Newsbulletin of the Nexus Project Cluster – Issue 2 (March 2021)

Update of the Nexus Project Cluster

We are now well into the new year and let's hope conditions on the pandemic will gradually improve. The Nexus Project Cluster had few activities during the past year. Unfortunately, it was not possible to organise a science-policy workshop in Brussels, and the Steering Committee of the Cluster remains looking into possibilities to organise an event. Many projects in the Cluster were active during DNC2020, the Dresden Nexus Conference, which was held June 3-5. Some 1,200 people from across the globe registered for the on-line conference and the large number of session were well attended. As part of the Conference, the Nexus Project Cluster and EASME organised a session, entitled 'Towards a nexus knowledge agenda'. The purpose of the session was to identify knowledge gaps with a view to strengthen decision-making adopting the nexus concept. Some 170 participants attended the special session on June 5, 14-15.30 pm. UNU-FLORES (the United Nations University Institute for the Integrated Management of Material Fluxes and Resources, Dresden Germany), partner in the Cluster, is planning to develop a policy brief on a nexus knowledge agenda. This will follow-up from DNC2020. Meanwhile feel free to share the news among your network.

Members of the Steering Committee are confirmed

The Cluster is governed by a Steering Committee, meeting some 2-4 times a year and otherwise when necessary. For 2021, the Steering Committee will include Floor Brouwer (SIM4NEXUS and Wageningen Research), Tamara Avellán (Creating sustainable impact), Serena Caucci (UNU-FLORES), Phoebe Koundouri (DAFNE and Athens University of Economics and Business), Pia Laborgne (Creating Interfaces), Chrysi Laspidou (SIM4NEXUS and University of Thessaly), Dolores Rey Vicario (NEXT-AG, Cranfield University) and Lydia Vamvakeridou-Lyroudia (SIM4NEXUS and NEXTGEN). We will start to speak about governance of the cluster for the next 2-years period, and invite any member of the cluster, to express an interest to join the Steering Committee. Please send an e-mail to Floor Brouwer (floor.brouwer@wur.nl) until April 30, and we speak.

Webinar: Towards a Nexus Knowledge Agenda - from Knowledge to Action; 19 April 2021 (15:00 - 16:30 CET)

The Webinar is a follow-up to the session during DNC2020 (June 2020). The Nexus Approach has attracted significant interest in recent years as the global community seeks collective solutions to highly interconnected resource challenges triggered by climate change and anthropogenic pressures. Understanding the tensions, synergies, and trade-offs between the resource systems from a Nexus lens is essential for more efficient resource use and management, and for keeping the negative socio-ecological effects of resource use within reasonable bounds.

With the mission to advance the Nexus Approach, the United Nations University Institute for the Integrated Management of Material Fluxes and Resources (UNU-FLORES) and the Nexus Project Cluster bring together actors from academia, civil society, industry, and governments to discuss the sustainable management of environmental resources via the Nexus Approach.

The Webinar will focus on key building blocks of the Nexus Approach from biophysical, socioeconomic, and policy perspectives and offer an innovative forum for presenting and discussing cutting edge experiences on testing nexus approaches in practice. The Webinar aims to create a platform for exchanging good practice examples and success stories to encourage joint action and prepare the ground for further implementation of Nexus that remains urgently needed. For now, please pencil the date of the webinar (April 19, 3 pm – CET) and look forward to your participation. The Webinar is open to everyone. All stakeholders are encouraged to join and exchange views. Please find the link below to register via: http://bit.ly/3jOebXA.



Workshop on bridging land, food, energy and water for increased resource sufficiency

Date: 23 March 2021; Time: 10-12 CET; Registration now open! The Impact-SC5 project aims to identify and analyse the impact of Horizon 2020 Societal Challenge 5 projects on science, society, the environment and the economy, to understand why certain impacts have or have not been achieved. Part of this analysis is to compare the linkages and synergies between the projects awarded under Challenge 5 Climate Action and Challenge 2 Sustainable Agriculture and Bio-economy. In this interactive online workshop, we will discuss how stronger interlinkages between programmes could help to increase efficiency, reduce redundancies and build synergies in research and its applications while also improving governance across sectors. The aim is to learn from these past projects to inform and improve the cross-cutting nature of Horizon Europe work programmes. Following a presentation of the analysis results, we will have a panel comment and reflect from their own experience and perspective. Participants will then be given the opportunity

Confirmed panel members are:

- Panagiotis Balabanis, Head of Sector Water, EC DG Research and Innovation,
- Floor Brouwer, SIM4NEXUS scientific coordinator, Wageningen Research
- Antonia Lorenzo (BIOAZUL), Leader of the WG on Water and Agrifood, Water Europe
- Jaana Lehtimäki, NCP for both SC2 and SC5, Academy of Finland)
- Casper Zulim de Swarte, Senior Advisor Food Transition, Schuttelaar & Partners

Upon registration, you will receive a confirmation. About a week before the workshop, we will send you a link which will give you access to the event. Do you have questions or suggestions? Please let us know at info[at]impact-sc5.eu. On behalf of the organising team, Mona Arnold, VTT (Finland). The workshop is open to everyone. Please find the link to register via: https://bit.ly/3ktBAOR.

New members in the Cluster

Welcome to the following projects that joined the cluster since the summer of 2020:

- SUNEX Formulating sustainable urban FWE strategy by optimizing the synergies between food, water and energy systems. SUNEX establishes an integrated framework to formulate sustainable urban FWE strategies by combining selected bottom-up modelling tools and synchronizing their data exchange to analyse FWE systems and capture their interactions taking into account local urban policies and related SDGs.
- SWEDIMS SWEdish Drought Irrigation Management System. This project aimed at answering the following research question: How the water-food energy nexus interrelationships in the agricultural sector are affected during drought? The main outcome of the project is SWEDISMS, an information product for farmers and decision makers from the water, food and energy sectors.
- AWESOME Managing water, ecosystems and food across sectors and scales in the South Mediterranean. The main objective of AWESOME is developing a decision-analytic platform based on a multi-level, integrated WEF model to address the Nexus and explore the interdependencies and feedbacks across spatial scales, from the macroeconomic development, to regional planning down to the single farm.
- PHEMAC Participatory hub for effective mapping, acceleration and capitalization of EU-MPC NEXUS best practices. PHEMAC aims to develop and disseminate an interactive platform to profile best practices from previous projects and initiatives and those that are underway relating to the agricultural, water and food sectors in the Euro-Mediterranean area.
- SIGMA Nexus Sustainable Innovation and Governance in the Mediterranean Area for the WEF Nexus. The overarching objective of SIGMA-Nexus is to develop climate resilience in the Mediterranean region by proposing sustainability pathways within the WEFE Nexus framework. SIGMA-Nexus will analyse the socio-economic and technical characteristics of several case study sites in Egypt and Greece.
- AWESOME mAnaging Water, Ecosystems and food across sectors and Scales in the sOuth Mediterranean. The main objective of AWESOME is developing a decision-analytic platform based on a multi-level, integrated WEF model to better understand multi-sectoral WEF tradeoffs and to capitalize on potential synergies, also exploring the interdependencies and feedbacks across a hierarchy of spatial scales, from the macroeconomic development of the Mediterranean region and national scale, to regional planning at river basin scale, down to the single farm.

A very welcome to the new members in the cluster. They will soon be added to the website of the cluster (http://www.nexuscluster.eu/). Meanwhile new members are on their way, with the upcoming nexus projects from the H2020 call from last year. Two consortia are finalizing their grant agreement and indicated



their interest to join, including NEXOGENESIS (coordinated by IHE-Delft, the Netherlands) and GoNEXUS (coordinated by Universitat Politècnica de València, Spain). The coordinators already indicated their interest to join the cluster once their contract has been signed.

Science-Society-Interfaces: Knowledge Systems and Co-Creation in Environmental Local Governance - Special Issue Information:

Global environmental challenges demand transformations in local governance systems in urban and rural areas and complex, multi-level approaches integrating different social and political actors, tools, and processes. This includes the creation of socio-technical interfaces such as new communication and participation platforms and intermediary institutions. Those interfaces can potentially improve processes of local knowledge co-creation, cooperation, and citizen participation in local environmental governance. For this Special Issue, we invite contributions regarding local knowledge co-creation (e.g., citizen science, co-creative research design) responsible research and innovation (RRI) and the integration of different knowledge systems into local environmental governance. Both conceptual papers and case studies are welcome. They should reflect on the opening up of science, experts systems, data infrastructures, digital tools, planning, and policy making, with a focus on local environmental governance. Papers addressing the integration of citizen-science-based knowledge and the empowerment of citizens/local stakeholders for participation in knowledge creation are especially welcome. A specific focus will be knowledge co-creation on the urban Food-Water-Energy Nexus. Specific questions can, e.g., be: How can knowledge co-creation and participation work regarding complex interlinkages of socio-technical and environmental systems and how can these approaches can help in enhancing local visibility and understanding of crucial global environmental challenges?

Ms. Pia Laborgne Prof. Dr. João Porto de Albuquerque

Prof. Dr. Andrea Sarzynski

Dr. Jochen Wendel

Prof. Dr. Michał Wróblewski

Guest Editors

https://www.mdpi.com/si/41071

Nexus Project Cluster - Website

Please visit our website (http://www.nexuscluster.eu/) for more information on the nexus projects in the Cluster, or contact floor.brouwer@wur.nl. The website will be updated with new projects in the coming months.

