LIVE WEBCAST Creating Socio-Environmental Scenarios

WED. 20 OCTOBER 2021, 15:00 – 16:30 (EDT UTC -4) WED. 20 OCTOBER 2021, 21:00 – 22:30 (CEST UTC +2) THURS. 21 OCTOBER 2021, 05:00 – 06:30 (AEST UTC +10)

Hosted by:

The Integrated Assessment Society The National Socio-Environmental Synthesis Center And the journal, Socio-Environmental Systems Modelling



Vanessa Schweizer Presenter



Hannah Kosow Presenter



Sondoss El Sawah Panelist

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Martin Cenek Panelist



Rebecca Kariuki Panelist

Climate change, biodiversity loss, urbanization, pandemics. These phenomena have a major impact on society and the environment and introduce significant uncertainty and complexity into policy and decision processes.

Socio-environmental systems researchers and practitioners are increasingly concerned about potential long-term impacts of near-term decisions. To provide the most effective decision support, we need to expand our understanding of the future in socio-environmental systems.

Based on the 2020 article "Scenario processes for socio-environmental systems analysis of futures: A review of recent efforts and a salient research agenda for supporting decision making," this webcast explores the present status and futures of creating socio-environmental scenarios. The article grew out of a workshop at the International Congress of the Environmental Modelling & Software Society, where practitioners and researchers discussed the state of the art on the development and use of scenario analysis for exploring and understanding socio-environmental systems. The webcast will begin with a presentation by two of the paper's co-authors, Hannah Kosow and Vanessa Schweizer, briefly describing the life cycle of scenario development. Comments from each panelist will follow and then an open discussion. Viewers may post questions and comments.

PROGRAM

Introduction: Margaret Palmer, Director, SESYNC

Presentation: "Creating Socio-Environmental Scenarios"

Vanessa Schweizer, Associate Professor, University of Waterloo and Director, Waterloo Institute for Complexity and Innovation, Canada

Hannah Kosow, Research Associate, Center for Interdisciplinary Risk and Innovation Studies, University of Stuttgart, Germany

Panel Session: (Responses 10 mins. per panelist) Sondoss El Sawah, Associate Professor, University of New South Wales, Australia Martin Cenek, Associate Professor, University of Portland, USA Rebecca Kariuki, Carson Fellow, Rachel Carson Center for Environment and Society, Germany and African Institute of Mathematical Sciences Fellow in Climate Change Science, Rwanda

Q&A: Presenters and panelists respond to questions from the participants (10 mins.)

Open Discussion: (20 mins.)

PRESENTERS' & PANELISTS' BIOS

Dr. Vanessa Schweizer is an Associate Professor of Knowledge Integration at the University of Waterloo in the Faculty of Environment. She is also a faculty member at the Balsillie School of International Affairs and Director of the Waterloo Institute for Complexity and Innovation. Her research focuses on the integration of qualitative and quantitative knowledge for constructing narrative scenarios as well as computational methods for 'discovering' scenarios. Her work has focused primarily on climate change, and she is a steering committee member of the International Committee on New Integrated Climate Change Assessment Scenarios.

Dr. Hannah Kosow is a researcher, project manager, and lecturer at the Center for Interdisciplinary Risk and Innovation Studies at the University of Stuttgart, Germany. Her research focuses on environmental scenarios and qualitative systems analyses. During her PhD at the Stuttgart Cluster of Excellence SimTech, she explored new qualitative-quantitative scenario methods. She also studies the participation of experts, stakeholders, and citizens in research processes. Currently, she works on conflicts and policy design in the fields of water and land use.

Dr. Sondoss El Sawah is an is an Associate Professor in the School of Engineering and Information Technology at the University of New South Wales, Australia, and leads the modeling and simulation effort in the Capability Systems Centre. Her research focuses on the behavior of large complex problems and systemic risks arising from interactions between social, ecological, and technological systems. She is Editor of the journal *Environmental Modelling and Software* and has published over 90 journal articles, 3 of which are Web of Science high-impact papers. Her research and leadership have been recognized with eight awards and fellowships.

Dr. Martin Cenek is an Associate Professor at the University of Portland, Oregon, USA. He is a computer science researcher and educator working in the fields of complex systems and intelligent cyber-physical systems. He builds integrative agent-based models to study and understand coupled socio-ecological systems. The models aid in answering questions of how we, as a society, interact with natural resources and the environment at a time of global ecological change. Martin received his PhD in computer science from Portland State University, specializing in artificial intelligence and complex systems.

Dr. Rebecca Kariuki is a Carson Fellow with Rachel Carson Center for Environment and Society, Germany and an AIMS Fellow in Climate Change Science with the African Institute of Mathematical Sciences (AIMS), Rwanda. Her research is on understanding the impacts of changing climates, environments, and societies on the future sustainability of social-ecological systems in East Africa. Her current research involves integrating multistakeholder perspectives with spatial modeling to understand long-term changes in southern Kenya and northern Tanzania and to explore sustainable futures for the societies, biodiversity and ecosystem services they support. She has worked at the African Conservation Centre (ACC) and other consultancies in Nairobi, Kenya in several projects. She received her PhD in Environmental Geography from the University of York, UK and her MSc (in Biology of Conservation) from the University of Nairobi, Kenya.





