INTRODUCTION
Rapidly increasing industrialization, urbanization, agriculture and other human activities have resulted in an intense deterioration in quality of various natural water bodies, particularly rivers and lakes all over the world. Recently, the use of riverine, estuarine and marine systems for the disposal of sanitary and industrial wastes has increased severely. But estuaries and backwaters are more affected by pollution than the open sea (Glasby and Roonwal 1995).

Generally it is argued that environmental contamination is the unavoidable consequence of human civilization and it is quite only a natural phenomenon (Sen Gupta 1991). Water is the most precious and at the same time the most abused natural resource. Wastes disposing into the nearby waters is the tendency everywhere and this disposed wastes combined with land run-off adversely affect the natural ecosystems in the aquatic habitat.

Due to the increased input of sewage and industrial wastes, the self purification capacity of the waterbody is lost and the aquatic environment
is getting eutrophied giving ample chances for growth and proliferation of the sewage-borne pathogenic microbiota. Varieties of toxigenic and infectious agents of bacteria, virus, fungi, acellular and multicellular organisms get a flourished growth and proliferation in the nutrient enriched sewage dumps. As rivers and lakes are among the major sources of water directly or indirectly for human and animal consumption, the range of hazard is wide including infection arising directly from water contact or by consuming uncooked or undercooked sea foods. The load of microbiota in the aquatic system directly reflects the extent of sewage and faecal pollution and suitability of the environment for human activities of fishing and recreation.

It has been observed that polluted water is often the main source of disease in man and animals, directly or indirectly. The pathogenic bacteria and virus even in domestic waste water may result in potential health hazard to consumers of fishery grown in ponds and lakes to which the wastes are disposed. In tropical countries, increased mortality and morbidity has been reported (Okpokwasili 1991; Aiyamperumal et al. 1994; Carnahan et al. 1994; Pathak and Bhattacherjee 1994; Ishimura et al. 1995) due to frequent epidemics of sea food borne gastroenteritis caused by pathogenic bacteria like \textit{Vibrio hollisae}, \textit{Vibrio parahaemolyticus}, enteropathic \textit{Escherichia coli} and \textit{Aeromonas hydrophila}. 
Apart from the contained pathogenic microbes, sewage has its brood, full of organic and inorganic nutrients which accelerate the growth of both pathogenic and non-pathogenic microbes in the aquatic environment. Thus, the anthropogenic wastes-agricultural, industrial and domestic—disposed into the neighbouring rivers not only fouls the river water and its organisms but ultimately reaches in lakes, backwaters and sea, where it contaminate both the watermass and the seafood resource. Through sewage dumping, the natural water system gets remarkably heavier nutrient load. Increased nutrients in an aquatic system can act to protect microorganisms from the deleterious effects of temperature and salinity with the net result being survival of pathogenic bacteria that would otherwise die off. With the environmental factors such as favourable pH, salinity and optimum temperature, the microorganisms get an accelerated growth which result in rapid colonization in the nutrient enriched estuarine environment.

The six major rivers and the several rivulets that empty into Vembanadu lake bring large quantities of enteric pathogens along with land run-off and sewage. The lake receives plenty of drainage canals that discharge several thousand gallons of coliform loaded powerful septic sewage into it. Thus, with all the sludge and sewage the backwater remains as a potential environment for an accelerated bacterial growth and the region is under the threat of severe ecological impairments.
Clams constitute a highly appreciated group of sea food in almost everywhere. The black clam *Viloria cyprinoides var. cochinensis* (Hanley), which are abundantly present in Vembanadu lake has got very high economic importance due to its food value and industrial use of shell. Clams are filter feeders and hence naturally, large quantities of microflora are concentrated in the gastro intestinal tract. Therefore, the intestinal bacterial flora will be a direct reflection of the intensity, extent and nature of bacterial pollution in water and sediment. Also the clam may act as an efficient bacterial reservoir, safeguarding the bacterial flora including the disease causing pathogens in its mantle cavity and gastro intestinal tract and periodically eliminated into the surrounding water which may result in epidemic outbreaks.