

LIST OF PUBLICATIONS (Dr. GCS Negi)

International Journals

1. Singh, S.P., Y.S. Rawat, B.S. Rana & **G.C.S. Negi**, 1990. Effects of unusually large seed crop on litterfall and nitrogen retranslocation in Himalayan oaks. **Forest Ecology & Management** 32:79-86.
2. Singh, S.P., P.K. Ralhan, V.P. Upadhyay & **G.C.S. Negi**, 1990. Seasonal changes in stem diameter and leaf development in a tropical montane forest. **Journal of Vegetation Science** 1:165-172.
3. Ralhan, P.K., **G.C.S. Negi** & S.P. Singh, 1991. Structure and functioning of the agroforestry system in the Pithoragarh district of Central Himalaya: an ecological viewpoint. **Agriculture, Ecosystems & Environment** 35:283-296.
4. **Negi, G.C.S.** & S.P. Singh, 1992. Leaf growth pattern in evergreen and deciduous tree species of the Central Himalaya, India. **International Journal of Biometeorology** 36:233-242.
5. **Negi, G.C.S.**, H.C. Rikhari & S.P. Singh, 1992. Phenological features in relation to growth form and biomass accumulation in an alpine meadow of the Central Himalaya. **Vegetatio** 101: 161-170.
6. Rikhari, H.C., **G.C.S. Negi**, B.S. Rana & S.P. Singh, 1992. Phytomass and primary productivity in several communities of a Central Himalayan alpine meadow, India. **Arctic & Alpine Research** 24:344-351.
7. **Negi, G.C.S.** & S.P. Singh, 1993. Leaf nitrogen dynamics with particular reference to retranslocation in evergreen and deciduous tree species of Kumaun Himalaya. **Canadian Journal of Forest Research** 23:349-357.
8. **Negi, G.C.S.**, H.C. Rikhari & S.P. Singh, 1993. Plant regrowth following selective horse and sheep grazing and clipping in an Indian Central Himalaya alpine meadow. **Arctic and Alpine Research** 25 (3):211-215.
9. **Negi, G.C.S.**, H.C. Rikhari, Jeet Ram & S.P. Singh, 1993. Foraging niche characteristics of horses, sheep and goats in an alpine meadow of the Central Himalaya. **Journal of Applied Ecology** 30:383-394.
10. Rikhari, H.C., **G.C.S. Negi**, Jeet Ram & S.P. Singh, 1993. Human induced secondary succession in an Indian Central Himalayan alpine meadow. **Arctic & Alpine Research** 25 (2):8-14.
11. **Negi, G.C.S.** 1994. High yielding vs traditional crop varieties: A socio-agronomic study in a Himalayan village in India. **Mountain Research and Development** 14(3):251-254.
12. Dhaila, S., S.P. Singh, **G.C.S. Negi** & Y.S. Rawat, 1995. Shoot growth phenology of co-existing deciduous and evergreen species in oak forest of Himalaya. **Ecological Research** 10:151-159.
13. **Negi, G.C.S.** 1996. Phenology, leaf and twig growth pattern and leaf nitrogen dynamics of some multipurpose tree species of Himalaya: Implications towards agroforestry practice. **Journal of Sustainable Agriculture** 6(4):43-60.
14. Negi, A.S., **G.C.S. Negi** & S.P. Singh, 1996. Establishment and growth of *Quercus floribunda* seedlings after a mast year. **Journal of Vegetation Science** 7:559-564.
15. **Negi, G.C.S.** & V. Joshi, 1996. Land use in a Himalayan catchment under stress: system responses. **AMBIO** 25 (2): 126-128.
16. **Negi, G.C.S.**, H.C. Rikhari & S.C. Garkoti, 1998. The hydrology of three high- altitude forests in Central Himalaya, India: A reconnaissance study. **Hydrological Processes** 11: 343-350.
17. **Negi, G.C.S.** & V. Joshi, 2000. Water management and sustainability of agriculture in the Himalayan mountains: An overview. **ILIEA (LEISA India)** 2 (1): 12-13.

18. **Negi, G.C.S.** 2001. The need for micro-scale and meso-scale hydrological research in the Himalayan mountains. **Environmental Conservation** 28 (2): 95-98.
19. **Negi, G.C.S.** & V. Joshi, 2001. Agroforestry trees restore degraded land in the Himalayan mountains. **Agroforestry Today** 13 (1-2): 19-21.
20. Joshi V., Naithani, A.K. & **G.C.S. Negi**, 2001. Study of Landslides in Mandakini River Valley, Garhwal-Himalaya, India. **GAIA** 16:87-95.
21. **Negi, G.C.S.** & V. Joshi, 2002. Drinking water issues and hydrology of springs in a mountain watershed in Indian Himalaya. **Mountain Research & Development** 22 (1): 28-31.
22. Critchley, W.R.S., M. Brommer & **G.C.S. Negi**, 2003. Mahender Rautela: Water volunteer. **ILIEA** 19 (3): 23-24.
23. **Negi, G.C.S.** & V. Joshi, 2004. Rainfall and spring discharge patterns and relationships in two small catchments in the western Himalayan mountains, India. **The Environmentalist** 24 (1): 19-28.
24. **Negi, G.C.S.** 2006. Leaf and bud demography and shoot growth in evergreen and deciduous trees of central Himalaya, India. **Trees: Structure & Function** 20:416-429.
25. Bisht, Vimla, **G.C.S. Negi** & G.C. Joshi, 2007. Changing pattern of the flora vis-à-vis tea cultivation in Uttaranchal. **International Journal of Tea Science** 6 (3):15-21.
26. Pramod Kumar, Madhuri Pant & **GCS Negi**, 2009. Soil physico-chemical properties and crop yield improvement following Lantana mulching and reduced tillage in rainfed croplands in the Indian Himalayan mountains. **Journal of Sustainable Agriculture** 33 (6):636-657.
27. Singh, N., L.S. Lodhiyal, R.C. Sundriyal & **G.C.S. Negi**, 2009. Tree layer characteristics and regeneration pattern of Central Himalayan forests in relation to catchment area. **New York Science Journal** 2 (4): 42-45.
28. Carla Restrepo, L.R. Walker, A.B. Shields, R. Bussman, L. Claessens, S. Fisch, P. Lozano, **G.C.S. Negi**, I. Paolini, G. Poveda, C. Ramos-Scharron, M. Richter & E. Velazquez. 2009. Landsliding and its multi-scale influence on mountainscapes. **Bioscience** 59 (8): 685-698.
29. **Negi, G.C.S.** & R.L. Semwal. 2010. Valuing the services provided by forests and agroecosystems in the Central Himalaya. **Mountain Forum Bulletin** 10 (1): 44-47.
30. Panwar, S., D.K. Agrawal, **G.C.S. Negi**, K.S. Kanwal, V. Sharma, M.S. Lodhi, J. Singh, & V. Bhatt. 2010. Impact assessment of a hydro-electric project on the flora in the western Himalayan region based on vegetation analysis and socio-economic studies. **Journal of Environmental Planning & Management** 53 (7): 907-923.
31. Joshi, G. & G.C.S. Negi. 2011. Quantification and valuation of forest ecosystem services in the western Himalayan region, India. **International Journal of Biodiversity Science, Ecosystem Services & Management** 7 (1): 2-11 (DOI: 10.1080/21513732.2011.598134).

National Journals

32. Yadav, S. & **G.C.S. Negi**, 1985. Shoot growth phenology of Maiden hair tree (*Ginkgo biloba*). **Environment & Ecology** 3:463-464.
33. **Negi, G.C.S.**, B.S. Rana, Y.D. Bhatt & H.C. Rikhari, 1992. Survival and growth of tree seedlings in certain village lands of Naini Tal. **Journal of Tree Science** 11(2):131-134.
34. **Negi, G.C.S.**, H.C. Rikhari & S.P. Singh, 1993. Height growth response of certain alpine meadow species to Clipping and grazing. **Range Management & Agroforestry** 14(2):93-101.
35. Singh, S.P., H.C. Rikhari & **G.C.S. Negi**, 1995. Community patterns in an alpine meadow of Indian Central Himalaya. **Journal of Indian Botanical Society** 74 A: 529-538.
36. **Negi, G.C.S.** & V. Joshi, 1996. Geohydrology of springs in a mountain watershed: The need for problem solving research. **Current Science** 71 (10): 772-776.
37. **Sohani, S.K.**, V. Joshi, G.C.S. Negi & J.K. Rawat, 1997. Various collapsible frames of solar-warmer-cum-nursery plant protector. **Indian Forester** 123 (1): 26-31.

38. **Negi, G.C.S.**, K. Kumar, V. Joshi, Y.S. Panda & G.S. Satyal, 2001. Water yield and water quality of some aquifers in the Himalayan mountains. **International Journal of Ecology & Environmental Sciences** 27: 55-59.
39. Joshi, V. & **G.C.S. Negi**, 2001. Rainfall characteristics, overland flow and soil erosion under three vegetation types in the Himalayan mountains of India. **Hydrology Journal** 25 (20): 55-63.
40. **Negi, G.C.S.**, 2002. Hydrological research in the Indian Himalayan mountains: soil and water conservation. **Current Science** 83 (8):974-980.
41. **Negi, G.C.S.** 2003. Traditional methods of water management in the Central Himalayan agriculture. **Indian Journal of Traditional Knowledge** 2 (3): 256-264.
42. Kandpal, K.D. & **G.C.S. Negi**, 2003. Studies on leaf litter decomposition rate for rain-fed crop soil fertility management in the western Himalayas. **Journal of Hill Research** 16 (1): 35-38.
43. Bhatt, V.P. & **G.C.S. Negi**, 2006. Ethnomedicinal plant resources of Jaunsari tribe of Garhwal Himalaya, Uttaranchal. **Indian Journal of Traditional Knowledge** 5 (3): 331-335.
44. **Negi, G.C.S.** & D.K. Agrawal. 2006. Measuring and valuing ecosystem services: Himalayan mountain context (A report on brain storming session organized by the first author). **Current Science** 91 (5): 573-575.
45. Kumar, P., M. Pant, **G.C.S. Negi** & P.C. Joshi, 2009. Influence of leaf litter quality on rate of decomposition, nutrient release pattern, soil microbial biomass and nitrogen mineralization in Central Himalayan rainfed cropfields. **Journal of Environment Bioscience** 23 (1): 19-27.
46. Bagwari, H.K., **G.C.S. Negi** & N.P. Todaria. 2010. Characterization of Rawanganga watershed in Garhwal Himalaya. **Indian Journal of Soil Conservation** 38 (1): 37-41.
47. Bagwari, H.K., **G.C.S. Negi** & N.P. Todaria. 2010. Biomass production of forests in Rawanganga watershed in Garhwal Himalaya. **Indian Journal of Forestry** 33 (1): 55-62.
48. **Negi, G.C.S.**, P.K. Samal, J.C. Kuniyal, B.P. Kothyari, R.K. Sharma & P.P. Dhyani. 2011. Impact of climate change on the western Himalayan mountain ecosystems: An overview. **Tropical Ecology** (Special Volume on Mountain Ecology) 53 (3): (In Press).

Research Projects Undertaken:

1. Ecology of reduced tillage and mulching in the Central Himalayan mountains – **Phase I & II** (Funded by D.S.T., Govt. of India, New Delhi)- **Principal Investigator.**
2. Demonstration of a silvi-pasture model for wasteland restoration in the western Himalaya (Funded by Ministry of Rural Development, GOI, New Delhi)- **Principal Investigator.**
3. Performance and adaptability analysis of sloping watershed environmental engineering technology (SWEET) in the hills of Kumaun Himalayas (Funded by Ministry of Rural Development, Govt. of India, New Delhi)- **Co-Investigator.**
4. Global change impact assessment for Himalayan mountain region for environmental management and sustainable development (A joint project with Nepal and Pakistan, funded by Asia Pacific Network, Japan)- **Co-Investigator**
5. Environmental hazard zonations and resource-use pattern in Alaknanda valley using RS and GIS (A collaborative project with Space Application Centre, Ahmedabad) funded by MoEF, New Delhi- **Co-Investigator.**
6. Geohydrological studies for augmentation of spring discharge in western Himalaya. (Funded by Ministry of Water Resources, Govt. of India, New Delhi). - **Principal Investigator.**
7. Creating interest and curiosity through organization of science motivation programme for high school students (Funded by DST-NCSTE, New Delhi)- **Co-Investigator.**
8. EIA/EMP studies of Rupin hydro-electric project- SPML, New Delhi- **Co-Investigator.**

9. Environmental and social impacts of hydropower projects in Ganga River basin (between Dharasu and Gangotri) in Uttarakhand (Funded by MoEF, New Delhi)- **Principal Investigator.**
10. EIA/EMP studies of Nandprayag-Langasu and Tamak-Lata hydro-power projects in Uttarakhand (Funded by UJVNL, Dehra Dun). – **Principal Investigator.**
11. Kailash Sacred Landscape Conservation Initiative (Rapid study on tourism in Pithoragrah Distt.) Funded by ICIMOD, Nepal (**Co-Investigator**).
12. Indicators of climate change in the context of Himalayan ecosystems along an altitudinal gradient (Funded by DST, Govt. of India, New Delhi)- **Principal Investigator.**
13. Inventorization and monitoring of biosphere reserves in India using remote sensing and GIS technology (Funded by MoEF, Govt. of India, New Delhi)- **Co-Investigator**
14. Assessment and quantification of forest ecosystem services with special emphasis on pollination in the Indian Himalayan agro-ecosystems (Funded by Earthwatch Institute, India & UK) – **Co-Investigator**

Training Manuals/ Folders Developed:

1. Community Training Manual on Village Environment Action Plan for SWAJAL Project.
2. Spring Sanctuary Development in the mountains.
3. Rain Water Harvesting for Irrigation and Domestic Use Guidelines. Submitted to Ministry of Environment & Forests, Govt. of India, New Delhi.
4. Environmental and Social Management Framework. Guidelines prepared for Uttaranchal Decentralized Watershed Development Project, Govt. of Uttaranchal.
5. R. Semwal, A. Tewari, **G.C.S. Negi**, R. Thadani, P. Phartiyal (Editors & Research Contributors), M. Verma, S. Joshi, G. Godbole & A. Singh (Research Contributors). 2007. Valuation of Ecosystem Services and Forest Governance: A Scoping Study from Uttarakhand. Document Published by Leadership in Environment & Development, LEAD-India, New Delhi. 125 p.

Ph. D. Thesis Supervised:

1. Organic matter decomposition and its effect on available nitrogen, phosphorus and potassium in mountain cropfield soil. HNB Garhwal University, Srinagar (Co-Supervisor) (2002).
2. Resource dynamics in a Himalayan watershed and implication for sustainable development. HNB Garhwal University, Srinagar (Co-Supervisor) (2003).
3. Effect of reduced tillage tillage and *Lantana* mulching on soil microbial processes, soil fertility and crop yield in the central Himalayan mountains. Gurukula Kangri Vishwavidyalaya, Haridwar (Co-Supervisor) (2008).
4. A comparative geohydrological study of some springs in Garhwal Himalaya. HNB Garhwal University, Srinagar-Garhwal (Co-Supervisor) (2008).
5. Role of soil macrofauna in organic matter decomposition in relation to soil fertility in district Almora. Gurukula Kangri Vishwavidyalaya, Haridwar (Co-Supervisor) (2009).

Master's Thesis supervised:

1. Unlocking the flow of indigenous water knowledge in the Himalayas. Masters Thesis, Free University, Amsterdam, The Netherlands (Co-Supervisor).
2. Land and water resources management practices in a Himalayan watershed. Masters Thesis, Ecole Nationale du Genie Rural des Eaux et des Forêts, Nancy, France (Co-Supervisor).
3. Fuelwood and fodder consumption in three villages of Alaknanda valley, Chamoli-Garhwal. Masters Thesis, HNB Garhwal University, Srinagar-Garhwal (Supervisor).

4. Plantation management in a Himalayan village: Issues, opportunities and constraints, P.G. Diploma Internship in Plantation Technology, Forest Research Institute (ICFRE), Dehra Dun. 2008 (Supervisor).
5. Status of Land, Vegetation and Water Resources in Bhimtal Lake Catchment: A Growing Township in Uttarakhand. Allahabad University (2009) (Supervisor)
6. Impacts of Hydro-electric Power Projects in Bhagirathi Valley (Ganga Basin), Uttarakhand (Gurukula Kangri Vishwavidyalaya, Haridwar) (2010) (Supervisor)
7. Forest ecosystem services in buffer zone villages in Nanda Devi Biosphere Reserve: Quantification and Valuation (G.B. Pant University of Agriculture & Technology, Pantnagar) (2011) (Supervisor)

Consultancy Assignments:

1. Development of Village Environment Action Plan (SWAJAL Project, U.P. Govt.)
2. Ecological and Economic Impact Assessment of Diversified Agriculture Support Programme in selected villages of Uttaranchal.
3. Worked as a Consultant Scientist with Appropriate Technology International, U.S.A. on natural resources management in the Garhwal Himalaya.
4. Landscaping and restoration plan for Dhaulti Ganga hydro-electric project. National Hydro-Power Corporation, Dharchula, Pithoragarh.
5. Rapid EIA and formulation of environmental management plan for Lakhwar-Vyasi hydro-electric project. NHPC, Dehra Dun.
6. Enhancing Livelihood Through Participatory Watershed Development in four watersheds of Distt. Almora (U.A.), India
7. EIA/EMP studies on hydroelectric projects in river Rupin (Distt. Uttarkashi; UA).
8. Valuation of Ecosystem Services in Uttarakhand, LEAD India, New Delhi.
9. Course content on the topic "Forest Based Livelihood (Unit-I; Block-II)", under the *Leadership Programme on Himalayan Ecosystems* was written for IGNOU, New Delhi (online publ. on IGNOU website: www.ignouonline.ac.in/save).

Awards/Honours:

1. Selected leadership in environment & development (**LEAD**) Fellow - Cohort 12
2. Awarded "**Visiting Fellowship**" by The Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India (Not availed).
3. Member, **Scientific Advisory Committee** for the 6th Biennial Conference of the Indian Society for Ecological Economics on "Nature, Economy and Society: Understanding the Linkages", to be held in October, 2011.
4. Member, **Technical Advisory Committee** for a project, "Environmental Restoration and Environmental Conservation in Hill Villages of Kumaun Himalayas" executed by Institute of Himalayan Environmental Research and Education, Masi-Almora and India Canada Environment Facility, New Delhi.
5. Awarded honorary member to the **Research Board of Advisors** of The American Biographical Institute, U.S.A.

Membership of the Professional /Academic Societies:

- 1) Indian Association of Soil and Water Conservationists, Dehra Dun
- 2) People's Association for Hill Area Research, Naini Tal
- 3) Central Himalayan Environment Association, Naini Tal
- 4) Sikkim Science Society, Sikkim

- 5) Commonwealth Forestry Association (India Unit), New Delhi
- 6) U.P. Association for the Science and Technology Advancement, Lucknow
- 7) National Institute of Ecology, New Delhi
- 8) Mountain Action Research Group, Naini Tal
- 9) Indian Association of Hydrologists, Roorkee
- 10) Indian Association of Tree Scientists, Solan (H.P.)
- 11) Society for Plant Physiology & Biochemistry
- 12) Indian Society for Ecological Economics