

Webinar: 'Advancing the Nexus through Internationalization and Networking'

25 October 2022

(14:00 - 17:00 CEST)

Virtual Event







AGENDA

14:00	Welcoming and updates on the Nexus Project Cluster	Dr Floor Brouwer Mr Paul Webb Dr Octavi Quintana		UNU-FLORES, Nexus Project Cluster European Research Executive Agency (REA) Partnership for Research and Innovation in the Mediterranean Region (PRIMA) – Director
* * 14:10	Moderation of the event by Prof. Rabi Mohtar Introduction	Prof. Chrysi Laspidou	Chair of COST- Action NEXUSNET University of Thessaly	Prof. Chrysi Laspidou will introduce the topic of the webinar, sharing some findings from NEXUSNET to adopt Nexus best practices, identifying policy gaps and proposed more Nexus-compliant policies. The webinar's objective is to present examples of these topics, coming from other Nexus activities across the globe. Examples could focus on methodologies, outreach and networking actions and outcomes. See also: https://nexusnet-cost.com/

14:30	Findings from other Nexus Initiatives	Prof.Rabi Mohtar	Texas A&M University	Professor Rabi Mohtar (Texas A&M University) will share a global perspective on the Nexus and introduce the session. Contributions will make explicit their contributions to advance the Nexus and the expected outcomes towards internationalisation of the Nexus.
*	US-Africa Sustainable Food Systems through Water-Energy-Food Nexus Networking (SustainFood)	Prof. Michael Jacobson	Penn State University	US-Africa Sustainable Food Systems through Water-Energy-Food Nexus Networking (SustainFood). The project will build the SustainFood network of networks (NoN) with partners across the US, Africa, and Europe that accelerate research and implementation of sustainable food system solutions for Africa using a water-energy-food (WEF) Nexus approach and a Collaborative Learning School (CLS) platform. This project is funded by the National Science Foundation (NSF).

Resource Nexus for Sustainability Prof. Daniel Karthe **UNU-FLORES** The programme focuses on interlinkages **Transformations (NEXtra)** between environmental resources and synergies and trade-offs in their management. Doctoral students are expected to turn into "agents of transformation" who will contribute toward sustainable development in their home regions and beyond. From 2023 until 2030, we expect an annual intake of 7 to 8 scholarshipfunded candidates. Students from the Global South and with different disciplinary backgrounds will work on sustainability transformations using a Resource Nexus perspective. This project is funded by German Academic Exchange Service (DAAD).

WEFRAH - Water-Energy-Food-Health Dr Iman Nuwayhid **American University** WEFRAH has the vision to make American **Nexus Renewable Resources Initiative** of Beirut, AUB University of Beirut (AUB) a regional hub for Dr Mirella Aoun innovations in water-energy-food-health Nexus and interconnectedness in renewable resources in arid and semiarid regions. These highly interlinked primary resources carry high risks and vulnerabilities. Understanding these risks and vulnerabilities through quantifying them to better understand the complex system of systems they represent is crucial and requires multi-disciplinary work that includes the technologies, science, policies, health, communication, and economics, at local process and system level scales. The work will advance the Nexus in the Middle East and also

bring health to the international dimension of

the Nexus.

* Finding Innovative Solutions to the Nexus Challenge Using International Transdisciplinary Approaches

Transdisciplinary Approaches

Future Earth and George Mason University

Finding innovative solutions to the Nexus challenge using international transdisciplinary approaches. Judit Ungvári, Co-lead, Research & Innovation Future Earth and Research and Innovation Officer, George Mason University, Institute for a Sustainable Earth (USA): The Sustainable Urbanisation Global Initiative (SUGI)/Food-Water-Energy Nexus (2016-2022) Collaborative Research Action was the first cobranded call by Future Earth and a call jointly established by the Belmont Forum and the Joint Programming Initiative Urban Europe. The cooperation was established in order to bring together the fragmented research and expertise across the globe to find innovative new solutions to the Food-Water-Energy Nexus challenge using international transdisciplinary approaches.

Integrated Water-Energy Resource System Design and Planning for Enhancing the Penetration of Renewable Energies in Africa

Dr Mathaios Panteli

Department of
Electrical and
Computer
Engineering,
University of Cyprus

Hydropower is currently the leading source of renewable energy storage and power system flexibility worldwide, including Africa. To play though a significant and sustainable future role in the low-carbon energy transition of Africa, integrating river basins into strategic multisector energy systems planning is required, which also should engage broad stakeholder coalitions and be driven by new Nexus policy and regulatory incentives. In this context, this presentation will share relevant experiences and studies on African river basins by the recently completed UKRI-funded FutureDAMS project, ranging from novel AI-based algorithms to perform water-energy trade-off-informed design and planning for enhancing the penetration of variable wind and solar power in African electricity systems, to water-energy Nexus policy and regulatory opportunities and barriers in Africa.

*	Asia Hub - Nexus activities in the Asia region.	Prof. Jiaguo Qi	Michigan State University	Prof. Qi is the founder of the Asia Hub network and director of the Center for Global Change and Earth Sensing Shati University, Michigan. Such an Asia Hub initiative in China aims to promote innovative international partnerships and collaboration with institutions in China, Central Asia and Southeast Asia. A series of workshops in Southeast Asia and establish a regional network focusing on interactions and synergies among water, energy and food systems in the region.
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15:45	Coffee Break			
16:00	PANEL: Future actions to advance the Nexus and networking. *Moderation by Prof. Rabi Mohtar	Dr Giulio Pattanaro	European Research Executive Agency (REA)	Lessons learnt (from an international perspective) from the Nexus projects we have been monitoring in our sector
		Prof. Ali Rhouma	PRIMA	Nexus WEFE in the transboundary settings towards improving the management of natural resources in transboundary basins.
		Dr Kara C. Hoover	National Science Foundation (NSF)	AccelNet

Dr Stacey Standridge National Science Foundation (NSF)

NSF funding opportunities for international collaboration

16:40 Draft of Action Plan of the Nexus Dr Floor Brouwer

17:00 Closure of the Webinar

Notes:

• For content-related questions please contact to:

Floor Brouwer (UNU-FLORES): floor.brouwer@unu.edu

Serena Caucci (UNU-FLORES): caucci@unu.edu

For technical matters please contact to:

Zeynep Ozkul (UNU-FLORES): ozkul@unu.edu

