

## Development of new marine ecosystem at Pulau Geluk, Terengganu: Future sustainability.

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### Abstract

Present study was conducted to identify new coral species to propagate that able to attract marine organism at Pulau Geluk Terengganu which the ultimate aim is to develop Marine Park to attract marine life for future marine ecosystem sustainability. The research was conducted due to lack feasibility of coral reef for marine organism's rehabilitation at the area which has effect the habitat of diverse aquatic species, including thousands of fish species that jeopardize the income of the fisherman at the area as well as sources for food for people living near coral reefs, especially on small islands. The process of initiating in propagating the corals starts with developing a hexagon shape artificial frame. The frame is coated with coral sand to enhance the coral newbies to attach to the frame. Based on the result obtain, it is observed that there is a positive outcomes to the coral transplanted by using artificial reef where ninety-nine percent of the corals have survived with 1% mortality rate. There is marked increase in their sizes gradually covering the frames. There are also other benthic organism found in the frame and this indicates that the frames are suitable as substance for sessile benthic organism. Thus, the artificial frame and the environment at the area is suitable to propagate the corals. Future plan is to propagate other species of coral and subsequently build a new marine park at the area to further enhance the marine ecosystem.

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