

Marine Environmental Education for the Fishermen Students for Biodiversity Conservation in Gulf of Mannar, India

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The Gulf of Mannar of India is the first marine biosphere reserve in south and south east Asia encompassing a group of 21 small islands along the coast. This biosphere reserve which stretches for 180 km long and 10 km wide is known for its diversified fisheries resources including the world famous pearl oyster, sacred chank and sea cow. A total of 3600 species of plants and animals including 117 species of corals, 11 species of sea grass and 5 species of turtles have been recorded from this reserve. The biodiversity of this coastal zone faces heavy threats in recent years due to rapid industrialisation and man-made activities such as bottom trawling, discharge of sewage from human settlements, flyash disposal by the coal-fired thermal power plant, clandestine quarrying of corals, dynamite fishing, etc. During the last 20 years, it is estimated that more than 10% of the native species have disappeared and this warrants suitable coastal zone management and conservation measures. Marine environmental education for fishermen students could be one of the useful tools for the coastal stewardship, as these students could serve as vectors in spreading the message to each household of the fringe fishermen villages of this region. In order to impart marine environmental education, a total of 150 pupils, 50 each from VIII, IX and X standards were selected from certain schools located in the fishing villages in the vicinity of this coast. A pamphlet containing simple diagrams and 100 points relating to various aspects of Gulf of Mannar was prepared and copies of this pamphlet were distributed to the target group of students. The points in the prepared pamphlet centered around benefits of the sea to mankind, fisheries resources, threatened and endangered species, prevailing threats due to industrial and man-made activities, and management measures to conserve biodiversity. After 15 days of distribution of pamphlets, randomly selected students were interviewed for their interest and knowledge about this coastal zone. In question and answer sessions conducted in this regard, 46%, 58%, and 65% of the VIII std, IX std and X std students respectively showed curiosity and answered excellently. By imparting this kind of environmental education to students, a conservation ethics has been seeded for the first time in the teenagers of this coast; an awareness on the importance of conserving biodiversity of the Gulf of Mannar has been created in the minds of the students and a sense of man-marine environment relationship and consciousness of the importance of protecting the habitats of the precious and threatened species have been developed. The present investigation has paved way for extending this venture to other students of all the coastal villages bordering the Gulf of Mannar. Further programmes identified for students and teachers in this regard include organising marine environmental seminars, exhibitions, summer training, museum visits, slide and video shows, awareness campaigns, field visits, etc. Publications such as leaflets, books, and posters in

regional language on the identification of marine biota and coastal zone management are to be brought out.