

larval supply at Samui Island was relatively high. However the density of juvenile colonies observed on reef substrates was very low. There were available substrates for coral settlement mainly dead corals, but they were covered quickly by algal turfs and sediment. Coral reef recovery at Samui Island may be delayed because of abundant algal turfs and coral stress by high sedimentation. Appropriate management strategies to prevent high sediment inputs from developed catchments and coastal areas are proposed.

ICZM in the era of the basic act on Japanese Ocean policy: the role of local governments - case of Tottori Prefecture

Yasuhiko KAGAMI

Tottori University of Environmental Studies,
Wakabadai-kita 1-1-1, Tottori City, Tottori Prefecture,
689-1111 Japan *E-mail: u-oyknak@kankyo-u.ac.jp

The year 2007 was a turning point in Ocean management by Japan. In April, the Basic Act on Ocean Policy was enacted and Japan stood at the starting line of cross-sectoral comprehensive ocean management. Article 25 stipulates the integrated coastal zone management (ICZM), the first time this stipulation has appeared in Japanese statute act. In November, the Third National Strategy for the Conservation and Sustainable Use of Biological Diversity was announced. It is the first to include content related to the problem of biological diversity conservation in coastal zones.

What kinds of initiatives should local governments take concerning coastal Management in response to this trend? This paper reports on a study of the role of local governments in coastal zones management in the present age of the Basic Act on Ocean Policy. The study focused on a case in Tottori Prefecture: a prefecture facing the Japan Sea, home to the smallest prefectural population in Japan, a place endowed with a beautiful coastal zone including the well-known Tottori Sand Dunes, and the site of Japan's first advanced initiative under the Integrated Soil and Sand Management Plan.

Investigation on fish market wastewater characteristics in Lempasing, Bandar Lampung, Indonesia

Yonik Meilawati YUSTIANI¹, Hary PRADIKO¹ & Verlyany DEWI¹

¹ Department of Environmental Engineering, Pasundan University, Jl. Dr. Setiabudhi 193 Bandung 40153

Indonesia
*E-mail: yonik@unpas.ac.id

The Lempasing fish market is the fish auction center, located near the coastal area of Bandar Lampung City, Lampung Province, Indonesia. Due to the inefficiency of wastewater treatment facilities, the water quality of the coastal nearby becomes deteriorated. In this research, we investigate the fish market activities condition in related to the wastewater generated. We took samples of wastewater from the fish vendors when they finished washing the fishes. Water samples were also taken from three points of the coastal area. The results show that BOD concentration of wastewater reached 160 mg/l, COD concentration reached 528 mg/l, TSS concentration up to 150 mg/l, and E. coli number was more than 1420 cell/100ml. Those values were over the standard limit. From the seawater samples analysis, the results show that dilution and distribution effect of the sea dispersed the contaminants offshore. However, the number of *E. coli* was still high (>2800 cell/100ml) and it appeared that the coastal sediment contained high septic decomposed organic matter. The dissolved oxygen was as low as 4.5 mg/l. It is recommended that wastewater treatment facility includes units of filter, sedimentation, and filter press for sludge handling.

Concept of integration in shoreline management

S. Mokhtari¹ & A. Danekar²

¹ Senior Expert of Coastal and Port Engineering office, Ports and Maritime Organization, Iran
E-mail: mokhtari@pso.ir

² Assistant Professor, Tehran Univ. of Natural Resources, Danekar@nrf.ut.ac.ir

The significance of integration in coastal zone management has been the topic of various issues and comments and the investigation in this variety expresses each commentator's span of vision. Governments, private organizations, national institutions, scientists and researchers, experts and professionals have explained "integration" from their own point of view and each explanation can be an exact description in the related specific situation. For instance, although in some Pacific or Asian countries this word has been utilized in a vast extent as an indicator to a suitable policy from cultural and executive point of view, the authorities in Australia do not agree with the utilization of this word as they believe it might