

Bishwa Prakash Puri

Assistant Lecturer, College of Applied Sciences-Nepal, Kathmandu, Nepal

Freelance Environmental Consultant, Kathmandu, Nepal

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I am a prospective Phd applicant with a strong interdisciplinary background in environmental science, community engagement, hydrological modeling and climate risk analysis. Growing up in Nepal's Koshi Basin, a region highly vulnerable to multi-hazard risks (droughts, floods, landslides and climate variability risks). I developed a deep commitment to understanding and addressing environmental challenges in Himalayan communities. My expertise spans climate data analysis, multi-hazard risk assessment, and hydrological modeling, supported by strong programming skills in Python, R, and GIS technologies. As an environmental consultant and assistant lecturer in Environmental Modeling, I combine technical proficiency with practical field experience to understand and manage climate-driven extremes in water systems through system modelling and decision support approaches relevant to climate-resilient urban and regional infrastructure. My research on temperature trends and agricultural impacts in the Koshi Basin, along with my experience in environmental impact assessments, has equipped me to bridge scientific modeling with community-focused solutions.

I was involved in College of Applied Sciences Nepal as an assistant lecturer in Environmental Modeling and freelance environmental consulting, focusing on EIA/IEE for hydropower projects (Green Globe International Pvt. Ltd.), and business development for small enterprises (Smart Connect Global Education Pvt. Ltd.). My goal is to leverage my skills and experiences to contribute to resilient and sustainable environmental practices in Nepal and beyond.

EDUCATION

Tribhuvan University (MSc.)

2024

College of Applied Sciences-Nepal, Kathmandu, Nepal
Master of Science in Environmental Science

Tribhuvan University (BSc.)

2019

Tri-Chandra Multiple Campus, Kathmandu, Nepal
Bachelor of Science in Environmental Science

ACADEMIC EXPERIENCE

College of Applied Sciences-Nepal

Kathmandu, Nepal

Assistant Lecturer

November 2024–January 2025

- Teaching Environmental Modeling to MSc 4th-semester students, focusing on hydrological modeling (HEC-HMS, HEC-RAS), climate modeling (SDSM), and geospatial analysis (GIS).
- Designing and delivering lectures, leading hands-on practical sessions, and mentoring students in applying modeling tools to environmental challenges.
- Serving as a thesis co-supervisor, guiding research projects and ensuring academic and professional excellence.

PROFESSIONAL EXPERIENCE

Freelancer

Nepal

Environmental Consultant, Researcher, Business Development Consultant

August 2024–Present

- Preparation of EIA, IEE, and Monitoring Reports for hydropower projects.
- Conduct fieldwork and assess environmental impacts of hydroelectric projects.
- Consultations with stakeholders.
- Preparation and presentations of reports.
- Business development and growth strategies for small businesses consultancy firms.

Quest Forum

Kathmandu, Nepal

Environmental Assistant

January 2023–June 2023

- Assisted in environmental studies including preparation of reports, preparation of Terms of References (TOR), facilitation of public hearing, data collection, preparation of presentations.
- Compilation of technical and financial documents for Bidding.
- Assisted in field visits for environmental monitoring in various industries from different sectors such as Brick, Cement, Beverage, and Pharmaceuticals.
- Assisted in Preparation of Environmental Monitoring Report.

- Communicated findings and recommendations to clients, stakeholders, and regulatory bodies.

Nepal Environmental and Scientific Services (NESS)

MSDS Officer Intern

Kathmandu, Nepal

July 2022 – December 2022

- Prepared laboratory consumables inventory and created material safety data sheets (MSDS).

PUBLICATIONS

Journal Articles

- Puri, B. P., Adhikari, T. R., et al. *Spatial and Temporal Variations of Surface Air Temperature (1962–2022) across Physiographic Regions in the Koshi Basin, Nepal*. Published in SOHAM.
- Gautam, R., Puri, B. P., et al. *Impact of Climate Variability on Agricultural Productivity and Food Security in Banke, Nepal: Insights from 1990–2020*. Published in OASK Publishers.
- Research Paper (In Progress): *Assessing Soil Nutrient Dynamics and Their Impacts on Crop Yields: A Case Study of Janaki Rural Municipality, Banke, Nepal*.

Thesis

- Temperature Trend Analysis Along with Paddy Production Trend and Their Impact on Paddy Cultivation in Koshi Basin, Nepal.

RESEARCH AND FIELD EXPERIENCE

- Conducted flood frequency analysis using Gumbel's Distribution Method and HEC-HMS, and developed river channel geometry for Balkhu River Basin using HEC-RAS.
- Simulated rainfall data using Statistical Downscaling Modelling (SDSM) during the Flood and Hydrological Modeling Project in Surkhet Weather Station, Nepal.
- Conducted geological data collection, input, and analysis in Kakani Ranipauwa Area, Nuwakot District, Nepal.
- Geological and Ecological Field Study, Malekhu – Pokhara, Nepal: Conducted geo-environmental studies on rock mass classification, slope stability, landslides, and biodiversity; created environmental geological maps and assessed fluvial deposits.
- Led community-based solid waste segregation initiatives at Sunrise English Boarding School, Sainbu, Lalitpur, Nepal, including managing solid waste and conducting field-based data collection.
- Emission inventory from cement production in Nepal: Annual pollutant emission that generate from the Shivam and Hongshi cement industries was calculated and estimated by the help of default emission factor for different pollutant.
- Emission inventory from hospital: Conducted an emission inventory analysis of NOx, CO, and SOx from Bir Hospital and Grande Hospital, including calculations of mercury and lead emissions during clinical waste incineration.
- Water quality monitoring of ground water and irrigation water: Conducted water quality monitoring of surface and groundwater of Koplu Khola, Nuwakot, analyzing parameters such as temperature, pH, EC, TDS, TSS, heavy metals, and coliform bacteria.
- Measurement and comparison of noise level (equivalent, percentile) in residential, public and workplaces: Compared and identified the noise level within Balkhu and nearby areas.

SKILLS

- **Programming:** Python, R
- **Software:** ArcGIS, HEC-HMS, HEC-RAS, SDSM, LaTeX, Markdown, Git
- **Technical:** Field Surveys, EIA/IEE/BES, Report Writing, Stakeholder Consultations

TRAINING AND CERTIFICATIONS

- Geographic Information System (GIS) Certification – 1 Month (2020)
- Chemical Management and MSDS Certification – 2 Weeks (2022)
- Environmental Impact Assessment Certification – 3 Weeks (2020)

Language Skills

Language	Reading	Writing	Speaking
Nepali	Native	Native	Native
English	Excellent	Excellent	Good
Hindi	Excellent	Beginners	Intermediate

REFERENCES

Dr. Bhupendra Devkota

Principal, Professor, College of Applied Sciences-Nepal
bhupendra.devkota@gmail.com

Dr. Tirtha Raj Adhikari

Professor Emeritus, Tribhuvan University
tirtha43@gmail.com

Surendra Dev Bhatta

Executive Director, Green Globe International Pvt. Ltd.
surenbtta@gmail.com