



MAHENDRA SINGH THAPA

Institute of Forestry, Tribhuvan University, Nepal

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ACADEMIC QUALIFICATIONS

- **PhD in Forestry ongoing since September 2022 and study leave from May 2023**
- **PGD in Remote sensing and Geographical information system (RS GIS) in 2014 with CGPA 8.42**, Centre for space science and Technology education in Asia and Pacific (CSSTEAP), Indian Institute of Remote Sensing (IIRS) Dehradun, India
Project Paper: Assessment and Mapping Aboveground Carbon Stock using High Resolution Satellite Imagery in Doon Valley Uttarakhand, India. CSSTEAP, IIRS, Dehradun.
Courses: Remote sensing, Aerial Photogrammetry and Photo interpretation, GIS with application in Forest Mapping and Monitoring, Forest Inventory, Forest Informatics and Forest Ecosystem Analysis and Modelling
- **Master of Science in Natural Resource Management and Rural Development (2005 – 2007) with 81.3 %**, Tribhuvan University, Institute of Forestry, Nepal
Thesis: Market Potentiality of Tropical Timber species in Terai Community Forests of Nepal.
Courses: Geo-informatics, Resource Mapping and Analysis, Project Management, Natural Resource Economics, Microfinance and Entrepreneurship Development, Natural Resource Policy and Planning, Conservation and rural Development, Research Methodologies and participatory Action Research, Statistical methods in biological and social sciences, Forest Management.
- **Bachelor of Science in Forestry (2001 – 2004) with 66 %**, Tribhuvan University, Institute of Forestry (IoF), Pokhara, Nepal.
Thesis: An assessment of Management Practice of Cinnamomum tamala: case study from Eladi VDC of Syangja District, Nepal
Major courses: Remote Sensing and image Interpretation, Aerial Photo Interpretation and Photogrammetry, GIS Application in NRM, Forest Ecology, Wildlife Ecology, Forest Hydrology, Forest Mensuration, Silviculture, Forest Management, Wildlife Management, Soil Conservation Engineering and Watershed Management, Protected Area Management, Experimental Design and Statistical Analysis, and Environmental Science, Communication and Technical English. Research Methods and Scientific Writing, Tourism and Recreation Management.
- **Intermediate Science in Forestry (1996 – 1998) with 61 %**, Tribhuvan University, Institute of Forestry (IoF), Pokhara, Nepal.
Major courses: Soil science, English, Maths, Science, Accounts and Procedures, Health and Hygiene Forest Management, Silviculture, Forest Mensuration.

PROFESSIONAL EXPERIENCE

Assistant Dean (Planning and Academics)

31 May, 2019 – 16 July, 2021, Tribhuvan University, Institute of Forestry, Kathmandu, Nepal

Major Responsibilities

- Academic Program planning and execution
- Course curriculum revision
- Formulation of academic policy at Institute level.
- Development of academic calendar and its implementation
- Member secretary of IOF research committee
- Member secretary of IOF faculty board standing committee
- Coordination and linkage development with university campuses, government offices and non-government organizations
- Academic program monitoring and evaluation

Assistant professor: Geographical Information System (GIS)

5 March 2012- present, Tribhuvan University, Institute of Forestry, Hetauda Campus Hetauda and Pokhara Campus, Pokhara.

Major Responsibilities

- Teaching and coordinating GIS, Remote Sensing, Aerial Photogrammetry and Photo interpretation forestry, biometrics, soil conservation
- Coordinating Soil conservation, land use planning and watershed management courses
- Conduct Research and dissemination work
- Course Curriculum design and development
- Lecture notes and other teaching material production
- Research guide and thesis supervision
- Conduct educational tour and excursions
- Exam conduction, observation, monitoring and evaluation
- Copy checking, marking and publication

Program Coordinator

25 June, 2010 – 1 March 2012, Research Conservation and Development Nepal (RCDN) Kaski.

Major Responsibilities

- Coordination and linkage development
- Project development/ Planning / implementation/ monitoring and evaluation
- Proposal and report writing.
- Publication and dissemination
- Fund raising

Program Coordinator (Forestry Resource Development Program)

16 December, 2007 – 24 June, 2010, Nucleus for Empowerment through skill transfer (NEST), Pokhara.

Major Responsibilities

- Coordination and linkage development
- Training /workshop facilitation
- Training material design and development.
- Planning, monitoring and evaluation
- Proposal and report writing.
- Organizational representation
- Supervision

Major Activities

- Supervised forestry field activities including forest resource inventory, participatory resource mapping of commercial forest products and identification of threatened plant species.
- Prepared spatial distribution maps of the threatened plant species in community forests.
- Organized multiple workshops and awareness raising programs for the monitoring and conservation of the threatened plant species.
- Prepared project proposals and contracts for collaborative work with other line agencies in the western region of Nepal.
- Designed and conducted training need assessment programs for forest technicians, local resource persons/social mobilizers and local people involved in forestry activities.
- Conducted orientation programs for forest technicians and local resource persons in using topographic map, hand-held GPS unit and forest inventory instruments.
- Involved in several research projects under forestry development program (e.g., forest growth measurement and monitoring within permanent research plots; assessment of insect affected forest trees; biodiversity monitoring in community forests; and impact of NTFP species cultivation within community forest land).

Community Ranger

17 January 2000- 9 April 2001, Natural Resource Management Sector Assistance Program (NARMSAP), Syangja Nepal.

Major Responsibilities

- Launch Income Generation activities
- Conduct resource conservation activities.
- Develop Coordination with all concern stockholders and communication
- Program Planning and implementation
- Reporting
- Community mobilization
- Group facilitation / motivation

RESEARCH AND CONSULTANCY

- Completed Small –Research report on “Assessing the Ecosystem Services of Community Managed Forest Restoration in Chitwan Nepal” Submitted to the Research Directorate, Rector's Office, Tribhuvan University in June 2024
- Completed Faculty grant research on contribution of forest restoration in stand structure in Kankali Community Forest of Chitwan Nepal in June 2024.
- Completed research report on Contribution of forest restoration in stand structure and carbon stock: A case study from Kankali community forest of Chitwan Nepal submitted to research committee IOF Pokhara Campus in June 2024
- Completed project on Building Climate Change Resilience through Community Based Natural Waterholes Conservation in CFMs of, Lamjung District with the support from SCIFOR Project, Denmark.
- Completed Project on Digital Demarcation and Mapping of Forest Area of the Jhapa District Forest Office on 2015 with the support from Department of Forest.

- Completed project on Building Climate Change Resilience through Community Based Natural Waterholes Conservation in Tamagadi CFM, Bara on 2015 with the support from WWF Nepal.
- Completed project on Modelling and Mapping of Aboveground Woody Carbon Stock Integrating Very High Resolution Satellite Imagery and Field Inventory in Bagmara Community Forest, Chitwan Nepal on 2015 with the support of NORHED Project.
- Principal Investigator for “Assessment and Mapping Aboveground Carbon Stock using High Resolution Satellite Imagery in Doon Valley Uttarakhand, India”, PGD Thesis in March 2014 with the financial assistance of CSSTEAP, IIRS
- Team member for Socio-economic impact assessment of Rastrapati Chure Conservation Project (RCCP) in Makawanpur, Bara, Parsa, Rautahat and Udaypur District of Nepal, conducted by Nepal Foresters Association (NFA) for the Ministry of Forest and Soil Conservation, May-June, 2013.

SCHOLARSHIP/AWARDS

- Fellowship from University Grant Commission (UGC) Nepal and EFN faculty grant from WWF for PhD in Assessing the outcomes of community based forest restoration in Central Nepal from IOF, TU Nepal.
- Scholarship for the completion of CSSTEAP (Affiliated to UN) 9- months Post Graduate Course in Remote Sensing and GIS from Indian Institute of Remote Sensing, ISRO, department of Space, Government of India, Dehradun, India
- Fellowship for the completion of the Master’s Degree in Natural Resource Management and Rural Development from ITTO Yokohama Japan.
- Research grant by Bio-Diversity Sector Program for Siwalik and Terai (BISEP-ST) as partial fulfilment for the completion of Masters of Science in Natural Resource Management and Rural Development (NRMRD) on the thesis entitled “Market Potentiality of Tropical Timber Species in Terai Community Forests of Nepal”.
- Research grant by NARMSAP for partial fulfilment for the completion of bachelor degree in forestry for thesis entitled "An Assessment of Management Practice of Cinnamomum Tamala" a case study of Eladi VDC of Syangja District., Nepal

PUBLICATIONS

1. Choksi, P., Lalai, D., Menon, A., Joglekar, A., Roy, A., Ramprasad, Vijaya R., **Thapa M. S.**, ... & Fleischman, F. (2025). How do trees outside forests contribute to human wellbeing? A systematic review from South Asia. *Environmental Research Letters*.
2. Lamichhane, S., Thapa, A., **Thapa, M. S.**, Panthi, S., & Giordano, A. J. (2023). Understanding human-leopard conflict in the ‘Mid-hill’ region of western Nepal. *Journal of Mountain Science*, 20(12), 3464-3475.
3. Bist, DB, **Thapa, M S**, Bista U and Awasthi N (2020): Analytical Hierarchy Process (AHP) based landslide susceptibility mapping of Kaligandaki Hydro-catchment of Syangja, Nepal *Agriculture and Forestry Journal*, Vol 4, Issue 2, PP 80-90. DOI: 10.5281/ZENODO.4310940
4. **Thapa M.S.**, Pandey, M and Dhakal S. (2025). Ecosystem services of Community-Managed Forest restoration in Chitwan Nepal *eJournal of Applied Forest Ecology* (eJAFE), Vol. 13. No. 1, PP 08-23
5. Bhandari AJ, Joshi R, **Thapa M.S**, Sharma RP, Rauniyar SK, (2022): Land Cover Change and Its Impact in Crop Yield: A Case Study from Western Nepal, *The Scientific World Journal*, vol. 2022, Article ID 5129423, 9 pages, <https://doi.org/10.1155/2022/5129423>.

6. Sharma, G., & **Thapa, M. S** (2023). Spatial and Temporal Distribution of Forest Fire in Terai and Chure Range, Nepal. *eJournal of Applied Forest Ecology (eJAFE)*, Vol. 11. No. 1, PP 39-48
7. **Thapa MS**, Lama, S., and Pariyar, S. (2019). Spatial Temporal Dynamics of Human Elephant Conflict in Parsa-Bagmati Corridor of Terai Arc Landscape, Nepal. *eJournal of Applied Forest Ecology (eJAFE)* , Vol. 7. No. 2, PP 1-6.
8. Sharma, R P and **Thapa MS** (2019): Soil Fertility and Soil Quality Index inTibrekot, Community Forest, Western Nepal. *eJournal of Applied Forest Ecology (eJAFE)*, Vol. 7. No. 1, PP 37-46
9. Regmi, S. R., **Thapa, M. S.**, Adhikari, R., & Regmi, R. R. (2021). Dynamics of Land Surface Temperature in Response to Land Use Land Cover Change in Phewa watershed, Kaski, Nepal. *Forestry: Journal of Institute of Forestry, Nepal*, 18(01), 61–80.
<https://doi.org/10.3126/forestry.v18i01.41758>
10. **Thapa MS**, Bhattarai. T, Sharma, R P, KC, Baburam and Puri, L. (2020): Analytical Study on Fertility Status and Soil Quality Index of Shorea robusta Forest, Central Nepal. *Tribhuvan University Journal. Nepal*. DOI: 10.3126/tuj.v33i2.33560
11. Singh, B., Maharjan, M., & **Thapa, M. S.** (2020). Wildfire Risk Zonation of Sudurpaschim Province, Nepal. *Forestry: Journal of Institute of Forestry, Nepal*, 17, 155-173.
12. Regmi, S. R., **Thapa, M. S.**, & Regmi, R. R. (2020). Drivers and dynamics of land use land cover in Phewa watershed, Kaski, Nepal. *Journal of Forest and Natural Resource Management*, 2(1), 19-36.
13. Pokhrel, G., Upadhyaya, and **Thapa, M.S.** (2019): Threats and Conservation of Paris polyphylla: Vulnerable Medicinal Plant in Panchase Protected Forest, Nepal, *Forestry: Journal of Institute of Forestry, Nepal*. Vol 16 pp 11 - 30.
14. **Thapa M. S.**, Poudel G. (2018): Assessing the Coverage of Urban Green Space in Butwal Sub-Metropolitan City, Nepal: A GIS based approach. *Forestry: Journal of Institute of Forestry, Nepal*. Vol. 15: pp 77 - 86.
15. **Thapa M. S.**, KC Baburam (2017): Management Practice of *Cinnamomum tamala* in Eladi VDC of Syangja District. *Himalayan Biodiversity, an International Journal of Life Sciences* Vol 5 No.1 Page 57-65.
16. **Thapa, M.S.** (2015). Modelling and Mapping of Aboveground Carbon Stock Integrating LISS-IV and Cartosat-1 imagery of Timli forest Range, Dehradun India *Himalayan Biodiversity, an International Journal of Life Sciences* Vol 3 Number 1 PP 71- 77.
17. **Thapa, M. S.**, & Sunar, C. (2025). Land use and land cover dynamics and their driving factors in the Ritung Khola watershed, Myagdi District, Nepal. *Himalayan Geographer*, 15(1), 92–109.
<https://doi.org/10.3126/thg.v15i1.81418>.
18. KC Baburam, **Thapa M. S.** (2017): Physiographic Condition of *Berginia ciliata*: a case study from Sanlapsi Sitalban Community Forest, Kaski Nepal. *Kalika Journal of Multidisciplinary studies* Vol 1 pp 1-13.
19. **Thapa M.S** and Chhetri. BBK (2018): Exploring Community Based Natural Waterholes Conservation in lamjung district Nepal. *Wild harvest Governance and Livelihood in Asia, proceeding from the international conference held in Kathmandu*. PP 22-35
20. **Thapa M.S** and Dhital. M (2022): Geospatial approach on estimation and distribution of soil erosion using the RUSLE model. A case study of Ghorahi sub-metropolitan, Dang district. *Inventive* Vol 4

MASTER'S THESIS SUPERVISIOS

S.No.	Thesis Topics	Student Name	Program	My Responsibility
1	As Assessment of Land Use/Land Cover Change in Panchase Ecological Region by Using GIS and Remote Sensing	Hari pd. Gautam	M.Sc Forestry	Supervisor
2	Land suitability of Chiraito (Swertia chirayta) using remote sensing and GIS	Manoj Burlakoti	M.Sc. Community Forestry	Supervisor
3	Modeling Nesting Habitat for White-Rumped Vulture (Gyps bengalensis) in Dang District,	Suman Ghimire	M.Sc NRM RD	Supervisor
4	Spatial and Temporal Distribution of Forest Fire in Kaski District	Nabin BK	M.Sc Forestry	Supervisor
5	Habitat Suitability Modelling of Gaur Using Maxent Model: A case study from Chitwan and Parsa National Park	Sudeep KC	M.Sc Wildlife Conservation and PAM	Supervisor
6	Correlation between the reflectance value and above ground carbon stock :a study from Raktakamala Namuna Community Forest , Saptari District Nepal.	Saroj Das	M.Sc NRM RD	Supervisor
7	Dynamics of Land surface temperature in response to landuse landcover change in Phewa watershed of Kaski District Nepal.	Sudip raj Regmi	M.Sc.Forestry	Supervisor
8	Tree line Dynamics and its impact on carbon storage	Badri Bhattarai	M.Sc.Forestry	Supervisor

MAJOR TRAININGS /WORKSHOPS/CONFERENCES /SEMINARS PARTICIPATIONS

- Participated “International Training Course on 8th Small Satellite Mission, 2019 from 23 November to 09 December, 2019 organized by IIRS, ISRO, India.
- Participated “International Training on Application of Very high resolution satellite data in Natural Heritage management from 11-14 July, 2017 organized by UNESCO, C2C, Wildlife Institute of India, Dehradun.
- Participated “Regional Training on Deforestation and Forest Degradation Mapping and Monitoring Using Multi Scale Geospatial Methods in the Context of REDD+ Initiatives” from 4-8 Aug, 2014 organized by ICIMOD, support by NASA, NORAD, USAID and SERVIR HIMALAYA.
- Officially Registered Participant for “IIRS User Interaction Meet, February 20-21, 2014, organized by Indian Institute of Remote Sensing (ISRO), Dehradun.
- Participated “National Symposium on RS and GIS for Environment with special emphasis on Marine and coastal Dynamics” organized by ISG and ISRS, December 4-6, 2013 Andhra University Visakhapatnam.
- Participated “Pre-Symposium Tutorial on Planetary Exploration” conducted at Department of Geo-Engineering and Centre for Remote Sensing, College of Engineering, Andhra University Visakhapatnam during December 2-3, 2013.

- Participated “Scientific Writing Training” organized by IOF with the support of CoMForM Project, Pokhara Nepal, from 11th to 15th September, 2012.
- Participated “Data Base Training on MS -Access” organized by Institute of Forestry with the support of NUFU Networking Project, IOF, Pokhara Nepal, from 6th to 9th August, 2010.
- Participated in training on “Organizational Disaster Preparedness Planning” organized by FELM Nepal, Kathmandu from 3rd to 5th March 2010.
- Participated in Regional Workshop on "Nepal Climate Change Scenarios; Impacts and Adaptation" on June 22nd 2009 jointly organized by ISET-N and Practical Action with the support of DFID at Pokhara.
- Participated in Workshop on "Climate change; common challenges and our responsibility" on June 5th 2009 organized by Local Initiatives for Biodiversity research and Development (LI-BIRD) at Pokhara.
- Participated in Workshop and process on "Strategic Planning of NEST” on March 3-5th 2010 organized by NEST at hotel Barahi, lakeside Pokhara.
- Participated in training on " Start and Improve Your Business(SIYB)" from 29th Jan to 22nd February 2009 organized by NEST and Centre for Business Development (CEBUD)
- Participated in training on "Transformation based on Appreciative Inquiry" from 2-4th March 2008 organized by NEST.
- Participated in training on "Right Based Advocacy in Natural Resource Management for Food Security" from 24-29th January 2009 organized by Community Development Organization (CDO), Kathmandu.
- Participated training on “Participatory Research and Development” jointly organized by Institute of Forestry, T.U. Nepal and Department of International Environment and Development studies, Norwegian University of Life Sciences, Norway in collaboration with NEPAN/ LIBIRD, Nepal. On December 3-8 2006: Kaski Pokhara Nepal
- Participated workshop on “Managing Mountain Watershed for Rural Development in Nepal”, Organized by institute of Forestry and Agricultural University of Norway (Nor Agric), September 15-16, 2005

SOFTWARE SKILLS

- **GIS and Remote Sensing** softwares (ArcGIS Desktop Products, ArcGIS Online, GPS Utility Q-GIS, Erdas imagine, eCognition Developer) for management, analysis and displaying of geospatial data.
- **Microsoft Office, SPSS and R-studio** for statistical computing and graphics.

COMMUNICATION SKILLS

Good communication skill in English through teaching and studying in English medium
 Academic and professional writing skill
 Secured overall 6.0 band score in academic IELTS test taken in 25th April,2019.

DRIVING SKILL

Drive car, motorcycle, scooter having driving license

AFFILIATION TO ORGANIZATIONS

- Treasurer of Nepal University Professors Association Campus committee Pokhara Campus Pokhara from 2079-082
- Member Secretary of Institute of Forestry, Research Committee 31 May 2019 to 16 July 2021
- SAT committee Member of Quality Assurance and Accreditation of IOF for UGC
- Life member of the "Nepal Red Cross Society".
- Founder President of Research Conservation and Development Nepal (RCDN), Pokhara Nepal.
- Life Member of Nepal Foresters Association
- General Member of Tribhuvan University Teachers Association (TUTA)
- General Member of British Ecological Society

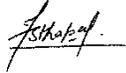
REFERENCES

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