

TERMS OF REFERENCE (ToR)

Water and Climate Analyst

Action Area: Managing Cryosphere and Water Risks

Strategic Group: Reducing Climate and Environmental Risks (SG1)



About ICIMOD

The Hindu Kush Himalaya (HKH) region stretches 3,500 km across Asia, spanning eight countries – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. Encompassing high-altitude mountain ranges, mid-hills, and plains, the zone is vital for the food, water, and energy security of around two billion people and is a habitat for countless irreplaceable species. It is also acutely fragile and at the frontline of the impacts of the triple planetary crisis of climate change, pollution, and biodiversity loss.

The International Centre for Integrated Mountain Development (ICIMOD), based in Kathmandu, Nepal, is an international organisation established in 1983, that is working to make this critical region greener, more inclusive and climate resilient. For more information, read our Strategy 2030 and explore our website.

Position overview

We are looking for someone passionate about reducing climate risks and contributing to sustainable water resource management across the HKH region. The applicant should be motivated to investigate the growing complexities of transboundary water resources. The role entails a multifaceted set of responsibilities centered around the assessment of hydrological dynamics and climate change impacts within major river basins and watersheds. Additionally, the role involves collaborating on basin-specific climate scenario analyses within the Himalayan region, supporting capacity-building initiatives, participating in field missions, and contributing to research publications.

The position will be located within ICIMOD's Action Area A - Managing Cryosphere and Water Risks, under Strategic Group 1 - Reducing Climate and Environmental Risks.

The Resilient River Basin Intervention conducts work on climate change and water resources of the HKH region's major river basins. This includes the application of hydrological models and water management scenario assessments of river basins at different scales. Similarly, understanding the impact of climate change on water resources to support climate resilient river systems in the HKH is an essential part of this work.

Responsibilities

The Water and Climate Analyst will be responsible for delivering results in line with the commitments we have made in our <u>Strategy 2030: Moving Mountains</u> and our <u>Medium-Term Action Plan V (2023–2026): Embracing Change and Accelerating Impact.</u>

The Water and Climate Analyst will be responsible for:

- Conducting hydrological assessment of major river basins and watersheds by effective utilization of hydro-climatic models representing mountain hydrological processes such as SPHY (Spatial Processes in Hydrology), VIC (Variable Infiltration Capacity), or J2000.
- Contributing to studies assessing climate change impacts on water, agriculture, energy, and water supply.
- Supporting the climate scenario analyses and assessment of various basins in HKH region.

- Supporting capacity-building trainings and workshops on hydrological modelling and climate change analyses, and translate these assessments into risk analyses and linked to the AAA2 DRR intervention.
- Participating in field missions and research programmes as and when necessary, usually in collaboration with national partners.
- Contributing to planning, monitoring, reporting, and evaluation, and writing proposals.
- Contributing to the wider dissemination of research finding through content writing for communication and outreach products, documents, manuscripts, and journal papers...

Person specification/competencies

ESSENTIAL

- A master's degree in Hydrology, Climate Change, Hydrological Modelling, Geoinformatics, Environmental Sciences, Environmental Management, or related subjects with at least five years of relevant work experience.
- Competence in hydrological modelling and experience with models with strong mountain process representation like SPHY, VIC (Variable Infiltration Capacity), or J2000 etc., suitable for the HKH context.
- Experience in hydrology, climate change, and water resource management specific to mountains in the HKH region.
- Strong skills in programming for climate data analysis (such as R programming, Matlab, Python, Java, etc) and GIS softwarel.
- Competent skills in scientific data management software for statistical climate data downscaling and bias correction.

PREFERRED

- Understanding of dynamic climate downscaling;
- Knowledge of machine learning for impact assessment;
- Ability to handle NetCDF data using tools such as GrADS, Ferret, NCO, CDO, etc.

Reporting and supervising

The Water and Climate Analyst will report to the Intervention Manager, Resilient River Basins, and work in collaboration with the Action Area Coordinator for Managing Cryosphere and Water Risks. The analyst will also work in coordination with team members of the Strategic Group on Reducing Climate and Environmental Risks.

Location

You will be working in a cross-cultural, impact-oriented environment at ICIMOD's head office in Kathmandu, Nepal. Frequent travels in the HKH region will be required. Kathmandu is a lively and exciting place to live. People are friendly, living costs are comparatively inexpensive, food is delicious (with a range of local and international cuisines), and there are good local and international schools and a low crime rate. Nepal offers amazing trekking trails, white water rafting, and safaris, combined with a rich culture and charming yet lively nightlife.

Duration

Two years, with a probation period of six months. There is a possibility of extension, subject to performance and ICIMOD's future funding levels.

Remuneration

This is an international position at ICIMOD. The starting annual gross salary for this position is **USD 16,320**/- (negotiable based on experience and qualifications). Gross salary comprises of basic salary, provident fund, family/post adjustment allowance, and child/dependency allowances. Salaries and benefits at ICIMOD are competitive compared with other international organisations. We offer a comprehensive benefits package which includes insurances (medical, life and accidental), children's education grant for maximum 2 children below 18 years of age, severance pay, paid leave (30 holidays and 10 public holidays per year) and day care facility.

For expatriates, there is a tax exemption in Nepal; they are responsible for their home country's tax payments. Expatriate staff are entitled to housing allowance, annual home leave ticket, shipment of personal effects, and an installation and repatriation allowance.

ICIMOD's core values

Our core values are integrity, neutrality, relevance, inclusiveness, openness, and ambition. These values are an expression of our culture and are central to the guiding beliefs and principles of our work and behaviour. Our core values will lie at the heart of ICIMOD operations and delivery. They will underpin everything we do and frame how we work with our partners. They reflect our founding intentions and the balances we seek to hold, while equipping ourselves for the future.

Diversity, equity, inclusion, and safeguarding

ICIMOD's human resource selection process is based on the qualifications and competence of the applicants. As an employer, ICIMOD is committed to promoting diversity, equity, and inclusion, and offers equal opportunities to applicants from all backgrounds and walks of life, including but not limited to gender, age, national origin, religion, race, caste, ethnicity, sexual orientation, disability, or social status. ICIMOD strongly encourages applications from all eligible applicants, especially women, from all parts of the HKH region.

ICIMOD is dedicated to establishing and upholding a safe and nurturing work environment, where all its employees can participate fully and meaningfully without fear of violence, harassment, exploitation, or intimidation. Any type of abuse or harassment, including sexual misconduct [including child abuse], by our staff, representatives, or stakeholders is not condoned or tolerated.

Method of application

Applicants are requested to apply online before October 13, 2024 (11:59 PM Nepal Standard Time) through the <u>ICIMOD Vacancy Application Portal</u>.

Only shortlisted candidates will be notified.