

## ABSTRACT

Abstract of thesis submitted to the Graduate School of Maejo University in partial fulfillment of the requirements for the degree of Master of Science in Cooperative Economics

### COST AND INCOME OF AQUARIUM FISH PRODUCTION IN RATCHABURI PROVINCE

By

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August 1998

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The objectives of this study were to study (1) cost and income of aquarium fish production in Ratchaburi Province (2) how the production factors in aquarium fish farms are (3) problem of aquarium fish production. The study was done with three aquarium groups: a.) Gold fish farm b.) Gold fish and other fish farm c.) Redtail Shark fish Silver Shark fish and other fish farm.

The population were selected from farmers who raise aquarium fish production in Tambon Samruan Amphur Muang and Tambon Donsai Amphur Potharam Ratchaburi Province and were divided into three groups: 25 farms in Gold fish farm, 7 farms in Gold fish and other fish farm, and 6 farms in Redtail Shark fish Silver Shark fish and other fish farm.

The data were collected by structured interview. The cost and income were then analyzed by calculating an average and percent due to differences in production factor, cost and income.

The study revealed that for Gold fish farm, which has an average concrete pond area of 0.66 rai per farm, has the total cost of 156,642.52 baht. This total cost can be calculated as 139,905.60 baht variable cost, which is about 89.14 percent, and as 17,036.32 baht total fixed cost, which is 10.86 percent. This type of farm has a total income of 190,960 baht. As far as net income is concerned, it is about 51,064.40 baht over the total variable cost, and 109,374.40 baht over the total cash cost. The net profit is, therefore, 34,017.48 baht. For Gold fish and other fish farm, which has an average concrete pond area of 0.50 rai per farm, has the total cost of 139,366.13 baht. This total cost can be calculated as 126,285.69 baht variable cost, which is about 90.61 percent, and as 13,080.44 baht total fixed cost, which is 9.39 percent. This type of farm has a total income of 154,000 baht. As far as net income is concerned, it is about 31,014.31 baht over the total variable cost, and 87,714.31 baht over the total cash cost. The net profit is, therefore, 14,633.87 baht. For Redtail Shark fish Silver Shark fish and other fish farm, which has an average concrete pond area of 0.29 rai and pond area of 24.33 rai per farm, has the total cost of 363,069.24 baht. This total cost can be calculated as 313,480.84 baht variable cost, which is about 86.35 percent, and as 49,578.40 baht total fixed cost, which is 13.65 percent. This type of farm has a total income of 497,800 baht. As far as net income is concerned, it is about 184,319.16 baht over the total variable cost, and 304,560.86 baht over the total cash cost. The net profit is, therefore, 134,740.76 baht.

The problems of aquarium fish production were bad water, insufficient amount of Moina resources, technology transfer among those who are raising the fish and lacking knowledge of marketing management.