

Environmental Impact Assessment of Semi-Intensive Shrimp Farms in the Coastal Regions of Bangladesh

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Roll No.: 0119/08 Registration No.: 726 Session: 2019-2020

A thesis submitted in the partial fulfillment of the requirements for the degree of Master of Science in Fisheries Resource Management

> Department of Fisheries Resource Management Faculty of Fisheries

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List of Abbreviation

GDP	Gross Domestic Product
ТК	Taka
Kg	Kilogram
На	Hectare
MT	Metric Ton
DoF	Department of Fisheries
PL	Post larvae
ASC	Aquaculture Stewardship Council
ECA	Ecologically Critical Area
IAIA	International Association for Impact Assessment
IUCN	International Union for Conservation of Nature
NGO	Non-Government Organization
PA	Protected Area (s)
PPT	Parts Per Trillion
dS/m	deciSiemans per metre
НАССР	Hazard Analysis Critical Control Point

Abstract

The study was performed to assess the environmental impact of shrimp farming on local ecosystem and adjacent community in relation to the country. It is assumed that shrimp farming has some negative consequences on the animal welfare, environment sustainability, people's livelihood pattern and living conditions in coastal, rural and urban areas. At the same time shrimp industry not only brings economic velocity in national economy but also generates economic solvency to millions of people in country. However, the country cannot compete profitably in international market because of low productivity, poor farm management, proper land utilization and lack of hygiene practice throughout the production. This paper attempts to identify environmental changes due to shrimp farming activities on three selective shrimp farms of Shymanagar and Tekaf Upazila and their adjacent communities and areas. It was conducted based on several focus group discussion, multiple interviews, community meetings and laboratory analysis of soil for electrical conductivity measurement.

Keywords: Shrimp farming; Environment; Aquaculture Stewardship Council; Coastal zone; Sustainability