

Evaluating the Performance of Artificial Reef Deployment Projects in Taiwan

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Abstract

This study analyzes the experience of Taiwan throughout the four decades of artificial reef (AR) deployment and examined the value of ARs and the mechanism of self governance. A questionnaire is designed to explore the perception of AR deployment performance from experienced experts. The results show a certain level of achieving fisheries resource enhancement objectives. On the other hand, increasing incidences of conflicts upon territories of AR fishing grounds among stakeholders are observed. Results also imply that cooperatives of fishermen associations and the community are essential in the management stage of planning AR deployment. Based on the Taiwan's experience, effective ARs should take into account all variables including reef design, site selection, depth and materials. It is also recommended that in the process of AR deployment, decision-makers should not take the current economic benefit as the only criterion; the impacts on the natural environment, the efficient use of resources, as well as humanities and social aspects should also be taken into account.

Keyword : Artificial reefs, Deployment, Management, Performance, Taiwan