



(Retd) Professor Seema Kulshreshtha (Ph. D)

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Education & Experience

Seema Kulshreshtha received her graduation degree from University of Rajasthan, Jaipur (1981) and postgraduation degree from ML Sukhadia University, Udaipur Rajasthan, India (1983). After four years of research in reproductive physiology, she availed her Ph. D degree from University of Rajasthan, Jaipur, India (1984-1989). She worked on ethnomedicines commonly used by tribals and their impacts on reproductive enzymes of males. She received Departmental scholarship(1984-85), University of Rajasthan, Jaipur, India, Indian Council of Medical Research (ICMR)-Junior Research Fellowship(1985-87). She also qualified the most prestigious National Eligibility Test (NET) conducted by University Grants Commission (UGC), India for Junior Research Fellowship(JRF)(1987-89) and UGC (NET) Senior Research Fellowship (SRF)(1989) . For postdoctoral work, she joined a National Fellow Project (1992-96), at the Department of Veterinary Biotechnology, College of Veterinary Sciences, G.B. Pant University of Agriculture and Technology, Pant Nagar, Utrakhnad, India. She worked with techniques like RIA, ELISA, production of monoclonal antibodies, tissue culture, IVF, immunization techniques, lyophilization, affinity chromatography and electrophoresis. She also prepared an indigenous, cheaper Dipstick Bovine Pregnancy Diagnostic kit using milk, for the local farmers.

Then, she achieved top-most (rank one) in the merit of Rajasthan Public Selection Commission (RPSC) competitive examination for the Assistant Professorship in the Government Colleges of the state of Rajasthan in 1998 and joined government services as an Assistant Professor in the year 1999 and was retired as a professor in 2021. She has total 23 years of UG and PG teaching experience in various colleges of the state in the subject of zoology. Apart from this, she is involved in omissions of dissections of animals from Zoology teaching.

She has attended short-term training programs on immunological separation techniques at International Institute of Reproduction, Mumbai. ESP International Training Workshop-Valuing and capturing the benefits of ecosystem restoration at WII Dehra Dun and Applications of Very high resolution satellite data in natural heritage management” from (2017)UNESCO Category2 Centre on World Natural Heritage Management and Training at Wildlife Institute of India. She also completed a training course on Geospatial Technologies under National Resource Data Management System (NRMDS) Program of DST, Ministry of

Science and Technology, Government of India, conducted by the Department of Remote sensing , Birla Institute of Science & Research, Jaipur, Rajasthan.

During her service period, she continued her research activities in the biodiversity conservation field . She undertook five research projects, two minor and three major projects related to various aspects of conservation of Sambhar Salt Lake in collaboration with Rajasthan State Biodiversity Board, and the Forest Department, Government of Rajasthan. Beginning from compilation of 100 years of data collection and monitoring on flamingo migration, causes of decline in their population in 2005, digitization of map of the Sambhar Lake, continuous observation and monitoring of ecology of the lake using remote-sensing and, assessment of ecosystem services was the main focus of the studies. Ecological indicators' monitoring is being done by my team members since 2005.

She is the first one to create “People’s Biodiversity Registers” (PBRs) for every village *panchayat* (village administrative unit) which are legal documents and provide the legal right for charging of 2-4% tax from individuals/ companies and also benefit-sharing, who collect any kind of biodiversity benefit from village forest area.

Socio-economic survey of 38 peripheral villages was also conducted by her to find out livelihood-dependency of communities on the lake. Creating sustainability awareness for the lake among local communities of peripheral villages and finding out alternative livelihood options are also undertaken in my small college level projects. To meet out the purpose of conservation of the lake, she organizes biodiversity and lake conservation workshops every year involving stakeholders, till now five such workshops and 12 seminars have been conducted.

She has published 14 research papers, three books, nine chapters and five article in various magazines. She has supervised eight research scholars for Ph. D. till now and two are underway. She has attended and presented papers in more than 50 international and national conferences and seminars. She has delivered many invited lectures. She is also invited every years for the training of auditors at International Centre for Environment Audit and Sustainable Development (ICED), Jaipur, Rajasthan on wetlands. She is also a lifetime member of Flamingo Specialist Group of IUCN, WWF, Indian Bird Conservation Network, Asian waterfowl census, International Salt Lake Research Society, Ecosystem Services Partnership(ESP) network, and Society for Conservation Biology.

Important Publications

1. *Faunal Heritage of Rajasthan: Ecology and Background of Vertebrates. Vol.1* Springer, New York, USA. 2013. Springer, New York, USA. ISBN 978-1-4614-0799-7

2. *Faunal Heritage of Rajasthan: Conservation and management. Vol. 2.* Springer, Cham, Switzerland, 2013. ISBN 978-3-319-01344-2

3. Ramsar Sites of Rajasthan: Ecology and Conservation of Sambhar Salt Lake, Jaipur and Keoladeo National Park, Bharatpur. In: *Faunal Heritage of Rajasthan: Conservation and management. Vol. 2*

4. Seema Kulshreshtha, GV Reddy & H. Nangyal(2020)Community based conservation of the Sambhar Salt Lake, Jaipur, India, in *Environmental Pollution, Biodiversity and Sustainable Development: Issues and Remediation.* Edited by Hasnain Nagyal & Muhammad Salim Khan. Apple Academic Press, USA pp 169-188. ISBN hard: 978-1-77188-805-9. Cat#: K4197345. E Book ISBN: 9780429265013. Cat#: KE94591

5. Kulshreshtha Seema, Reddy GV (2019): Livelihood-dependency of local communities leading to survival crisis of the Sambhar Salt Lake. *Int J Res Analyt Rev(IJRAR).*6(1): 1019-1032. E-ISSN 2348-1269, P-ISSN2349-5138

6. Kulshreshtha Seema (2017): Diminishing Salt Lakes of Rajasthan, India and their sustainable Conservation Management: Sambhar Salt Lake-A case study. Proceedings of SAARC ECUBE-17: International Conference on Ecofriendly and socially responsive Economy and Equity: Issues and challenges of 21st century for emergent sustainable development amongst SAARC countries. Eds, Arti Prasad, SS Katewa, Subhash Donde. Organized by Department of Zoology, University College of Science, Mohanlal Sukhadia University , Udaipur, Rajasthan, India. Pp 179-184

Candidate's statement

My life is dedicated to saline lake conservation from past twenty years which has risen up to a level from 'lab to field' and 'field to community-welfare' over the years. I joined ISSLR in the year 2018. I had the first pleasant experience of meeting salt lake scientists from all over the world during the online ICSLR conference of 2021. Plethora of research studies updated me and made me aware of the level of research on salt lakes. I was elected as a board member during the ICSLR 2024 at Turkey. My mission is, to link scientific research on salt lakes to suitable international and national conservation policies and platforms and present them as documentary proofs to policy-makers and influential government authorities. Secondly, I am involved in creating conservation awareness among younger generation of students and communities to spread the message of stopping the horrible state of illegal salt extraction for saving the lake and livelihoods of lake-dependent communities for future generation.

In my opinion, creation of working groups for undertaking different tasks is the best idea, I support it strongly and is determined to work with ecosystem services group and also with outreach activity/ community work/. Socio-economic survey group, flamingo group etc.

I feel that society still needs more members, and wide publicity, we can create a common e-brochure for attracting new members and e-news-letter for widespread publicity of our members activities.
