

## **MEKONG DELTA MANGROVE FOREST CHANGES OVER THE LAST FIVE YEARS MONITORED BY REMOTE SENSING**

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### **ABSTRACT**

The Mekong Delta's mangrove forest resources have been seriously depleted in the last decades. Many of the deforestation activities are uncontrolled. This means that an accurate account of the losses is difficult to obtain from field survey. There was urgent need for monitoring of this resource in order to develop appropriate management measures. A Geographic Information System (GIS) is an effective tool to assist monitoring.

This research describes the change in mangrove forest cover in the Mekong delta (**MKDT**) over the past five years (1990-1995). It discriminates mangroves on fast accreting coasts and mangroves on slow accreting coasts. The mangrove forests are an important economic resource, and the importance of the forests for the ecological balance in the delta, as a nursery site for fish and other aquatic animals, and as a protection belt against coastal erosion is widely recognized. Recent information indicates that combined mangrove-shrimp land-use systems are more productive than pure shrimp systems and that such combined systems have largely escaped the recent shrimp disease catastrophe of 1994/1995. It is therefore of utmost importance to know more exactly how much forest has been removed from the delta during the last decade. The results showed that in 1990, the total mangrove forest was 208,143 ha; this was reduced to 114,536 ha in 1992 and 83,385 ha in 1995. Shrimp or other cropping systems has replaced most of the depleted mangrove forest area. The provinces of Camau, Baclieu, and Travinh have the largest mangrove forest loss.