Sustainable Development Requires an Integrated Approach

Over 350 participants from 65 countries came together to discuss nexus-oriented strategies for sustainable development at the inaugural Dresden Nexus Conference organized by UNU-FLORES, TU Dresden and IOER.

27 March 2015, Dresden. – With their closing remarks, Verena Klinger-Dering from the Federal Ministry for the Environment, Nature Conversation, Building and Nuclear Safety together with the organizers brought the first Dresden Nexus Conference to an end Friday evening. Over the course of three days 350 participants from 65 countries and all continents discussed how to manage vital environmental resources such as water, soil and waste more sustainably. At the centre of the lectures, panel discussions and poster presentations was the nexus approach. A nexus approach to the sustainable management of environmental resources integrates environmental management and governance across sectors and scales. This approach is based on the understanding that environmental resources are intricately interconnected. Considering their mutual dependencies in environmental management increases resource use efficiency while minimizing at the same time environmental risks and ecological degradation.

The Dresden Nexus Conference 2015 (DNC2015) took place under the umbrella of “Global Change, SDGs and the Nexus Approach”. Global Change, in all its forms, is possibly the most pressing challenge humanity faces in the twenty-first century. To address this challenge, the international community has devoted much time and effort into developing the Sustainable Development Goals (SDGs) – to be adopted at the UN Conference on Climate Change in Paris 2015. Concrete strategies for achieving these goals are still in development. Focusing on three key dimensions of global change – climate change, urbanization and population growth – conference attendees discussed how adopting a nexus approach can help develop effective and appropriate strategies for implementing these goals. Both the presenters in the parallel sessions and the keynote speakers were in consensus on one point: applying a nexus approach is the key to identifying effective and appropriate mechanisms for achieving the SDGs.

The scientific case studies and rigorous debates presented at the conference clearly showed that any action taken to address global change and implement the SDGs produce both positive and negative feedback that require tradeoffs. Developing appropriate and effective strategies means, identifying the mechanisms and tools that results in the least negative feedback. Applying a nexus approach provides a better understanding of these synergies and tradeoffs and enables the detection of the most optimal strategies.

A further conclusion of the conference is the central role of the Water-Soil-Waste Nexus in achieving sustainable development and global security, particularly with regard to the pressing challenges posed by the ever-growing global population. “The train that is going to bring us a total global
population of 9.6 billion people by 2050 has already left the station. We cannot stop it. Our task is to be prepared to receive these guests,” Professor Rattan Lal, Chair of UNU-FLORES Advisory Committee and Professor at Ohio State University, emphasized in the conference wrap-up talk. Soil, in particular, plays a critical role in ensuring the means of existence for all global citizens. Maintaining the integrity of soil, but also exploring soil-less or less soil-intensive means of agriculture will be crucial.

Finally, organizers, stakeholders and participants alike agreed that it is time to translate collective knowledge and collective goodwill into action. And the first and most significant step in implementing these findings is to develop educational curriculum that applies and promotes integrated thinking. Educational programmes need to be executed in an integrated, cross- and transdisciplinary manner, and at the same time teach critical integrated thinking.

As UNU-FLORES Director Reza Ardakanian summarizes, “the successful implementation of the integrated management of environmental resources requires a nexus mind-set. If the people on the ground are resistant, nexus approach strategies will not work. Educational, study and knowledge sharing programmes are the first step to addressing this gap.” Professor Bernhard Müller, Director of IOER, drew attention to open-ended questions with regard to the implementation of the nexus approach, “the theoretical foundation needs further research and it needs to be asked, how integrated thinking can successfully respond to resistance. Addressing this is an important task for the team at UNU-FLORES, and IOER will continue to support them these endeavours.”

High-level representatives from seven United Nations (UN) Member States, nine UN entities, six international organizations, numerous universities and research institutions, and various foundations and technical assistance agencies were joined by members of the German government from federal, state and municipal levels for a three-day conference at the Deutsches Hygiene-Museum Dresden, making DNC2015 one of the largest and most influential international conferences on sustainability in Germany in the lead-up to the United Nations Climate Change Conference in December in Paris.

The Dresden Nexus Conference 2015 was organized by the UN University Institute for Integrated Management of Material Fluxes and of Resources of the (UNU-FLORES), the Technische Universität Dresden (TUD) and the Leibniz Institute of Ecological Urban and Regional Development (IOER). All three are connected through their commitment to research on sustainable development. The Dresden Nexus Conference is planned to be held every two years. It is envisioned as a platform that brings together experts from national and international academia, politics and civil society, to discuss and promote academic and practical initiatives advancing a nexus approach to the sustainable management of environmental resources. By bringing these stakeholders together, the organizers hope to identify and further develop policy-relevant solutions. This conference series as well as the research initiatives of all three organizers taking place around the conference, strengthen Dresden’s role as a hub for research on sustainable development.

For further information: http://www.dresden-nexus-conference.org
United Nations University Institute on the Integrated Management of Material Fluxes and of Resources

The University of the United Nations aims to develop sustainable solutions for pressing global problems of human survival and development. The “Institute for the Integrated Management of Material Fluxes and of Resources” (UNU-FLORES) was established in Dresden, Germany in December 2012. The institute engages in research, capacity development, advanced teaching and training. UNU-FLORES develops strategies to resolve pressing issues in the area of sustainable use and integrated management of environmental resources such as soil, water and waste.

http://flores.unu.edu/

Leibniz Institute of Ecological Urban and Regional Development (IOER)

The Leibniz Institute of Ecological Urban and Regional Development (IOER) is an establishment of the Leibniz Association for research in the spatial sciences. The IOER develops the scientific basis for the sustainable development of cities and regions in the national and international context. Research addresses ecological issues of sustainable development.

http://www.ioer.de

Technische Universität Dresden

The Technische Universität Dresden (TUD) is one of Germany’s eleven universities of excellence.: strong in research and considered first-rate with respect to the range and the quality of the study programmes it offers, it is also closely interconnected with culture, business and society. A strategic partnership between the Faculty of Environmental Sciences at TUD and UNU-FLORES has been established, which has led to joint research projects and a doctoral degree programme in “Integrated Management of Water, Soil and Waste”.

http://tu-dresden.de/en