

Dr K. Venkatarman

Former Director, Zoological Survey of India, Kolkata



Dr. Krishnamoorthy Venkataraman is a Scientist, born on July 14, 1955 at temple city Kanyakumari, Tamil Nadu, India. He did his Ph.D. in Zoology (Limnology) in 1983 at Madurai Kamaraj University under the guidance of Late Professor Dr. S. Krishnaswamy, renowned Copepodologist and former Vice Chancellor of Madurai Kamaraj University. He subsequently acquired competence in Marine Biodiversity especially on coral reefs with his study on coral bleaching and crown of thorns in the Andaman and Nicobar Islands, India, in 1990. His research areas include coastal and marine biodiversity assessment, coral reef restoration, integrated management of coastal, marine and wetland ecosystems, biodiversity laws and policies. He has demonstrated expertise in strategy formulation, climate change resilience in management of marine ecosystem, meiofaunal assemblage in Antarctic ecosystem, and training and organizing awareness programmes on faunal resources conservation.

He has gained 37 years of research experience in faunal diversity studies by serving in Madurai Kamaraj University, Bombay Natural History Society (BNHS) and over 27 years at Zoological Survey of India (ZSI) in various capacities. At BNHS he worked with internationally renowned Ornithologists, Dr. Salim Ali, in the Management of Keoladeo National Park, Bharatpur, Rajasthan. Presently he is the Director of Zoological Survey of India, Kolkata and consequently also serving as an Advisor to Government of India on Zoological Affairs. He has contributed over 458 publications in the field of marine, wetland, terrestrial and freshwater ecosystems, of which 41 have been published as books. Besides, he is serving as a member in the editorial board of leading scientific journals in India and has reviewed several articles for journals of international repute. He is serving as a member of various committees of Government of India and attended over 500 national and 50 international meetings for sharing views, chairing sessions, delivering lead talks and panel discussions pertaining to the marine biodiversity. He has been invited by several institutions including ISRO, CSIR, ICAR, ICMR, Central and State Universities, Colleges and schools to deliver lectures on faunal resources and their conservation.

He has played a pivotal role in National Biodiversity Authority of Ministry of Environment, Forests and Climate Change, Government of India as a Founder Secretary and coordinated the

implementation of thematic National Biodiversity Strategy Action Plan, and Action plan for biophysical monitoring of coral reefs in Andaman and Nicobar Islands and Gulf of Mannar Biosphere Reserve. His inputs and involvement in the implementation on Biological Diversity Act, 2002 and establishment of State Biodiversity Boards are worth mentioning. Besides, he was holding an additional charge as a Member Secretary in Loss of Ecology Authority (Prevention and payment of compensation) from 2007-2010 and played an important part in the Implementation of Supreme Court proceedings under Section 3(3) of Environment (Protection) Act, 1986.

Having expertise in marine biodiversity, he has been deputed to research institutions of several countries including United Kingdom, United States of America, Australia, Japan, Singapore, Sri Lanka, Maldives, Philippines, Indonesia, Mexico etc. To exchange his views, collaborative research, training and conferences on biodiversity conservation and gained rich experience. He was instrumental in achieving the recognition of Great Nicobar Biosphere Reserve (GNBR) of Andaman and Nicobar Islands in UNESCO-MAB World Network of Biosphere Reserve as ZSI is the Lead Institution for GNBR. Besides, research based recommendations made by him for the extension of ban to exploit Sea cucumbers in Indian Seas protected under Schedule-1 of Wildlife (Protection) Act, 1972, and inclusion of Tokay Gekko under the Schedule-1 of the said Act, delisting of breed variety of Japanese Quail from the Schedule list, and inclusion of 4 species of Elasmobranchs in CITES Appendix-II were readily accepted by Government of India and implemented accordingly.

He was nominated by the Government of India to represent the country in the meetings of the Group of Like-minded Megadiverse Countries (LMMCS) held at New Delhi during 2005. Considering his expertise in the coastal and marine biodiversity research and related national policies, he was again nominated by the Government of India to participate as an Indian Delegate in the Conference of the Parties-11 to the UN Convention on Biological Diversity, held in Hyderabad during 2012 under the Indian Presidency in which he highlighted the importance of Taxonomy. Thus, he has played a key role in the management process as well as policy formulations at the local, national, regional and global levels.

Dr. K. Venkataraman is a pioneer scientist in Zoological Survey of India who undertook subtidal faunal exploration using SCUBA diving devices since 1990s as he has received credential certified by PADI, Australia for advanced open water diving, dive master and rescue diver which helped him to thoroughly investigate the status of Indian coral reefs from time to time. He also had the opportunity of diving in the Great Barrier Reef, Australia. Being a scientist of ZSI, he could gather *in-situ* knowledge with working experience in all the ecosystems of India right from Deep Sea to high altitude Himalayan th Mountains and also the Antarctic ecosystem. He has participated in 14 Indian Expedition to Antarctica during 12 December 1994 to 30 March 1995 organized by Department of Ocean Development, Government of India, and conducted studies on Tardigrada, South Polar Skua and other mammals. Introduction of permanent monitoring plots to study the coral reef status in Andaman and Nicobar Islands laid by him is an approach first-of-its-kind in Indian reef studies. He

has conducted a holistic study on the coral reef ecosystems especially on Gulf of Mannar & Palk Bay, Gulf of Kachchh, Lakshadweep and Andaman and Nicobar Islands and as a result of it Identification Manual for Coral Reefs published him, is serving as a reference material for reef researchers in India. In collaboration with Central Pollution Control Board, he has revealed out the effect of durga pooja on river Ganges in 1994. In the capacity as Director of ZSI, he was successful in obtaining sanction for Rs. 14.5 crores from Government of India to strengthen the infrastructure facilities for taxonomical research and as a result a total of over 319 new taxa have been described and more than 506 species were recorded under various faunal groups as new to India within a short span of time. As a result of his concerted efforts, he could obtain another Rs. 45.9 crores from Government of India to modernize the museums and buildings of ZSI headquarters and 16 Regional Offices spread across the country. During his tenure of Directorship, long pending promotional issues of scientists and staff of ZSI were sorted out and over 369 scientific and administrative personnel benefited out of it. In addition to over 100 in-house research programmes, he has handled more than 41 grants-in-aid projects with the financial support from World Bank, MoEFCC, DST, MoES, ISRO, Ministry of Defence etc. and generated an External Cash Flow of Rs. 17.5 crores. He has also coordinated the All India Coordinated Project on Marine Biodiversity and brought out the compendium on marine faunal diversity. His initiatives for digitizing 4 million faunal collections of ZSI, above 3 lakhs pages of ZSI publications, quick accessing of type specimens for scientific research have been acclaimed by the scientific communities around the globe. With his vast knowledge in biodiversity conservation, apart from Government of India, he could build a good rapport with international bodies such as, UNESCO, IUCN, UNDP, GEF, ICRMN, EU, FAO, Queensland Museum, British Natural History Museum, ICZM, Bay of Bengal Programme, BOBLME, CITES and so on. He is a Gold Medalist in graduate Zoology, and recipient of various awards including Fellow of Zoological Society, Kolkata, Fellow of Society of Reef Studies, Fellow of International Attorney's, Fellow of Indian Academy of Sciences Fellow of Madras Science Foundation, Chennai, to mention of few. He is a recognized Ph.D. supervisor of University of Madras and under his research guidance 3 students have so far been awarded Ph.D. degree and two more are presently pursuing the same. He is an Orator and delivered several talks in electronic medias and written popular articles in print medias to popularize the science and produced short films on marine biodiversity conservation and its awareness.

Dr. K. Venkataraman started his career in Zoology as a Limnologist and subsequently his interests diversified to ornithology, marine biology and biodiversity. He grabbed and utilized the opportunities that came in his path to the fullest and moulded him into a personality that he is now. At present Dr Venkataraman is supporting the National Centre for Sustainable Coastal Management, Ministry of Environment as a consultant in the real time status studies on Coral Reefs of India.



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