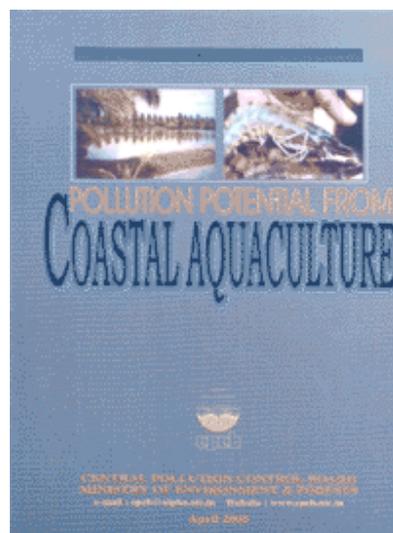


List of Publications



Pollution Potential From Coastal Aquaculture Foreword

Fish accounts for 70% of the animal protein in the diet of many people from developing countries. Unless fishery resources are properly managed, the fish may become a scarce commodity to human being. Coastal aquaculture is one of the most important sectors, which could contribute to augment supply of protein rich fish food. Aquaculture is an age old practice in India and now the coastal aquaculture is predominated by shrimp culture with very small quantities of seaweeds, molluscs and fish. Though it was in the form of traditional occupation, it has started gaining importance in the last 15 to 20 years through technical improvement made in the shrimp farming in many parts of the world. This made way to increase shrimp production by adopting extensive and semi-intensive systems of aquaculture. It needs large volume of water, which is the prime medium of oxygen and food supply.



For healthy growth and better production, the ambient water should be free from contamination. However, in the course of culture the remains of food supplied to support the system, the fecal material, metabolites, molted shells, plankton, bacteria and dissolved substances like ammonia, urea and phosphorus get accumulated in the pond and contribute to the quality of final discharge water. Although the pollution potential of the effluent from aquaculture is less compared to domestic and industrial, effluents, the problem arises because of large volume of water being discharged from farms coupled by large number of farm units in areas with limited supply of water and inadequate flushing.

In this connection the Central Pollution Control Board has conducted a detailed study in some aquaculture farms located in the States of Gujarat and Maharashtra. It was observed that on an average, a load of total suspended solids (TSS) 285mg/l, total nitrogen 5.52mg/l and total phosphorus 0.31 mg/l reaches the coastal waters from the pond through the harvest water. The severity may be assessed, when hectares of aquafarms discharge their effluents during the cropping season.

The endeavor put by a team of officials in executing the project and bringing out this report is worth mentioning. The co-operation extended by the Regional offices of the Marine Products Export Development Authority located at Alibagh and Valsad and State Pollution Control Boards of Gujarat and Maharashtra by providing primary data and in monitoring are highly appreciated. We hope that this report will be highly useful to those concerned on the environmental issues of aquaculture.

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