

ISBN: 9798554163623

CHAPTER-6

BIOSECURITY MEASURE IN SHRIMP AQUACULTURE

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Introduction

Incidence of Infectious disease in aquaculture is one of the major factors that caused huge mortality of fish stock and becoming more critical for ensuring the growth and sustainability of aquaculture. Implementing of biosecurity practices on aquaculture can be prevent the spreading of pathogens. The old adage that “prevention is better than cure” certainly implement to aquaculture diseases, particularly when the economic impacts of disease eruption have turn out to be huge. The biosecurity is defined as “the sum total of the activities and measures taken by aquaculture production facility to protect the cultured stocks from the possible negative impacts resulting from the introduction and spread of disease-causing organisms”. The literal meaning of biosecurity is ‘life protection’. Biosecurity describes the systems put in place to protect the fish farm from diseases. These systems will reduce the risk of damaging diseases entering culture farm, can

prevent health issues emerging within the farm, and can reduce impacts of disease when it occurs.

1. Principle of Biosecurity

The biosecurity principle is the management strategies of disease control and prevention that depend on the interrelated processes of bioexclusion, surveillance, and biocontainment. Prevention of disease is costly, difficult, and time consuming and is primarily directed at preventing epidemic or exotic diseases. It always involves eradication of disease-causing agents from a fish population or geographic area. In contrast, control programs are less demanding and primarily focus on limiting endemic diseases to tolerable levels within a population of fish or geographic area. Although preventing exposure to disease-causing agents remains an objective of control strategies, and strategies are primarily focused on limiting the consequence of disease.

2. Objective of biosecurity in aquafarm:

The objective of an aquaculture biosecurity plan is to:

1. Reduce the risk of diseases being introduced into fish pond (entry-level biosecurity)