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ADDRESS FOR CORRESPONDENCE

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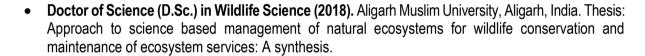
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Date of Birth: 27th June 1960

EDUCATIONAL BACKGROUND



- Doctor of Philosophy (Ph.D.) in Wildlife Science (1993), Aligarh Muslim University, Aligarh, India.
 Thesis: Aspects of the ecology of smooth-coated otter (*Lutrogale perspicillata*) in National Chambal Sanctuary, India.
- Master of Philosophy (M. Phil.) in Wildlife Science (1991), Aligarh Muslim University, Aligarh, India. Dissertation: Ecology of gharial (*Gavialis gangeticus*) in National Chambal Sanctuary, India.
- Master of Science (M.Sc.). in Zoology (1985), Aligarh Muslim University, Aligarh, India
- Bachelor of Science (B.Sc.) Zoology (Hons), Botany & Chemistry with distinction (1980), Utkal University, Bhubaneshwar, India

MEMBERSHIP OF PROFESSIONAL SOCIETIES

- IUCN SSC, Red List Authority on Otter Species of the World
- Member, IUCN Commission on Ecosystem Management
- Member, IUCN World Commission on Protected Areas
- Member, IUCN Transboundary Specialist Group
- Member, IUCN SSC Conservation Breeding Specialist Group
- Member, Multi Task Force on Gangetic Gharial Gavialis gangeticus
- Member, Govt, of India Core Group on Antarctica and Southern Ocean Research





- Wildlife biology and ecology
- Biodiversity conservation and protected area management
- Aquatic ecology (Rivers & wetlands) management
- Coastal and marine habitat management
- Environmental Impact Assessment
- Wildlife Conservation policy and governance issues

LEAD AUTHOR/CONTRIBUTING AUTHOR

- 1. Inter-Governmental Platform on Biodiversity and Ecosystem Services (IPBES), Biodiversity and Ecosystem Services (Chapter 2c Nature & Drivers).
- 2. Himalayan Monitoring and Assessment Programme (HIMAP), Biodiversity and Ecosystem Services. Sustaining biodiversity and ecosystem services in the Hindu Kush Himalaya. In The Hindu Kush Himalaya Assessment (pp. 127-165).
- 3. UNEP 2014: The importance of mangroves to people: A call to action
- 4. FAO 2002: Special Service Agreement: Contribution of mangrove forests to agriculture productivity in east coast of India.

WORK EXPERIENCE

- Around 35 years of work experience (1986-2020) in the field of Biodiversity conservation after obtaining the M.Sc. degree. During this period, I have worked on the ecology of several endangered species such as river otter, crocodiles, river dolphin, freshwater turtles and water birds. Worked on river ecology, wetlands of Gangetic plains, high altitude wetlands of Himalayas, mangrove ecology, evaluation of ecosystem services of inland wetlands and mangroves ecosystems. Currently working on the ecology of Eld's deer, hog deer and swamp deer ecology, Human wildlife conflicts in and around protected areas. Impact of dams and water abstraction on otters and other wildlife, integrated approach to reduce the vulnerability of local community to environmental degradation in the Western Himalayas and ecosystem services of the mountain ecosystems. I am the principal investigator of the National Mission for Clean Ganga sponsored project "Biodiversity conservation and Ganga" in which I am leading a team who are working for the ecological restoration of the Ganga River.
- Taught subjects related to wildlife biology, protected area management, wetland ecology, conservation
 and management of freshwater and coastal habitats at the postgraduate level. Looking after Wetlands
 and Coastal habitat management programme of the Wildlife Institute of India since 1994.
- Developed and implemented courses related to Biodiversity conservation, Wetlands and Coastal habitat management, and Protected Area management. Conducting research on free ranging wildlife and their habitats. Writing reports and scientific papers for publication. Providing technical and intellectual inputs in the context of Wetland Conservation/Wildlife and Protected Area management.
- Developed and implemented field based conservation projects by involving multiple stakeholders and advocacy. Providing research supervision to students.
- Prioritized areas for conservation at landscape level including prioritization of Transboundary Protected Areas (TBPA). Imparting training to in-service forest officers from India and other Asian countries in Protected Area management/Wetland Conservation and Management.
- Reviewing and critically commenting upon various research project proposals submitted to the Government and other funding agencies for approval/financial support/publication.

 Developed Integrated management planning for inland and coastal wetlands and forested landscapes, impact assessment of development projects on wildlife/wetland habitats. Coordinated UNDP Sponsored Environmental Information System, Ministry of Environment and Forests, Govt. of India, Centre on Wildlife and Protected Areas of India at Wildlife Institute of India for the period of 1995-2015. During this period collected and disseminated information on wildlife and protected areas through the publication of bulletins and electronics media.

COUNTRIES OF WORK EXPERIENCE

Mostly India and short-term assignments in Sri Lanka, Vietnam, Thailand, Cambodia and wildlife surveys in Antarctica.

LANGUAGE PROFICIENCY

English (Excellent), Hindi (Excellent), Urdu (Excellent), Bengali (Good)

AWARDS, GRANTS & FELLOWSHIP RECEIVED

- Certificate of appreciation for contribution to ecological economics, from United States Society for Ecological Economics, Pace University, New York.
- Small Grant from Commonwealth Foundation, U.K to participate in Mountain Summit, Canada.
- IUFRO-SPDEC Programme, Austria for Training on Sustainable Management of Forests.
- Travel Grant from United States Society for Ecological Economics to travel Pace University
- Small Grant from Banff Mountain Centre, Canada for attending Mountain summit.
- Travel Grant from FAO to attend XII Forestry Congress, Buenos Aires, Argentina.
- Travel Grant from Carnivore and Pangolin Conservation Group, Vietnam.
- Travel Grant from Conservation International, Cambodia to participate in the Training programme on Building capacity to conserve the otters of South East Asia.
- Travel Grant from Alka Wildlife to travel to Cottbus, Germany for otters and EIA workshop.
- IUCN SSC OSG Grants to train participants in Nepal, Thailand, Taiwan as principal trainer for monitoring otters and their wetland habitats.
- Travel Grant from Otter Survival Funds, UK. For providing training in Indonesia and Bangladesh.
- Travel Grant from University of Pavia to attend XI Otter Congress, Italy.
- Travel Grant from Instituto Araguia, Brazil to attend XII Otter Congress, Rido de Janeiro.
- Small grants from IUCN SSC Otter Specialist Group for attending IMC 2013, Belfast.
- SERB-DST Animal Science, GOI for study on biomass production and its use in Kaziranga.
- South Asian Network for Development and Environmental Economics (SANDEE).
- International Centre for Integrated Mountain Development (ICIMOD).
- Junior and Senior Research Fellow of the Wildlife Institute of India, Ministry of Environment and Forests, Govt. of India.

TRAINING COURSES DESIGNED/CONDUCTED

National level courses

- 25 Training courses on Management of Wetlands and Coastal Habitat during 1995-2020
- 3 Training courses on Wetland Management Planning 2000, 2001 & 2003
- 1 Training workshop on Wetland Research Methodology 1999
- 1 Postgraduate Diploma Course in Wildlife Management 2002-2003 (9 months)
- 1 Certificate Course in Wildlife Management 1999 (3 months)
- 1 Training programme on Wetland Management for the managers of Ramsar sites 2008

International level courses

- Conducted 4 Study tours for Officers of the Special Diploma Course, Department of Wildlife Conservation, Sri Lanka during 1999, 2003, 2007, 2011 & 2014
- International Workshop on Wildlife Satellite Tracking 1999
- International Training Course on Critical Wetland Habitat Management 1997

INPUTS IN INTERNATIONAL COURSES/STUDY TOURS

- Training workshops on Building capacity to conserve the otters of South east Asia (Cambodia, Vietnam, Indonesia) in 1997, 1998, 2006, 2013, & 2014
- Training workshops on Building capacity to conserve the otters of South Asia (India, Nepal, Indonesia and Bangladesh) in 2006, 2013, & 2014
- M.Sc. Course in Fish and Wildlife Sciences, University of Peradeniya, Sri Lanka 2001
- Training Course on Wildlife Management for officers of the Department of Wildlife Conservation, Sri Lanka 1999, 2003, 2007, 2011 & 2014
- Study tour of protected area managers from the KwaZulu, South Africa on management of Protected Areas 1999
- International Training course on Critical wetland habitat management, India 1997

COMPLETE LIST OF PUBLICATION (PEER REVIEWED JOURNALS)

- 1. Devi, A., **Hussain, S. A.**, Sharma, M., Gopi, G. V., & Badola, R. (2022). Seasonal pattern of food habits of large herbivores in riverine alluvial grasslands of Brahmaputra floodplains, Assam. *Scientific Reports*, 12(1), 1-15.
- 2. Basak, S., Pandav, B., Johnson, J. A., & **Hussain, S. A.** (2021). Resource utilisation by smooth-coated otter in the rivers of Himalayan foothills in Uttarakhand, India. *Global Ecology and Conservation*, 32, e01896.
- 3. Talukdar, A., Panda, A., Srivastav, A., **Hussain, S. A.**, Malik, P. K., & Nigam, P. (2021). Growth patterns of critically endangered, head-started three-striped roofed turtle, Batagur dhongoka (Gray, 1834). *Biologia*, 76(12), 3705-3710.
- Grace, M. K., Akçakaya, H. R., Bennett, E. L., Brooks, T. M., Heath, A., Hussain, S.A., ... & Quintana, M. G. (2021). Testing a global standard for quantifying species recovery and assessing conservation impact. *Conservation Biology*, 35(6), 1833-1849.
- 5. De, K., Sarkar, A., Singh, K., Uniyal, V. P., Johnson, J. A., & **Hussain, S. A.** (2021). Diversity of aquatic insects and biomonitoring of water quality in the upper Ganga River, a Ramsar site: a preliminary assessment. *Journal of Threatened Taxa*, 13(13), 20011-20018.
- 6. De, K., Siliwal, M., Uniyal, V. P., & **Hussain, S. A.** (2021). Spiders as bio-indicators of habitat disturbance in the riparian zone of the Ganga river: a preliminary study. *Tropical Ecology*, 1-7.
- 7. Yadav, P., Kumar, A., Sahoo, S., Yadav, N., **Hussain, S. A.**, & Gupta, S. K. (2021). Identification of Gangetic turtles based on species-specific variations on mitochondrial cyt b and nuclear Cmos genes. *Forensic Science International: Animals and Environments*, 1, 100035.

- 8. Mahar, N., Habib, B., **Hussain, S. A.**, Shawl, T., & Takpa, J. (2021, September). Imperiled Prancing Crane: Population Status and Breeding Performance of Black-Necked Crane Grus nigricollis in Trans-Himalayan Ladakh Region. In *Proceedings of the Zoological Society* (pp. 1-9). Springer India.
- 9. Frank, S. J. D., Gopi, G. V., Sankar, K., & **Hussain, S. A.** (2021). Dry season resource selection among sympatric ungulates in a tropical coastal landscape: implications for conservation and management. *Tropical Ecology*, 62(3), 418-426.
- 10. Gangaiamaran, P., Usmani, A. A., Gopi, G. V., **Hussain, S. A.**, & Khan, K. A. (2021). Photographic record of Lesser Flamingo Phoeniconaias minor (Aves: Phoenicopteridae) in Ramganga river, Bareilly, India. *Journal of Threatened Taxa*, 13(8), 19159-19161.
- 11. Kumar, A., Yadav, P., Usmani, A., **Hussain, S. A.**, & Gupta, S. K. (2021). Comparative Mitogenomics of Two Critically Endangered Turtles, Batagur Kachuga and Batagur Dhongoka (Testudines: Geoemydidae): Implications in Phylogenetics of Freshwater Turtles.
- Ghazi, M.G., Hussain, S.A. & Gupta, S.K. (2021). Detection of 40 bp tandem repeat motif and associated insertions and deletions (INDEL) in the mitochondrial DNA control region of Sambar deer (Rusa unicolor). *Molecular Biology Reports*, 48, 4129–4135.
- 13. Sharma, S. P., Ghazi, M. G., Katdare, S., Dasgupta, N., Mondol, S., Gupta, S. K., & **Hussain, S. A**. (2021). Microsatellite analysis reveals low genetic diversity in managed populations of the critically endangered gharial (Gavialis gangeticus) in India. *Scientific Reports*, 11(1), 1-10.
- 14. Badola, R., Ahmed, T., Gill, A. K., Dobriyal, P., Das, G. C., Badola, S., & **Hussain, S. A.** (2021). An incentive-based mitigation strategy to encourage coexistence of large mammals and humans along the foothills of Indian Western Himalayas. *Scientific reports*, 11(1), 1-13.
- Ghazi, M. G., Sharma, S. P., Tuboi, C., Angom, S., Gurumayum, T., Nigam, P., & Hussain, S. A. (2021). Population genetics and evolutionary history of the endangered Eld's deer (Rucervus eldii) with implications for planning species recovery. *Scientific reports*, 11(1), 1-14.
- Talkudar, A., Mallapur, G., Goswami, S., Konch, P., Hussain, S. A., & Nigam, P. (2021). Hematology and Serum Chemistry Values in the Critically Endangered Red-Crowned Roofed Turtle, Batakur Kachuga and Three-Stripped Roofed Turtle, B. Dhongoka. *Herpetological Conservation and Biology*, 16(3), 681-685.
- 17. Vasudeva, V., Garg, J. K., Badola, R., & **Hussain, S. A**. (2020). Waterbird abundance and diversity along a stretch of Ganga River, India modified by construction of a barrage. bioRxiv.
- 18. Yadav, P., Kumar, A., Yadav, N., Bist, M., **Hussain, S. A.,** & Gupta, S. K. (2020). Molecular evidence indicates the existence of multiple lineages of *Sperata* species in Indian Rivers. *bioRxiv*.
- 19. De, K., Ali, S. Z., Dasgpta, N., Uniyal, V. P., Johnson, J. A., & **Hussain, S. A.** (2020). Evaluating performance of four species distribution models using Blue-tailed Green Darner Anax guttatus (Insecta: Odonata) as model organism from the Gangetic riparian zone. *Journal of Threatened Taxa*, 12(14), 16962-16970.
- 20. Sharma, S. P., Katdare, S., Zaidi, Z., Ghazi, M. G., Gupta, S. K., & **Hussain, S. A.** (2020). Mitochondrial DNA analysis reveals extremely low genetic diversity in a managed population of the Critically Endangered Gharial (Gavialis gangeticus, Gmelin, 1789). *Herpetological Journal*, 30(4).

- 21. Kumar, A., Yadav, P., Usmani, A., **Hussian, S.A.**, Gupta, S.K. (2020). Complete mitogenome of Ganges river dolphin, *Platanista gangetica gangetica* and its phylogenetic relationship with other cetaceans. *Molecular Biology Reports.* https://doi.org/10.1007/s11033-020-06048-4
- 22. Sharma, S. & Katdare, S. & **Hussain, S.A.** (2020). Sharma et al 2020. CROCODYLUS PALUSTRIS (Mugger Crocodile). REPRODUCTION (Record of twinning in mugger (Crocodylus palustris). *Herpetological Review.* 51. 321.
- 23. **Hussain, S. A.,** Irengbam, M., Badola, R., Barthwal, S. and Dasgupta, N. Conservation planning of the Ganga River: a policy conundrum. *Landscape Research*. https://doi.org/10.1080/01426397.2020.1808959
- 24. Yadav, P., Kumar, A. **Hussain, S.A.** and Gupta, S.K. (2020). Evaluation of the effect of longitudinal connectivity in population genetic structure of endangered golden mahseer, Tor putitora (Cyprinidae), in Himalayan Rivers: Implications for its conservation. **PLOS One** doi.org/10.1371/journal.pone.0234377
- Sah, R., Baroth, A. and Hussain, S.A. (2020) First account of spatio-temporal analysis, historical trends, source apportionment and ecological risk assessment of banned organochlorine pesticides along the Ganga River, *Environmental Pollution*.doi: https://doi.org/10.1016/j.envpol.2020.114229.
- 26. Gupta, S.K., Kumar, A., Angom, S., Singh, B., Ghazi, M. G. U., Tuboi, C., & **Hussain, S.A.** (2018). Genetic analysis of endangered hog deer (*Axis porcinus*) reveals two distinct lineages from the Indian subcontinent. *Nature Scientific Reports*, 8(1), 16308 1-12. https://doi.org/10.1038/s41598-018-34482-9
- 27. Tuboi, C., & **Hussain, S.A.** (2018). Plant community structure of the floating meadows of a hypereutrophic wetland in the Indo-Burma Biodiversity Hotspot. **Aquatic Botany**, 150, 71-81. https://doi.org/10.1016/j.aquabot.2018.06.006
- 28. Laha, A., Badola, R. & **Hussain, S.A.** (2018). Earning a Livelihood from Himalayan Caterpillar Fungus in Kumaon Himalaya: Opportunities, Uncertainties, and Implications. Mountain Research and Development. 38(4), 323-331.
- 29. Badola, R., **Hussain, S.A.**, Dobriyal, P., Manral, U., Barthwal, S., Rastogi, A. & Gill, A.K. (2018). Institutional arrangements for managing tourism in the Indian Himalayan protected areas. *Tourism Management*, 66, 1-12.
- 30. Tuboi, C., Badola, R. & Hussain, S.A. (2018). Rapid assessment of proposed reintroduction sites for Manipur's Brow-antlered Deer or Sangai. *Indian Forester*, 144(10), 893-899.
- 31. Badola, R., **Hussain, S.A**., Dobriyal, P., Manral, U., Barthwal, S., Rastogi, A., Gill, A.K. (2017). Institutional arrangements for managing tourism in the Indian Himalayan protected areas. *Tourism Management*, 66 1-12. https://doi.org/10.1016/j.tourman.2017.10.020
- 32. Tuboi, C., Irengbam, M., & **Hussain, S. A**. (2017). Seasonal variations in the water quality of a tropical wetland dominated by floating meadows and its implication for conservation of Ramsar wetlands. *Physics and Chemistry of the Earth*, Parts A/B/C. https://doi.org/10.1016/j.pce.2017.09.001
- 33. Angom, S., Kumar, A., Gupta, S. K., & **Hussain, S. A**. (2017). Analysis of mtDNA control region of an isolated population of Eld's deer (*Rucervus eldii*) reveals its vulnerability to inbreeding. *Mitochondrial DNA Part B*, 2(1), 277-280. http://dx.doi.org/ 10.1080/ 23802359.2017.1325335

- 34. Dobriyal, P., Badola, R., Tuboi, C. & **Hussain, S. A**. (2017). A review of methods used to monitor stream flow and its implications for water resource management. *Journal of Applied Water Science*. doi 10.1007/s13201-016-0488-y.
- 35. Kumar, A., Ghazi, M. G. U., Singh, B., **Hussain, S. A**., Bhatt, D., & Gupta, S. K. (2017). Conserve primers for sequencing complete ungulate mitochondrial cytochrome c oxidase I (COI) gene from problematic and decomposed biological samples. *Mitochondrial DNA Part B*, 2(1), 64-66. http://dx.doi.org/10.1080/ 23802359.2016.1247672
- 36. Manral, U., Badola, R., & **Hussain, S. A**. (2017). Forest composition and structure under various disturbance regimes in the Alaknanda River Basin, Western Himalaya. *Mountain Research and Development*, 37(3), 310-322. https://doi.org/10.1659/MRD-JOURNAL-D-16-00109.1
- 37. Irengbam, M., Dobriyal, P., **Hussain, S. A.,** & Badola, R. (2017). Balancing conservation and development in Nandhaur Wildlife Sanctuary, Uttarakhand, India. *Current Science*, 112(6), 1187.
- 38. Platt, R.P., Ogra. M.V., Badola, R. & **Hussain**, **S.A.** (2016). Conservation-induced resettlement as a driver of land cover change in India: An object-based trend analysis. *Applied Geography*. 69: 75-86. https://doi.org/10.1016/j.apgeog.2016.02.006
- 39. Tuboi, C. & **Hussain, S.A.** (2016). Factors affecting forage selection by the endangered Eld's deer and hog deer in the floating meadows of Barak-Chindwin Basin of North-east India. *Mammalian Biology*. 81: 53-60
- Kumar, A., Ghazi, M.G., Hussain, S.A., Bhatt, D. & Gupta, S.K. (2016). Mitochondrial and nuclear DNA based genetic assessment indicated distinct variation and low genetic exchange among the three subspecies of Swamp deer (*Rucervus duvaucelii*). *Evolutionary Biology*. DOI 10.1007/s11692-016-9387-2
- 41. Raha, A. & **Hussain, S.A.** (2016). Factors affecting habitat selection by three sympatric otter species in the southern Western Ghats, India. *Acta Ecologica Sinica*. 36: 45-49.
- 42. Manral, U., Sengupta, S., **Hussain, S.A.**, Rana, S., & Badola, R. (2016). Human wildlife conflict in India: A review of economic implication of loss and preventive measures. *Indian Forester.* 142(10): 928-940
- 43. Gupta, S.K., Kumar, A., Gaur, A. & **Hussain, S.A**. (2015). Detection of 40 bp insertion-deletion (INDEL) in mitochondrial control region among sambar (*Rusa unicolor*) populations in India. *BMC Research Notes*. 8: 581-588.
- 44. Mahar, N., Habib, B., Shawl, T., Gopi, G. V., Suhail, I., Takpa, J. & **Hussain, S. A.** (2015). Tracking the movement pattern of Bar-headed Goose *Anser indicus* captured from the Gharana Conservation Reserve, India. *Journal of Bombay Natural History Society*. 112(1): 14-22.
- 45. Angom, S., Gupta, S.K., Kumar, A. & **Hussain, S.A.** (2015). Identification of globally threatened cervids from problematic samples using cytochrome *b* and control region genes. *Conservation Genetics Resources*. 7: 647–650.
- 46. Rastogi, A., Hickey, G.M., Anand, A., Badola, R. & **Hussain, S.A.** (2015). Wildlife tourism, local communities and tiger conservation: A village level study at the Corbett Tiger Reserve, India. *Forest Policy and Economics*. 61: 11-19.

- 47. Badola, R., **Hussain, S.A.**, Dobriyal, P. & Barthwal, S. (2015). Assessing the effectiveness of policies in sustaining and promoting ecosystem services in the Indian Himalayas. *International Journal of Biodiversity Science, Ecosystem Services & Management*. 11: 216-224
- 48. Khan, A., Chandan, P., Takpa, J., **Hussain, S.A.**, Rattan, R., Jamwal, P.S. & Ahmad, T. (2014). Diurnal time budget of breeding Black-necked Crane (*Grus nigricollis*) in Changthang, Ladakh, India. **Zoological Research**. 35 (S1): 158–166.
- 49. Chandan, P., Khan, A., Takpa, J., **Hussain, S.A.**, Mehdi, K., Jamwal, P.S., Rattan, R., Khatoon, N., Rigzin, T., Anand, A., Dutta, P.K., Ahmad, T., Ghose, P.S., Shrestha, P. & Theengh, L.T. (2014). Status and distribution of Black-necked Crane (*Grus nigricollis*) in India. **Zoological Research** 35 (S1): 39–50.
- 50. Rastogi, A., Hickey, G.M., Badola, R. & Hussain, **S.A.** (2014). Understanding the local Socio-political processes affecting conservation management outcomes in Corbett Tiger Reserve, India. *Environmental Management*, 53(5): 913-929 (DOI 10.1007/s00267-014-0248-4)
- 51. Selvan, K. M., Lyngdoh, S. Gopi G.V., Habib, B. & **Hussain, S.A.** (2014). Population densities, group size and biomass of ungulates in a lowland tropical rainforest of the eastern Himalayas. *Acta Ecologica Sinica*. 34(4): 219-224 (DOI: 10.1016/j.chnaes.2014.05.003)
- 52. Gupta, S.K., Kumar A. & **Hussain, S.A**. (2014) Novel primers for sequencing of the complete mitochondrial cytochrome b gene of ungulates using non-invasive and degraded biological samples. *Conservation Genetics Resources*. 6(3): 499-501 (DOI: 10.1007/s12686-014-0143-6).
- 53. Mohapatra, P.P., Palei, H.S. & **Hussain, S.A.** (2014). Occurrence of Asian small-clawed otter *Aonyx cinereus* (Illiger, 1815) in Eastern India. *Current Science*. 107 (3): 367-370
- 54. Selvan, K.M. Gopi G.V., & **Hussain, S.A.** (2013). Dietary preference of the Asiatic wild dog (*Cuon alpinus*). *Mammalian Biology.* 78: 486–489.
- 55. Rastogi, A. Hickey, G.M., Badola, R.,& **Hussain, S.A.** (2013). Diverging viewpoints on tiger conservation: A Q-method study and survey of conservation professionals in India. *Biological Conservation*. 161: 182–192.
- 56. Selvan, K.M., Gopi G.V., Lyngdoh, S., Habib, B. & **Hussain, S.A.** (2013). Prey selection and food habits of three sympatric large carnivores in a tropical lowland forest of the Eastern Himalayan Biodiversity Hotspot. *Mammalian Biology*. 78(4): 296-303. (dx.doi.org/10.1016/ j.mambio. 2012.11.009)
- 57. Angom, S. & **Hussain S.A.** (2013). A review on genetic status of Eld's deer (*Rucervus eldii*): with notes on distribution, population status and future perspectives. *Octa Journal of Environmental* **Research.** 1(2): 65-76
- 58. Manral, U., Raha, A., Solanki, R., **Hussain, S.A.,** Babu M. M., Mohan D., Gopi G.V., Sivakumar, K. & Talukdar, G. (2013). Plant Species of Okhla Bird Sanctuary: A Wetland of Upper Gangetic Plains, India. *Check List: Journal of species lists and distributions.* 9(2): 263-274.
- 59. Gupta, S.K., Kumar, A., **Hussain, S.A.**, Vipin, & Singh, L. (2013). Cytochrome b based genetic differentiation of Indian wild pig (*Sus scrofa cristatus*) and domestic pig (*Sus scrofa domestica*) and its use in wildlife forensics. **Science and Justice.** 53(2): 220-222 (DOI10.1016/j.scijus.2012.09.005)

- Gupta, S.K., Kumar, A. & Hussain, S.A. (2013). Extraction of PCR-amplifiable DNA from a variety of biological samples with uniform success rate. *Conservation of Genetic Resources*. 5(1): 215-217 (DOI 10.1007/s12686-012-9772-9)
- 61. Nawab, A. & **Hussain, S.A.** (2012). Factors affecting the occurrence of smooth-coated otter (*Lutrogale perspicillata*) in aquatic systems of the Upper Gangetic Plains, India. **Aquatic conservation: Marine and freshwater ecosystems.** 22(5): 616-625 (DOI: 10.1002/aqc.2253)
- 62. Dobriyal, P., Qureshi, A., Badola,R. & **Hussain, S.A.** (2012). A review of the methods available for estimating soil moisture and its implications for water resource management. Journal of Hydrology. *Journal of Hydrology*. 458–459: 110–117
- 63. Rastogi, A., Hickey, G.M., Badola, R. & **Hussain, S.A.** (2012). Saving the superstar: A review of the social factors affecting tiger conservation in India. *Journal of Environmental Management.* 113: 328-340.
- 64. **Hussain, S.A.,** Barthwal, S.C., Badola, R., Rahman, S.M.T., Rastogi, A., Tuboi, C. & Bhardwaj, A.K. (2012). An analysis of livelihood linkages of tourism in Kaziranga National Park, a natural world heritage site in India. *PARKS*. 18 (2): 32-42
- 65. Nawab, A. & **Hussain, S.A.** (2012). Prey selection by smooth-coated otter (*Lutrogale perspicillata*) in response to the variation in fish abundance in Upper Gangetic Plains, India. *Mammalia*. 76: 57–65.
- 66. Tuboi, C., Angom, S., Babu, M.M., Badola, R. & **Hussain, S.A.** (2012). Plant species composition of the floating meadows of Keibul Lamjao National Park, Manipur. *NeBio.* 3(4): 1-10.
- 67. Angom, S., Tuboi, C. & Hussain, **S.A.** (2012). Nest morphometry of Indian wild boar (*Sus scrofa*), its occurrence and reuse by Eld's deer or Sangai (*Rucervus eldii eldii*) in Keibul Lamjao National Park, Manipur. *NeBio.* 3 (3): 1-8.
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- Canadian Journal of Zoology National Research Council, Canada
- Acta Theriologica Polish Academy of Sciences
- Indian Forester Indian Council of Forestry Research and Education
- Indian Journal of Marine Sciences Council of Scientific and Industrial Research
- Journal of Bombay Natural History Society
- Current Science

ONGOING PROJECTS

#	Title	Agency	Period	Amount (INR)
1	Landscape sustainability challenges in proposed Similipal - Satkosia corridor region due to collective mining regime: mining-wildlife habitat linkages and impacts	MoEFCC, GOI	2019-20	1,25,30,000
2	Planning and management for aquatic species conservation and maintenance of ecosystem services in the Ganga River Basin for a clean Ganga	NMCG GOI	2019-24	113,99,28,587
3	Connecting the dots: finding dispersal corridors for large mammals in Kaziranga – Karbi Anglong landscape	NTCA GOI	2019-22	1,83,40,000
4	Promoting community participation in conservation and conflict resolution in the fringe villages of Kaziranga Tiger Reserve through Eco development.	NTCA GPI	2019-22	80,30,000
5	Management of invasive species in wet grasslands of Kaziranga Tiger Reserve, Assam	NTCA GOI	2018-21	80,30,000
6	Ecological monitoring of Chambal river basin with special reference to water requirement of key aquatic species	WII	2017-20	57,78,000
7	Dissemination and evaluation of technologies through networking of various institutes and organization of mountain ecosystem	DST	2017-20	75,55,384

8	Conservation of Manipur's Brown Antlered Deer or Sangai An Integrated Approach	CAMPA	2016-21	19,95,00,000
9	Development of conservation action plan for Gangetic dolphin	CAMPA	2016-21	
10	Biodiversity Assessment of Gautam Buddha Wildlife Sanctuary in Hazaribagh and Gaya District	Dedicated Freight Corridor	2017-19	12,31,650
11	Biodiversity Conservation and Ganga Rejuvenation	Ministry of Water Resources	2016-19	24,83,00,000
12	Assessing potential of community participation in biodiversity conservation of Kalesar and proposed Kund Community Reserve	Haryana Forest Department,	2015-17	15,00,000
13	The distribution pattern, habitat use and movement of breeding water birds with respect to Black necked cranes and Bar-headed geese using telemetry in Changthang Cold Desert Sanctuary and Gharana Wetland Reserve	MoEFCC GOI	2009-19	46,50,000

COMPLETED PROJECTS

#	Title	Agency	Period	Amount (INR)
1	Landscape sustainability challenges in Western Singhbhum region due to collective mining regime: Mining wildlife habitat linkages and impacts	MoEFCC, GOI	2015-17	50,00,000
2	Evaluation of ecosystem services including the hydrologic and carbon ecosystem services of Munnar Landscape	UNDP	2014-15	44,56,760
3	Genetic Assessment of Sambar Rusa Unicolor population in North East India	DST-SERB	2014-17	32,70,000
4	Management planning of Kusheshwarasthan and Baraila Bird Sacctuaries, Bihar	Bihar Forest Department,	2014-16	24,00,000
5	Pattern of biomass production by wetlands and it's use by wild ungulates in Kaziranga Landscape	DST-SERB	2013-16	48,82,000
6	Promoting livelihood security and community participation in forest conservation in fringes of Kedarnath Wildlife Sanctuary	UCOST	2013-15	5,45,000
7	Economics of living in the wild: cost-benefit analysis for the forest corridor linking the Rajaji and the Corbett National Parks	SANDEE	2012-15	13,72,500
8	Valuation of rangelands: livestock production function of the rangelands of the Hindu-Kush Himalayas	ICIMOD	2011-12	7,36,000
9	Assessment of impact of sand mining in Uttarakhand	Uttarakhand Forest Department	2011-12	8,00,000
10	Integrated Development of wildlife habitat- Sangai	Govt. of Manipur	2010-13	7,60,000
11	Assessment of policies and institutional arrangement in the Indian Hindu Kush Himalayas	ICIMOD, Nepal	2010-11	9,50,857.5

12	Management planning of Okhla Bird Sanctuary	Uttar Pradesh Forest Department	2009-11	17,35,350
13	An integrated approach to reduce the vulnerability of local community to climate change impacts and environmental hazards in western Himalayas	WII (grant-in-aid)	2006-11	49,14,000
14	Conservation ecology of Sangai and its wetland habitat	WII grant-in-aid	2005-11	65,00,000
15	Valuation of Bhitarknika mangrove ecosystem for ecological security and sustainable resource use	IGIDR	2001-03	15,00,000
16	Ecology of otters in Corbett Tiger Reserve: Impact of Kalagarh reservoir on the habitat use pattern	WII grant-in-aid	2000-04	7,82,400

PH.D. THESIS SUPERVISING/SUPERVISED

- 1. Sharma, S.P. (Field work in progress). Genetic diversity, gene-flow and mating system in sympatric crocodylian species in National Chambal Sanctuary, India. Saurashtra University, Rajkot.
- 2. Kumari, P. (Field work in progress). Avian community structure with relation to landscape heterogeneity in Lower Shivalik Landscape, Haryana. Saurashtra University, Rajkot.
- 3. Devi, A. (Thesis writing in progress). Food habits of sympatric large herbivores in Kaziranga National Park, Assam. Saurashtra University, Rajkot.
- 4. Sharma, M. (Thesis writing in progress). Plant community structure and biomass productivity of seasonally flooded wetlands of Brahmaputra floodplains, Assam. Saurashtra University, Raikot.
- 5. Mahar, N. (Thesis writing in progress). Status, habitat use and factors affecting breeding waterbirds of Changthang Cold Desert Sanctuary, Ladakh (India). Saurashtra University, Rajkot.
- 6. Sinha, A. (Thesis writing in progress). Distribution pattern, abundance and habitat use by hog deer (*Axis porcinus*) in Manas National Park, Assam. Saurashtra University, Rajkot
- 7. Manral, U. (2018). A study on the resource dependence, human-wildlife conflict and community participation in forest management in Alaknanda basin, Uttarakhand. Saurashtra University, Rajkot
- 8. Pariva, D. (2015). Assessment of provisioning services and the recreational value of Nanda Devi Biosphere Reserve Ph.D. Thesis. Saurashtra University, Rajkot
- 9. Gupta, S.K. (2015). Assessment of genetic variation in sambar deer (*Rusa unicolor*). Ph.D. Thesis Saurashtra University, Rajkot
- 10. Leima, S. T. (2014). A study on the people protected area interface at Keibul Lamjao National Park, Manipur. Ph.D. Thesis. Saurashtra University, Rajkot

- 11. Selvan, M. K. (2013). Ecology of sympatric large carnivores in Pakke Tiger Reserve, Arunachal Pradesh. Ph.D. Thesis. Saurashtra University, Rajkot
- 12. Tuboi, C. (2013). Assessment of water quality and biomass productivity of the tropical floating meadows of Keibul Lamjao National Park, Manipur, Ph.D. Thesis. Saurashtra University, Rajkot
- 13. Angom, S. (2012). Demographic status and genetic variation of Sangai in Keibul Lamjao National Park, Manipur. Ph.D. Thesis. Saurashtra University, Rajkot
- 14. Fozia, H. (2010). A study on waterfowl population and human use of Hokersar and Hygam wetlands of Kashmir valley for conservation planning. Ph.D. Thesis. Saurashtra University, Rajkot.
- 15. Nawab, A. (2008). Ecology of otters in Corbett Tiger Reserve. Ph.D. Thesis. FRI University, Dehra Dun.

M.SC. DISSERTATION SUPERVISED

- 1. Basak, S. (2019). Resource use and distribution of Smooth-coated otter (*Lutrogale Perspicillata*) in the Sub-Himalayan foothill rivers of Uttarakhand. M.Sc. Dissertation. Saurashtra University, Rajkot.
- 2. Sharma, R. (2017). Diversity and abundance of birds in disturbed and undisturbed wetlands of Manipur River Basin. M.Sc. Dissertation. Saurashtra University, Rajkot.
- 3. Anees, C.R. (2015). Assessing riverine vulnerability: A multiscale landscape approach using Smooth-coated otter as a key species in Kabini River Basin.
- 4. Nadendla, L.P. (2015). Resource selection, abundance and conservation of Smooth coated otters in and around Coringa Wildlife Sanctuary.
- 5. Devi, A. (2014). Food habits of Swamp deer and Hog deer in Kaziranga National Park, Assam, India. M.Sc. Dissertation. GGSIP University, New Delhi.
- 6. Shamra, M. (2014). Plant species composition and aboveground biomass production of wet grasslands of Kaziranga National Park, Assam, India. M.Sc. Dissertation. GGSIP University, New Delhi.
- 7. Jayaram, S. (2013). Density, distribution and factors influencing sea stars in selected islands of Lakshadweep, India. M.Sc. Dissertation. Saurashtra University, Rajkot.
- 8. Sebastian, S. (2013). An assessment of recreational value of Periyar Tiger Reserve and the distribution of tourism income among stakeholders. M.Sc. Dissertation. Saurashtra University, Rajkot.
- 9. Jabaraj, F.S.D. (2013). Resource selection by large herbivores with special reference to blackbuck (*Antelope cervicapra*) in Point Calimere Wildlife Sanctuary, Tamil Nadu.
- 10. Rana, M. (2012). Agro-biodiversity and food security in context to climate change: A case study of Nanda Devi Biosphere Reserve, Uttarakhand. M.Sc. Dissertation for the award of degree in Environmental Science, School of Environment & Natural Resources, Doon University.
- Phukan, A. (2011). An assessment of socioeconomic status of local people, their resource dependency and attitude towards wetland conservation: a case study of Panidihing Wildlife Sanctuary, Assam. M.Sc. dissertation. Environment management. Deemed University, Forest

- Research Institute, Dehra Dun. 107 pp.
- 12. Niazi, S.G. (2011). Gender based natural resource management in and around Nanda Devi Biosphere Reserve. M.Sc. dissertation. Forest Management, Deemed University, Forest Research Institute, Dehra Dun. 69 pp.
- 13. Sabic, K. (2011). Human–Wildlife conflicts in the Nanda Devi Biosphere Reserve. Uttarakhand, India. Dissertation. Bachelor of Arts with honours. University of Michigan, USA. 29 pp.
- 14. Singh, H. (2009). Urban attitudes towards climate change in Dehra Dun, Dissertation, Post Masters Diploma in Natural Resource Management, FRI University, Dehra Dun. 85 pp.
- Mainak, M. (2009) A review of scenario and possibilities of clean development mechanism in India. Dissertation, Post Masters Diploma in Natural Resource Management, FRI University, Dehra Dun. 51 pp.
- 16. Passeport, F. (2009) Appropriation of natural resources, space and discourses of the Bhotiya community of Mana village (buffer zone of Nanda Devi Biosphere Reserve), Uttarakhand, India. M.Sc. Dissertation on Environmental Anthropology, Muséum National d'Histoire Naturelle (Paris, France), 44 pp.
- 17. Devlin, L. (2008). Assessment of ecosystem services of Loktak Lake, Manipur. M.Sc. Dissertation. Doon College of Agriculture Science and Technology, Dehra Dun.
- 18. Gupta, S. (2008). Vegetation characteristic and carbon stored in forests of Forest Research Institute campus, Dehra Dun. M.Sc. Dissertation. FRI University. Dehra Dun
- 19. Das, D. (2007). Ecosystem services of Manas National Park, Assam. M.Sc Dissertation, Forest Research Institute University, Dehra Dun.
- 20. Thapliyal, S. (2006). Assessment of ecosystem services of Corbett Tiger Reserve. M.Sc. Dissertation, Forest Research Institute Deemed University.
- 21. Rastogi, A. (2006). Stakeholder Analysis for Corbett National Park. M.Sc. Dissertation, Forest Research Institute Deemed University, by Archi Rastogi. June 2006
- 22. Kandpal, V. (2006) Study of effects of Relocation of villages from Corbett Tiger Reserve. M.Sc. Dissertation, Forest Research Institute Deemed University by. June 2006
- 23. Dadda, T. (2005). The Relative sensitivity of mammalian carnivores to disturbance. M.Sc. Dissertation, Wildlife Institute of India, Dehra Dun & Saurashtra University, Rajkot
- 24. Konthoujam, B. (2005). Human-wildlife conflicts around the Corbett Tiger Reserve. M.Sc. Dissertation, FRI University.
- 25. Sah, T. (2005). Perception of local people towards services provided by forest ecosystem: A case study from Bhabar-Tarai. M.Sc. Dissertation, FRI University.
- Sushant (2003). Dead wood, Wildlife and PA Management: A study on the extent of use of dead wood by wild animals at Periyar Tiger Reserve. M.Sc. Dissertation, Wildlife Institute of India, Dehra Dun & Saurashtra University, Rajkot

- 27. Anoop, K.R. (2002). Factors affecting distribution and feeding habits of Smooth-coated otter in Periyar Tiger Reserve. WII & Saurashtra University, Rajkot
- 28. Latt T.W. (2002). Seasonal change in social structure, behaviour and habitat use by Sarus crane in Keoladeo National Park. WII & Saurashtra University, Rajkot

January 17, 2022 Dehra Dun

(SYED AINUL HUSSAIN)

Hussain