THE UNIVERSITY OF MANCHESTER
SCHOOL OF ENVIRONMENT, EDUCATION AND DEVELOPMENT
FEE PAYMENT-BASED RESEARCH ASSOCIATE REQUIRED

We are looking for one Research Associate at the Department of Environmental Science & Management and the South Asian Institute of Policy and Governance (SIPG), North South University, Dhaka, Bangladesh, for our International Science Partnerships Funded (2024/25) Project. The Research Associate will work in-person at the Department of Environmental Science & Management and the South Asian Institute of Policy and Governance (SIPG), North South University, Dhaka, and remotely with the University of Manchester, UK. The main contributions of the post-holder shall be primary and secondary data collection, data analysis, model running, and regular contact with the Project PI and Co-PIs. Interested and eligible candidates can apply directly through email to the Project PI with a CV and cover letter.

PROJECT OVERVIEW AND TASKS

Project Title: *Comparing the impact of upstream and downstream flood hazards in transboundary rivers: Case studies from Nepal and Bangladesh*
Funder: International Science Partnerships Fund 2024/25 (ISPF)
RA Post (1): We are looking for one fee payment-based research associate from Bangladesh who will be engaged for 12 months from the 1st of June to the 31st of May (with remuneration of 35,000 BD Taka/month).
Last date of application: 30th May, 2024
The interview will be scheduled in June and conducted in online-mode
Work Start date: 1st June 2024
Work End date: 31st May 2025
International Partner(s): Kathmandu University, Nepal; North South University, Dhaka, Bangladesh; Presidency University, Kolkata, India

HOW TO APPLY

Please send your CV and cover letter to –

- **Dr Mehebub Sahana**, (Project PI), Department of Geography, University of Manchester, UK (mehebub.sahana@manchester.ac.uk) and also CC it to sipg@northsouth.edu

The RA post is based in NSU and collaborative research partner **Dr Mehebub Sahana** (Project PI), Department of Geography, University of Manchester, UK, under the International Science Partnerships Funded 2024/25 (ISPF) research project.

PI and Co-PIs:

Dr Mehebub Sahana, Department of Geography, University of Manchester, UK
Dr Upasak Das, Global Development Institute, University of Manchester, UK
Dr Nimesh Dhungana, Humanitarian Conflict Response Institute, University of Manchester, UK
Dr Reshma Shrestha, Department of Geomatics Engineering, Kathmandu University, Nepal
Dr Md. Abdus Samad, Department of History, Jagannath University, and Adjunct Faculty at North South University, Dhaka, Bangladesh
Dr Priyank Pravin Patel, Department of Geography, Presidency University, Kolkata, India

WORK DESCRIPTION

This is a contract research post involving the following key tasks:

- To work with the Project PI and Co-PIs to carry out the research required, which includes:
    - Help to gather primary data (household survey, interviews, and FGDs) on community vulnerability, disaster inequality, coping mechanisms, and post-flood resilience in the river basins to be studied.
    - Help access historical records and archives to gather information on past flood occurrences, magnitudes, and impacts. Gather data from government agencies in Nepal and Bangladesh (water resource departments, meteorological agencies, and disaster management authorities).
    - Use WRI Aqueduct Floods Hazard data, Global Surface Water dataset, and flood simulation models to understand the nature and characteristics of floods in these basins.
    - Assess statistical data on the case study region's socio-economic indicators, population characteristics, and infrastructure development. Correlate this data with WRI flood maps to asses upstream/downstream flood character.
    - Help to run geospatial modeling (GWR and LBMI models) and statistical modeling for comparative analysis and correlation of spatial flood hazard data with non-spatial survey data and socio-economic indicators to discern different impacts of upstream/downstream floods and their links with disaster inequalities.
    - Help enumerate Causal estimation techniques, Principal component analysis, Poison regression model, and time-series analysis to derive correlations with WRI flood prediction and link these with EWS, coping mechanisms, community resilience, and TRBs flood management.
- To be in regular contact with the project PI and update the progress of the assigned works
- To support ongoing work punctually and help in understanding the field condition.

PERSON SPECIFICATION

- Completion of a Master's degree in Geography, Environmental Science, or higher education in a relevant discipline;
- Expertise in quantitative data processing and analysis (past research activities and qualifications);
- Experience and interest in processing and analyzing spatial data, socio-economic and/or environmental data, and interview data;
- An ability to work independently and a willingness to adapt to emerging research priorities;
- Excellent written and speaking communication skills in English;
- Knowledge of flood hazards, flood modeling, and environmental sustainability;
- The ability to work effectively as part of academic teams and/or with external partners;
- Advanced skills in spreadsheets, GIS software, R-studio and Python.