

CURRICULUM VITAE (PROF. G. S. SINGH)

Name & Post: Dr. Gopal Shankar Singh, Professor

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Core Specialization: Ecology, Environment and Sustainable Development

Educational/Academic Qualifications:

- Ph.D.** 1993, Jawaharlal Nehru University, New Delhi, India, Environmental Science
- M.Phil.** 1yr Course, 1987 Jawaharlal Nehru University, India, Environmental Science
- M.Sc.** 1986, Banaras Hindu University, India, Botany- Ecology Specialization
- B.Sc.** 1983, Banaras Hindu University, Varanasi, India, Botany- Honors.

Awards/Honours/Academic Recognition:

- Biographical information published in Who's Who in the World. A Who's Who in American Publication, 16th edition, 1999, for outstanding achievement in the field of Science (Ecology and Environmental Sciences).
- RA, in Tropical Soil Biology and Fertility (TSBF) Programme, (International) Mar 1995-Apr 1996.
- RA, in Environmental Information System Project (ENVIS), Jan 1995-Mar 1995.
- RA, at GB Pant Inst. of Himalayan Environment and Development (GBPIHED), Almora/Kullu, in Norwegian Agency for Development Cooperation (NORAD) Project, (International), May 1993-Dec. 1994.
- JRF, UGC-JNU, 1988-1989; SRF, UGC-JNU, 1989-1992.
- JRF, DST, Govt. of India, Oct. 1987- Aug. 1988.

Professional Assignments/Editorial Tasks

- Advisory Capacity, Centre Sustainable Environ & Heritage, New Delhi, 1996-2001.
- Member, DRC- BHU, 2006-2008.
- Member of Regional Advisory Committee, Climate Change Leader Initiatives, Lead India and British High Commission, New Delhi, 2008-2009.
- Reviewer, J. of Pharmacognosy & Phytotherapy (JPP), Academic Jour. Sept 2009--.
- Member, Board of Studies, Environ. Sciences/Studies, MGK Vidhyapith 2008-11.
- Editorial Board- Ecological Questions, Poland 2012---
- Member, Board of Studies in Botany Dept., MGKVP, Varanasi 2012-15.

Teaching/Employments:

- Professor (Stage 5)-** Institute of Environment & Sustainable Development (IESD), Banaras Hindu University, India, (26-2-2014)
- Associate Professor (Stage 4)-** Institute of Environment & Sustainable Development (IESD), Banaras Hindu University, India (26-2-2011 to 25-2-2014)
- Assistant Professor (Stage 3)-** Department of Botany, Banaras Hindu University, India (16-4-2010 to 25-2-2011)
- Assistant Professor (Stage 2)/Lecturer (Senior Scale)-** Department of Botany, Banaras Hindu University, India (16-4-2005 to 15-4-2010)
- Lecturer-** (Botany/Environmental Science) Department of Botany, Banaras Hindu University, India (22-1-2004 to 15-4-2005)
- Lecturer-** Department of Botany, SGPG College, Sarurpur (Khurd), Meerut, India (16-4-2001 to 21-1-2004)

Research Experience:~ 26 years of field and laboratory work

Teaching Experience: ~14 years (UG, PG, & Research Students)

Duties/Responsibilities:

- Lecturer Meerut 2001-2004; Lecture to Professor Banaras Hindu Univ 2004-contd.
- Teaching, research and extension; -Planning and implementation; -Academic and administrative; -Subject experts/editorial and board member

Professional Courses Attended:

- Short Term Course on Excellence in Higher Education, Faculty of Management Studies and HRD Cells BHU, ASC Feb 23-29, 2012
- Refresher Course, Botany, ASC, BHU, Varanasi, Jan 3-23, 2007
- Refresher Course, Environmental Sciences, ASC, BHU, Varanasi, Mar 8-28, 2006
- Refresher Course, Environmental Sciences, ASC, BHU, Varanasi, Mar 9-29, 2004
- Orientation Course, Natural Sciences, ASC, JNU, New Delhi, Jul 15-Aug 09, 2002

Professional Skills/Trainings Attended:

- 1st National Training Session of LEAD'S Leadership building program 2014, on the theme 'Understanding basics: Conservation and climate change' held at Bhimtal, Nainital, organized by LEAD India- Leadership for Environ & Dev, New Delhi, Jul 5th-12th, 2014.
- 2nd National Training Session of LEAD'S Leadership building program 2014, on the theme 'Understanding conservation and climate adaptation in rural development' held at Leh, Ladakh, organized by LEAD India- Leadership for Environ & Dev, New Delhi, Sept 13th-20th, 2014.
- Advance training workshop on Application of Crop Simulation model and decision support system in yield forecasting, IMD Govt of India-IESD BHU, 25-30 June 2012.
- Training program on collection, characterization, evaluation and conservation of agrobiodiversity in northwestern Indian Himalayas, NBPGR, Shimla, 20-25Nov 2001.
- Trainers training programme under HRD on NATP on plant biodiversity under Jai Vigyan National Science and Technology Mission on conservation of agrobiodiversity, NBPGR, New Delhi, Mar 2-21, 2001.
- Orientation training cum workshop under HRD on National Agriculture Technology Project (NATP) on plant biodiversity, NBPGR, New Delhi, Feb 27-Mar 1, 2001.

Professional/Organizational Abilities:

- Course Coordinator: 7th Refresher Course in Environmental Studies (Interdisciplinary), UGC-ASC, BHU, Oct 8-28, 2014.
- Course Coordinator: 6th Refresher Course in Environmental Studies (Interdisciplinary), UGC-ASC, BHU, Jan 9-29, 2014
- Course Coordinator: 5th Refresher Course in Environmental Studies (interdisciplinary), UGC-Academic Staff College, BHU, Aug 14-Sept 3, 2012
- Organizing Secretary: National Seminar on Environmental Concerns and Sustainable Development: Issues and Challenges for India, 2-4 March, 2012
- Joint Organizing Secretary: Annual Review Meeting on FASAL, 1-2 March, 2012

- Course Coordinator: 4th Refresher Course in Environmental Studies (interdisciplinary), UGC-Academic Staff College, BHU, Oct 01-21, 2011
- Joint Organizing Secretary: Role of higher education in disaster management in India: Issues and Challenges, 29-30 Apr 2011

Editorial Task/Academic Recognition:

- Editorial Board- Ecological Questions, Poland 2011—
- Reviewer, J. of Pharmacognosy and Phytotherapy (JPP), Academic Jour. Sept 2009
- Editorial board/team, Himalayan Paryavaran Journal, Sikkim, 1997-2000
- Editorial committee, Centre for Sustainable Environment and Heritage, 1996-2000

Professional/Institutional Memberships/Affiliations:

- Indian Meteorological Society, Mausam Bhawan Complex, New Delhi (Life, 2012)
- International Society for Tropical Ecology, BHU, Varanasi (Life, 2009)
- Mountain Forum, Kathmandu, Nepal (1998)
- Indian Society of Tree Scientist, Solan, (Life, 1995)
- Range Management Society of India, Jhansi (Life, 1994)
- Indian Academy of Sciences, Bangalore (1991-93)
- Indian Institute of Ecology, New Delhi (Life, 1991)
- Indian Science Congress Association, Calcutta (Life, 1991)

Areas of Research Interest:

- Ecosystem function (forest, agriculture, animal and domestic/village subsystems)
- Biodiversity conservation, natural resource management, ethno-botany
- Linking social and economic components with ecological/environmental components
- Environmental/ecological impact assessment, land use/cover analysis
- Traditional ecological knowledge, promotion of sustainable development options
- Watershed management
- Sustainable agriculture
- Climate change
- Ecology, environment and sustainable development

Research Projects: Completed- 4 as PI (ICAR, DST, UGC; **In-hand-** 1 UGC Project)

Consultancy Project- Evaluation of alternative mining methods and social cost benefit analysis of Sondiha Coal Block, Chhattisgarh Mineral Development Corporation Limited, Raipur, Chhattisgarh and Dept. of Mining Engineering, IIT, BHU, Varanasi, 2012.

Salient Academic Contributions/Achievements:

Publications

Published (Total Published- 79)

Papers/Journal Articles- 48 (International- 10; National- 38)

General Articles- 6 (International- 2; National- 4)

Book Chapters- 17 (International- 1; National- 16)

Proceeding Chapters- 5 (International- 1; National- 4)

Books/Booklets- 3 (Booklet-1; Book-2)

Seminars/Symposia/Conferences/Participated/Attended- 72

International- 14, National- 58

Invited Lectures Delivered: 25**Professional Course Attended: 5**

Orientation Course- 1; Refresher Course- 3; Excellence in Higher Education-1

Professional Training Program: 6**Organizational/Administrative Abilities: 7**

Course Coordinator- 4; Organizing Secretary- 1; Joint Organizing Secretary-2

Students Guided/Supervised: 18

Ph. D Degree -2; M. Phil- 2; M.Sc. Dissertation-14

Students Registered: 3**Curricula/Syllabus Designed/Taught:**

-**Dept. of Botany/Environ. Sci-** Conservation and restoration ecology; Foundation course in ecology; Biodiversity conservation; Microbial Biogeochemistry; Ecology; Botany

-**IESD-** Concept and practices of sustainability; Ecological principles; Environmental issues and policies; Sustainable agriculture; Advances in sustainability science and other courses

Research Groups:

Association with other Departments and Institutions

Academic/Administrative Responsibility:

IESD- Members- all Departmental Committees, Policy & Planning (PPC), Academic, Research (DRC), Administrative, Admission, Board of Studies & Examiners, Purchase Committees etc,

Botany- Member in Admission committees, DRC nominee

Outside- Board of Studies, Paper settings, invited lectures/classes

PUBLICATIONS

Papers/Journal Articles

A Tripathi, **GS Singh** (2013). Perception, anticipation and responses of people to changing climate in the Gangetic plain of India. **Current Science**, 105(12):1673-1684. (ISSN 0011-3891; Impact Factor 0.91).

A.Singh, **GS Singh** and PK Singh (2012). Medico-ethnobotanical inventory of Renukoot forest division of district Sonbhadra, Uttar Pradesh, India. **Indian Journal of Natural Products and Resources**, 3(3): 448-457. (ISSN 0976-0504/0976-0512).

A.Singh, **GS Singh** and PK Singh (2012). Ethnopharmacological values of weeds in Eastern Uttar Pradesh, India. **Journal of Medicinal Plants Research**, 6(26):4362-4367. (ISSN 1996-0875; Impact Factor 0.879).

GS Singh (2011). Commercialization unsustainable to Himalayan environment. **Ecological Questions**, 15: 71-75. (ISSN 1644-7298).

Upama Mall and **GS Singh** (2011). Management and conservation of biodiversity through soil seed bank in moist tropics of India. **New York Science Journal**, 4(11): 30-37. (ISSN 1554-0200).

CP Kushwaha, SK Tripathi, **GS Singh** and KP Singh (2010). Diversity of Deciduousness and phonological traits of key Indian dry tropical forest trees. **Annals of Forest Science**. 67(3):310. (ISSN 1286-4560; Impact Factor 1.788; Citation 4).

Kumari Poonam and **GS Singh** (2009). Ethnobotanical study of medicinal plants used by the Taungya community in Terai Arc Landscape, India. **Journal of Ethnopharmacology**, 123 (1): 167-176. (ISSN 0378-8741; Impact Factor 3.014; Citation 16).

GS Singh (2008). Wealth of traditional ecological knowledge: Securing foundation for sustainable future in the Thar Desert of Rajasthan, India. **Science & Culture**, 74(9-10): 373-381. (ISSN 0036-8156).

GS Singh (2008). Traditional knowledge and sustainable agriculture: A study in the western Himalaya. **Social Action**, 58:184-199. (ISSN 0037-7627).

GS Singh (2006). Women and mountain environment: Prospects of cultural diversity, status and sustainable development of north western Himalaya. **Science & Culture**, 72(3-4):122-127. (ISSN 0036-8156).

GS Singh (2005). Traditional ecological knowledge, biodiversity and resource use practices in high altitudes region of Western Himalayas. **Environmental Conservation Journal** 6(2):47-57. (ISSN 0972-3099).

GS Singh (2005). Functional attributes of tribal people of western Himalaya: Need for indigenous knowledge based sustainable planning. **J. Human Ecology**, 17(4):307-312. (ISSN 0970-9274).

GS Singh (2004). Ethno-biological and bio-medicinal wealth of western Himalaya, India. **J. Medicinal and Aromatic Plant Sciences**, 26(3):517-526. (ISSN 0253-7125).

GS Singh (2004). Indigenous knowledge and conservation practices in tribal society of western Himalaya: A case study of Sangla Valley. **Stud. of Tribes & Tribals**, 2(1):29-35. (ISSN 0972-639X).

JC Kuniyal, SCR Vishvakarma and **GS Singh** (2004). Changing crop biodiversity and resource use efficiency of traditional versus introduced crops in the cold desert of the northwestern Indian Himalaya: a case of the Lahaul valley, **Biodiversity and Conservation**. 13:1271-1304. (ISSN 0960-3115; Impact Factor 2.238; Citation 14).

GS Singh (2004). Prospects of indigenous medicinal plants of Himachal Himalaya. **Indian Forester** 130(1):62-70. (ISSN 0019-4816).

GS Singh, JC Kuniyal, and SCR Vishvakarma, (2004). Agro-biodiversity of cold desert of Lahaul valley; Present scenario, **Everyman's Science**. 38(6):331-334. (ISSN 0531-495X).

GS Singh (2003). Dwindling edifice of the indigenous land races of north western Himalaya: Search for new alternatives. **Environmental Awareness** 26(4):137-145. (ISSN 0254-8798).

GS Singh (2003). Ethnobotanical inventory of Sariska National Park in the Aravalli hills of eastern Rajasthan, India. **J. Econ. Tax. Bot.** 27(1):181-195. (ISSN 2050-9768).

GS Singh (2002). Medicinal plants and their uses in valley of Gods and Goddess: A case study of Kullu valley. **Bull. Env. Sci.** 1:65-68.

GS Singh and KS Rao (2002). Altering indigenous farming practices in north western Himalaya. *Envis Bulletin* **Himalayan Ecology and Development**, 10(2):1-3. (ISSN 0971-7447).

GS Singh (2002). Women in the mountain society. **Women's Link**, 8(3):23-26.

GS Singh (2000). Traditional phytotherapy amongst the rural communities of north western Himalaya. **Bot. Surv. India, Bull.** 42(1-4):121-126. (ISSN 0006-8128).

GS Singh (2000). Some additional information on the ethnobotany of Rajasthan. **Bull. Bot. Surv. India**, 42(1-4):127-132. (ISSN 0006-8128).

GS Singh (2000). Dynamics of sacred groves in western Himalaya: A paradigm of community based practices. **J. Indian Anthropol. Soc.**, 35(2):101-107. (ISSN 0019-4387).

GS Singh (2000). Traditional society and bio-cultural values in western Himalaya. **J. Social Sciences**, 4(1):95-100. (ISSN 0971-8923).

GS Singh (1999). A contribution to ethnomedicine of Alwar district of Rajasthan. **Ethnobotany**, 11(1&2):97-99. (ISSN 0971-1252).

GS Singh (1999). Utility of non-timber forest products in a small watershed in the Indian Himalayas: The threat of its degradation. **Natural Resources Forum**, 23(1):65-77. (ISSN 0165-0203; Impact Factor 0.792; Citation 5).

GS Singh (1999). Herbal heritage of western Himalaya: Medicinal plants in therapy. **Acta Botanica Indica**, 27(1):23-28. (ISSN 0379-508X).

GS Singh (1999). An ethnobotanical survey of natural plant resources of Sariska National Park of Rajasthan. **Acta Botanica Indica**, 27(2):151-159. (ISSN 0379-508X).

GS Singh (1999). Ethnobotanical study of useful plants of Kullu District in north western Himalaya, India. **J. Econ. Tax. Bot.**, 23(1):185-198. (ISSN 2050-9768; Citation 16).

GS. Singh (1998). Environmental, ecological and socio-economic impact of introduced crops in western Himalaya: A case study of Kullu valley. **J. Human Ecology**, 9(1):63-72. (ISSN 0970-9272).

GS Singh, KK Sen, JC Kuniyal and SC Ram (1997). Cloudburst calamities in high altitude regions of Himachal Pradesh: Prevention or cure? **Himalayan Paryavaran**, 5:72-74. (ISSN 0971-8931).

GS Singh (1997). Socio-cultural evaluation of sacred groves for biodiversity conservation at Kullu district in north western Himalaya. **Man and Life**, 23(3&4):201-208. (ISSN 0972-4109).

H Jaitli and **GS Singh** (1997). Status of occupational health and safety in five star hotel: A case study of Ashoka hotel. **Occupational and Environmental Health**, 4(2):8-11).

GS Singh (1997). Work participation and social status of women: A case study of Kullu valley. **Man and Development**, XIX (4):97-108. (ISSN 0258-0438).

GS Singh (1997). Sacred groves in western Himalaya: An eco-cultural imperative, **Man in India**, 77(2&3):247-257. (ISSN 0025-1569; Citation 7).

GS Singh, KS Rao and KG Saxena (1997). Energy and economic efficiency of the mountain farming system: A case study in the north-western Himalaya. **J. Sustainable Agriculture**, 9(2/3):25-49. (ISSN 1044-0046; Impact Factor 0.393; Citation 46).

GS Singh, SC Ram and JC Kuniyal (1997). Changing traditional land use patterns in the Great Himalayas: A case study from Lahaul valley. **J. Environmental Systems**, 25(2):195-211. (ISSN 0047-2433).

GS Singh and SC Ram (1997). Prospects of sustainable development of Kullu valley in north-western Himalaya. **J. Rural Development**, 16(2):359-368. (ISSN 0970-3357; Citation 6).

GS Singh (1997). Socio-cultural evaluation of sacred groves for biodiversity conservation in north western Himalaya. **J. Hill Research**, 10(1):43-50. (ISSN 0970-7050).

RM Dobriyal, **GS Singh**, KS Rao and KG Saxena (1997). Medicinal plant resources in Chhakinal watershed in the north western Himalaya. **J. Herbs, Spices, and Medicinal Plants**, 5(1):15-27. (ISSN 1049-6475; Impact Factor 1.018; Citation 13).

JC Kuniyal, SCR Vishvakarma and **GS Singh** (1997). Ecological impacts of cash crops on traditional crops in cold deserts of Lahaul valley in north west Himalaya. **Envis Bulletin-Himalayan Ecology and Development**, 5(2):6-9. (ISSN 0971-7447; Citation 3).

GS Singh and SC Ram (1996). Traditional agricultural practices: A changing scenario in Kullu valley, north western Himalaya. **Environmental Awareness**, 19(4):139-143. (ISSN 0254-8798).

GS Singh (1996). Pesticides: A growing menace. **Occupational and Environmental Health**, 3(3):13-18.

GS Singh and KK Sen (1996). Cause and consequence of cloudburst at Kullu district in Himachal Himalaya. **Himalayan Paryavaran**, 4(1):13-16. (ISSN 0971-8931).

GS Singh, KG Saxena, KS Rao and SC Ram (1996). Traditional knowledge and threat of its extinction in Chhakinal watershed in north western Himalaya. **Man in India**, 76(1):1-17. (ISSN 0025-1569; Citation 13).

GS Singh and KS Rao (1995). Traditional knowledge in Chhakinal watershed. **Envis Bulletin- Himalayan Ecology and Development**, 3(1&2):6-12. (ISSN 0971-7447).

General Articles

GS Singh (2006). Himalayan woes: Himachal's valleys are being robbed off their natural gift-medicinal herbs. **Down To Earth**, June 15. 51. (ISSN 0971-8079).

GS Singh (2004). High yield, low agro diversity. **Down To Earth**. 55 (ISSN 0971-8079).

GS Singh (2001). Sacred groves-Divine intervention: Traditional paradigms of conservation. **Wastelands News**. May-July, 52-53. (ISSN 0970-9762).

SC Ram and **GS Singh** (1997). *Grewia oppositifolia*- time for revival in Himalaya. **Agroforestry Today**, 9(1):14-15. (ISSN 1013-3225).

GS Singh (1997). Chemical trademill in India. **Pesticides News**, 35:10.

GS Singh, JC Kuniyal and SC Ram (1994). Cloudburst in Kullu: A report. **Hima Paryavaran, Newsletter**, 6(2):11-12. (ISSN 0970-8421).

Book Chapters

U Mall and **GS Singh** (2014). Soil seed bank dynamics: History and ecological significance in sustainability of different ecosystems. In MH Fulekar, B Pathak, RK Kale (Eds.) **Environment and Sustainable Development**. DOI 10.1007/978-81-322-1166-2_3 @ Springer India, 198pp.

GS Singh and A Tripathi (2013). Changing climate in Indo-Gangetic region of eastern Uttar Pradesh, India. In PR Sharma, RS Yadava and VN Sharma (Eds.) **Interdisciplinary Advances in Geography**. RK Books, New Delhi, 380-392. (ISBN: 978-81-9100-598-1).

GS Singh, Poonam and U Mall (2013). Terai arc landscape and Taungya system: Ecology, biodiversity and conservation. In PR Sharma, RS Yadava and VN Sharma (Eds.) **Interdisciplinary Advances in Environmental and Earth System Studies**. RK Books, New Delhi, 401-413. (ISBN: 978-81-910059-9-8).

GS Singh (2008). Functional attributes of tribal people of western Himalaya: Need for indigenous knowledge based sustainable planning. In: MI Srinivasan and S Patnaik (Eds.) **Indigenous Peoples in the World: Issues Challenges and Experiences**, ICFAI University Press, Hyderabad, reprinted from JHE, 73-85. (ISBN 978-81-314-1636-5).

GS Singh (2007). Role of traditional ecological knowledge and social institutions in sustainable development: A changing scenario in the western Himalaya. In KK Misra and KK Basa (Eds.) **Traditional Knowledge in Contemporary Societies**. Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal and Pratibha Prakashan, New Delhi, 318-331. (ISBN 81-7702-141-9)

CP Kuniyal, **GS Singh**, JC Kuniyal and SCR Vishvakarma (2006). Utilization and conservation prospects of medicinal plant resources in high altitude of Himachal Pradesh. In: PC Trivedi (Ed.) **Herbal Medicine: Traditional Practices**. Aavishkar Publishers, Distributors, Jaipur, 225-237. (ISBN 81-7910-152-5 Prefix 817910).

GS Singh (2002). Medicinal plants in western Himalaya: Traditional knowledge, economy and conservation. In: VK Singh, JN Govil, S Hashmi & G Singh (Eds.) Series Recent Progress in Medicinal Plants, Vol. 7- **Ethnomedicine and Pharmacognosy II**, Sci Tech Pub. USA, 137-154. (ISBN 1930-81-3120).

GS Singh (2001). People and environment in Himachal Himalaya: A socio-economic perspective. In: KK Misra and MLK Murty (Eds.) **People and Environment in India**. Discovery Publishing House, New Delhi, 156-178. (ISBN 81-7141-586-5).

GS Singh (2000). Ethnobotanical study of useful plants of Kullu district in north western Himalaya, India. In: JK Maheshwari (Ed.) **Ethnobotany and Medicinal Plants of Indian Subcontinent**. Scientific Publishers (India), Jodhpur, reprinted from JETB, 185-198. (ISBN 81-7233-221-1).

GS Singh (1999). Tribal women of western Himalaya: A socio-cultural interpretation. In: DK Behera and G Pfeffer (Eds.) **Contemporary Society: Tribal Studies**, Vol. 3, Social Concern. Concept Publishing Company, New Delhi, 203-214. (ISBN 81-7022-737-2).

SCR Vishvakarma, JC Kuniyal and **GS Singh** (1998). Indigenous agroforestry system of north western Himalaya. In: **Research for Mountain Development: Some Initiatives and Accomplishments**. Published by Gyanodaya Prakashan, Nainital, UP, 99-118. (ISBN 81-8509-747X)

GS Singh (1998). Sacred sites, cultural integrity and biological diversity: An approach of landscape sustainability analysis in western Himalaya. In: RB Singh (Ed.) **Sustainable Development of Mountain Environment in India and Canada**, Oxford & IBH Publishing Co. Ltd, New Delhi, 208-216. (ISBN 81-204-1286-9).

GS Singh, KS Rao and KG Saxena (1998). Eco-cultural analysis of sacred species and ecosystem in Chhakinal watershed, HP. In: PS Ramakrishnan, KG Saxena and UM Chandrashekara (Eds.) **Conserving the Sacred for Biodiversity Management**, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, 301-314. (ISBN 81-204-1285-0; Citation 6).

GS Singh and KG Saxena (1998). Sacred groves in the rural landscape: A case study of Shekhala village in Jodhpur district of desert Rajasthan. In: PS Ramakrishnan, KG Saxena, and UM Chandrashekara (Eds.) **Conserving the Sacred for Biodiversity Management**, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, 227-288. (ISBN 81-204-1285-0; Citation 6)

GS Singh (1996). Changing traditional land use pattern in Himachal Himalaya at Kullu, HP. In: PS Pathak and B Gopal (Eds.) **Studies in Indian Agroecosystems**, 1-13. (ISBN 81-86047-14X)

GS Singh (1995). Socio-economic evaluation of different land use systems in high altitude of western Himalaya. In: RB Singh and MJ Haigh (Eds.) **Sustainable Reconstruction of Highland and Headwater Region**, Oxford & IBH Publishing Co. Pvt. Ltd, New Delhi, 127-137. (ISBN 81-204-1035-1).

JC Kuniyal, SC Ram, **GS Singh** and AP Jain (1995). Environmental assessment of Kullu Dussehra in Himachal Himalaya, India. In: RB Singh and MJ Haigh (Eds.) **Sustainable Reconstruction of Highland and Headwater Region**, Oxford & IBH Publishing Co. Pvt. Ltd, New Delhi, 73-85. (ISBN 81-204-1035-1; Citation 8).

Books/Booklets

KG Saxena, Y Kumar, KS Rao, KK Sen, U Rana, BS Majila, A Pharswan, **GS Singh** and Nehal (1994). Hydropower Management for Sustainable Rural Development in Remote Unelectrified Zones of Himalaya. **Himavikas Publication No. 7**. GBPIHED, Almora, 1-22.

Proceedings Chapters

GS Singh (2002). Sustainable utilization and conservation of biodiversity in north western Himalaya. In: A. Kumar (ed.) **Proceedings of National Symposium on Science and Ethics of Environmental Care and Sustainability**, Dr.SPMGDC,Phaphamau,Allahabad,Vol.1:1-4.

GS Singh (2002) Vegetation distribution and its utility in Chhakinall watershed at Kullu, Himachal Pradesh. In: A. Kumar (ed.) **Proceedings of National Symposium on Science and Ethics of Environmental Care and Sustainability**, Dr. SPMGDC, Phaphamau, Allahabad, Vol. 1:125-134.

CP Kuniyal, SCR Vishvakarma, JC Kuniyal and **GS Singh** (2001). Seabuckthorn (*Hippophae L.*) A Promising plant for land restoration in the cold desert Himalayas. In: V Singh and PK Khosla (Eds.) **Proceeding of International Workshop on Seabuckthorn**, 1-6.

H Jaitli and **GS Singh** (1998). Effect of pesticides on human beings in western Himalaya. In: **Proc. WHO workshop on Occupational Health Problems in Agricultural Sector**, National Institute of Occupational Health, Ahmadabad, 147-155.

GS Singh and AK Gangwar (1989). Vegetation analysis of degraded environment around Alwar and its restoration strategies. In: **Proc. of National workshop on Arid Zone Research**. Remote sensing applications center for resource evaluation and geo-engineering, Aligarh. 15-26.

Invited Lectures Delivered

Nature, Development and Environment- Role of Science, 6th Refresher Course in Library and Information Science, UGC-ASC, BHU, Nov 29, 2014 (Invited).

Natural resource management in western Himalayan region, National seminar on Threat to Biodiversity & Ecosystems -- Climate Change --, Dept of Zoology & Environ. Sci, Gurukul Kangri Vishwavidyalaya, Haridwar, Nov 17-19, 2014 (Invited).

Environmental Crisis, 3rd Refresher Course in Business Management, ASC-BHU, Nov 13, 2014 (Invited).

Beyond Environmental Sciences, 7th Refresher Course in Environmental Studies (Interdisciplinary), ASC-BHU, Oct 21, 2014 (Invited).

Environmental issues, 5th Refresher Course in Education, ASC-BHU, Jul 22, 2014 (Invited).

National seminar on Biodiversity conservation title Biodiversity- where do we stand? Dept. of Botany, UP College, Varanasi, Mar 12, 2014 (Invited).

International conference on Environmental technology and sustainable development: challenges & remedies, Dept of Environ. Sci. BBAU, Lucknow Feb 21-23, 2014 (Invited).

Nature and environment, 1st Refresher Course in Bhojpuri literature, ASC- BHU, Feb 20, 2014 (Invited).

Man and environment, Refresher Course in Environ. Sci. Dept of Botany, DDU Gorakhpur Univ. Feb 12, 2014 (Invited).

Biodiversity: concept and issue, Refresher Course in Environ. Sci. Dept of Botany, DDU Gorakhpur Univ. Feb 12, 2014 (Invited).

Man and environment II, 6th Refresher Course in Environmental Studies, UGC-ASC, BHU, Jan 25, 2014 (Invited).

Man and environment I, 6th Refresher Course in Environmental Studies, UGC-ASC, BHU, Jan 25, 2014 (Invited).

Man and environment, 6th Orientation Course, UGC-ASC, BHU, Jan 24, 2014 (Invited).

Man and environment, 6th Refresher Course in Environ Sci. UGC-ASC, BHU, Jan 24, 2014 (Invited).

Nature and environment, 6th Orientation Course, UGC-ASC, BHU, Jan 23, 2014 (Invited).

Conservation of degraded ecosystem, SBPG College Baragaon, Varanasi, Dec 24-25, 2013 (Invited/Guest lecture).

36th All India Conference of the Indian Botanical Society Theme: Plant Wealth and Human Welfare, Dept. of Botany, DDU Gorakhpur University, Gorakhpur, October 18-20, 2013 (Oral).

National conference on Climate change: Causes, consequences and remedial measures, SBPG College, Baragaon, Varanasi, December 16-17, 2012 (Invited lecture).

National conference on Environment and Sustainable Development, Central University of Gujarat, School of Environment and Sustainable Development, Gandhinagar, Mar 15-16, 2012 (Invited lecture).

National conference on Environmental degradation due to human activities and suggestive measures in urban and industrial areas, Dept of Botany and Environmental Science, SBPG College, Baragaon, Varanasi, Dec 17-18, 2011 (Keynote/special lecture).

National conference on Environmental degradation vis-à-vis biodiversity conservation. MLK (PG) College, Balrampur- RML Avadh Univ, Nov. 5-6, 2011 (Lead/invited speaker).

National seminar on Recent advances in the development of geographical knowledge and its interdisciplinary association with sciences. Dept of Geography, BHU, Nov. 3-4, 2011 (Key Speaker- two lectures).