




Faculty Details proforma for DU Web-site

Title	Prof.	First Name	Sreenivasa Rao	Last Name	Kottapalli	Photograph
Designation		Professor				
Address		Department of Botany University of Delhi Delhi 110007				
Phone No	Office	27667525				
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Email	srkottapalli@botany.du.ac.in, srkottapalli@yahoo.com					
Web-Page		http://people.du.ac.in/~ksrao				
Educational Qualifications						
Degree		Institution			Year	
Ph.D.		North Eastern Hill University, Shillong			1987	
M.Phil. / M.Tech.						
PG		Saurashtra University, Rajkot			1980	
UG		Andhra University, Waltair			1978	
Any other qualification						
Career Profile						
Organisation / Institution		Designation		Duration		Role
Central Sericulture Research and Training Institute, Berhampore, WB		Senior Research Assistant		Dec 1987 to Dec 1988		Research and Training
G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora		Scientist -A		Jan 1989 to Jan 1991		Research and Training
G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora		Scientist -B		Jan 1991 to Oct 1992		Research and Training
G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora		Scientist -C		Oct 1992 to Dec 1997		Research and Training
G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora		Scientist -D		Jan 1998 to May 2003		Research and Training
University of Delhi, Delhi		Reader		May 2003 to August 2008		Teaching and Research
University of Delhi, Delhi		Professor		August 2008 to Contd..		Teaching and Research
Administrative Assignments						
Member – Board of Research Studies, Fac of Sci (DU)				30-10-2014 to 29-10-2016		
Member – M.Phil committee				August 2008....???? ; 12-03-2015 to 11-03-2017		
Member – Ad-hoc panel committee				August 2012 to June 2015; 24-06-2015 to ... contd		

Member – Departmental Purchase Committee Incharge, Departmental Stores	August 2014 to ... contd October 2014 to July 2017
Member – Management committee Jublee Hall	09-06-2011 to 08-06-2013; 09-06-2013 to 08-06-2015; 09-06-2015 to 08-06-2017
Member – Governing Body, Deshbandhu College	19-08-2012 to 18-08-2013; 19-08-2013 to 18-08-2014; 19-08-2014 to 18-08-2015; 19-08-2015 to 18-08-2016
Member – Governing Body, Shri Venkateswara College	25-01-2014 to 24-01-2015; 25-01-2015 to 24-01-2016; 25-01-2016 to 24-01-2017
Member – Governing Body, BCAS	21-12-2014 to 20-12-2015; 21-12-2015 to 20-12-2016
Member – PG Board of Studies in Environmental Studies, North Eastern Hill University	05-09-2011 to 04-09-2014; 05-09-2014 to 04-09-2017
Member – PG Board of Studies in Ecology and Environmental Sciences – Pondicherry University	01-12-2013 to 30-11-2016
Member – Academic Committee, Army Cadet College, Indian Military Academy, Dehradun	May 2017 to May 2019
Member – Academic Council, CSIR-CMAP-JNU Ph.D. Programme, CMAP, Lucknow	May 2017 to May 2019
Areas of Interest / Specialization	
Ecosystem analysis; Adaptation to climate change; Plant nutrition; Ecosystem redevelopment; Agroforestry system researches; Land use/cover analyses; Reserve people conflict mitigation, Soil and water conservation; Sustainable rural development models/approaches.	
Subjects Taught	
<p>M.Sc. – Botany Course 202 – Systematics, Evolution and Environmental Science Course 304 – Principles of Ecology Course 402 - Agroecology Course VIIB: Plant Resource Utilization Course VIII: Plant Ecology</p> <p>M.Sc. - Environmental Biology Course V: Organismal and Population Ecology Course VI: Community Ecology, Ecosystem Dynamics and Modeling</p> <p>M.A./M.Sc. - Environmental Studies Paper 1. Introduction to Environmental Sciences Paper 3. Environment, Development & Sustainability Paper 4. Methodologies for Environmental Studies Paper 5. Environmental Impact and Risk Assessment Paper 10 (M.Sc.). Natural & Managed Ecosystems Paper 19 (M.A.). Global Environmental Issues</p> <p>M.Phil – Botany Course 8 – Population Biology Course 9 – Ecological Adaptations</p> <p>M.Phil. - Environmental Studies Course III: Ecological Economics</p> <p>Ph.D. Course work – Botany Biostatistics, Methods for field biology Research Methodology, Population ecology, Community and ecosystem ecology, Landscape ecology</p>	
Research Guidance	
<p><i>List against each head (If applicable)</i></p> <p>1. <i>Supervision of awarded Doctoral Thesis</i> L.R. Gopinath 1999. Nutrient/Resource Management Relevant to Agroforestry Systems of</p>	

- Traditional Societies of Central Himalaya. Jawaharlal Nehru University, New Delhi.
- Abdul Wakeel** 2002. Land Use and Land Cover Changes and Their Ecological Implications: A Case Study of Kuchgad Watershed in Central Himalaya. Jawaharlal Nehru University, New Delhi.
- Shankar Datt Tiwari** 2002. Studies of Forest Ecosystems in a Protected Area of Garhwal Himalaya. H.N.B. Garhwal University, Srinagar (Garhwal).
- K. Chandrasekhar** 2003. Ecological Analysis of Settled Agropastoral Farming in Cold Desert (Spiti Catchment, Himachal Pradesh). Jawaharlal Nehru University, New Delhi.
- Ravinder Gavali** 2003. Ecosystem Structure and Function in Relation to Grazing in Alpine Landscape of Cold Desert (Spiti Catchment, Himachal Pradesh). Jawaharlal Nehru University, New Delhi.
- Aditya Narayan Purohit** 2003. Studies on Structural and Functional Aspects of Timberline Vegetation in Nanda Devi Biosphere Reserve, Garhwal Himalaya. H.N.B. Garhwal University, Srinagar (Garhwal).
- Laxman Singh Kandari** 2005. Eco-Physiological and Socio-Economic Studies of Some Rhizomatus Medicinal and Aromatic Plant Species. H.N.B. Garhwal University, Srinagar (Garhwal).
- Kusum Payal** 2007. Eco-Physiological and Soci-Economic Studies of Some Multipurpose *Allium* Species of Higher Hiamalaya. H.N.B. Garhwal University, Srinagar (Garhwal).
- Vimla Bisht** 2007. Conservation and Management of Traditional Paddy Cultivars/Landraces by Local Farmers: A Case Study from Central Himalaya. H.N.B. Garhwal University, Srinagar (Garhwal).
- Abhishek Chandra** 2008. Traditional Agrobiodiversity Management in a Central Himalayan Village Ecosystem. University of Delhi, Delhi.
- Tusiem Shimrah** 2009. Land use land cover change analysis in shifting cultivation areas in West Siang district in Arunachal Pradesh. University of Delhi, Delhi.
- Y. Sarathchandra Khuman** 2011. Bio-Energy Modeling in Upland Village Ecosystems. University of Delhi, Delhi.
- Nancy Raina** 2011. Analysing the Spatial and Temporal Patterns of Land Use/Cover Change in Uttranchal. University of Delhi, Delhi.
- Yamal Gupta** 2013. Potential Utility of Microbial Culture Media and Plants to Generate Matal nanoparticles. University of Delhi, Delhi.
- Neha Sharma** 2014. Effect of Elevated CO₂ Concentration on Growth, Phenology, Ultrastructure and Biochemical Composition in Leaves and Seeds of *Brassica juncea* (L.) Czern. And Coss. University of Delhi, Delhi.
- Mohd. Hanif.** 2016. Land use/Land cover change and associated ecosystem soil carbon dynamics in a mountainous watershed in north western (Kashmir) Himalaya, India. University of Delhi, Delhi.
- Archana Mena.** 2017. Soil carbon dynamics in different terrestrial ecosystems of Delhi, India. University of Delhi, Delhi.
- Ankita Bidalia.** 2017. Performance of trees under abiotic stress in Keoladeo National Park, Bharatpur, Rajasthan (India). University of Delhi, Delhi.
- Supervision of Doctoral Thesis, under progress*
- Krati Vikram** Rhizosphere biology
- Indu Tripathi** Heavy metal toxicity in plants
- Kajal Patel** Growth performance of some MAPs
- Tenzen Notup** Ecophysiology of crop plants of cold desert area
1. *Supervision of awarded M.Phil dissertations*
- J.S. Chandrasekhar.** 2005. Impact of Land Use-Land Cover on Selected Soil Organisms in a Village Landscape of Garhwal Himalaya. Jawaharlal Nehru University, New Delhi.
- Bharti Sarin.** 2009. Analysis of Fungal Diversity in Managed Land Uses of Garhwal Himalaya. University of Delhi, Delhi.
- Amit Kumar.** 2013. Effects of Different Plantations on Soil Properties. University of Delhi, Delhi.
2. *Supervision of M.Phil dissertations, under progress*
- Meenakshi Chaurasia.** 2018. Ecophysiological studies of herbaceous plants. University of Delhi, Delhi. Master of Philosophy. Supervisor: Prof. K.S. Rao. Ongoing.

Publications Profile

List against each head (If applicable) (as Illustrated with examples)

1. Books/Monographs (Authored/Edited)

1. Nautiyal, S. Schaldach, R., Raju, K., Kaechele, H., Pritchard, B. & **Rao, K.S.** 2016. *Climate Change Challenge (3C) and Social-Economic-Ecological Interface-Building*. Springer-Verlag, Berlin. 765pp.
2. Saxena, K.G. & **Rao, K.S.** 2016. *Soil Biodiversity: Inventory, Functions and Management*. Bishen Singh Mahendra Pal Singh, Dehradun. 476pp.
3. **Rao, K.S.**, Saxena, K.G. & Tiwari, B.K. 2016. *Biodiversity, Climate Change and Socio-economic Development in the Indian Himalaya: An Overview*. Bishen Singh Mahendra Pal Singh, Dehradun. 86pp.
4. Nautiyal, S., Manasi, S., Umesh Babu, M. S. & **Rao, K.S.** 2015. Study on the Production and Profitability of Pulses and Beans in India – A Case Study of Karnataka. Social and Economic Change Monographs 37. Institute for Social and Economic Change, Bangalore. 112pp.
5. **Rao, K.S.**, Saxena, K.G. & Tiwari, B.K. 2014. *Linking Conservation of Terrestrial Biodiversity with Climate Change Mitigation and Adaptation and Socio-economic Development in the Himalaya*. Policy Discussion Paper, UNESCO, New Delhi. 52pp.
6. Nautiyal, S., **Rao, K.S.**, Kaechele, H., Raju, K.V. & Schaldach, R. (Eds.) 2013. *Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change*. Springer-Verlag, Berlin. 720 pp.
7. Ramakrishnan, P.S., Saxena, K.G., **Rao, K.S.** & Sharma, G. (Eds.) 2012. *Cultural Landscapes: The basis for linking biodiversity conservation with the Sustainable Development*, UNESCO, New Delhi. 217pp.
8. Mendiratta, N., SivaKumar, S. & **Rao, K.S.** (Eds.) 2008. *Standards for Bio-geo Database, Version 1*. TERI, New Delhi.
9. Ramakrishnan, P.S., Saxena, K.G. & **Rao, K.S.** (Eds.) 2006. *Shifting Agriculture and Sustainable Development of North-Eastern India: Tradition in Transition*. Oxford & IBH, New Delhi.
10. Ramakrishnan, P.S., Saxena, K.G., Swift, M.J., **Rao, K.S.** & Maikhuri, R.K. (Eds.) 2005. *Soil Biodiversity, Ecological Processes and Landscape Management*. Oxford & IBH, New Delhi.
11. Kimoti, M.M., Maikhuri, R.K., Murthy, T.V.R., Garg, J.K., **Rao, K.S.** & Bhatt, O.P. 2001. *Bioprospecting for Economic Development of Hippophe rhamnoides (Seabuckthorn) in the Himalayan Wastelands - A case Study in Uttranchal Using High resolution IRS 1D data*. Scientific Report - SAC/RESA/FLPG-FED/SR// /2001. pp 17. Space Applications Centre (ISRO), Ahmedabad; G.B. Pant Institute of Himalayan Environment and Development, Almora; and Dasholi Gram Swarajya Mandal, Gopeshwar.
12. Ramakrishnan, P.S., Chandrashekhara, U.M., Elouard, C., Guilamoto, C., Maikhuri, R.K., **Rao, K.S.**, Sankar, S. & Saxena, K.G. (Editors). 2000. *Mountain Biodiversity, Land Use Dynamics, and Traditional Ecological Knowledge*. Oxford & IBH Publications Ltd., New Delhi. 353pp.
13. Nandy, S.N., Pant, Rekha. & **Rao, K.S.** 2000. *Demographic Data Base of Himalaya*. ENVIS Monograph 2. G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora 263 643, India.
14. Maikhuri, R.K., **Rao, K.S.** & Rai, R.K. (Editors). 1998. *Biosphere Reserves and Management in India*. Himavikas Occasional Publication No. 12. G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora. 266pp.
15. Nautiyal, S., Maikhuri, R.K. & **Rao, K.S.** 1999. [Nanda Devi Jaivmandal Aarakshit Kshetr (Biosphere Reserve) mein Oushadiya Padapon ki Krushi Takniki] Traditional Cultivation Practices of Medicinal Plants in Nanda Devi Biosphere Reserve. G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora. 26pp. (in Hindi).
16. Tolia, R.S., Sharma, R., Bisht, R.S., Joshi, S.M., Singh, V.K., Khali, M.P., Adhikari, S., **Rao, K.S.**, Kumar,

- K., Bhartarya, S.K., Purohit, A.N., Pandey, R.K. & Shastri, C. 1999. *Shivalik Watershed Development Strategy, Uttar Pradesh*. Centre for Development Studies, U.P. Academy of Administration, Nainital 263 001. 84pp.
17. Ghosh, S., Sen, K.K., Rana, U., **Rao, K.S.** & Saxena, K.G. 1997. *GIS Applications to Natural Resource Management and Development Planning in a Rural Area: Pranmati Watershed, Garhwal Himalaya, India*. Menris Case Study Seris No. 5. International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal. 84 + xv pp.
 18. **Rao, K.S.** 1997. *Natural Resource Management and Development in Himalaya: A Recourse to Issues and Strategies*. ENVIS Monograph 1. G.B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora 263 643, India.
 19. Ramakrishnan, P.S., Purohit, A.N., Saxena, K.G., **Rao, K.S.** & Maikhuri, R.K. (Editors). 1996. *Conservation and Management of Biological Resources in Himalaya*. Oxford & IBH Publication Ltd., New Delhi.
 20. Das, A.K. & **Rao, K.S.** (Compilers). 1996. *Biology and Fertility of Tropical Soils: Bibliography and Abstracts*. South Asian Regional Network, Tropical Soil Biology and Fertility Programme, New Delhi.
 21. Garg, J.K., Saxena, K.G., Narayana, A., Murthy, T.V.R., Maikhuri, R.K., Arya, A.S., Joshi, V., **Rao, K.S.**, Sati, V.P. & Ghosh, S. 1995. *Environmental Appraisal of Tehri Dam - Multipurpose River Valley Project Using Remote Sensing and GIS Techniques*. Project Report. RSAM/SAC/RSAG/PR/06/95. GBPIHED, Kosi & SAC, Ahmedabad.
 22. Saxena, K.G., **Rao, K.S.**, Pandey, A., Rana, U., Sen, K.K., Nehal & Majila, B.S. 1994. *Sustainable Rural Development: Opportunities and Constraints. A micro-level analysis of Pranmati Watershed in Uttar Pradesh Himalaya*. Himavikas Publication No. 6. G.B. Pant Institute of Himalayan Environment and Development, Kosi, Almora. 70pp.
 23. Saxena, K.G., Kumar, Y., **Rao, K.S.**, Sen, K.K., Rana, U., Majila, B.S., Pharswan, A., Singh, G.S. & Nehal. 1994. *Hydropower Management for Sustainable Rural Development in Remote Unelectrified Zones of Himalaya*. Himavikas Publication No. 7. G.B. Pant Institute of Himalayan Environment and Development, Kosi, Almora. 28pp.
 24. **Rao, K.S.** & Saxena, K.G. 1994. *Sustainable Development and Rehabilitation of Degraded Village Lands in Himalaya*. Himavikas Publication No. 8. Bishen Singh Mahendra Pal Singh, Dehra Dun. xiv+287pp.
 25. Ramakrishnan, P.S., Purohit, A.N., Saxena, K.G. & **Rao, K.S.** 1994. *Himalayan Environment and Sustainable Development*. Indian National Science Academy, New Delhi. vi+84pp.
- 2. Research papers published in Refereed/Peer Reviewed Journals**
1. Bidalia, A., Okram, Z., Hanief, M. & **Rao, K.S.** 2017. Assessment of tolerances in *Mitragyna parvifolia* (Roxb.) Korth. And *Syzygium cumini* Keels. seedlings to waterlogging. *Photosynthetica*, 55
 2. Bidalia, A. & **Rao, K.S.** 2017. Tolerance of *Mitragyna parvifolia* (Roxb.) Korth. seedlings to NaCl salinity. *Photosynthetica*, 55 (2): 231-239. DOI: 10.1007/s11099-016-0224-8.
 3. Dinakaran, J., Bidalia, A., Kumar, A., Hanif, Md., Meena, A. & **Rao, K.S.** 2016. Near infrared-spectroscopy for determination of carbon and nitrogen in Indian soils. *Communications in Soil Sciences and Plant Analysis*, 47(12): 1503-1516.
 4. Shimrah, T., **Rao, K.S.** & Saxena, K.G. 2015. Soil property variations under different land use/cover types in traditional agricultural landscape in northeast India. *Journal of Chemistry, Environmental Sciences and its Applications*, 2(1): 73-97.
 5. Shimrah, T., Maikhuri, R.K., **Rao, K.S.** & Saxena, K.G. 2015. An overview of shifting agriculture (jhum) in eastern Himalayan region as a component of village landscape. *Keanean Journal of Science*, 4: 45-62.

6. Devi, O.Z., **Rao, K.S.** & Bidalia, A. 2015. Characterization of chemical constituents in *Zanthoxylum acanthopodium* D.C. leaf using GC-MS. *Indo-American Journal of Pharmaceutical Research*, 5: 1690-1694.
7. Khuman, Y.S., Raina, N., Pandey, R. & **Rao, K.S.** 2015. Fuelwood assessment at micro-watershed level: A case study in Garhwal Himalaya, India. *Chinese Journal of Population Resources and Environment*, 13: 177-186.
8. Raina, N., Khuman, Y.S.C., **Rao, K.S.** & Sreekesh, S. 2014. Comparative analysis of species distribution modeling of *Daphne papyracea* in Dabka watershed, Nainital District, Uttarakhand. *Journal of Environment and Earth Science*, 4 (17): 19-29.
9. Pardha Saradhi, P., Yamal, G., Peddisetty, T., Sharmila, P., Nagar, S., Singh, J., Nagarajan, R. & **Rao, K.S.** 2014. Reducing strength prevailing at root surface of plants promotes reduction Ag⁺ and generation of AgO/Ag₂O nanoparticles exogenously in aqueous phase, *PLOS ONE*, 9(9): e106715, doi:10.1371/journal.pone.0106715.
10. Khuman, Y.S., Raina, N. & **Rao, K.S.** 2014. Fuelwood assessment at micro-watershed level in northeast Himalaya: A case study in Manipur, India. *Chinese Journal of Population Resources and Environment*, 12: 137-145.
11. Dinakaran, J., Hanif, M., Meena, A. & **Rao, K.S.** 2014. The chronological advancement of soil organic carbon sequestration research: A review. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, 84: 487-504.
12. Payal, K., Maikhuri, R.K., **Rao, K.S.** & Kandari, L.S. 2014. Effect of gibberellic acid and water based presoaking treatments under different temperature and photoperiod on seed germination of *Allium stracheyi* Baker: An endangered alpine species of central Himalaya, India. *Plant Biosystems*, 148: 1075-1084. <http://dx.doi.org/10.1080/11263504.2013.823131>.
13. Pardha Saradhi, P., Yamal, G., Peddisetty, T., Sharmila, P., Singh, J., Nagarajan, R. & **Rao, K.S.** 2014. Plants fabricate Fe-nanocomplexes at root surface to counter and phytostabilize excess ionic Fe. *BioMetals*, 27: 97-114. <http://dx.doi.org/10.1007/s10534-013-9690-7>.
14. Pardha Saradhi, P., Yamal, G., Peddisetty, T., Sharmila, P., Singh, J., Nagarajan, R. & **Rao, K.S.** 2014. Root system of live plants is powerful resource for green synthesis of Au-nanoparticles. *RCS Advances*, 4: 7361. <http://dx.doi.org/10.1039/C3RA45370G>.
15. Raina, N., Rao, K.S. & Sreekesh, S. 2013. Species distribution modeling of *Berberis aristata* in Dabka watershed, Uttarakhand. *Vegetos*, 26: 30-38.
16. Shimrah, T., **Rao, K.S.** & Saxena, K.G. 2013. Composition, diversity and regeneration potential of plant species in shifting agricultural landscape in north east India: A case study in and around Dihang-Dibang Biosphere Reserve, Arunachal Pradesh, India. *Environment & We: An International Journal of Science and Technology*, 8: 1-17.
17. Semwal, R.L., Nautiyal, S., Maikhuri, R.K., **Rao, K.S.** & Saxena, K.G. 2013. Growth and carbon stocks of multipurpose tree species plantations in degraded lands in central Himalaya, India. *Forest Ecology and Management*, 310: 450-459.
18. Yamal, G., Sharmila, P., **Rao, K.S.** & Pardha Saradhi, P. 2013. Inbuilt potential of YEM medium and its constituents to generate Ag/Ag₂O nanoparticles. *PLOS ONE*, 8(4): e61750.
19. Yamal, G., Sharmila, P., **Rao, K.S.** & Parcha Saradhi, P. 2013. Yeast extract mannitol medium and its constituents promote synthesis of Au nanoparticles. *Process Biochemistry*, 48: 532-538.
20. Chandra, A., Kandari, L.S., Negi, V.S., Maikhuri, R.K. & **Rao, K.S.** 2013. Role of intercropping on production and land use efficiency in the central Himalaya, India. *We, International Journal of Science and Technology*, 8: 105-113.
21. Dinakaran, J. & **Rao, K.S.** 2012. Carbon sequestration in terrestrial vegetation and soils: A review. *Phytomorphology*, 62(3-4): 177-188.
22. Laishram, J., Saxena, K.G., Maikhuri, R.K. & **Rao, K.S.** 2012. Soil quality and soil health: A review.

International Journal of Ecology and Environmental Sciences, 38(1): 19-37.

23. Khuman, S.C., Pandey, R. & **Rao, K.S.** 2012. Micro-watershed level population based fuelwood consumption dynamics: Implications of seasonal vs. annual models for sustainable energy. *Renewable and Sustainable Energy Reviews*, 16: 6142-6148.
24. Kandari, L.S., **Rao, K.S.**, Maikhuri, R.K. & Payal, K. 2012. Effect of mixed-cropping and water stress on macro nutrients and biochemical constituents of rhizomatous medicinal plants in central Himalaya, India. *Journal of Forestry Research*, 23(4): 615-621.
25. Kandari, L.S., Phondani, P.C., Payal, K.C., **Rao, K.S.** & Maikhuri, R.K. 2012. Ethnobotanical study towards conservation of medicinal and aromatic plants in upper catchments of Dhaul Ganga in the Central Himalaya. *Journal of Mountain Science*, 9 (2): 286-296.
26. Kandari, L.S., **Rao, K.S.**, Payal, K.C., Maikhuri, R.K., Chandra, A. & van Staden, J. 2012. Conservation of aromatic medicinal plant *Rheum emodi* Wall. Ex Meissn through improved seed germination. *Seed Science & Technology*, 40: 95-101.
27. Bhadauria, T., Kumar, P., Kumar, R., Maikhuri, R.K., **Rao, K.S.** & Saxena, K.G. 2012. Earthworm populations in a traditional village landscape in central Himalaya, India. *Applied Soil Ecology*, 53: 83-93.
28. Kandari, L.S., **Rao, K.S.**, Maikhuri, R.K. & Payal, K.C. 2011. Effects of plant growth regulators on rooting of four rhizomatous medicinal plants of central Himalaya. *National Academy Science Letters*, 34 (11 & 12): 401-406.
29. Maikhuri, R.K., Rawat, L.S., Negi, V.S., Farooquee, N.A., **Rao, K.S.**, Purohit, V.K., Agarwal, S.K., Chamoli, K.P., Negi, C.S. & Saxena, K.G. 2011. Empowering rural women in agro-ecotechnologies for livelihood improvement and natural resource management. *Outlook on Agriculture*, 40 (3): 229-236.
30. Chandra, A., Kandari, L.S., **Rao, K.S.** & Saxena, K.G. 2011. Assessment of socio-economic status and its impact on land use management in central Himalaya. *Asian Journal of Agricultural Research*, 5 (4): 234-242.
31. Kuman, Y.S., Pandey, R. & **Rao, K.S.** 2011. Fuelwood consumption patterns in Fakot watershed, Garhwal Himalaya, Uttarakhand. *Energy*, 37: 4769-4776.
32. Maikhuri, R.K., Rawat, L.S., Negi, V.S., Purohit, V.K., **Rao, K.S.** & Saxena, K.G. 2011. Managing natural resources through simple and appropriate technological interventions for sustainable mountain development. *Current Science*, 100 (7): 992-997.
33. Chandra, A., Saradhi, P.P., **Rao, K.S.**, Saxena, K.G. & Maikhuri, R.K. 2011. An investigation into the energy use in relation to yield of traditional crops in central Himalaya, India. *Biomass and Bioenergy*, 35 (5): 2044-2052.
34. Chandra, A., Saradhi, P.P., Maikhuri, R.K., Saxena, K.G. & **Rao, K.S.** 2011. Traditional agrodiversity management: A case study of central Himalayan village ecosystem. *Journal of Mountain Science*, 8: 62-74.
35. Kandari, L.S., **Rao, K.S.**, Maikhuri, R.K., Kharkwal, G., Chauhan, K. & Kala, C.P. 2011. Distribution pattern and conservation of threatened medicinal and aromatic plants of Central Himalaya, India. *Journal of Forestry Research*, 22(3): 403-408.
36. Chandra, A., Saradhi, P.P., **Rao, K.S.**, Saxena, K.G. & Maikhuri, R.K. 2010. Assessment of monetary budget in traditional agrodiversity management: A case study of central Himalayan village ecosystem. *Phytomorphology*, 60 (3&4): 137-149.
37. Nautiyal, S., **Rao, K.S.**, Kaechele, H. & Zander, P. 2010. Conceptual model developmet for landscape management in the mountains of the Indian Himalayan region: an approach for sustainable soci-ecological development. *Landscape Online*: 18: 1-19.
38. Rawat, L.S., Maikhuri, R.K., Negi, V.S., Bahuguna, A., **Rao, K.S.**, Agarwal, S.K. & Saxena, K.G. 2010. Managing natural resources with eco-friendly technologies for sustainable rural

- development: A case of Garhwal Himalaya. *International Journal of Sustainable Development and World Ecology*, 17 (5): 423-430.
39. Phondani, P.C., Maikhuri, R.K., Rawat, L.S., Farooquee, N.A., Kala, C.P., Vishvakarma, S.C.R., **Rao, K.S.** & Saxena, K.G. 2010. Ethnobotanical uses of plants among the Bhotiya tribal communities of niti valley in central Himalaya, India. *Ethnobotany Research and Applications*, 8: 233-244.
 40. Dhyani, D., Maikhuri, R.K., Misra, S. & **Rao, K.S.** 2010. Endorsing the declining indigenous ethnobotanical knowledge of seabuckthorn in central Himalaya, India. *Journal of Ethnopharmacology*, 127: 329-334.
 41. Chandra, A., Kandari, L.S., Payal, K.C., Maikhuri, R.K., **Rao, K.S.** & Saxena, K.G. 2010. Conservation and sustainable management of traditional ecosystems in Garhwal Himalaya, India. *New York Science Journal*, 3 (2): 71-77.
 42. Misra, S., Maikhuri, R.K., Dhyani, D. & **Rao, K.S.** 2009. Assessment of traditional rights, local interference and natural resource management in Kedarnath Wildlife Sanctuary. *International Journal of Sustainable Development and World Ecology*, 16(6): 404-416.
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<p>(Eds.). <i>Bamboos: Current Research</i>. Kerala Forest Research Institute & IDRC, Singapore. pp. 59-65.</p> <p>119. Ahmed, A., Ramakrishnan, P.S. & Rao, K.S. 1989. Management and conservation of wildlife: environmentalists' view points. In: Singh, P.R., Sharma, O.P. & Boojh, Ram (Eds.). <i>Environmental Conservation and Development</i>. Directorate of Environment, Lucknow, U.P. pp. 81-90.</p> <p>120. Ahmed, A., Ramakrishnan, P.S. & Rao, K.S. 1989. Environmental impact assessment of water resources projects in Himalayas: an urgent need for sustainable development. In: Singh, P.R., Sharma, O.P. & Boojh, Ram (Eds.). <i>Environmental Conservation and Development</i>. Directorate of Environment, Lucknow, U.P. pp. 91-102.</p> <p>4. Other publications (Edited works, Book reviews, Festschrift volumes, etc.)</p>
<p>Conference Organization/ Presentations (in the last three years)</p>
<p><i>List against each head(If applicable)</i></p> <ol style="list-style-type: none"> 1. <i>Organization of a Conference</i> 2. <i>Participation as Paper/Poster Presenter</i>
<p>Research Projects (Major Grants/Research Collaboration)</p>
<ol style="list-style-type: none"> 1. Development of indicators for anthropogenic, environmental and chemical stress on urban ecosystem: A study of aquatic and terrestrial ecosystems of Yamuna river catchment from National Capital Region (Delhi). DST-PURSE.
<p>Awards and Distinctions</p>
<p>Vishisht Vaigyanik Puraskar on 16th September 2005 by Ministry of Environment and Forests, Government of India</p> <p>UGC National Swami Pranavananda Saraswati award for Ecology and Environmental Sciences</p>
<p>Association With Professional Bodies</p>
<ol style="list-style-type: none"> 1. <i>Editing</i> 2. <i>Reviewing</i> Elsevier/Springer/Academic journals 3. <i>Advisory Committees and Boards</i> <ol style="list-style-type: none"> 1. Expert committee on Development of Database on Climate Change Statistics, Ministry of Statistics and Programme Implementation, New Delhi 4. <i>Memberships</i> <ol style="list-style-type: none"> 1. National Institute of Ecology, New Delhi (Life and Fellow) 2. Indian Botanical Society, Jaipur 3. The National Academy of Sciences, Allahabad 4. Indian Society of Tree Scientists, Solan 5. Indian Society of Soil Biology and Ecology, Bangalore 6. Himalayan Research Group, Nainital 7. Society of Tropical Forestry Scientists, Jabalpur 8. Bioved Research Society, Allahabad 9. Bamboo Society of India, Bangalore 10. The Indian Society for Ecological Economics, Delhi 11. Indian Science Congress Association, Calcutta 12. Society of Ethnobotanists, Lucknow 13. U.P. Association for S & T Advancement, Lucknow 14. Central Himalayan Environment Association, Nainital 15. Indian Society for Agricultural Development & Policy, Ludhiana 16. Indian Society of Remote Sensing, Dehradun 17. Soil Conservation Society of India, New Delhi

18. Delhi University Botanical Society, Delhi
19. Indian Association of Soil and Water Conservationists, Dehradun
20. International Society for Tropical Ecology, Varanasi
21. International Society of Plant Morphologists, Delhi
22. Society for Conservation and Resource Development of Medicinal Plants, Delhi.

5. *Office Bearer*

Secretary General, National Institute of Ecology 2008-2010; 2011-2014; 2015-2017

Other Activities