

Environmental issues of the Gulf of Thailand

Piamsak Menasveta*

Chulalongkorn University and Royal Society of Thailand

The Gulf of Thailand is one of the 21 enclosed coastal seas as identified by the International EMECS Center. The gulf locates in Southeast Asia, immediately to the west of South China Sea. Its bordering nations, Thailand, Cambodia, Malaysia and Vietnam. The gulf is roughly triangular and may be divided into two sections, i.e. the “inner gulf” and the “Gulf”. The inner gulf is a small apex of the Gulf of Thailand. The average depth of the inner gulf and the Gulf is 20 m and 45 m, respectively. The water circulation of the Gulf is influenced by the flux from South China Sea and the monsoon winds. The Gulf of Thailand is one of the most productive areas of the world.

During the past four decades, there have been a number of environmental issues mostly occurred in the inner gulf. These issues are, for instance eutrophication, mangrove conservation and destruction, coastal erosion, contamination of toxic wastes, overfishing and marine litter. Eutrophication used to be a problem during 1978-1983. At present the problem was alleviated. Mangrove forest area decreased sharply during 1961-1986. Since then the rate start to slow down. The reversal started after 1996 due to a big restoration campaign. At present, the present increase from 1996 is 47%. The problem of coastal erosion is still growing. One important factor to this problem is the rising sea level, the global issue. Contamination of toxic waste especially lead (Pb) and mercury (Hg) used to be a problem; but now it is under controlled. Overfishing is still an issue in the Gulf. We are preparing several control measures, with a hope to reverse the situation. Marine litter has received a lot of attention recently, especially the plastic debris. Several campaigns have been exercised for the clean-up.