

International Conference on Environment & Society (EAS)

2022 International Conference on Water, Food and Energy Security: The Role of Science and Communities in Post War Reconstruction

July 4-5, 2022
Sapphire Addis Hotel, Addis Ababa, Ethiopia

Day 1: Monday, July 4, 2022

Time (Eth)		Combined Session: Amber Hall (Ground Floor)
8:00 AM - 8:05 AM		Organizing Committee Welcome (Assefa M. Melesse, Conference Chair)
8:05 AM - 8:20 AM		Opening Speech: H.E. Dr. Habtamu Itefa, Minister Ministry of Water and Energy
8:20 AM - 8:50 AM		Keynote Speech: The Nile River development and management - a need for a new approach Moderator: Assefa M. Melesse
		Prof. Yilma Seleshi - Addis Ababa University
8:50 AM - 9:00 AM		Strengthening Partnership and Collaborations to Address the Water-Food-Energy Nexus Challenge in Ethiopia: AEWM's Perspective
		Speaker: Dr Feleke Beshah - ACEWM
9:00 AM - 9:10 AM		The Role of Ethiopian Space Science and Geospatial Technology Sector for Contributing the Sustainable Development Program of Ethiopia (ESSTI)
		Speaker: Mr. Abdisa Yilma, Director of ESSTI
9:10 AM - 9:20 AM		The Alliance of Biodiversity and the International Center for Tropical Agriculture (CIAT): Major Research Areas and Initiatives
		Speaker: Dr Lulseged Tamene , Alliance Bioersivity International – CIAT
	Paper No.	Amber Hall (Ground Floor)
9:20 AM-12:10 PM		The Nile and GERD (Moderator: Assefa M. Melesse)
9:20 AM - 9:40 AM	T01	An analysis of water development pathways in Ethiopia (basins, groundwaters, urban and pastoralist contexts): Where to now?
		Invited Speaker: Prof. Seifu Kebede - University of Kwazulu
9:40 AM - 10:00 AM	T03	The Hydro-Politics of Green, Blue, Grey, Virtual Water and Water Footprint in the Nile Basin
		Author: Dr Wossenu Abteu - Water and Environment Consulting LLC
10:00 AM -10:30 AM		Coffee Break
10:30 AM -10:50 AM	T04	Developing Nile as 21st Human Project: Assessing Goldilocks Conditions for Nile Hydro- solidarity and Shared Responsibility
		Author: Dr Semu Moges - Dallas, Texas, Senior Hydrologist
10:50 AM -11:10 AM	T05*	Reservoir induced land use/land cover change and its impact on GERD environment: The case of GERD catchment, Ethiopia
		Authors: Paulos Lukas - Arba Minch University; Tamirat Solomon
11:10 AM -11:30 Am	T06	Rainfed Agriculture in the Blue Nile Basin and the Grand Renaissance Dam (GERD) Negotiations
		Author: Dr Wossenu Abteu - Water and Environment Consulting LLC; Assefa M. Melesse; Mekdelawit Messay Deribe
11:30 AM -11:50 AM	T07	Impact of climate change on the Nile Basin

		Authors: Dr Shimelis Setegn - SFWMD/Florida International University; Assefa M. Melesse
11:50 AM -12:10 PM	T08	The dynamics of farmer migration and resettlement in the Dhidhessa River Basin, Ethiopia
		Authors: Meseret Teweldebrhan - Haramaya University; Saket Pande; Michael McClain
12:10 PM -1:00 PM		Lunch Break
1:00 PM - 4:10 PM		Water Management I (Moderator: Berhan Awoke)
1:00 PM -1:20 PM	T09*	Soil erosion, sediment yield and runoff modeling of Megech watershed using physically based GeoWEPP
		Authors: Mulugeta Admas - Addis Ababa Science and Technology University; Assefa M. Melesse; Brook Abate
1:20 PM - 1:40 PM	T10*	The Transboundary Watercourse Management under International Law: The Comparative Cases of Tigris-Euphrates and Nile River Basin
		Authors: Yusuf Ali Mohammed - Anadolu University; Yücel ACER
1:40 PM - 2:00 PM	T11	Operational Strategies to Mitigate Adverse Effects of Water Shortages and Excesses
		Author: Belay Muluneh Imru - Allied Consulting Engineers and Scientists LLC
2:00 PM - 2:20 PM	T12	Forecasting Water Levels using Artificial Neural Network
		Authors: Fatema Habeeb - Sudan Ministry of Irrigation and Water Resources; Ashraf Osman Ibrahym
2:20 PM - 2:40 PM	T13	Hydrometereological Data monitoring network and database
		Author: Dr Wossenu Abteu - Water and Environment Consulting LLC
2:40 PM - 3:00 PM	T14	Building Earth Observation Technological Capabilities to Enhance Sustainable Water Development for the Betterment of Humanity in Ethiopia
		Author: Dr Berhan Awoke - Ethiopian Space Science and Technology Institute
3:00 Pm - 3:30 PM		Coffee Break
3:30 PM - 3:50 PM	T68*	Hydrologic Responses to Climate and Land Use/Cover Changes in Bilate Catchment, Southern Ethiopia
		Authors: Hailu Kuma - Civil and Environmental Engineering, Jimma Institute of Technology, Jimma University; Fekadu Fufa Feyessa; Tamene Adugna Demissie
3:50 PM - 4:10 PM	T92	Storage variation from 1984-2021 in water supply reservoirs of Addis Ababa – remote sensing-based approach
		Author: Tilaye Worku Bekele - International Water Management Institute (IWMI)
		Co-author: Alemseged Tamiru Haile
4:10 Pm – 5:40 PM		Joint Panel Discussion: The Nile and GERD
		Moderator: Assefa M. Melesse
		Panelist: Prof. Yilma Seleshi
		Panelist: Dr. Belete Berhanu
		Panelist: Dr. Alem Gebriel
		Panelist: Dr. Semu Moges
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		Speaker: Dr Feleke Beshah - ACEWM
9:00 AM - 9:10 AM		The Role of Ethiopian Space Science and Geospatial Technology Sector for Contributing the Sustainable Development Program of Ethiopia (ESSTI)
		Speaker: Mr. Abdisa Yilma, Director of ESSTI
9:10 AM - 9:20 AM		The Alliance of Biodiversity and the International Center for Tropical Agriculture (CIAT): Major Research Areas and Initiatives
		Speaker: Dr Lulseged Tamene , Alliance Bioersivity International – CIAT
	Paper No.	Dravite Hall (First Floor)
9:20 AM - 4:30 PM		Natural Resources I (Moderator: Solomon Gebreyohannis & Temesgen Enku)
9:20AM - 9:40 AM	T80*	Application of GIS and RS Technique for Soil Loss estimation with Integrated RUSLE in Fincha Catchment, Ethiopia
		Authors: Gutema Debelo - Addis Ababa Science and Technology; Assefa M. Melesse; Getachew Tegegne
9:40 AM-10:00 AM	T17*	Spatial and temporal Variation of Soil Respiration under Different Land Uses in Northwest Ethiopia
		Authors: Genetu Fekadu - Bahir Dar University; Enyew Adgo; Derege Tsegaye Meshesha; Atsushi Tsunekawa
10:00 AM -10:30 AM		Coffee Break
10:30 AM -10:50 AM	T18	Soil fertility status of highland maize production areas of West Shoa Zone, Central Highlands of Ethiopia
		Authors: Bahiru Adisu - Haramaya University; Nigussie Dechassa; Tamado Tana; Lemma Wogi
10:50 AM -11:10 AM	T19*	Optimum soil bund spacing cost-benefit analysis in a midland agro-ecological region of Ethiopia
		Authors: Simeneh Demissie - Bahir Dara University; Derege Tsegaye Meshesha; Enyew Adgo; Nigussie Haregeweyn
11:10 AM -11:30 AM	T20	Soil Loss Rate Mapping and Severity Analysis by RUSLE model Using GIS in Tashat Watershed, Northwestern, Ethiopia
		Authors: Mequanent Mengie - Ethiopian construction design & supervision works corporation; Derege Yonas Gebresilasie Hagos; Tesfa Gebre Andualem; Demelash Ademe Malede
11:30 AM -11:50 AM	T21*	Implications of land management practices on selected ecosystem services in the agricultural landscapes of Ethiopia
		Authors: Abera Assefa Biratu - Haramaya University; Bobe Bedadi; Solomon Gebreyohannis Gebrehiwot; Tilahun Hordofa; Desale Kidane Asmamaw; Assefa M. Melesse

11:50 AM -12:10 PM	T22X	Impact of Land Use and Land cover Change on Land surface Temperature Variation in the Case of Lake Tana Basin, Ethiopia
		Authors:Dr Bisrat Kifle - Ethiopian Civil Service University; Gizaw Mengistu Tsidu
12:10 AM -1:00 PM		Lunch Break
1:00 PM - 1:20 PM	T23*	Soil Erosion Risk Assessment—A Key to Conservation Planning in the East Hararghe Zone, Ethiopia
		Authors: Gezahegn Woldu ; Berhan Gessesse; Tesfamariam Engida Mengesha; Kalid Hassen
1:20 PM -1:40 PM	T24*X	Response of soil nutrient flows, balances and use efficiency to polyacrylamide and other soil amendments in a sub-humid tropical environment
		Authors: Temesgen Mulualem ; Enyew Adgo; Derege Tsegaye Meshesha
1:40 PM - 2:00 PM	T16*	Modelling soil fertility using spectral reflectance in Upper Blue Nile Basin
		Authors: Gizachew Tiruneh - Bahr Dar University; Derege Tsegaye Meshesha; Nigussie Haregeweyn
2:00 PM - 2:20 PM	T26*	Changes in mycoflora of maize (Zea mays L.) grain stored at different initial moisture contents and agro-ecologies
		Authors: Habtamu Gebremichael Daba - Ethiopian Institute of Agricultural Research (EIAR); Mulugeta Admasu Delele; Solomon Workneh Fanta; Nigus Gabbaye Habtu
2:20 PM - 2:40 PM	T27*	Scenario Analysis of the Prospect of Water-Energy-Food (WEF) Security in Ethiopia by 2030 and 2050
		Authors: Megersa Tesfaye - Addis Ababa University; Semu Ayalew Moges; Zeleke Agide Dejen
2:40 PM - 3:00 PM	T28	The Impact of Weather and Climate Extremes on Air Quality and Water Quality
		Author: Dr Solomon Billign - North Carolina A&T State University
3:00 PM -3:30 PM		Coffee Break
3:30 PM - 3:50 PM	T25	Life Cycle Assessment of Reinforcing Bar Manufacturing from Scrap Materials: A Case Study on the Ethiopian Metal Industries
		Authors: Tefera Fente - Bahir Dar University; Wim Dewulf; Assefa Asmare
3:50 PM - 4:10 PM	T56	Bacterial endophytes of climate smart Brachiaria grass in Ethiopia
		Authors: Goshu Misganaw - Hawassa University; Collins Mutai; Sita Ghimire
4:10 PM - 4:30 PM		
4:10 PM – 5:40 PM		Joint Panel Discussion: The Nile and GERD
		Moderator: Assefa M. Melesse
		Panelist: Prof. Yilma Seleshi
		Panelist: Dr. Belete Berhanu
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		Speaker: Mr. Abdisa Yilma, Director of ESSTI
9:10 AM - 9:20 AM		The Alliance of Biodiversity and the International Center for Tropical Agriculture (CIAT): Major Research Areas and Initiatives
		Speaker: Dr. Lulseged Tamene , Alliance Bioversity International – CIAT
	Paper No.	Pearl Hall (9th Floor)
9:20 AM -10:50 AM		Post War Reconstruction (Moderator: Getachew Tegegne)
9:20 AM - 9:40 AM	T30*	Households' Food Insecurity and the Responses to Shocks: Evidences from Bahir Dar and Gondar Cities of the Amhara Region, Ethiopia
		Author: Dersolegn Mekonen - Bahir Dar University
9:40 AM - 10:00 AM	T31*	War in Ethiopia and its consequence on rural development
		Author: Fentaw Teshome - Bahir Dar university and Injibara university
10:00 AM -10:30 AM		Coffee Break
10:30 AM - 10:50 AM	T32	Challenges of humanitarian action in post-conflict development in the new security environment
		Author: Fiseha Moreda - Addis Ababa University
10:50 AM - 4:10 PM		Irrigation and Food Production Moderators: Tena Alamirew & Fasikaw Atanaw
10:50 AM - 11:10 AM	T40*	Analysis of Water-Energy-Crop Nexus Indicators in Irrigated Sugarcane of Awash Basin, Ethiopia
		Authors: Yusuf Kedir - AAI; Belete Berhanu; Tena Alamirew
11:10 AM - 11:30 AM	T34*	Improving climate resilience agronomic practice through characterizing rainfall and temperature trends and variability in the Koga watershed, Northwest Ethiopia
		Authors: Abebe Zeleke - University of Gondar; Kindie Tesfaye; Tilahun Tadesse; Teferi Alem
11:30 AM - 11:50 AM	T35	Evidence of a vicious cycle of climate change and agriculture in Northern Ghana
		Authors: Dr. Nana Ama Browne Klutse - University of Ghana; Kwadwo Owusu; Eric Dominic Forson

11:50 AM - 12:10 AM	T36	Land Suitability Evaluation for Surface Irrigation Using Geographic Information System and Remote Sensing. A Case Study in Didessa River Sub Basin, Western Ethiopia
		Authors: Dessalegn Obsi Gameda - Jimma University; Mitiku Badasa; Biratu Bobo Merga
12:10 PM - 1:00 PM		Lunch Break
1:00 PM - 1:20 PM	T37	First known survey on watermelon production, marketing and consumption in the central rift valley areas of Ethiopia
		Authors: Habtamu Tegen - Amhara Agricultural Research Institute; Melkamu Alemayehu; Getachew Alemayehu; Ermias Abate; Tadele Amare
1:20 PM - 1:40 PM	T38	Assessment of Water Productivity for Small Scale Irrigation Schemes under Drip and Furrow Methods at Hormat-Golina Small Scale Irrigation Scheme, East Amhara Region, Ethiopia
		Authors: Habtamu Dessalegn Gizaw - University of Gondar; Daniel Geletaw Eshetie
1:40 PM - 2:00 PM	T39	Determination of Crop Coefficients and Yield Response Factors for Different Varieties of Teff (<i>Eragrostis Tef</i>)
		Authors: Ligalem Agegn - Arba Minch University; Melkamu Ateka
2:00 PM - 2:20 PM	T74	Assessment of Selamko farm reservoir water quality using GIS Techniques in Debre Tabor, Ethiopia: Suitability for multipurpose applications
		Author: Dr. Tamru Aragaw - Arba Minch University
2:20 PM - 2:40 PM	T41	Comparative performance and improvement mechanisms of community managed irrigation scheme in selected irrigation scheme, East Gojjam Zone, Ethiopia
		Authors: Anmut Enawgaw Kassie - Debre Markos University; Alene Goshu; Esubalew Tadele
2:40 PM - 3:00 PM	T42	Effect of Rate and Timing of Nitrogen Fertilizer Application on Yield and N Use Efficiency of Highland Maize in Central Highland of Ethiopia
		Authors: Bahiru Adisu - Ethiopian Institute of Agricultural Research; Nigussie Dechassa; Tamado Tana
3:00 PM - 3:30 PM		Coffee Break
3:30 PM - 3:50 PM	T50	The causal relationship between climate change and agricultural value in Ethiopia
		Author: Dr. Mebratu Alemu Senbeta
3:50 Pm - 4:10 Pm	T67*	Estimation of Climate Change Effects on Rainfed Maize Production in Southern Ethiopia
		Author: Kinde Negessa Disasa - Ambo University
4:10 Pm – 5:40 PM		Joint Panel Discussion: The Nile and GERD
		Moderator: Assefa M. Melesse
		Panelist: Prof. Yilma Seleshi
		Panelist: Dr. Belete Berhanu
		Panelist: Dr. Alem Gebriel
		Panelist: Dr. Semu Moges
		Panelist: Dr. Wossenu Abteu

Day 2

Tuesday, July 5

Day 2: Tuesday, July 5, 2022

Time (Eth)		Combined Session: Amber Hall (Ground Floor)
8:15 AM - 8:20 AM		Today's Conference Program (Assefa Melesse, Conference Chair)
8:20 AM - 8:50 AM		Keynote Speech - Is Technology Helping Us with our Challenges in the Construction Sector in Ethiopia? If not, why not, and a way forward Dr. Ephraim Senbetta
		Moderator: Assefa M. Melesse
8:50 AM - 9:00 AM		The role of Bahir Dar University in the advancement of research in water resources management
		Speaker: Dr. Seifu A. Tilahun - Bahir Dar University
9:00 AM - 9:10 AM		Towards multifunctional and resilient systems in Ethiopia: approaches/tools, evidence, recommendation- CIAT
		Speaker: Dr. Lulseged Tamene - Alliance Bioversity International – CIAT
9:10 AM-9:20AM		Addis Ababa Science and Technology University towards Supporting National and Global Green Industry Initiatives
		Speaker: Dr. Getachew Tegegne, AASTU
	Paper No.	Amber Hall (Ground Floor)
9:20 AM - 11:30 AM		Droughts and Floods (Moderator: Alem Gebriel)
9:20 AM - 9:40AM	T90	Flood Prone Regions in Ethiopia: their Sources of Flooding and Possible Mitigation Measures
		Author: Dr. Alem Gebriel - WSP Houston, Texas
9:40 AM - 10:00 AM	T44	Flood Hazard Assessment and Mapping Using GIS integrated with Multi-criteria Decision Analysis in Upper Awash River Basin
		Authors: Yonas Hagose - Ethiopian Construction Design and Supervision Works Corporation; Mesenbet Yibeltal; Mequanent Abathun Mengie
10:00 AM - 10:30 AM		Coffee Break
10:30 AM - 10:50 AM	T71*	Impacts of climate change on the inflow flood for dam safety in the Upper Awash Sub-basin, Ethiopia
		Authors: Fekremariam Wakeyo - Addis Ababa Science and Technology University; Assefa M. Melesse; Brook Abate
10:50 AM - 11:10 AM	T47X	Knowledge of Climate Change and Adaptation: Empirical Evidence from Southern Ethiopia
		Authors: Dr. Abrham Belay Mekonnen - Bonn University; Alisher Mirzabaev; Christopher Oludhe; Lydia Olaka
11:10 AM - 11:30 AM	T43*	Trend and Temporal Variation of Droughts in East Wollega Zone, Western Ethiopia
		Authors: Teka Bekuma Abdisa - Wolega University; Girma Mamo; Alemayehu Regassa
11:30 AM- 4:10 PM		Environmental and Socio-Economic Issues (Moderator: Medhanit Mamaye)
11:30 AM - 11:50 AM	T49*	Biomass yield, nutritional value, and soil properties of grazing land as influenced by farmyard manure and enrichment planting in northwestern, Ethiopia
		Authors: Misganaw Walle - Bahir Dar University; Firew Tegegne; Yeshambel Mekuriaw; Atsushi Tsunekawa

11:50 AM - 12:10 PM	T48	Socio-economic factors affecting Saving and Credit Cooperative Membership in Gozamin District Western Amhara region
		Authors: Ayinadis Eneyew - Woldia University; Azanaw Abebe; Birhanu Melesse
12:10 PM - 1:00 PM		Lunch Break
1:00 PM - 1:20 PM	T51	Fuzzy logic methods with GIS-based groundwater delineation potential zones Robit-Bata watershed case study, humid Ethiopian highland
		Author: Tariku Sileshi Bekele - Bah Dar University
1:20 PM - 1:40 PM	T52*	Analysis of dairy value chain
		Author: Geleta Fikru Temesgen - Ambo University
1:40 PM - 2:00 PM	T53*	Long Term Land Use Land Cover Change Triggering Climate Change in Urban Centers of Southwest Ethiopia
		Authors: Tesfaye Dessu Geleta - Jimma University; Diriba Korecha; Debela Hunde; Adefires Worku
2:00 PM - 2:20 PM	T54	Adsorption efficiency of teff straw (Eragrostis teff) activated carbon for Hawassa Industry Park Wastewater
		Authors: Dr. Medhanit Mamaye - Hawassa University; Yosef Dereje; Zenebe Demrew; Memar Melkamu
2:20 PM - 2:40 PM	T55*	Future landscape management scenarios related ecosystem services trade-offs and synergies in Central Ethiopia
		Authors: Abera Assefa Biratu - Haramaya University; Bobe Bedadi; Solomon Gebreyohannis Gebrehiwot; Tilahun Hordofa Nebi; Assefa M. Melesse
2:40 PM - 3:00 PM	T46	Environmental Variability and Climate Change Impacts on Stream Flow: A case study in Awash Basin
		Authors: Addisalem Bitew Mitiku - Ethiopian Construction Design and Supervision Works Corporation; Gebreyohannes Abrha; Abel Tadesse
3:00 Pm - 3:30 PM		Coffee Break
3:30 PM - 3:50 PM	T94	Modelling and Quantification Ecosystem Services in the Upper Omo Gibe Basin, South-Western Ethiopia
		Author: Abreham Aneseeye - Wolkite University
3:50 PM - 4:10 PM	T93	Modeling the impact of water quality and climate variability on ecosystem services dependent livelihoods of smallholder farmers in the Gumara river of Lake Tana sub-basin; Ethiopia
		Authors: Wubneh Belete Abebe - Bahir Dar University; Ludo Schuurman; Edo Abraham
4:10 Pm - 5:40 PM		Panel Discussion: Irrigation and Food Production
		Moderator: Dr. Dereje Hailu
		Panelist: Dr. Tena Alamirew
		Panelist: Dr. Mekonnen Ayana
		Panelist: Dr. Wossenu Abtew

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		Moderator: Assefa M. Melesse
8:50 AM - 9:00 AM		The history of Bahir Dar University
		Speaker: Dr. Seifu A. Tilahun - Bahir Dar University
9:00 AM - 9:10 AM		Towards multifunctional and resilient systems in Ethiopia: approaches/tools, evidence, recommendation- CIAT
		Speaker: Dr. Lulseged Tamene - Alliance Bioversity International – CIAT
9:10 AM-9:20 AM		Addis Ababa Science and Technology University towards Supporting National and Global Green Industry Initiatives
		Speaker: Dr. Getachew Tegegne , AASTU
	Paper No.	Dravite Hall (First Floor)
9:20 AM - 4:10 PM		Water Management II (Moderator: Shimelis Setegn and Muluneh Imru)
9:20 AM - 9:40AM	T2	Irrigation Development Aspiration and Reality: observations and recommendation Invited Speaker: Dr. Tena Alamirew
9:40 AM - 10:00 AM	T59*	Urban Drainage Challenges and Failure Assessment, Addis Ababa City, Ethiopia Authors: Mengistu Addis - ASTU; Assefa M. Melesse
10:00 AM - 10:30 AM		Coffee Break
10:30 AM - 10:50 AM	T60	Lessons from the German-Ethiopian SDG graduate school- CLIFOOD in meeting food security under changing climate Author: Dr. Sintayehu Yigrem-Hawassa University
10:50 AM - 11:10 AM	T57	Geospatial Technology Based Groundwater Potential Zone Investigation and Mapping: A case Study of the Upper Awash Basin Authors: Gelana Daba Adugna - Salale University; Berhan Gessesse Awoke
11:10 AM -11:30 AM	T62	Rainfall Variability and Trend analysis in the Volta Basin in Ghana and its impact on Hydro Generation Authors: Philip Tetteh Padi - Volta River Authority; Abdul Noor Wahab
11:30 AM - 11:50 AM	T58	Hydrological impacts of climate change in ungauged sub-watersheds of Lake Tana Sub-Basin (Gilgel Abay, Gumara, Megech, and Rib), Upper Blue Nile Basin, and Ethiopia: A regionalization approach Authors: Melsew A. Wubneh - Gondar University; Mekash S. Kifelew; Dejene Sahlu
11:50 AM - 12:10 PM	T64*	Evaluation of factors affecting the quality of citizen science rainfall data in Akaki catchment, Addis Ababa, Ethiopia Authors: Hailay Tedla - Addis Ababa University; Alemseged Tamiru Haile; David W. Walker; Assefa M. Melesse
12:10 PM - 1:00 PM		Lunch Break

		Water Management II Cont. (Moderator: Wossenu Abteu)
1:00 PM - 1:20 PM	T65	Identification of Suitable Dam Sites Using GIS-Based MCDA Case Study of Chemoga watershed
		Authors: Yonas Hagos -Ethiopian Construction Design and Supervision Works Corporation; Tesfa Gebrie Andualem; Workineh Tadesse; Mequanent Abathun Mengie
1:20 PM - 1:40 PM	T66	Addis Ababa Adaptation Network (AAN): Addressing water security challenges under uncertain futures
		Authors: Mihret Mersha Haileeslassie - Addis Ababa water and Sewerage Authority; Ajay Bhave; Alemseged Tamiru Haile
1:40 PM - 2:00 PM	T61	Assessment of Roof Tops Rainwater Potential for Alternative Water Supply Source in Ethiopian Higher Educational institutes: A Case of Wachemo University, Main Campus
		Authors: Tamru Aragaw - Arba Minch University; Tamirat Abreham Solomon; Eyobel Mulugeta
2:00 PM - 2:20 PM	T73*X	Evaluation of merging method for CHIRP satellite rainfall estimate over Wabi Shebelle River Basin, Ethiopia
		Authors: Kindie Engdaw - Addis Ababa and Gondar University; Assefa M. Melese, Adane Abebe
2:20 PM - 2:40 PM	T69*	Recent approaches for separating impacts of climate and human activities on Streamflow variability: A Review
		Authors: Shimelash Kassaye - African Center of Excellence for Water Management (ACEWM); Getachew Tegegne
2:40 PM - 3:00 PM	T70*	An Uncertainty Estimation Framework to Quantify the Regional Water Balance for the data-scarce region of Ethiopian Rift Valley Lake Basin
		Author: Tesfalem Abraham - University of Freiburg; Yan Liu; Sirak Tekleab; Andreas Hartmann
3:00 Pm - 3:30 PM		Coffee Break
3:30 PM - 3:50 PM	T72	Performance evaluation of satellite rainfall estimates in urban area: the case of Addis Ababa, Ethiopia
		Authors: Kumnegor Elias - Arbaminch University; Alemseged Tamiru
3:50 PM - 4:10 PM	T75	Climate change impact on Lake Tana water storage, Upper Blue Nile Basin, Ethiopia
		Authors: Melsew Amsalu Wubneh - Gondar University; Tadege A.Worku ; Fitamelak T.Fekadie
4:10 Pm - 5:40 PM		Panel Discussion: Water-Energy-Food Security
		Moderator: Dr. Semu Moges
		Panelist: Eng. Behailu Assefa
		Panelist: Dr. Meron Teferi
		Panelist: Dr. Negede Abate
		Panelist: Dr. Solomon Gebreyohannis

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		Speaker: Dr. Lulseged Tamene - Alliance Bioversity International – CIAT
9:10 AM-9:20AM		Addis Ababa Science and Technology University towards Supporting National and Global Green Industry Initiatives
		Speaker: Dr. Getachew Tegegne, AASTU
	Paper No.	Pearl Hall (9th Floor)
9:20 AM - 11:10 AM		Energy Production (Moderator: Selamawit Mulugeta)
9:20 AM - 9:40AM	T95	The challenges and opportunities of Ethiopia's future distributed energy system
		Invited speaker: Eng Behailu Assefa
9:40 AM - 10:00 AM	T77	Suitability Analysis for Wind Farm Establishment and Wind Energy Potential Investigation: The case of Upper Blue Nile Basin, Ethiopia
		Authors: Dr Eyale Bayable Tegegne - Addis Ababa University; Yewubdar Berhanu
10:00 AM - 10:30 AM		Coffee Break
10:30 AM – 10:50 AM	T78*	Comparative evaluation of torrefaction and hydrothermal carbonization of wheat straw (Triticum aestivum L.) For the production of solid biofuel
		Authors: Minichil Negussie - Bahir Dar University; Elias Wagari
10:50 AM – 11:10 AM	T79	Biomethane Potential of sludge from municipal sewer and exchange stations
		Authors: Selamawit Mulugeta - AASTU; Agizew Nigussie
11:10 AM - 2:00 PM		Natural Resources II (Moderator: Anwar Adem)
11:10 AM - 11:30 AM	T85	Determination of heavy metals in soil used for potato cultivation by atomic absorption spectroscopy in Awi Zone, Amhara Region, Ethiopia
		Authors: Fentahun Adamu - Injibara University; Melaku Metto; Banchalem Kassie
11:30 AM - 11:50 AM	T82	Hydrogeology of Volcanic Highlands Affects Prioritization of Land Management Practices
		Authors: Dr Anwar Adem - Bahr Dar University; Gashaw G. Addis; Seifu A. Tilahun; Tammo S. Steenhuis
11:50 AM - 12:10 PM	T83	Soil quality evaluation under the different land-use types in Kersa Sub\Watershed Eastern Harerghe, Ethiopia

		Authors: Dr Yared Mulat Tefera - Hawassa University; Kebebew Kiberet
12:10 PM - 1:00 PM		Lunch Break
1:00 PM - 1:20 PM	T84	Valuing the Biodiversity and Ecosystem Services of the Sudd Wetland in South Sudan for Green Infrastructure Planning and Development
		Authors: Dr Jemal Ahmed Tadesse - Addis Ababa University; Dawit Wubishet Mulatu; Tinebeb Yohannes
1:20 PM - 1:40 PM	T63	Effects of Enset-Based land use system on infiltration rate and Curve Number of the soil in Meki River Watershed, Western Lake Ziway Sub-Basin, Central Rift Valley of Ethiopia
		Authors: Alemu Woldesenbet - Addis Ababa University; Sebsebe Demisew; Mekuria Argaw
1:40 PM - 2:00 PM	T81	Use of soil spectral reflectance as a criterion for water resource management in Ethiopia
		Author: Gizachew Ayalew Tiruneh - Bahir Dar University
2:00 PM - 4:10 PM		Urban Water Supply (Moderator: Tirusew Asefa)
2:00 PM - 2:20 PM	T87	Improving Addis Ababa Water Supply System through Water-Energy-Food (WEF) Nexus Approach
		Authors: Dr Semu Moges - Dallas, Texas, Senior Hydrologist; Bedassa Desalegn Kitesa; Geremew Sahilu
2:20 PM - 2:40 PM	T86	Geospatial Assessment of Groundwater Quality using water quality index and GIS techniques in Bahir Dar city
		Authors: Abreham Melaku - Bahir Dar University; Atikilt Abebe; Eshetu Assefa
2:40 PM - 3:00 PM	T88	Evaluation of Hydraulic Performance of Kombolcha Town Water Distribution Systems
		Authors: Dr Tamru Aragaw - Arba Minch University; Selamawit Workneh Tsige
3:00 Pm - 3:30 PM		Coffee Break
3:30 PM - 3:50 PM	T89	Domestic water security under climate change: A case of Addis Ababa city, Ethiopia
		Author: Yonas Tewodros Assefa - ECDSWCO
3:50 PM - 4:10 PM	T91	Groundwater Sources and Management Challenges of Addis Ababa City Water Supply
		Author: Engida Zemedagegnehu - ECDSWC
4:10 Pm - 5:40 PM		Panel Discussion: Urban Water Supply
		Moderator: Dr. Tirusew Asefa
		Panelist: Zerihun Abate
		Panelist: Dr. Dagnachew Aklog
		Panelist: Dr. Edo Abraham