
The Desires Of People To Fattening Mud Crab In The Mangrove Of La-ngu District, Satun Province

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This study aimed to explore needs for the domestication of fattening mud crabs again of farmers who used to domesticate fattening mud crabs at the mangrove forest in La-Ngu district, Satun province. The target group consisted of 268 farmers who used to domesticate fattening mud crabs and 67.16 percent of them wanted to domesticate it again but the rest (32.84%) did not. The following were reasons why they wanted to domesticate fattening mud crabs: 1) there were more tools and equipment supporting the domestication which helped an increased in yields than before; 2) the farmers perceived that previous experience could help them in the domestication of fattening mud crabs; and 3) the pattern for fattening mud crab domestication again was the domestication in an earthen pond with the integration of wisdoms. Capital, domestication place, knowledge, and equipment were needed for the assistance. The following were reasons why some farmers did not want to domesticate fattening mud crabs again: 1) uncertainty in continual receiving mud crab mega lots for domestication; 2) having other supplementary occupations; 3) high production costs; and 4) topographical change of the mangrove forest which was not suitable for the domestication of fattening mud crabs.

Keywords: fattening, mud crab, mangrove

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Significance and Background of Research Problem

La-Ngu district is located in Satun province, lower part of southern Thailand and the province is in the southern most of the country which is close to Andaman Sea. The seashore in this area is complex and a habitat of organism which is important to the ecology system particularly in the area of mangrove forests. Since this area is the connection between land and Andaman sea, there is the interaction between the land and the sea in terms of physical, biological, and chemical aspects (Thamrongnawasawat and Wisentpongpan, 2007 A, p.4). Besides, there are valuable mangrove forest resources beneficial in many aspects such as a habitat of aquatic animals, breeding place, egg. Laying and aquatic larva place, food chain place, fisheries area, plants for animal feed area, and herbal plants area (Kamlangek, 2009 p:18). And the land The seasonal climate of Thailand coupled with the complex topography has resulted in rich biodiversity, including of fungal diversity.(Luo, Yaling Pongnak, Wattanachai and Soyong, Kasem 2015p:540) People living along the seashore of La Ngoo district prefer to domesticate fattening mud crabs since the production costs are not too high. Besides, the domestication and management of fattening mud crabs are not complicate because it eats natural food such as Mozambique tilapia, Nile tilapia, horse mussel, mussel, small aquatic animals, and aquatic animal remains. Mud crabs can be sold in various forms as follows: 3 mud crabs per kg. for 270 baht; 4-5 mud crabs per kg. for 250 baht; and 6-8 mud crabs per kg. for 220 baht (Satun Fisheries Office, 2012 A: p.11). In addition, mud crabs can be processed as crab sauce and souvenirs. Mud crabs are also sold to neighboring countries such as Malaysia. Thus, the domestication of mud crabs is an occupation gaining a big income which is enough for family support. It can be said that mud crabs are important economic animals of fishermen along the seashore (Boonyawejechewin and Buasalee, 2011: p.24).

The domestication of mud crabs in the mangrove forest of fishermen in La-Ngu district usually employs knowledge transferred from generation to generation. It mostly uses natural resources for the domestication such as using clean marine water and there is no pellets feeding but aquatic animals like trash fish and chopped horse mussel. Fattening mud crabs are domesticated in natural water sources at the seashore. It was fattened in an earthen pond at the mangrove forest area and the domestication lasts 90-120 days. Mud crabs are sometimes allowed to walk on the earthen dike so that the fishermen can continually observe size and a number of fattening mud crabs. At the earthen pond, a raceway is due to the sea for sea water inlet and outlet. Besides, there is a clear boundary of the pond by using trawl and bamboo (Naiyanet, 2009: p.5).

It was found that there were 185 mud crab farmers in 2013 which rapidly decreased from 350 in 2009 based on data on mud crab farmers who did not register as aquatic animal farmers (Satun Fisheries Office, 2012 A: p.11). This makes decreased incomes earned from fattening mud crab domestication, resulting in decreased quality of life of the farmers and their family. An example of an impact on children schooling which may be a social problem in the future.

Due to this problem the researcher perceived the importance of fattening mud crab domestication and needs for fattening mud crab domestication again of the farmers in La Ngoo district, Satun province. Also, the research realized the importance of mangrove forest where it is an area of mud crab domestication. Therefore, the researcher decided to conduct a study on the domestication of fattening mud crabs in mangrove forest areas, La Ngoo district, Satun province. This will lead to knowledge management, transfer, and dissemination to new generations around mangrove forest. Also, it can stimulate and promote consciousness in mangrove forest conservation and wise use of resources in mangrove forest.

Research Question

How are needs for the domestication of fattening mud crabs again of the farmers at mangrove forest in La-Ngu district, Satun province?

Research Objective

Specifically, this study aimed to explore needs for the domestication of fattening mud crabs again of farmers in mangrove forest area, La-Ngu district, Satun province

Materials and methods

Scope and Limitation of the Study

1. Locale of the Study

This study was conducted in La-Ngu, Paknam, and Laemson sub-districts where it was mangrove forest area, seashore of La-Ngu district, Satun province. This area was abundant suitable for domestication of all species of aquatic animals. Also, it was the area where fattening mud crabs were domesticated densely and continually.

2. Target Group of the Study

The target group in this study consisted of 268 farmers who used to domesticate fattening mud crabs in La-Ngu, Paknam, and Laemson sub-districts, La-Ngu district, Satun province.

3. Content

3.1 Investigate causes of the abolishment of fattening mud crab domestication in La-Ngu, Paknam, and Laemson sub-district.

3.2 Needs for the domestication of fattening mud crabs again of the farmers in these districts. The following were investigated:

- Reasons of needs for the domestication of fattening mud crabs again of the farmers;
- Reasons why some farmers in these districts did not want to domesticate fattening mud crabs again;
- Needed pattern for the domestication of fattening mud crabs again of the farmers; and
- Needs for assistance when the farmers wanted to domesticate fattening mud crabs again.

Methodology

The study on needs for the domestication of fattening mud crabs again of the farmers who used to domesticate fattening mud crabs in mangrove forest, La-Ngu district, Satun province was a qualitative research. There was the investigation of causes of the abolishment of fattening mud crab domestication of the farmers who used to domesticate it (The sample group of 268 farmers). Review of related literature and official documents were conducted. After that, in-depth interview and observation in the actual situation was conducted in which electronic tools were used for recording pictures and sound. Besides, the researcher collected data by using interview schedule. All obtained data were checked by the researcher and personnel in the field survey. For data analyses, the researcher analyzed content during the field survey and after the field survey and with the assistance of specialists to check it again.

Results

Regarding socio-economic attributes, it was found that most of the informants were male and their age range was 50-59 years, married, and bread winners and they had 1-5 family members. The highest educational attainment was elementary school. Most of the informants were fishermen as their main occupation with their income was 10,001-15,000 baht per month. Their supplementary occupation was a hired worker (aquatic animal domestication).

Most of the informants were local people or their domicile was in La-Ngu district, Satun province.

Results of the study could be concluded as follows:

1. In the past, the occupation of most of the informants was aquatic animal catching for selling. Thus, it was found that those animals were fattened in order to sell it with a high price.

2. It was found that during 1998-2002 was the time when there was the domestication of fattening mud crabs most whereas during 2008-2012 was the time found least.

3. The domestication of fattening mud crabs in the past had mostly practiced for 10 years.

4. The domestication of fattening mud crabs in the past was done by an individual in his own land.

5. The following were causes of the abolishment of the domestication of fattening mud crabs in La-Ngu district, Satun province: 1) there was a rapid decrease in a number of mud crab meggalots so it could not be domesticated continually; 2) most of the informants had a new occupation learning more income than before and it was more convenient; 3) the price of mud crab meggalots was higher than before so the production costs was high; and 4) the area of mangrove forest were deteriorated, not suitable for the domestication of fattening mud crabs.

Results of the study on needs for the domestication of fattening mud crabs again of the informants were as follows:

1. There were 180 informants (67.16%) who wanted to domesticate fattening mud crabs again whereas the rest (32.84%) did not want to domesticate it again.

2. Those who wanted to domesticate fattening mud crabs again claimed that there are new tools and equipment at present which help increase yields and they had experience in fattening mud crab domestication.

3. The domestication of fattening mud crabs in the earthen pond was the pattern which the informants wanted.

4. The domestication of fattening mud crabs by an individual in his own land was required by the informants who wanted to domesticate fattening mud crabs again.

5. Those who wanted to domesticate fattening mud crabs again needed for assistance in terms of the following 5 aspects: capital, domestication place, mud crab mega lots, knowledge, and domestication equipment.

6. The following 4 reasons were found that some informants did not want to domesticate fattening mud crabs again: 1) uncertainty of continual receiving mud crab mega lots; 2) having other occupations with high incomes; 3) production costs (domestication place and; mud crab mega lots) was higher than before; and 4) the area of mangrove forest condition was changed which was not suitable for the domestication of fattening mud crabs.

Discussions (with cited references)

Based on results of the study, the researcher found interesting issues which could be discussed as follows:

Regarding the domestication of fattening mud crabs in the area of mangrove forest in La-Ngu district of Satun province, it was found that fattening mud crabs have been densely domesticated in La Ngoo, Paknam, and Laemson sub-districts from the past up to the present. This might be because these areas have abundant mangrove forest and it is the source of animal feed suitable for the domestication of all species of aquatic animals. This conforms to an idea of Kamlangek (2009, p.19) who claimed that mangrove forest is the habitat of aquatic animals, breeding and egg spawning source, food chain source, and fisheries source.

Findings showed that those who domesticated fattening mud crabs in La-Ngu district are offspring's of the families catching aquatic animals for selling. Many of them domesticate mud crab mega lots to increase its size for selling with a high price. They adopt knowledge and experience in the domestication of fattening mud crabs of their families to fatten mud crab mega lots and increase the yields.

However, it was found that earthen pond with the integration of wisdoms in the pattern needed by the informants who want to domesticate fattening mud crabs again. This conforms to an idea of Nuengchalerm (2003, pp. 65-68) who cited that local wisdoms are dynamic and there is improvement, change, and creation where there is change in livelihoods, social and environmental conditions. Thus, local wisdoms will be adapted to cope with local context. This also conforms to a study of Thiensongratsami and Prathumchat, (2002, p.159) on marine crabs, biology, resource conservation, and sustainable commercial marine crab culture. They found that crab domestication in earthen ponds can be practiced in various forms depending on objective.

In addition, results of the study revealed that the informants who want to domesticate fattening mud crabs again need for assistance in terms of capital, domestication place, mud crab mega lots, knowledge, and domestication equipment. This needed assistance has effect on successful domestication of fattening mud crabs so much. Hence, concerned agencies can take it as a guideline for the extension and development.

Suggestion

According to the study on needs for the domestication of fattening mud crabs again of farmers in the area of mangrove forest in La-Ngu district, Satun province, the researcher has the following suggestion:

1. Concerned agencies on agricultural extension can take the reason why some of the informants do not want to domesticate fattening mud crabs again so as to be a basis for the preparation of readiness and problem solving for farmers domesticating fattening mud crabs or promoting farmers to domesticate it as a supplementary occupation.

2. Concerned agencies on agricultural extension can take needs for assistance in terms of capital, domestication place, mud crab meggalots, knowledge, and domestication equipment which has an effect on successful domestication so as to be a basis for preparing readiness and problem solving for farmers domesticating fattening mud crabs. In other words, it can be a guideline for development an counseling on assistance source seeking for the farmers.

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