United Nations Educational, Scientific and Cultural Organization · Intergovernmental Hydrological Programme

AGWA

United Nations Educational, Scientific and Cultural Organization · International Center for Integrated Water Resources Management under the auspices of UNESCO

Climate-Resilient Water Management Approaches: Adaptation in an Age of Uncertainty
A webinar series from UNESCO, AGWA, & ICIWaRM

Webinar 5 | Climate Risk Assessment on Hydropower
Wednesday, 10 March 2021; 08:45-10:15 UTC / 14:30-16:00 Kathmandu

Registration link - https://unesco-org.zoom.us/webinar/register/WN_-XIY2EVVReiXNj3gNN0AkQ

As the impacts of climate change continue to stress our critical infrastructure systems, how do we adequately assess those risks and enhance resilience in light of uncertainty? The latest webinar in the series on "Climate Resilient Water Management Approaches" focuses on the climate-water-energy nexus, drawing upon experiences and lessons learned in South Asia. Presenters will share two different approaches to climate risk assessments recently applied in Sri Lanka and Nepal, followed by an interactive panel discussion featuring questions from the audience.

Kelsey Harpham of the International Centre for Environmental Management (ICEM) will present her experience implementing a comprehensive analysis of infrastructure vulnerability in transport, water, and energy sectors by integrating a "top-down" climate science approach with a "bottom-up" stakeholder-driven approach in Sri Lanka's Kelani River Basin. The ADB-supported project analyzed risks from climate change impacts at national, sub-national, and local scales — including implications for hydropower production. Peter Droogers of FutureWater, who also worked on the project, will join the panel discussion.

In the second presentation, Divas Basnyat of the Nepal Development Research Institute (NDRI), will discuss his work assessing the future impacts of climate change on Nepal's hydroelectricity sector and the associated findings. The program sought to build resilience through a combination of vulnerability assessments, institutional analyses, and identification of potential adaptation options. Dibesh Shrestha of NDRI will join in the panel discussion.

Webinar Agenda *(times listed as UTC)*
Moderated by: **Anil Mishra,** Programme Specialist, Division of Water Sciences, UNESCO

08:45–08:50 | Welcome and Opening Statement by **Anil Mishra,** Programme Specialist, Division of Water Sciences, UNESCO

08:50–09:10 | *A river basin approach to vulnerability assessment and building resilience in critical infrastructure: Kelani River Basin, Sri Lanka* **by Kelsey Harpham**, Water Resources Engineer, International Centre for Environmental Management (ICEM)

09:10–09:30 | *Designing Climate Resilient Hydropower Sector: the Case of Nepal* **by Divas Basnyat**, Water and Climate Program Lead, Nepal Development Research Institute (NDRI)

09:30–10:10 | Moderated Q&A with **Kelsey Harpham, Divas Basnyat, Peter Droogers**, Senior Hydrologist, FutureWater, and **Dibesh Shrestha**, Senior Research Associate, NDRI

10:10–10:15 | Closing Remarks and Announcements by **Will Logan,** Director, ICIWaRM