Coastline Change at Koh Tao Island, Thailand

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Abstract : Human utilizes coastal resources as well as deteriorates them. Coastal tourism may degrade the environment if poorly managed. This research investigated the shoreline change at Koa Toa Island, one of the most famous tourist destinations. Aerial photographs and satellite images from three different periods were collected and analyzed. The results showed that the noticeable shoreline change before and after the tourism on the island had expanded. Between 1995 and 2002 when the tourism on Koh Toa Island was not intensive, sediment deposition occurred along most of the coastline. However, after the tourism had grown during 2002 to 2015, the coast evidently experienced less deposition and more erosion. The erosion resulted from less land-based sediment being provided to the littoral system. If the coastline of Koh Toa Island is not carefully sustained, the tourism will disappear along with the beautiful beach.

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