IMPLEMENTATION OF BETTER MANAGEMENT PRACTICES ON *Penaeus monodon* FARMING IN PUTTLAM ZONE, SRI LANKA

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Abstract

Penaeus monodon farming is the main brackish water, commercial scale aquaculture practice in Sri Lanka, which, targets the export market. However, it has been suffering from disease outbreaks due to the unplanned aquaculture development in the North Western area of the country. To overcome these issues National Aquaculture Development Authority (NAQDA) has introduced better management practices to farmers for the convenience of management and monitoring. Shrimp farming area of North Western Province has been classified into five major zones as Chilaw, Arachchikattuwa, Mundalama, Kalpititya and Puttlam. These major zones were divided into 33 sub zones. This study was carried out to investigate the level of implementation of better management practices in the six sub zones and to assess the relationship between better management practices and yield per hectare in Puttlam Zone. Among 120 farms of the Puttlam Zone, 30 individual farms representing six sub zones were selected randomly. Level of implementation of better management practices, yield per hectare, and disease occurrence data were collected through a self-administered questionnaire and farm observation. According to the Principal Component Analysis, farms in Puttlam zone can be categorized into four major groups based on the level of implementation of better management practices as 26.66% optimum level implementation, 40% average level implementation, 10% Minimum level implementation and 23.33% dissatisfied level implementation. Further, levels of implementation of better management practices referring to the sub zones are 57.14%, 42.8%, 25%, and 25%, respectively for the sub zones of Sewwanthiwu, Aneikutti, Manalthiwu and Wadathamunei. Descriptive analysis reveals that the levels of implementation of better management practices in Mee oya and Poorwasikuda sub zone are 7.66% and 3.5% respectively. The significant positive relationship was observed between level of implementation of better management practices and yield per hectare ($r = 0.810$, P-value = 0.000). Further, significant negative relationship was observed between level of implementation of better management practices and disease occurrence ($r = -0.837$, P-value = 0.035).

Key words: Better Management Practices, *Penaeus monodon*, Sub zone