

## **A multicriteria decision making model for responsible management of marine protected area in Semporna Sabah: identification of decision making criteria**

### **ABSTRACT**

Marine Protected Area (MPA) has always been a tool used to protect marine ecosystem that are in danger of being of its resources being over exploited or manage the ecosystem with a structure in place. Semporna has the most valuable Marine Protected Area in the east coast of Sabah. The marine parks in Semporna were gazetted for the very same reason. However, with the existence of community living within the marine park, management of the MPA requires approaches that are not conventional with MPAs without communities in them. The problems faced are multi facet and requires the marine park management to look at multiple criteria in their decision making process. The aim of this study is to identify criterions that are essential in the decision making process to manage the marine park responsibly by considering inputs of the relevant stakeholders. A semi-structured interview was conducted with 15 respondents to gather the management criterions. Seven areas were identified with a total of 94 criterions. The finding from this study will later be used to get consensus from the selected stakeholders on criterions that are relevant for decision-making. This is essential for the decision-making matrix using Analytical Hierarchical Process for a later stage of this study. Protecting the ecosystem as well as maintaining the livelihood of community living within the park is essential in managing the park responsibly. Responsible Management is term that defines.

**Keyword:** Decision-making; Responsible management; MPA; AHP