

Wallapa Cheewaphisan 2007: Cost-Benefit Analysis and Management of Seabass Cage Culture:  
Case Study in Songkhla Outer Lake, Koh Yor Subdistrict, Muang District, Songkhla Province.  
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Fishery Management. Thesis Advisor: Associate Professor Kungwan Jantarashote, D.Agri.  
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Cost-benefit analysis and management of Seabass Cage Culture was investigated with a case study of Songkhla Outer Lake, Koh Yor Subdistrict, Maung District, Songkhla Province. Eighty five samples Seabass Cage Culture farms were selected by cluster sampling technique. Data Collection was done through questionnaire interview.

The results revealed that the Seabass cage culture farmers were both owner and partner of the business. The labors were family members and employees. The cages were stationary cages of  $5 \times 5 \times 2 \text{ m}^3$ . Two cages were attached together. Amount of 400-500 fish of size 7-8 inches were released in each cage. The survival rate was 80%. The farmers fed the fish with yellow-tail round scad, lizardfish and borrowing goby one time a day in every two days. Each crop took 18-24 months. The average of the productivity was  $44.74 \text{ kg/m}^2$ . Total cost was 5,302.01 baht which consisted of 89.45% and 10.55% of variable cost and fixed cost, respectively. The food expense was the highest variable cost (65.18%). The net profit was -1.01 baht. When the size of cage was considered, the operation cost of small cage was 5,858.57 baht which consisted of 89.9% and 10.1% of variable cost and fixed cost, respectively. The food expense was the highest variable cost (67.59%) and the net profit was 430.67 baht. The operation cost of large cage was 4,459.41 baht which consisted of 90.11 % and 9.89% of variable cost and fixed cost. The food expense was the highest variable cost (70.34%) and the net profit was 249.76 baht. The problems of the cage culture were water quality, parasite, disease, quality of seed, and shallow water area. The result showed that there was a highly significant difference of the problems between different culture zones. The problems of operation cost were high food expense, lack of capital, and low productivity, respectively, and the results showed that there was not significantly difference of the operation cost between different culture zones. For further management, the farmers should feed in optimum volume, set up cages with suitable distance, excavate the channel around Koh Yor subdistrict and establish farmers group to strengthen their bargaining power.

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Student's signature

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Thesis Advisor's signature