2. REVIEW OF LITERATURE

The environmental parameters, Phytoplankton and Zooplankton have long been studied in worldwide in view of their role in ecology and environment. Among them, recent studies are reviewed in this chapter. The accumulation of nitrogen and phosphorus in the *Bruguierasexangula* mangrove forest in Hainan, China was studied by Lin-Peng and Wu-Xinhua (1990). Wolanski (1992) described the hydrodynamics of mangrove swamps of many tropical estuaries. Frewin (1994) studied the distribution of organic matter in sediments of Florida Bay. Mwashote (1997) noticed the dissolved inorganic nutrient fluxes in the Gazi Bay. The vegetation, nutrient status and salinity variation of soils from a mangrove swamp in West Africa were studied by Ukpong (1998). Tam and Wong (1998) studied the variations of soil nutrient and organic matter content in a subtropical mangrove ecosystem. Mwashote and Ohowas (1998) studied the spatial and temporal distribution of dissolved inorganic nutrients in the Mida creek.

(2000). Davis et al. (2001) resulted the nutrient dynamics in vegetated and unvegetated areas of a Southern Everglades Mangrove Creek. Along et al. (2001) investigated the organic carbon accumulation, mineralization and sediments were examined from southern Thailand.


Swamiet al. (2000) studied the water quality status of Mumbai harbour. Vijayakumaret al. (2000) studied the seasonal distribution and behavior of nutrients in

Bhaskara Rao et al. (1992) studied the mangrove environment and its sediment characters in Godavari estuary, east coast of India.


Erftemeijer, (1994) studied the concentrations of dissolved reactive phosphate, ammonia, nitrate and nitrite in different sites in south Sulawesi – Indonesia. Kondo et al., (1994) studied the distribution of salinity, water temperature, dissolved oxygen saturation and the concentrations of phosphorus, nitrogen and chlorophyll “a” in the brackish water. Tam and Wong (1998) observed the variations of soil nutrient and organic mater content in a subtropical mangrove ecosystem. Blanco and Cantera, (1999) studied the vertical distribution of mangrove gastropods and environmental factors relative to tide level at Buenaventura Bay, Pacific Coast of Colombia Bulletin-of-Marine-Science. Many studies related to hydrobiological parameters were carried out in Indian coastal waters. Of which, Kadam (1992) investigated the physicochemical features of Thane creek. West coast of India. Menon et al. (2000) studied the hydrobiology of the Cochin backwaters, South west coast of India. Kathiresan et al.,
(1996), Rajendran, (1997) and Kathiresan (2000a) reviewed the physico chemical characteristics in Pichavaram mangroves, South east coast of India.


Phytoplankton density and diversity in two estuarine systems of the (Arsalar and Kaveri) southeast coast of India. Mani, (1994) Phytoplankton in Pichavaram mangroves. Santhanam _et al._, (1994), Reported on the _Trichodesmium_ bloom along with the hydro biological parameters and productivity. Sathpathy and Nair, (1996) reported the phytoplankton and it effect on the coastal water quality. Perumalet _et al._, (1999) investigated the interaction between the density of bloom farming species and changes on the water quality in Vellar estuary. Padhi and Padhi (1999) reported the qualitative and quantitative difference in phytoplanktonic community influenced by shrimp farm eflluents. Studies pertaining to planktonic abundance and distribution in Indian mangrove tropical waters are many which include those of Jayalakshmi _et al._(1986), Balakrishnan Nair and Abdul Azis (1987), Goswami (1992), observed biomass and production of phytoplankton are important in regaling the diversity of organisms at higher tropic levels.


Martin Thompson, (1986), Studied the seasonal distribution and abundance of marine cyclopoids copepods of mud banks. Selvakumaret _et al._, (1987), studied the