



GENERAL INFORMATION







Nationality: Nepalese | Address: Kaligandaki-06, Gulmi



EDUCATION

2018 - 2023

Agriculture and Forestry University (afu.edu.np), Hetauda, Nepal

Forestry, Bachelor of Science

Thesis: Dhakal, M. (2023). Forest Fire Risk Modeling Using Geospatial Tools and Techniques in Chure Tarai Madhesh Landscape (CTML): A B.Sc. Forestry report submitted to Agriculture and Forestry University, Faculty of Forestry, Hetauda, Nepal.



EXPERIENCE

FOREST TECHNICIAN

2020 - Present

Community and Sustainable Forest Management, (khotang, Bara, Chitwan, Makawanpur)

Key activities: Forest resource inventory, Geospatial mapping, data interpretation and Analysis, and operational plan preparation.

INTERN STUDENT

Aug 2023 – Oct 2023

Ramat Negev International Training Center, South District, Israel

Plant science, business management skills, computer skills, Learning and Earning experience, and Israel's History and Culture.

Feb 2023- July 2023

Forest Research and Training Centre (frtc.gov.np), Kathmandu, Nepal

(Forest Inventory and Carbon Mapping section)

- Allometric equations development of 7 major species involving Field, lab work, data entry and cleansing.
- Bamboo Resource Assessment outside the Forest areas using visual image interpretation through Collect Earth Online (CEO), laboratory work for biomass modeling and Quality Assurance and Quality Control (QA/QC) processes.
- LiDAR-based scanning field survey in western Nepal.
- Research Methodology for Forest Research and Data Analytics.
- Land Use Land Cover Analysis, Forest degradation, and restoration mapping for carbon trade, Species Distribution Modelling.



SKILLS





Technical Competency:

Nepali, English

- Software: ArcGIS, QGIS, Google Earth, Google Earth Engine,
- Programming language: Python, Java, R,
- Advanced Proficiency in MS-office attributes, and Power BI,
- Collect Earth Online (CEO), Google Forms, and JotForm,
- Advanced graphic designing (Adobe Photoshop and Adobe Illustrator).





TRAINING AND PARTICIPATION

March 2024	Going Places with Spatial Analysis,
	Esri's 6-week free online course
Jan 2024	Introduction to Geospatial Data Analysis with Google Earth Engine, UNU Institute for Water, Environment and Health
5 – 11 Jul 2023	Visual Image Interpretation of Forest Cover Change Using CEO, (Forest degradation and forest cover change analysis for carbon trade) FRTC and World Bank, Kathmandu, Nepal
Jan 2023	Deep learning in forest research, Building a Resilient Churia Region in Nepal (BRCRN),
5 th – 11 Jul 2023	Forest Resource Assessment (FRA) Inventory Guideline, 2022, Forest Research and Training Centre, Kathmandu, Nepal
10 th -14 th March 2023	Training on Google Earth Engine and R-Studio, Forest Research and Training Centre, Kathmandu, Nepal
2 nd – 5 th Jan 2022	Parliamentary Resolution for Invasive Alien Species Management Policies, Faculty of Forestry (AFU) and the Tony Hagen Foundation
5 th – 10 th April 2021	Training on handling and operating camera traps, Parsa National Park Official and Zoological Society of London (ZSL)
$7^{th} - 17^{th}$ July 2020	Community Forest Constitution, and Operational Plan Preparation.



PROJECTS INVOLVED

$11^{th} - 18^{th}$ Feb. 2023	Fieldwork on the allometric equation development of 7 major species in
	western Nepal.
	PEES-RAJDEVI-SMART-JV with technical support of Forest Research and

Training Center, Kathmandu, Nepal

Feb 18th – March 3rd, 2021, Fieldwork on the Soil Sample Collection of Makawanpur District for Digital Soil Mapping.

Department of Land Management and Archive, Kathmandu, Nepal.

Kunwar, S., Dhakal, M.*, Silwal, R. Forest Fire Risk Assessment using Multi-

models in the Chure Tarai Madhesh Landscape (CTML) of Nepal. *Geomatics*, *Natural Hazards and Risk*, *15*(1). https://doi.org/10.1080/19475705.2024.2436540



RESEARCH PUBLICATIONS

2024	Criteria Decision Analysis and Earth Observation Technique in Mountain Regions: Insights from Rasuwa District, Nepal. Submitted to Remote Sensing Applications: Society and Environment.
2024	Pokhrel, S., Neupane, P., Paudel, N., Dhakal, M. , Lamichhane, P., Khadka. A. How Will the Climate Change Shift the Suitable Area of Seven Woody Bamboo Species in Nepal? Evidences from Ensemble Species Distribution Modeling. Submitted to <i>Ecology and Evolution</i> . Wiley.
2024	Dhakal, M. , Bhatta, B., Lamichhane, P., & Parajuli, A. (2024). Synergistic approaches in forest fire risk mapping using fuzzy AHP and machine learning



REFERENCE

Dr. Balram Bhatta

Head/ Professor (Ecology and Environmental Science) faculty of forestry

Agriculture and forestry university, Hetauda, Nepal

bbhatta@afu.edu.np

Dr. Balkrishna Ghimire Assistant Professor of Botany faculty of forestry

Agriculture and forestry university, Hetauda, Nepal



