

Charting the research course for sustainable aquaculture in Sabah, Malaysia

Abstract

Due to arising needs and demands, aquaculture is currently the fastest growing food production sector. In order to increase yield and yet to remain sustainable, the challenges would be to minimise impact on the environment and ecosystem services. Aquaculture activity contributes significantly to Malaysia and also the state of Sabah's economy and food security. Hence, the future changes in the environment as a result of rapid population growth and development would pose as threats to this industry in terms of quality, quantity and sustainability. Unforeseen environmental changes such as environmental pollution from other sources, climate change and the changes in policies would jeopardize the sustainability of this industry. In order to anticipate such impacts to the aquaculture activities, this paper set to chart a sustainable course for its development. Four important research courses were proposed: establishment of a sustainable framework, assessment of impacts of climate change, viability and vulnerability assessment due to future environmental changes and food security. Such findings would eventually allow the stakeholders to plan and manage the resources and aquaculture activities in such a way that foster sustainable food security and resilient aquatic ecosystems.