



USAID's Higher Education System Strengthening Activity

International Summit on Shaping the Future of Higher Education in Pakistan 10-12 June 2024, Islamabad

Session 5: Monday, 11 June 2024 (10:00 to 11:30 hrs)

Topic: Climate Responsive Water Governance within the Context of Sustainable Development

- Speakers:**
- Dr. Michael Barber, Professor and Chair, Department of Civil and Environmental Engineering, University of Utah, USA
 - Dr. Sajjad Ahmad, Professor, Department of Civil and Environmental Engineering, University of Nevada, USA
 - Dr. Steve Burian, Professor, Department of Civil, Construction and Environmental Engineering, and Director of Science, University of Alabama, USA

Description: As the world grapples with the escalating impacts of climate change, effective water governance is paramount for building resilience and ensuring sustainable development. This session aims to explore innovative strategies, best practices, and policy frameworks for managing water resources in a changing climate. According to the International Labor Organization, unmitigated climate change poses threats to global economic growth but climate change action can lead to more and better jobs.

This session will delve into the intersection of climate change, water governance, and employment opportunities in Pakistan. Addressing climate change not only mitigates economic risks but also creates avenues for job creation and improvement, particularly within the context of water governance for sustainable development.

Pakistan's transition towards net-zero carbon emissions presents unprecedented prospects across educational disciplines, constituting a green job revolution. In this regard, the HEIs can play a crucial role in bridging the gap between the demand for green skills and their supply, by producing graduates equipped with climate-resilient and eco-friendly competencies. This session will explore various aspects of this transition, including but not limited to the following.

- Examining the role of HEIs in fostering climate-resilient graduates, including the challenges and opportunities for future graduates in climate-related professions.
- Integrating climate education into higher education curriculum and research agendas.
- Emphasizing the need for a multi-disciplinary approach and collaborative partnerships to address climate change and water governance challenges in an integrated manner.

- Developing and implementing training programs for enhancing teaching and learning practices in climate resilience and improved water governance, including enhanced research skills in geospatial data processing, statistical analysis, and hydrologic/climate modeling.
- Fostering partnerships for developing and implementing climate resilience research agenda.

While discussing above topics, the speakers will draw upon a diverse range of resources, including insights from the State Department Project being implemented by the University of Utah (Partnership for Countering Climate Change in Sindh and Baluchistan), international best practices, and multidisciplinary research on the water-climate-development nexus. With insights from these resources, along with analysis of other innovative approaches implemented both locally and globally, the speakers aim to provide practical recommendations for advancing climate-responsive water governance within the context of sustainable development in Pakistan.

Learning Outcomes

1. Enhanced understanding of effective water governance's crucial role in sustainable development amidst climate change, alongside insights into innovative strategies and policy frameworks.
2. Recognition of the economic potential inherent in climate change action, including the creation of more and better jobs.
3. Appreciation for the pivotal role of HEI in cultivating climate-resilient graduates and integrating climate education into curriculum and research agendas, fostering multidisciplinary collaboration.
4. Access to practical recommendations for advancing climate-responsive water governance, drawn from diverse resources and analyses, with a focus on actionable insights tailored to Pakistan's context for sustainable development.