Conservation of Sea Turtle in Cox's Bazar- Teknaf Peninsula and Sonadia Island Ecologically Critical Area (ECA) of Bangladesh

Authors : Pronob Kumar Mozumder M. Nazrul Islam, M. Abdur Rob Mollah

Abstract : This study was conducted in Cox's Bazar-Teknaf Peninsula and Sonadia Island Ecologically Critical Areas during the period of October, 2011 to June, 2013. Six species of marine turtle are found in the Indian Ocean. Among them, olive ridley (Lepidochelys olivacea) listed as endangered in the IUCN Red List of Threatened Species. Marine turtle populations in the Indian Ocean have been depleted through long-term exploitation of eggs and adults, incidental capture (fisheries bycatch) and many other sources of mortality. The specific objective of the study was to conserve the sea turtles specially the olive ridley (Lepidochelys olivacea) with a view to contribute towards protection of the turtle species from extinction and to facilitate hatching of eggs through providing protection to turtle eggs or nest through ex-situ conservation efforts. In order to achieve the desired outputs and success, a total of five turtle hatcheries were established at Pechardwip, Khurermukh, Hazompara, Bodormokam, and Sonadia Eastpara sites. In total, 31,853 eggs were collected from 260 nests and were transferred to five hatcheries. The number of eggs/nest varied from 38 to 190 with an average clutch size of 122 eggs/ nest. Hatching of eggs took place during January to June with a peak in April. Sea turtle eggs were incubated by metabolic heat and the heat of the sun. The incubation period of turtle eggs in Cox's Bazar-Teknaf Peninsula and Sonadia Island ECAs extended from 54 to 75 days depending on the month with an average of 66 days. During study period the temperature in the ECAs varied between 10.5-34.5°C. A total of 27,937 hatchlings of turtle were produced from the five hatcheries and all the hatchlings produced were released into the sea. Hatching rates varied from 74-98 % depending on the location and months with an average of 88 %. Sea turtles spend the majority of their lives in the sea, only emerging on beaches to nest. Despite the intense conservation efforts on the beaches, some populations have still declined to the edge of extinction. So proper conservation and awareness measure should be taken for prevention of turtle extinction.

Keywords : conservation of sea turtle, Bangladesh, ecologically critical area, ECA, Lepidochelys olivacea
Conference Title : ICESCC 2015 : International Conference on Earth Science and Climate Change
Conference Location : Montreal, Canada
Conference Dates : May 11-12, 2015