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**THE LEARNING COMMUNITY OF
THE INTEGRATED ASSESSMENT SOCIETY WITH:**

**UNIVERSITY OF TWENTE, MCGILL UNIVERSITY, SÖDERTON UNIVERSITY,
UNIVERSITY OF OSNABRUECK,
PRESENT THEIR JOINT WEBINAR:**

From games to action: When and how can serious games stimulate learning and support decision making for natural resource management?

Date: 4th of July 2019, 15:00-16:30 CEST

Background and Focus

Natural resource management is a field with longstanding use of participatory processes. Assumptions that the involvement of locals and use groups in decision-making contributes to better decisions has greatly influenced the spread and use of a range of different participatory tools in practice. More recently this has included a growing number so-called ‘serious games’ as tools for education, awareness-raising and collective learning. This trend has also been of interest to the academic community which has sought to understand the effectiveness and impact of participatory tools, and has exposed some limitations. Concerns have been raised, for instance, about how participatory tools and processes address power imbalances and accommodate groups with low levels of literacy or numeracy (Few et al. 2007; Muro and Jeffrey 2008).

As revealed in recent literature reviews, research on serious games in the field of natural resource management is growing (Rodela et al. 2019; den Haan and van der Voort 2018). However, this research is largely focused on the development and delivery of the games themselves, and less on the supposed impacts of the game intervention. As such, questions about when and how serious games can serve as tools in support to learning, and long-term change processes have yet to be fully addressed. We take this gap as a point of departure for this webinar.

In the webinar we hope to explore the following **three questions**.

1. How can serious games be applied to foster transformative change in policy, practice and to generate learning and social learning?
2. Is there evidence from practice that serious games can foster transformative change and sustainable practices among actors?
3. What are the challenges and issues faced with serious games in natural resource management?

During this Webinar we will look closer at what *serious games* are, what their potential is and how can be these used to support natural resource use and its up-take across different context.

Agenda

Background information about the speakers is provided on the next page.

15:00	Welcome and introductory remarks <i>Blane Harvey and Joanne Vinke-de Kruijf</i>
15:10	Application of serious games in practice and reflections on social learning outcomes and transformative change <ul style="list-style-type: none">- <i>Robert-Jan den Haan on the application of serious games for river management in the Netherlands and results from a review on social learning outcomes of serious games</i>- <i>Sharlene Gomes on the application of serious games for capacity building in groundwater management in Bangladesh</i>- <i>Bettina Koelle on the use of serious games by the Red Cross Red Crescent Climate Centre</i>
15:55	Reflections on the application of serious games for transformative change <ul style="list-style-type: none">- <i>Ilan Chabay</i>
16:05	Roundtable discussion: challenges and issues
16:20	Wrap-up
16:30	Close of webinar

About the learning community

The Learning Community brings together those interested in learning for sustainable development. This community is a working group of The Integrated Assessment Society. The Learning Community is coordinated by: Joanne Vinke-de Kruijf (University of Twente, The Netherlands, contact person), Caroline Lumosi (University of Osnabrück, Germany), Romina Rodela (Södertorn University, Sweden) and Blane Harvey (McGill University, Canada).

You can also **email us on** learningcommunity@tias-web.info, **or find us on** <http://www.tias-web.info/tias-activities/learning-community/> **or find TIAS on** (www.tias-web.info)

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About the presenters



Robert-Jan den Haan, PhD Researcher, Industrial Design, University of Twente

Robert-Jan's research is on the design and evaluation of serious games to support collaborative decision-making in Dutch river management. In particular, he is developing the Virtual River serious game as part of the RiverCare research program. He has a background in Industrial Design Engineering, specializing in involving users in design processes and interaction design. He uses that specialization to develop methods for users to interact with models that are intuitive and easy to use, and that can be applied in gaming and decision support contexts.



Sharlene Gomes, PhD Researcher, Policy Analysis Section, Faculty of Technology, Policy & Management, TU Delft.

Sharlene's research is on the institutions underlying groundwater management in peri-urban Kolkata (India) and Khulna (Bangladesh). This trans-disciplinary research combines institutional analysis, game theory modeling, and simulation games to build problem solving capacity in peri-urban communities. Sharlene works as a researcher at Delft University of Technology, focusing on water policy issues in developing countries.



Bettina Koelle, Senior Learning Specialist, Red Cross Red Crescent Climate Centre

Bettina works with stakeholder groups from small-scale farmers' in the South African dry lands to policy-makers and business representatives. A geographer by training with an MSc from the Free University of Berlin, she is passionate about exploring linkages within complex systems and helping people navigate challenges through learning and dialogue.



Prof. Dr. Ilan Chabay, Institute for Advanced Sustainability Studies, Potsdam Germany

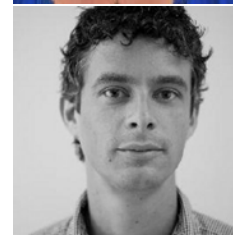
Ilan is Head of Strategic Science Initiatives and Scientific Project Leader of the Global Sustainability Strategy Forum and KLASICA (Knowledge, Learning, and Societal Change) projects at the IASS in Potsdam Germany. He is also Adjunct Professor in the School of Sustainability at Arizona State University in the ASU center in Washington, DC. Between his first career in natural science and his current career in social science, he was associate director of The Exploratorium Science Museum and then for 18 years, he was founder and president of an interactive science museum exhibition design and production company that designed and produced interactive exhibitions for 230 museums around the world, including for Disney, Smithsonian, and NASA. In addition to his research, he has continued to design physical, electronic, and mixed reality games that engage and inspire people across ages and cultures in authentic processes of scientific inquiry and build their sense of agency in understanding the world.

About the organizers

Joanne Vinke-de Kruijf is Assistant Professor at Civil Engineering, University of Twente. She is engaged in research and education in stakeholder and knowledge management for climate-resilient cities and regions with specific attention for multi-actor cooperation, (social) learning and governance. Before joining the University of Twente, Joanne did a Marie Curie Intra-European Fellowship at the Institute of Environmental Systems Research, University of Osnabrück. Before that, she worked for one year as international project manager at a Dutch regional water authority. She obtained her PhD degree from the University of Twente, the Netherlands in 2013.



Blane Harvey is Assistant Professor in the Department of Integrated Studies in Education at McGill University (Canada), and a Research Associate with ODI's Risk and Resilience Programme. His research examines the construction, validation and diffusion of climate change knowledge, and how learning-based processes can support action on climate change in the global South. Blane previously led work on learning and knowledge sharing the IDRC's Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA) and with the Climate Change Team at the Institute of Development Studies at the University of Sussex.



Romina Rodela is a researcher working in the interdisciplinary field of environmental governance. She has a research interest in participatory approaches, collective action and social learning. As part to past projects she was engaged on research synthesis of conceptual and methodological aspects of the literature on social learning in the field of natural resource management. Romina is currently managing the project "[Environmental Governance in Context](#)" at Södertörn University (Sweden). She is collaborating with Wageningen University (the Netherlands) and Can Tho University (Vietnam) on the assessment of the learning effects of serious games in the context of climate smart technologies in the Mekong Delta, Vietnam.



Caroline Lumosi is research associate and a PhD candidate at the University of Osnabrück. She is part of the DAFNE team to coordinate stakeholder engagement processes in the two basins - Zambezi basin and Omo basin. The **DAFNE** project is about use of a decision Analytic Framework to explore the water-energy-food nexus in complex and trans-boundary water resources system of fast growing developing countries. Her PhD focusses on social learning processes in transboundary river basin management in Omo-Turkana and Zambezi basins in Africa.

