

Jierapat Promchuay 2549: Choices between Mangrove Forest Rehabilitation and Coastal Shrimp Culture at Pak Paying Canal, Nakhon Si Thammarat Province. Master of Science (Resource Management), Major Field: Resource Management, Interdisciplinary Graduate Program.  
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Mangrove forest encroachment by groups of people where used the area for aquaculture is one of the issues which are the main cause of forest degradation. An interesting point is the choice between mangrove forest rehabilitation and shrimp culture that will generate the highest net benefit to the society. The objectives of this study are to analyze the net benefit of mangrove forest rehabilitation, to analyze the net benefit of coastal shrimp culture and to compare the benefits between them. This study includes the secondary and primary data. Fifty-seven sampling families are interviewed. The present value of the net benefit of the two activities are analyzed covered the area of 200 rai.

The results of the benefit derived from mangrove forest from 57 sampling families opinions are the following. The benefit in terms of nursery ground is found to be about 75.40%, wind breaker 63.20%, local fisheries area 50.90%, sedimentation 54.50%, biodiversity 50.90% and slow down saltwater intrusion 45.60%. The study's results of rehabilitation mangrove forest, considering the direct benefits from local fisheries, indirect benefits from being producing food for aquatic animal and benefits of being wind breaker (in 50 years), at the discounted rate of 5%, is 28,591,108 baht. The net benefit of coastal shrimp culture which utilizes for coastal shrimp culture in the 1<sup>st</sup> - 5<sup>th</sup> year and for crab culture in the 6<sup>th</sup> - 10<sup>th</sup> year and no using until the 50<sup>th</sup> year, is 23,529,420 baht. It can be conclude that the study area should be used for rehabilitation of mangrove forest.

The occupation of the local people in the study area normally are local fisheries in the mangrove forest area, as a result, the rehabilitation of mangrove forest is very important. The government should give full support in rehabilitation and also give advices on how to use and take care the mangrove forest. The next study should consider the benefits in terms of carbon sequestration values, existence values, bequest values and endemic species values in order to provide the economic value correctly.

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