ECONOMIC ANALYSIS OF TILAPIA POND CULTURE IN ILOILO

By:

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ABSTRACT

EMILY A ARELLADO. ECONOMIC ANALYSIS OF TILAPIA POND CULTURE IN ILOILO. COLLEGE OF ARTS AND SCIENCES DIVISION OF SOCIAL SCIENCES. UNIVERSITY OF THE PHILIPPINES IN THE VISAYAS, MIAG-AO, ILOILO.

This paper analyzed the factors affecting production of tilapia pond culture in Iloilo using the production function approach. The study used primary and secondary data. Primary data were gathered from a survey of actual operations of 30 tilapia farmers in Iloilo. Secondary data were taken from the Department of Agriculture in Sta. Barbara, Iloilo, the SEAFDEC and UPV libraries.

The production function was specified using the Cobb-Douglas function to identify and explain the factors affecting variations in the output of tilapia. The explanatory variables included in the analysis were: fingerlings stocked (X_1), inorganic fertilizers (X_2), organic fertilizer (X_3), supplementary feeds (X_4), farm size (X_5), hired labor (X_6), miscellaneous operating costs (X_7), number of years in tilapia farming (X_8) and age of pond (X_9). There were six variables found significant in explaining tilapia production namely: fingerlings stocked, inorganic fertilizer, organic fertilizer, farm size, hired labor

and age of pond.

The F-statistic rejected the null hypothesis which states that no explanatory variables help to explain variations in the dependent variable. Therefore, the alternative hypothesis was accepted that at least one or more of the independent variables affect production. The R^2 showed that 92 percent of the variations of the explanatory variables explained the variations in the independent variables. This implies that there exist a relationship between the independent and dependent variables.

Fingerlings stocked, inorganic fertilizer and hired labor were used inefficiently by the tilapia farmers. The use of fingerlings stocked should be increased while the use of inorganic fertilizer, organic fertilizer and hired labor should be reduced, if the maximum net returns are to be realized.