ABSTRACT

Mangrove Crab is one of the sea commodities which have a high economy value in the world's market. In the last 10 years, Mangrove Crab's export raises to 14.06% and makes this commodity as one of reliable export of non gasoline. Nevertheless, the needs of Mangrove Crab's export recently rely on the catching in the mouth of a river. If the exploitation is more intensive or un control, it will threat the lasting of the source. That is why it is needed an alternative effort through cultivation which is in Pemalang Regency called Silvofishery system, that is the fusion between Milkfish and Mangrove Crab cultivation in the mangrove forest area.

Empirically, almost all Mangrove Crab cultivator is either as price taker in the input market or output market because it is rarely to find a group of cultivator crab who are able to organize its group so that it has a strong bargaining position in the market. With this such background, in the daily practice of Crab cultivator, their orientation in the community which is relatively homogeneous tends to catch technique efficiency which is translated as an effort to maximalize the productivity. Nevertheless, in the reality Crab cultivator is not always be able to reach efficiency level hoped.

This research aims to analyze the effect of using production input to production output. Besides, it is also to estimate the efficiency level of using input production in Mangrove Crab greasing cultivation in Pemalang Regency. In this research, the sampling technique is census that is all farmers of Mangrove Crab greasing cultivator become respondent. The data analysis uses Stochastic Production Frontier which completion by LIMDEP program version 6.

The Estimation result shows that by using Production Frontier Function that free variable which is significant influences positively to Crab production is the width of the net, the sum of the seed and the sum of weft. While, the sum of employees do not influence quite significant statistically. Internal cultivators factors which supposed to influence the production is the farmer's income level, while the other internal variable such as education level and respondents' age are not significant statistically. The value of Return To Scale (RTS) is 1, 176. This identifies that Mangrove Crab greasing cultivation in the Increasing Return To Scale position means that addition of production factors proportion will produce extra production which has bigger proportion.

Analysis to Efficiency Technique (ET) is 0, 94986 on average. That value can be said as achievement of work method in using production input which is very satisfying (close to 1), but, on the other hand, the chance to do the development is relatively tight. So that, it needs an extensification way.

The value R/C ratio is 1, 9516, it means that Mangrove Crab greasing cultivation still beneficial so that it is proper to be developed.

Key words : Mangrove Crab Cultivation, Efficiency, Stochastic Production Frontier, Production Factors, Return To Scale, R/C Ratio.