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**STATUS OF SEAGRASS HABITATS OF
THE ANDAMAN AND NICOBAR COAST**

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Sálim Ali Centre for Ornithology and Natural History

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ABSTRACT

Seagrasses, mangroves and salt marshes have important functions in maintaining the richness of coastal environment. In the recent decades, destruction of seagrass meadows has occurred world wide. The loss may result from natural events, such as high energy storms but most seagrass loss has resulted from human activities. The apparent sensitivity of seagrasses to external environmental change, often induced by man, can be expected to cause wide fluctuations in the supporting population. Moreover, this is the major habitat of the dugong (*Dugong dugong*), one of the most threatened marine mammals of the Indian Ocean.

The Andaman and Nicobar islands have large meadows of seagrass, which flourishes in clear, relatively low nutrient coastal waters. A status survey of seagrass habitats was conducted in the Andaman and Nicobar islands with an objective to identify potential habitats for conservation of seagrass and associated animal life.

Field surveys were undertaken during April and May 1994 in the North, Middle and South Andaman, and January to April 1995 in Little Andamans and Nicobar group of islands, both in the subtidal and intertidal zones. Detail observations were made along the transect on a number of habitat parameters and environmental conditions.

Nine species viz. *Cymodocea rotundata*, *C. serrulata*, *Enhalus acoroides*, *Halodule pinifolia*, *Halodule uninervis*, *Halophila ovalis*, *Halophila ovata*, *Syringodium isoetifolium* and *Thalassia hemprichii* were collected during this survey. Marine turtles and sirenians (dugong) are the only vertebrate grazers on seagrasses. Three species of turtles, Olive ridley (*Lepidochelys olivacea*), Green (*Chelonia mydas*) and Hawksbill (*Eretmochelys imbricata*), were encountered in the seagrass beds during the survey. Dugongs could not be sighted, but information collected from local people and fishermen endorsed dugong's dependence on the seagrass habitats.

There are few invertebrates feeding on fresh seagrass leaves. Sea urchins and sea cucumbers feed on decomposed seagrass parts. *Holothuria scabra*, *H. atra* and *Tripneustes gratilla* were the common echinoderms met with in the seagrass meadows. Other life forms like juvenile prawns and fishes were common in the seagrass habitats.

Direct human use of the seagrass species is negligible. However, the habitat is used for diverse purposes. The study, finally, has evaluated the seagrass habitats of the Andaman and Nicobar islands for conservation on the basis of above information.