

Abstract

Study on environmental impacts and coastal zone management at coastal area of Phetchaburi province was divided to 2 areas : Jao Sum Ran beach and Phetchaburi's river mouth. Main activity at Jao Sum Ran beach has been tourism, while main activity at Phetchaburi's river mouth is coastal aquaculture. Results of the study showed inappropriate coastal zone management with different environmental problems. At Jao Sum Ran beach, beach index for tourism was found at 6.44. Quality of coastal water was found suitable for swimming with low amount of garbage. Problems on beach erosion, beach trespassing and harmful marine animals (Jellyfish) were found, while tourism activity was not the major problem on coastal environment at Jao Sum Ran beach. At Phetchaburi's river mouth, coastal water quality standard was found at level of 3 and 4. Communities along the river have been still released waste water into Phetchaburi river. Results of toxicity testing on Mussel (*Perna viridis*) showed that concentration of waste water in sea water that caused Mussel dead at 50% in 96 hours (96 hr - LC_{50}) was 0.22%. Safety concentration level of waste water that effect Mussel lives was found at 0.0044 – 0.0011%.

Recommendations base on improving environment management plan such as impact identification, monitoring program and protection, public training and public awareness were recommended.