

This self-study report entitled "*Management of Nile Tilapia Rearing in cages in Lamphatow Reservoir Amphoe Kangkro Changwat Chaiyaphum*" was aimed to study the general state of farmers who raise Nile Tilapia in cages in the way of production, marketing, production cost and income per a cage, and general problems in raising Nile Tilapia in cages. The data which were derived from this study was expected to be useful in developing more efficient ways of raising Nile Tilapia in cages for those in government, private section and others. The methodology was the collection of the data in all areas and the analysis of the data.

The results show that 90.48 per cent of Nile Tilapia raisers were male, aged 49.14 on average. 61.91 per cent were uneducated; they graduated from primary school. On average there were 3.96 people in one family. Raising the fish in cages did not need much time and effort. There was no need to ask permission to use the water container. Most of fish raisers had more than 3 years of experiences. The reason why they raised was due to government officers' suggestions that raising the fish would make huge profits. The source of knowledge in raising the fish came from fishery authorities and company officers. The number of baskets in the first year averaged 2.47 a person. In 2002 it averaged 9.09 a person, which means it increased by 6.62 a person.

In the way of production, it was found that Nile Tilapia raisers used one-layered cages made of bamboo which were cheap and convenient. The buoy was 200-litre iron box which was cheap and convenient. The cages size was 5 metres wide, 5 metres long, and 2 metres deep. Nile Tilapia was often transformed into another sex. Before put into the cages, a bag of fish would be soaked in water for 10-20 minutes. When there were illnesses and fish foes, the farmers would gave treatment by themselves because they were experienced. Before used to raise the new generation of the fish, the cages would be left free for 5-8 days. The farmers reused the cages. Because they did not invest a lot of money at one time, they could find circulating capital in time, raised fish and earned money in a consistent way. On average 3 cages were used for a generation per a farmer. One generation lasted about 30 days. The food for small fish averaged 4.81 bags per a cage. One bag cost 376 Baht or 18.80 Baht a

kilogram. The food for big fish averaged 74 bags per a cage. One bag cost 368.77 Baht or 18.45 Baht a kilogram. Small fish had 3 meals a day; large fish 2 meals. Fish preferred to eat in the morning and in the evening.

In the way of marketing, it was found that the farmers could sell fish at any time they wanted by categorising the fish weight. Most of them were caught by the farmers themselves. The wanted fish weight was 0.8-1 kilogram. Most of the farmers did not think of processing the fish because it was difficult, there was no capital and there was no market. Most of them had asked the fish price from sellers in the market before selling. However, the farmers could not make a bargain because the merchants would set the standard price for them. The time of the highest price was January and April. The time of the lowest price was from June to August. The farmers knew by fish sellers where to sell fish. Usually, they sold fish in front of the cages. Only a little of them went elsewhere to sell. They sold fish in cash in front of the cages.

In the way of production cost and income per a cage, it was found that the cages size was 5 x 5 x 2 metres. The number of fish per a cage averaged 1873.81. The period of raising the fish was 144 days. The varying production cost was 38,162.60 Baht in total per a cage. The stable production cost was 765.34 Baht in total per a cage. The sum total was 38,927.94 Baht per a cage. The production averaged 1,301.90 kilograms per a cage. The sale price in total was 50,839.20 Baht per a cage. The income was 12,676.60 Baht more than the varying production cost. The net profit was 11,911.26 Baht per a cage.

The problems often found were the lack of circulating capital, the high price of fish food, the law about raising fish in a water container, the small number of fish merchants, the tardy fish merchants, the varying price of the fish, and the price that was set beforehand by fish merchants.

Suggestions: For the government section, the related departments should look after and support in the way of production. They should find the way to reduce the production cost, for example, they support the farmers to produce fish food and nurse young fish by themselves. In the way of marketing, they should find the way to expand the market as well as hold a training and a tour of inspection regularly. For the farmers, they should gather together to strengthen and empower themselves in bargaining and they should control the amount of raising the fish in order not to exceed the demand of the market.