



Prof. P.J. Sanjeevaraj Endowment Lecture on Coastal Ecology

Delivered on 3rd November 2006, at the Department of Zoology, Madras Christian College, Tambaram, Chennai

Dr. V. Sampath, Ex-Adviser, Ministry of Earth Sciences and presently a Regional Consultant for UNEP/SACEP for Marine Litter Activity and a Senior National Consultant for UNDP Orissa Fisheries Project, while delivering the captioned Endowment Lecture on "Status and Development Potential of the Coastal and Marine Environment of India and its Living Resources", highlighted the natural and human induced changes that have led to loss of wetlands, increased erosion, flooding and seawater intrusion, degradation of coastal and marine ecosystems such as mangroves, coral reef and sea grass beds, beaches, etc., besides posing a constant threat to the coastal and marine resources, human lives and property.

He said that high rates of population growth, poverty as a result of dwindling coastal and marine fisheries resources, rapid industrialisation along the coastal belt degrading the resources, lack of awareness on sustainable resource management among the people and policy-makers, lack of proper enforcement of the rules and regulations for conservation of the coastal zone and its resources, etc., are the major driving forces behind the

devastating coastal resources depletion. Until such forces are offset, there is little hope to accomplish environmental conservation or resource sustainability, he added.

Since potentially high benefits come with equally high risks of ecological deterioration through over-fishing, killing of unwanted by-catch and habitat destruction, he emphasised the need to integrate all the activities carried out along the coast including tourism, fisheries, and other industries, following the Integrated Coastal Zone Management concept, for ensuring sustainable yields, as well as for protecting the vulnerable areas, species and the food and livelihood security of the fishing community.

While referring to the issues in coastal and marine fisheries

management, he pointed out that the open access nature of marine capture fisheries in India was one of the major reasons for depletion, economic waste and conflict among user groups. Without adequate control over access, these consequences would become increasingly severe and would further impede the sustainable management of fishery resources.

In the present day context of dwindling coastal and marine living resources, he said that sea ranching, mariculture and deployment of Artificial Reefs/Fish Aggregating Devices were being advocated, for living aquatic resources enhancement. To make this a reality, he called upon the ICAR fisheries Research Institutes to develop and standardise viable and cost-effective technologies, particularly for controlled breeding and rearing of a wide array of

commercially important fin and shell-fish species on priority basis and for providing proper extension services, training and capacity building among the coastal community.

The other major points flagged by him in his lectures included:

- Coordinated and integrated management of all activities in the coastal



1) Standing for Invocation: (L to R) Prof. Dr. R. Sridharan, Prof. Dr. S. Kannaiyan, Prof. Dr. P.J. Sanjeeva Raj, Dr. V. Sampath and Prof. Dr. S.K. Sunder Raj. 2) Prof. Dr. S.K. Sunder Raj welcoming (L to R) Prof. Dr. S. Kannaiyan, Prof. Dr. P.J. Sanjeeva Raj, Dr. V. Sampath and Prof. Dr. R. Sridharan. 3) Releasing the Book (L to R) Prof. Dr. P.J. Sanjeeva Raj, Prof. Dr. R. Sridharan, Prof. Dr. S. Kannaiyan and Prof. Dr. S.K. Sunder Raj.





zone to sustain the resources and protection and conservation of critical coastal/marine habitats for long-term economic growth of the country.

- Strict enforcement of the international/national Conventions, Laws, Acts, Rules and Regulations for protection, conservation, management and development of coastal and marine environment and its resources.

- Development of a Coastal Zone Data and Information System (data including storage and sharing/dissemination) for Coastal Zone Management.

- Preventing coastal pollution.

- Modification of craft and gear for selective fishing and reducing incidental/by-catch.

- Phasing out multilevel intermediaries in fish trade who

lead to income loss to the fishing community.

- Creation of post-harvest support facilities for reduction of post-harvest loss and for value addition and domestic market infrastructure.

To conclude, he pointed out that for Integrated Coastal Zone Management (ICZM) to succeed, a broad context of government and interest group involvement was essential and to accomplish this coordination, full involvement of all the stakeholders was needed.

The donor for these Endowment Lectures, Dr. R. Sridharan, Professor of Reproductive Physiology at the Morehouse School of Medicine at Atlanta, Georgia, USA, while inaugurating these Endowment Lecture Series announced the creation of the Prof. P.J. Sanjeeva Raj Foundation, with American Collaboration, to work for the security and welfare of the

coastal fisherfolk in India.

On this occasion, a 67 - Page book entitled 'Macro Fauna of Pulicat Lake' authored by Prof. P.J. Sanjeeva Raj was released by Prof. Dr. S. Kannaiyan, the Chairman of the National Biodiversity Authority. This book serves as a guide to identify all the macro fauna of the Pulicat Lake, upto the species level, making use of the dichotomous keys provided. This book would be very useful for researchers, managers, students and teachers, particularly when the Pulicat Wetland would be declared, hopefully soon, as a Ramsar Site for international protection. Free copies of this book can be obtained on request from the National Biodiversity Authority, 575, 9th South Cross Street, Kapaleswarar Nagar, Neelangarai, Chennai - 600 041. (Tel: 2499 0805/ 2499 2777, E-mail:nba_indial@vsnl.net).

