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KORNNIKAR PUNPORN :TECHNOLOGY ASSESSMENT FOR THE PROMOTION OF SNAKE HEAD FISH PRODUCTION, A CASE STUDY IN SUPHANBURI PROVINCE, THAILAND.

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The objective of this research is to study the different types of technology used in Snake Head Fish farming to try to alter or to increase the amount of production, as well as to study the trend of the technology used, the economical factors and the social factors which may affect the production rate. This research is conducted in Suphanburi province by interviewing and gathering information from 73 Snake Head Fish farmers, 29 of whom raise fingerling and the other 44 are involved in juvenile farming. The data are collected by using questionnaires as well as interviewing the farmers. A computer program called "SPSS FOR WINDOWS 7.5" is used to analyze the raw data. Statistical values that are used in the data analysis include the percentage and the mean. Other statistical techniques used are the t-test and the variance is analyzed by using ANOVA, LSD as well as using MCA.

The results of the research have shown that factors affecting production of fingerling of significance ( $P < 0.05$ ) are both fixed and the variable costs, the size of the fish pond, the rate of releasing the fish, the amount of food supply and the rate of survival. When the results were analyzed using the MCA technique, it was found that the amount of feed and the farming period had a positive relationship with the amount of production. It has also been found that the rate of releasing the fish has a Non-linear Relationship with the production and, a suitable rate is between 2-3 million fish per rai (or 1,200-1,800 fish per square meter).

From the study of the factors affecting production of juvenile, it has been found that the variable costs, area, rate of releasing the fish, amount of feed given and FCR all exhibit some effect on the rate of production at significance ( $P < 0.05$ ). When using MCA in the data analysis, it has been found that the rate of releasing the fish and the amount of feed supply have a positive relationship with the amount of production. But the farming period has a Non-linear Relationship with production. More over it has been found that a suitable period for farming is around 5 months.