

Faculty Profile

- 1. Name:** Dr. Neelu Lodhiyal
- 2. Designation:** Associate Professor
- 3. Qualification:** M.Sc., Ph.D.
- 4. Area of Specialization/ Research field:** Forest Ecology (M.Sc. & Ph.D.) and Taxonomy (M.Sc.)
- 5. Awards/Recognitions:**
- 6. Number of Research Projects:**

(i) On-going- as a Co-PI

S.N.	Title of the project	Funding agency	Amount (Rs.)	Year (From-to)
1.	Conservation, propagation and rehabilitation of rare, endemic and threatened plant species in the Himalayan Botanical Garden in Nainital of Uttarakhand	BSI, MOEF&CC	40,96000	2019-2022

7. Number of Ph.D. candidates successfully completed- 02

8. Number of Ph.D. candidates currently working- 05

9. Publications:

(i) Books

(ii) Research Articles published in journals:

- Adhikari, B., **Lodhiyal, N.** and Lodhiyal, L.S. 2020. Assessment of crop yield, productivity and carbon sequestration in agroforestry systems in Central Himalaya, India. *Agroforestry systems*, 94(1): 281-296. <https://doi.org/10.1007/s10457-019-00388-2>.
- Mishra, N., Panda, T., **Lodhiyal, N.** and Behera, S.K. 2019. Studies on the gametophytic development, mating behaviour and reproductive biology of *Macrothelypteris torresiana* (Gaudich.) Ching (Thelypteridaceae). *Micron*, <https://doi.org/10.1016/j.micron.2019.102700>.
- Gwal, P., **Lodhiyal, N.** and Rawat, Y.S. 2019. Biomass and carbon storage potential of oak-pine forests in Kumaun Himalaya, India. *Indian Journal of Forestry*, 42(3): 251-254.

- Adhikari, B., **Lodhiyal, N.** and Lodhiyal, L.S. 2019. Carbon sequestration efficiency of agri-horticulture system in Shiwalik plain of Central Himalaya, India. *Indian Journal of Agroforestry*, 21(1): 75-80.
- Adhikari, B., **Lodhiyal, N.**, Kapkoti, B., Lodhiyal, L.S. and Rawat, P.S. 2018. Population structure and regeneration of *Mallotus philippensis* in sal forests of Kumaun Himalaya. *The Indian Forester*, 144(12): 1158-1161.
- Adhikari, B., Kapkoti, B., **Lodhiyal, N.** and Lodhiyal, L.S. 2018. Diversity of Herbs in some sal forests in Shiwalik region of Central Himalaya, India. *Journal of Non-Timber Forest Products*, 25(1): 41-45.
- Bhakuni, N and **Lodhiyal, N.** 2018. Ecological Regeneration Trends of multiple tree size and structure in central Himalaya, India. *Environment and Ecology*, 36(2A): 657-663.
- Lodhiyal, L.S., **Lodhiyal, N.**, Lal, B. and Pandey, J. 2017. Leaf decomposition and nutrient release of poplar plantations in moist plain area of Central Himalaya, Uttarakhand. *Indian Journal of Ecology*, 44(2):330-336.
- **Lodhiyal, N.** Lodhiyal, L.S., and Adhikari, B. 2017. Forest Floor Biomass, Litter Input and Nutrient Pattern in Shisham Forest Plantations in Bhabar Region of Kumaun Himalaya. *Journal of Environment and Bio-Sciences*, 31(1): 17-22.
- Adhikari, B., **Lodhiyal, N.** and Lodhiyal, L.S. 2017. Agroforestry System: Link between Development and Environment. (eds. P. Prakash, N.K. Singh and A. Prakash) *Ecological Ignorance in Development Raising Disastrous Possibilities* pp. 1-13.
- Adhikari, B., Kapkoti, B., **Lodhiyal, N.** and Lodhiyal, L.S. 2017. Structure and Regeneration of Sal (*Shorea robusta* Gaertn f.) Forests in Shiwalik Region of Kumaun Himalaya, India, *Indian Journal of Forestry*, 40(1):1-8.
- Gwal, P., **Lodhiyal, N.**, Rawat, Y.S. and Adhikari, B. 2016. Structure and Diversity of Sal Forests in Government and Community Management Systems in Kumaun Region of Central Himalaya. *Current World Environment* 11(3): 784-790.
- Kapkoti, B., Adhikari, B. **Lodhiyal, N.** and Lodhiyal, L.S. 2016. Structure and Diversity of Sal Forests in Government and Community Management Systems in Kumaun Region of Central Himalaya. *Current World Environment*, 11(1):126-132.
- **Lodhiyal, N.**, Gupta, S., Lodhiyal, L.S., Kapkoti, B. and Bhakuni, N. 2016. Assessment of ecological parameters of crofton weed along the road-side forests of Kumaun Himalaya. *Indian Journal of Weed Science*, 48(4): 410-416.
- Lodhiyal, L.S., **Lodhiyal, N.** and Pathak, G.C. 2016. Plant diversity and vegetation composition of Shiwalik forests along an altitudinal gradient in the Kumaun Himalaya, India. *Globalization and marginalization in mountain regions: Assets and*

Challenges in Marginal Regions (eds. Raghubir Chand and Walter, Leimgruber) Springer International Publishing Switzerland. pp 205-227.

- **Lodhiyal, N.**, Bhakuni, N., Kapkoti, B. and Lodhiyal, L.S. 2016. Community Forest: A way to sustainable Forest management. Sustainable Development in Indian Himalayan Region: Prospects and Challenges (eds. A. Joshi and N. Ruwali) Jagdamba Publishing Company, New Delhi. pp 297-304.
- Lodhiyal, L.S., Pandey, J. **Lodhiyal, N.** Lal, B and Bhakuni, N. 2015. Weather and climate change pattern of Nainital in Kumaun Himalaya with special reference to the temperature and rainfall. In D.K. Jain, R. C. Arya and Singh, N.P. (eds.): Climate change: Socio economic and environmental issues- Problems and challenges, Mohit Publications, New Delhi. pp 35-63.
- Lodhiyal, L.S., Mohanty, T.L., **Lodhiyal, N.** Lal, B. and Kapkoti, B. 2015. Meteorological observation of temperature and rainfall with special reference to the climate change of Ramnagar division in Kumaun Himalaya. In D.K. Jain, R. C. Arya and Singh, N.P. (eds.): Climate change: Socio economic and environmental issues- Problems and challenges, Mohit Publications, New Delhi. pp 103-124.
- Bhakuni, N. **Lodhiyal, N.** and Lodhiyal, L.S. 2015. Certain demographic characteristics and tree layer analysis of Van-Panchayat forest in Kumaun Himalaya. In D.K. Jain, R. C. Arya and Singh, N.P. (eds.): Climate change: Socio economic and environmental issues- Problems and challenges, Mohit Publications, New Delhi. 161-175.
- Kapkoti, B., **Lodhiyal, N.** and Lodhiyal, L.S. 2015. Population structure and tree species diversity of Gahelna Van Panchayat forest in Nainital District. In D.K. Jain, R. C. Arya and Singh, N.P. (eds.): Climate change: Socio economic and environmental issues- Problems and challenges, Mohit Publications, New Delhi, 176-185.
- **Lodhiyal, N.** Dhek, S., Lodhiyal, L.S., Bhakuni, N. and Kapkoti, B. 2014. Species diversity and regeneration of Tilonj-Oak (*Quercus floribunda* Lind.) dominated forests of Nainital in Kumaun Himalaya. *International Journal of Biodiversity and Conservation*, 7(1): 21-27.
- Lodhiyal, L.S. and **Lodhiyal, N.** 2014. Impact of varying densities of poplar (*Populus deltoides*) plantation on soil physico-chemical properties in the Tarai region of Uttarakhand. *Indian Journal of Soil Conservation*, 42(03): 298-304.
- Kapkoti, B., **Lodhiyal, N.** and Lodhiyal, L.S. 2014. Ethno-medicinal plants and their uses by Van Panchayat people in Nainital of Kumaun Region Uttarakhand. *Biolife*, 2(2): 526-532.
- Lodhiyal, L.S., **Lodhiyal, N.** and Bhakuni, N. 2014. Standing tree biomass and carbon content in natural forests of Kumaun in central Himalaya. *Journal of Plant Development Sciences*, 5(04): 167-174.

- Lodhiyal, L.S. and **Lodhiyal, N.** 2013. Ecotourism in Protected areas and natural ecosystems. *Oaks*, 9:32-36.
- Lodhiyal, L.S., **Lodhiyal, N.** and Kapkoti, B.2013. Structure and Diversity of Tree species in natural forests of Kumaun Himalaya in Uttarakhand. *Journal of Plant Development Sciences*, 5:97-105.
- Bargali, K., **Lodhiyal, N.**, Parihaar, R. and Kapkoti, B. 2013. Indigenous Traditional knowledge on some medicinal plants from Kotabag Block (Ramnagar) Nainital. *International Journal of Biology, Pharmacy and Allied Sciences*, 2(1): 20-25.
- Lodhiyal, L.S., **Lodhiyal, N.**, Bargali, K. and Bargali, S.S. 2012. Forest conservation and management practices in Uttarakhand, *ENVIS Bulletin Himalayan Ecology*, 20:30-32.
- **Lodhiyal, N.** 2012. Forest floor, litter fall and nutrient dynamics in young aged Shisham forests in moist plain area of Kumaun of Uttarakhand, *Indian Journal of Forestry*, 35(3): 321-330.
- Lodhiyal, L.S. and **Lodhiyal, N.** 2012. Tree layer composition and carbon content of oak and pine in Lohaghat forests of Kumaun Himalaya. *Journal of Plant development Science*, 4(1): 55-62.
- Lodhiyal, L.S. and **Lodhiyal, N.** 2012. *Rhododendron arboreum* (Burans), a keystone species of Uttarakhand Himalaya. *Oaks*, (8):121-130.
- **Lodhiyal, N.** 2010. People's participation in watersheds for sustainable development of natural resources and climate change perspectives. *Quest: The journal of UGC-ASC Nainital*.
- Lodhiyal, L.S., **Lodhiyal, N.** and Pandey, S. 2011. Conservation and development of Van Panchayat village forests through joint forest management in Kumaun of Uttarakhand. *Environment, Development and Society* (eds. B.L. Sah, D.U. Joshi and R. Sah).
- Lodhiyal, L.S., **Lodhiyal, N.**, Bargali, K. and Bargali, S.S. 2011. Significance of forest ecosystem services in conservation and sustainable development. *Oaks*, 7:41-45
- Bohra, C.S., Lodhiyal, L.S. and **Lodhiyal, N.** 2010. Forest Stand Structure of Shiwalik region of Nainital district along an Altitudinal Gradient in Indian Central Himalaya. *New York Science Journal*, 3(2): 82-90.
- **Lodhiyal, N.** 2010. Ecological significance of Shisham forests with reference to the productivity and carbon sequestration potential. *Oaks*, 6:46-48.
- Lodhiyal, L.S. and **Lodhiyal, N.** 2009. Joint forest management and forest plantation: An alternative pathway for sustainable natural resource conservation and development in Uttarakhand. *Quest: The journal of UGC-ASC Nainital*, 3(1):42-60.

- **Lodhiyal, N.** and Lodhiyal, L.S. 2003. Aspects of nutrient cycling and nutrient use pattern of Bhabar Shisham forests in Central Himalaya, India. *Forest Ecology and Management*, 176: 237-252.
- **Lodhiyal, N.** and Lodhiyal, L.S. 2003. Biomass and net primary productivity of Bhabar Shisham forests in Central Himalaya, India. *Forest Ecology and Management*, 176: 217-235.
- Lodhiyal, L.S., **Lodhiyal, N.** and Singh, SK. 2002. Litter dynamics and nutrient return of Poplar plantations in moist plain area of Uttaranchal Central Himalaya. *The Indian Forester*, 128(11):1183-1194.
- Lodhiyal, L.S., **Lodhiyal, N.** Sanjay K. Singh and Koshiyari, R.S. 2002. Forest floor biomass, litter fall and nutrient return through litters of high density Poplar plantations in Tarai of Central Himalaya. *Indian Journal of Forestry* 25(3): 291-303.
- **Lodhiyal, N.,** Lodhiyal, L.S. and Pangtey, YPS. 2002. Structure and Function of Shisham forests in Central Himalaya, India: Nutrient Dynamics. *Annals of Botany* 89:55-65.
- **Lodhiyal, N.,** Lodhiyal, L.S. and Pangtey, YPS. 2002. Structure and Function of Shisham forests in Central Himalaya, India: Dry Matter Dynamics. *Annals of Botany*, 89(1): 41-54.
- Lodhiyal, L.S. and **Lodhiyal, N.** 2001. Plant diversity, productivity and nutrient cycling of short lived species under poplar plantations in Tarai region of central Himalaya. *Indian Journal of Tropical Biodiversity*, 9(1-4): 8-17.
- Lodhiyal, L.S., Singh, S.P. and **Lodhiyal, N.** 1998. Phenology, population structure and dynamics of ringal bamboo (*Arundinaria falcate* Nees) in Nainital Hills of Central Himalaya. *Tropical Ecology*, 39(1): 109-115.
- Lodhiyal, L.S. and **Lodhiyal, N.** 1997. Aspects of productivity and nutrient cycling of poplar (*Populus deltoides* Marsh) plantation in moist plain area of Central Himalaya, *Oecologia Montana*, 6:28-34.
- Lodhiyal, L.S. and **Lodhiyal, N.** 1997. Variation in biomass and net primary productivity of short rotation high density central Himalayan poplar plantation. *Forest Ecology and Management*, 98:167-179.
- Lodhiyal, L.S. and **Lodhiyal, N.** 1997. Nutrient cycling and nutrient use efficiency in short rotation high density central Himalayan Tarai poplar plantations. *Annals of Botany*, 79:517-527.

iii) Paper presented in Conference/Seminars

Sl. No.	Title of the paper	Title of conference/seminar	Year
1	Forest tree composition and carbon sequestration of forests in Lohaghat of Champawat District in Kumaun Uttarakhand	Research Methods in Forestry and Climate Change	2010
2	Conservation and Development of Van Panchayat village forest through joint forest Management in Kumaun of Uttarakhand	Environment Development and Society	2010
3	Plant diversity and vegetation composition of Shiwalik forests along an altitudinal gradient in Kumaun of Uttarakhand (India)	IGU Conference	2011
4	Changes in soil properties and species composition in different vegetation layer of shisham forests in Tarai Kumaun of Uttarakhand	Geology and Geo-resources of Himalaya and Cratonic regions of India	2012
5	Meteorological observation of temperature and rainfall with special reference to the climate change of Ramnagar division in Kumaun Himalaya.	Climate Change: Socio Economic and Environmental issues- Problems and challenges	2013
6	Carbon Sequestration in Poplar..... Central Himalaya	13 th Silviculture Conference	2014
7	Biomass productivity..... Uttarakhand	Holistic Development of Agroforestry: Potential and Policy Issues	2015
8	Assessing role of women..... Kumaun Himalaya	Challenges of women in the Himalayan region	2015
9	Productivity and carbon.....regions of Uttarakhand	Climate change Education-2015	2015
10	Agroforestry System: Link Between Development and Environment	Socio-Economic Impact of Ecological Ignorance in Development: Raising Disastrous Possibilities	2017
11	Agroforestry system : a way to sustainable development	International Seminar on “Environmental Governance and Sustainable Development in 21 st Century India: Challenges for the Mountain Regions in the Anthropocene” organized by Uttarakhand Political Science Association (UPSA) in conjunction with UGC-Human Resource Development Centre, Kumaun University, Nainital	2017
12	Workshop attended	National workshop on “Big Data	2018

		and Cloud Computing in Bioinformatics” Bioinformatics Infrastructure Facility, Department of Biotechnology, Kumaun University, Bhimtal Campus, Nainital	
13	Carbon sequestration potential in Agroforestry system	National Seminar on “Centaur of Asians: Role and Impact of Asian Countries (With special reference to BRICS and UN), by UPSA in conjunction with UGC- Human Resource Development Centre, Kumaun University, Nainital”	2018
14	Workshop attended	Workshop on “Gender Senitization” by Women’s Studies Centre, Kumaun University, Nainital	2018
15.	Carbon sequestration potential of agri-horti-silviculture system in Kumaun Himalaya, india	International Conference on “ Global Perspective in Agricultural and Applied Sciences for Food and Environmental Security(GAAFES,2019)” organized by AETDS US Nagar & Kumaun University, Nainital	2019

iv) Articles/review articles published in books/journals:

SI. No.	Title of the paper	Title of the book/journal	Editor/publisher	Year of publication	Page No.
1	Joint forest management and forest plantation: An alternative pathway for sustainable natural resource conservation and development in Uttarakhand.	<i>Quest: Nainital,</i>	<i>The journal of UGC-ASC, Nainital</i>	2009.	3(1):42-60.

v) Monographs/Reports (if any): NA

vi) IPR Registered/ Award: one

10. Conference/Seminar organized:

SI. No.	Status as organizer	Title of the conference/seminar	Year and dates
-	-	-	-

11. Sessions chaired in Conferences/Seminars:

SI. No.	Title of the seminar	Organized by	Year and dates
	Global perspective in Agricultural and Applied Sciences for Food and Environmental Security (GAAFES 2019)	Agriculture & Environmental Technology Development Society(AETDS) & Kumaun University	1-2 December,2019

12. Academic/Administrative position held:

SI. No.	Chairman/Member/Secretary	Committee/Authority	Year (From- to)
1.	Assistant Superintendent	Examination Committee	2013 to 2015
2.	Assistant Director	Environment Sciecne	2018 to till date
3.	Assistant Proctor	D.S.B. Campus, K.U. Nainital	2019 to till date

13. Membership to professional Organization/Associations:

SI. No.	Name of the Association/Organizations	Status of the membership
1	ISCA	Life membership
2	Quest	Life membership
3	Oaks	Life membership

14. Any other Information:

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