent of Restoration Using Coffee (Coffee arabica L.) as a Bioassay Plant Species - <i>Habtamu Chekol</i>
10:30 - 11:00	Coffee/ Tea Break
11:00 - 13:00 PLENARY SESSION 2	<p style="text-align: center;">MAIN CONFERENCE HALL P2: Ecosystem Sustainability and Natural Resource Management <i>Chair: Professor John Tabuti</i> <i>Rapporteur: TBA</i></p>
	1) Keynote speaker 2:Professor Rattan Lal
13.00 – 14:00	Lunch Break
14:00 - 15:30 Parallel Sessions	<p style="text-align: center;">Parallel Session 10 Main Conference Hall Water, Wetland Ecology and Watershed Management <i>Chair: Prof. Zemedu Asfaw</i> <i>Rapporteur: Ms. Susan Lado</i></p> <ol style="list-style-type: none"> 1. Impact of land-use change on seasonal flow regime in an upland watershed (Nyangores, Mara River basin, Kenya) - <i>Hosea Mwangi, Karl-Heinz Feger, Stefan Julich</i> 2. Influence of Inundation level on Plant Distribution in a Papyrus Wetland within the Lake Kyoga basin, Uganda - <i>Ellen. J. Kayendeke, Frank Kansime, Yazidhi Bamutaze, Helen K. French</i> 3. Species composition and diversity of riparian vegetation along the Walga River - <i>M. Meragiaw, Z. Woldu, B.R. Singh, and V. Martinsen</i> 4. Evaluation of water quality Status of wetlands and the implication for Ecological health in case of Wonchi District, Oromia Region, Ethiopia - <i>Balew Yibel Zeleke</i> 5. The role of papyrus wetland levels in groundwater-surface water interaction on a local scale – <i>Helen K. French and Ellen Kayendeke</i>
	<p style="text-align: center;">Parallel Session 11 Room/Hall 1 Resilient Agricultural Systems <i>Chair: Prof. Hellen French</i> <i>Rapporteur: Ms. Olga Ayiya</i></p>

	<ol style="list-style-type: none"> 1. Helminths Diversity and Transmission Patterns among Wild and Cultured <i>Clarias Gariepinus</i> in Central Uganda - <i>Lado S. Alfred, Masembe C and Akoll P.</i> 2. Design of an Integrated Ox-Drawn Plough, Planter and Cultivator for Small-Scale Maize Farming in Uganda - <i>Juma Obura</i> 3. Intensification of Sorghum and Pearl Millet Production in the Sahelian and Sahel-Sudanian Climatic Zones of Mali - <i>Adama Coulibaly and Jens B. Aune</i> 4. Sustainable Agricultural Intensification and its implications to Ecosystem Health in Ithemi Cluster - <i>Agnes Sirima, Japhet J. Kashaigili, Reuben M.J. Kadigi, Felix Kamau, Anna Sikira and Winfred Mbungu</i> 5. Optimizing Climate Smart Agriculture practices to enhance productivity and resilience of smallholder maize-based cropping systems to climate variability in Eastern Uganda - <i>Olga Ayia Charles</i> 6. Effects of Irrigation on Maize Growth and Yield under Different Fertilizer Levels in Wakiso District, Uganda - <i>E. Tukube, N. Kiggundu and J. Wanyama</i>
<p>Parallel Session 12 Room/Hall 2</p> <p>Agricultural Production, Food and Energy Security Chair: Dr. Pasquale Moilinga Rapporteur: Mr. Juma Obura</p>	
	<ol style="list-style-type: none"> 1. Livestock production in and around Mabira forest reserve, Uganda - <i>Dorothy K. Nampanzira, Constantine B. Katongole and John R. S. Tabuti</i> 2. Rethinking the Role of Farmers in Cassava Breeding: An Assessment of Farmer Preferred Traits and Selection Criteria for Cassava Varieties in Eastern Uganda - <i>Mukebezi, R., Mukasa, S. B., Kyazze, F. B., Obaa, B., Opolot, D., Kapiriri, M.N. and Masa, H.</i> 3. Composition and properties of <i>Dioscorea dumetorum</i> (Kunth Pax) and <i>Dioscorea shimeriana</i> (Kunth) of wild yam species in Metu - Moyo District Uganda - <i>Sauda Dehiya Wawa Musa</i> 4. Development of a Weaning Porridge composite flour for Children aged 6-59 Months - <i>Felix Vigilio Kenyi Tombe</i> 5. Adoption of Recommended Maize Production Practices and Productivity among Farmers in Morogoro District, Tanzania - <i>Consolatha J. Gahanga and Justin K. Urassa</i> 6. Impacts of Climate Change on Household Food Availability in Rajaf and Nyarkenye Counties, South Sudan - <i>Sandra Mikelele</i>

15:30 – 16:00	Coffee/ Tea Break
16:00 - 17:30 Parallel Sessions	Parallel Session 13 Main Conference Hall Ecosystems Services and Functioning <i>Chair: Professor Bal Ram Singh</i> <i>Rapporteur: Ms. Ellen Kayendeke</i>
	<ol style="list-style-type: none"> 1. Understanding Seasonality of browse herbage in Karamoja region, Uganda - <i>Benon. B. Nabaasa, Shuaib Lwasa, Ambrose Buyinza</i> 2. The status of giraffe in Ethiopia: searching for the elusive southern populations; a potentially unique genetic assemblage - <i>Tilaye Wube Hailemariam</i> 3. The Extent of Illegal Hunting of Wildlife Animals in the Sudd Region of South Sudan - <i>Jubara Nadlin, Vincent Muwanika, Thomas Lado.</i> 4. Fish and water provisioning to the local community by Naigombwa wetland in Iganga District, Uganda - <i>Ohitai, D. O. J; Were, D., Semyalo, R. and Kansiime, F.</i> 5. Ecological Sustainability: Miombo Woodland Conservation with Livestock production in Tanzania - <i>Peter Rogers Ruvuga, Ismail Said Seleman and Anthony Zozimus Sangeda</i> 6. Assessment of the impact of the type of Matrix on bird seed dispersal ecosystem service in Mabira Central Forest Reserve - <i>Kalindi Sadat, Assoc Prof. Vincent Muwanika, Dr. Esaete Josephine</i>
	Parallel Session 14 Room/Hall 2 Agricultural Production, Food and Energy Security <i>Chair: Associate Professor Denis Mpairwe</i> <i>Rapporteur: Ms. Susan Lado</i>
<ol style="list-style-type: none"> 1. Status of Sustainable Land Management in Pasture Production Systems in South Western Agro-Ecological zone of Uganda: Implications for Resilience of Livestock Production Systems - <i>G. A. Beyihayo, D. Nabasumba, R. Muzira, H. Kirunda</i> 2. The Economic Contribution of Frankincense in Drought-prone areas of Southern Ethiopia - <i>Yonas Berhanu, Jens B. Aune, Ayana Angassa</i> 	

	<ol style="list-style-type: none"> 3. An Econometric Analysis of Charcoal Consumption in Three Urban Centers of Tanzania - <i>G.Z. Nyamoga, Y.M. Ngaga, R. Malimbwi, B. Solberg, H. K. Sjølie and Greg Latta</i> 4. Profitability of Smallholder Cassava Bioethanol Production: a case for Northern Uganda - <i>Deogracious Opolot, Settumba Mukasa, Johnny Mugisha, John Ilukor</i> 5. The Distribution and Uses of the Genus Amaranthus in Ethiopia - <i>Mekbib Fekadu</i> 6. Besides Physical Scarcity: A Social Analysis of Water Scarcity in Rural Rakai District, Uganda – <i>Innocent R. Kamywa and Dauda B. Waiswa</i>
	<p>Parallel Session 15 Room/Hall 1</p> <p>Starting and Finishing Graduate Studies Mentoring and Networking Session <i>Chair: Professor Kyamanya</i> <i>Rapporteur: Mr. Narisi Mubangizi</i></p>
	<p>Reflections from:</p> <ol style="list-style-type: none"> 1. Professor John Tabuti 2. Dr. Julianne Sansa-Otim 3. Professor Edward Kirumira 4. Dr. Hellen K. French 5. Professor Bal Ram Singh 6. Assoc. Professor Gorettie Nabanoga <p>[Participants are graduate students at the conference]</p>
<p>17:30 – 18:30 Summary, Closing and Outlook Plenary</p>	<p>Closing Ceremony Main Conference Hall <i>Chair: Professor Kyamanya</i> <i>Rapporteur: Mr. Kenneth Balikowa</i></p> <p>Roundtable and Summary of Main Conference Activities</p> <ol style="list-style-type: none"> 1. Closing Remarks – ICERAP Scientific and Publications Committee - <i>Professor Frank Kansiime</i> 2. Closing remarks – NIDIC Chair – <i>Professor Hannington Oryem-Origa</i> 3. Closing remarks – Principal CAES – <i>Professor Bernard Bashaasha</i> 4. Closing Address by Vice Chancellor, Makerere University - <i>Professor Barnabas Nawangwe</i>

19:00 hours

Conference Dinner

Cultural Entertainment – School of Liberal and Performing Arts