

Project Update: December 2017

Mithapur reef area is one of the biodiversity-rich regions of Gujarat coast with unique oceanographic features. The seagrasses and its associated habitats are stressed in this area due to urbanisation. Seagrasses are also called underwater lungs due to their ability to fix carbon. Destruction of seagrass ecosystem would imbalance the total marine biodiversity of the region. Four species of seagrass namely *Halophila beccarii*, *Halophila ovalis*, *Halophila ovata* and *Halodule uninervis* are reported from Gulf of Kachchh region. Among the four seagrasses, *H. beccarii* is a common species. *Halodule uninervis* is selected for the present work on developing nursery for seagrass restoration due to its sparing distribution, and it is one among the rare species. The vegetative parts of the seagrass are collected at a depth of 3 to 4 ms with the help of SCUBA diving. The collected plants were planted within an iron frame (1 x 1m) (Fig. 1) with a mesh on its top to avoid uprooting due to water currents. The plantation was carried out consecutive days during for a week during low tide. The site was monitored after a week of transplantation, and the transplants were found to be stabilised. The site was found accumulated by different types of fishes including cuttlefish and shrimps (Fig. 2). Most interestingly, a cuttlefish was found perhaps laying egg (Fig. 3)



Fig. 1. Planting of seagrass within the frame



Fig. 2. Accumulation of fish at the nursery site



Fig. 3. A cuttlefish at the seagrass nursery site.