

Strategic planning of optimal development of aquaculture in coastal areas (case study: coastal areas of Qeshm Island)

Morteza Zarei^{1*}

Mohammad Reza Fatemi seyed²

Mohammad Seddiq Mortazavi³

Sharareh Pourebrahim⁴

Jamal Ghoddousi⁵

Department of Environmental Management, Faculty of Environment and Energy, Science and Research Branch, Islamic Azad University, Tehran, Iran

2. Department of Marine Biology, Science and Research Branch, Islamic Azad University, Tehran, Iran

3. Associate Professor, faculty member in the Research Institute, Persian Gulf and Oman Sea Ecological, Bandar Abbas, Iran

4. Department of Environmental Sciences, Faculty of Natural Resources University of Tehran, Tehran, Iran

5. Department of Soil Conservation and Watershed, Management Research Institute, Tehran, Iran

***Corresponding author:**

Mzarai2200@yahoo.com

Received date: 2016/08/11

Reception date: 2016/08/25

Abstract

From one side, the immethodical and growing of economic activities of aquaculture, and the other side, immediate depends of a large amount of growing population is providing districts for coastal survivals and caused to damage in coastal ecology and lots of aquatic creatures. In this paper, while realizing the potential capacities of the island, it's specially discusses the activities of aquaculture in the framework of Integrated Coastal Zone Management. Therefore, in this study, firstly, the environment's internal strategic factors (strengths and weaknesses) and external factors (opportunities and threats) were identified. Thereafter, Analytic Network Process (ANP) and Super Decision Software in SWOT matrix were used to evaluate and prioritize these factors, as well as to develop several proposed strategies. Using a designed network model, the proposed strategies were weighted and the main strategies of the evaluation matrix were ranked. The results showed that the most efficient strategies to optimal development of aquaculture use of coastal areas of Qeshm Island are: strategies of Using objectives, policies, plans of aquaculture and hunting Aquatic to build and strengthen of sustainable aquaculture these users in the region, Building and strengthening comprehensive aquaculture plan for conservation of natural marine resources in the framework of Integrated Coastal Zone Management, Creating and development of infrastructure facilities and infrastructure aquaculture in order to create optimum user of the lands, Allocate adequate funding to achieve conservation programs and user development of aquaculture and environmental protection involved in (ST) strategies.

Keywords: Strategic planning, Aquaculture, Qeshm Island, SWOT model, Analytic Network Process.