



Recommendations of the side event from September 16<sup>th</sup>, 2023 at United Nations University – Centre for Policy Research, New York, USA

# Leveraging Postgraduate Education for Sustainable Development

## The Resource-Nexus and Environmental Management in Global South Partnerships

### Speaker & Expert Panel

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### Background & Rationale

Higher education institutions play a crucial role in fostering innovation, research, and knowledge transfer that directly impact the attainment of the SDGs. Postgraduate education, in particular, provides a unique opportunity to train and equip the next generation of leaders, researchers, and professionals with the necessary skills, knowledge, and interdisciplinary perspectives required to address complex global challenges.

The concept of the resource nexus emphasizes the interconnectedness of different resources (e.g., water, energy, food, materials) and the importance of adopting a holistic approach to sustainable development. By promoting collaborations and partnerships between the Global South and North, we can facilitate knowledge exchange, capacity building, mutual learning and technology transfer, thus creating a positive ripple effect across regions and addressing common sustainability challenges.

## Recommendations

### *Strengthening Postgraduate Education for Sustainable Development*

The role of postgraduate education in achieving the global goals is a central theme and the significance of international collaborations is unquestionable. A comprehensive strategy for further investment and expansion of such initiatives, with particular focus on strengthening partnerships between the Global North and Global South is proposed. Special attention should be given to integrating environmental management and resource-nexus concepts into postgraduate curriculums, leveraging exemplary programs like the *Centre for International Postgraduate Studies of Environmental Management* (CIPSEM). This includes the implementation of joint research projects and knowledge exchange with the aim of addressing sustainability challenges.

### *Scaling Up Resource Nexus Research for Sustainability Transformations*

Programs like *Resource Nexus for Sustainability Transformations* (NEXtra) aim at connecting research on environmental resources to the implementing work of the UN system and represent an example for a pivotal tool in advancing the SDGs. An expansion of such effort is advocated, supported by increased partnerships and dedicated funding for students from the Global South. Additionally, the incorporation of mentorship and collaborative research projects to foster a dynamic learning environment is encouraged. Partnerships with institutions like the *Global Water and Climate Adaptation Centre* (ABCD-Centre) should be nurtured to further leverage research capabilities and knowledge transfer.

### *Empowering Change Agents*

Recognizing the critical role of higher education in sustainable development, approaches like United Nations University's *Knowledge Academy for the Resource Nexus* (KARE) should be actively promoted and expanded. Such initiatives serve as dynamic platforms in terms of education and capacity development for practitioners as well as policy makers. It is further recommended to establish close collaboration with initiatives such as the *International Academy Transformation for Environment and Sustainability* (TES-Academy), which empowers people through joint learning processes to initiate and implement transformation processes for the environment and sustainability as part of their professional activities

## Exemplary Programs

**Centre for International Postgraduate Studies of Environmental Management (CIPSEM)** - The centre is based at Dresden University of Technology in Germany and aims to support the environmentally sound and sustainable growth of developing countries including emerging market economies by assisting professionals from ministries, agencies, or local government units, NGOs, organizations and institutions in improving their knowledge base and skills.



<https://tu-dresden.de/cipsem>

### **Global Water and Climate Adaptation Centre - Aachen, Bangkok, Chennai, Dresden (ABCD-Centre)**

The centre addresses the pressing issue of humanity's adaptation to the consequences of climate change with a particular focus on water. As a joint effort between leading scientific institutions, it enables a global dialogue, the transfer of research results into practice, and the education of future environmental leaders. It consists of three main pillars, including teaching (e.g. establishing a joint MSc. program), research (e.g. including mobility funds to foster joint cooperation), and transfer activities (e.g. organizing international transfer workshops and conferences).



<https://abcd-centre.org/>

### **Resource Nexus for Sustainability Transformations (NEXtra) Program** - Ph.D.

students from the Global South and with different disciplinary backgrounds will work on sustainability transformations using a Resource Nexus perspective. The focus of the program is on interlinkages between environmental resources, and synergies and trade-offs in their management. Alumni are expected to turn into "agents of change" who will contribute towards sustainable development in their home regions and beyond. This is facilitated by connecting all students and supervisors to the UN system.

<https://go.unu.edu/3brhq>

## Exemplary Programs (continued)

**Knowledge Academy for the Resource Nexus (KARE)** - Through an increased awareness around the research themes, the Knowledge Academy strengthens the resource nexus concept in interdisciplinary work, trains new generations of thought leaders and multipliers, and facilitates knowledge transfer globally with an increased digital footprint. The Knowledge Academy shall showcase UNU-FLORES's work in education, capacity building, and knowledge transfer with a connection to all research of the Institute. It further aims to go beyond and establish such an academy on a UNU-wide level.

<https://go.unu.edu/sj5WL>

**TES Academy (Transformation for Environment and Sustainability)** - The TES Academy of the German Environment Agency offers inter- and transdisciplinary learning and collaboration spaces for professional actors, in which they can experience and (co-)shape concrete transformation processes along current challenges of sustainable development. Within the framework of scientifically based and virtual as well as physical formats, the TES Academy facilitates joint learning and long-term collaboration on personal, interpersonal, organizational, and overall societal levels, forms collaborative networks and partnerships, and further develops personal and institutional potentials in order to advance the social transformation for a sustainable future.

Umwelt  
Bundesamt

TES Academy  
Transformation for  
Environment and Sustainability

<https://t.ly/NEcBD>

## In Memory of Professor Saleemul Huq (1952 – 2023)



### *South-North Collaboration and People-to-People Exchanges*

Experiences from the Global South underscore the vulnerability of countries like Bangladesh to climate change impacts. To address these challenges, the establishment of a further development of structured exchange programs between institutions in the Global North and South is recommended. Such programs should be designed to facilitate the sharing of expertise, knowledge, and best practices, with a focus on practical solutions for climate resilience and adaptation. Exemplary partnerships like the one between the Ahsanullah University of Science and Technology (AUST) in Bangladesh and the Institute for Integrated Management of Material Fluxes and of Resources of the United Nations University (UNU-FLORES) should be encouraged and expanded to promote collaborative efforts towards sustainability.

### *International Cooperation for Sustainability in Education*

Academic Institutions in both, the Global South as well as in the Global North exemplify the importance of embedding sustainability concepts in curricula and research programs. A broader dissemination of best practices and a concerted effort to foster similar initiatives worldwide is advocated. This can be facilitated through the establishment of collaborative networks among universities, supported by funding and resources dedicated to sustainability education. Exemplary initiatives by the Indian Institute of Technology Madras or the Asian Institute of Technology in collaboration with UNU-FLORES and TU Dresden should serve as models for more integrated approaches.

### *Promoting Multifaceted Approaches to Sustainability*

The German Environment Agency's multifaceted approach, to provide learning and collaboration spaces to form collaborative networks and partnerships with institutions abroad, and further develop personal and institutional potentials, serves as an exemplary model. Other countries and institutions are invited to propose and jointly develop transformation processes on specific topics. Additionally, the establishment of a knowledge-sharing platform to facilitate the exchange of best practices and lessons learned in the pursuit of sustainability is proposed. Institutions should consider forming partnerships with organizations like the *International Academy Transformation for Environment and Sustainability* (TES Academy) to broaden their impact.

### *Youth Empowerment for the 2030 Agenda*

Emphasis on empowering youth as change agents and future leaders is of paramount importance. To promote this agenda, the development of specialized training programs for young leaders, focused on building their capacity to drive sustainable development initiatives is of crucial importance. Cross-collaboration among international partner institutes should be actively encouraged, with a specific emphasis on joint research projects and knowledge exchange. Such initiatives (e.g. *Young Researchers' School* of United Nations University's Institute for the Advanced Study of Sustainability) should be expanded to provide more opportunities for young scholars to engage with sustainability challenges.

### *Leveraging Digital Platforms for Education*

Insights on utilizing digital platforms for content development and knowledge sharing represent an important avenue for making education more inclusive and accessible. Hence, the establishment of a global consortium to explore and implement innovative digital education solutions is requested. This consortium should focus on creating high-quality, accessible content that addresses the specific needs of diverse stakeholder groups and regions. Collaboration with organizations specializing in digital education, such as the abovementioned TES Academy, should be explored to maximize the impact of digital platforms.

## Conclusion

Achieving the SDGs demands a concerted "moonshot" approach, underpinned by cross-global partnerships and higher education programs. The need for intensified collaboration, evidence-based policies, and interdisciplinary approaches cannot be overstated. This white paper calls for a collective effort to turn inspiration into meaningful action, urging everyone to contribute on both local and global levels for a more sustainable world. By adopting and implementing these recommendations, we can collectively accelerate progress towards a more inclusive, equitable, and sustainable future for all.

Recording of the complete side event session



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