Analysis of Personal Entrepreneurship Quality of The Society in Mandangin Island

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Abstract. Mandangin Island is one of the beautiful islands in Madura. The government has committed to develop Mandangin Island as an eco-tourism destination. There are several factors that affect the tourism activities. One of the important factors is the quality of human resources. Thus, the society in Mandangin Island should have good personality and entrepreneurship spirits to attract potential tourists. The aims of the study were: 1) to analyze the level of creativity of the Mandangin people to process natural resources; 2) to identify the entrepreneurial spirit of the society to support eco-tourism; and 3) to analyze the personal entrepreneurship quality of the society. The primary data were collected from the society through interviews using questionnaires. Descriptive analyses were used to analyze the data and phenomenon. The result indicated that the society is relatively creative to produce goods based on the marine and fisheries resources but they faced the constraints to develop new products. The respondents have high entrepreneurship spirit. The quality of personal entrepreneurship is high but the society is risk-averse. The society in Mandangin Island has good entrepreneurship to support eco-tourism activity but the government should facilitate and educate them with the relevant skills.

1. Introduction
Small islands have several characteristics such as remote areas, lack of land, lack of natural resources and low quality of human resources. The society was difficult to improve their wealth and be independence [1]. Mandangin Island as a small island has the same problems. The Mandangin's people have close relationships with other people in the Madura Island (in the north-side) as well as Probolinggo District (in the south-side). Almost all basic need i.e. food and nonfood are supplied from another island. This island only export sea fishery production to Sampang District. The large number of population caused several problems. In 2016, the population was 20,568 people.

The growth rate of fishermen is very high due to the growth of Mandangin's population was very high. On the other hand, The Madura street has been overfishing. They have gone further to catch fish in the deep sea. The condition of coral reefs was poor due to the bad habit of several fishermen. They catch the fish using restricted fishing gear. It caused environmental damaged and the fish population decreased. The existence of coral reef in Mandangin is really important. It could be a potential tourism destination. Moreover the government already stated in the Medium-term Development Plan of Sampang District 2013-2019 that coral reef area in Mandangin is an protected area. In 2014, the local government have been released Village Head Regulation about Mandangin Marine Protected Area.

Mandangin Island is one of the beautiful islands in Madura. The government has committed to develop Mandangin Island as an eco-tourism destination. There are several factors that affect the tourism activities. One of the important factors is the quality of human resources. Even the panoramic is beautiful, tourists will not visit the place if the situation is not conducive. Thus, the society in Mandangin Island should have good personality and entrepreneurship spirits to attract potential tourists. The aims of the study were: 1) to analyze the level of creativity of the Mandangin people to process natural resources; 2) to identify the entrepreneurship spirit of the society to support eco-tourism; and 3) to analyze the personal entrepreneurship quality of the society.
The objective of Mandangin Marine Protected Area protected some area including beach, sea, and its environment. In a long time, we expect the coral reef will grow well and the population of fish tends to increase. The marine protected area is one of strategy that could be solve the environmental damage and ecosystem degradation. This conservation area can promote the improvement of ecosystem and its habitat [2]. The results of several studies explained the success of community-based management of marine protected areas [3] [4] [5] and its contribution to rehabilitating fish habitat and increasing the population of fish in surrounding area [6]. However, the marine protected areas could not give positive impact on society [7] i.e. increasing fish population due to managerial problems [8]. The main problem is socioeconomic condition of the society that multi-dimensional perspective such as economic, social and environment.

2. Materials and Methods

The research was conducted in the Mandangin Island was located in Sampang District. This Island is the most densely populated island in Madura. The respondents in this research were all actors involved in the management of marine protected areas such as fishermen, entrepreneurs, cooperatives, government employees, and Islamic leaders. The primary data were collected from the society through interviews using questionnaires. Descriptive analyses was used to analyze the data and phenomenon. The research method used in this study were literature review, FGD, and PRA. Further, analytical tools used in this study involved i.e. descriptive analysis was used to answer the first objective and quality of private entrepreneur framework was used to answer the second and third objectives. The instruments used in the quality of private entrepreneurship framework were: 1) Questionnaire that consist 55 questions related to creativity and entrepreneurship, 2) Respondents answered the question by choosing 1 (strongly disagree), 2 (disagree), 3 (doubtful), 4 (agree), and 5 (strongly agree).

3. Results and Discussion

3.1. Existing Condition and Tourism Potency

Mandangin Island is the only island in Sampang District. It was located about 7 km from Tanglok Port, Sampang. The density population is about 11,850 people/km². It was most densely populated in Madura Island. The consequence is that the government has to manage the community and arrange the utilization of natural resources fairly. This concept on three aspects i.e. social condition, economic performance, and environmental situation. In the Mandangin Island, We found all those problems. They have economics problems such as 74% of the farmers have Income about $ 500/ year (very low); Unemployment rate was about 14%, Economic growth rate was lowest in East Java (5,33%) and the smallholder farmers were only have backyard farming system. In terms of social condition, they faced: HDI was lowest in East Java (59,58), Illiteracy rate was 1,574 people (34%). The environmental problems in this area: Illegal sand mining, Abrasion, Water pollution, Salinity problem, overfishing, lack of environmental awareness. So, we faced very complicated problems.

The location of Mandangin Island is relatively far from the mainland. It could a positive and negative factor. It could be a negative aspect if we consider accessibility and connection aspect. In the positive view, the situation offers some beautiful views and peaceful. There are many kinds of tourism in Mandangin i.e. nature tourism, culinary, creative industry and culture. Potency of nature tourism such as: a. White sand beach in the west area (sunset view); b. Candin small island and wast beach (sunset view); c. Coastal tourism. Food and culinary potency i.e. a. Tuna fish paste; b. Crab paste; c. Shrimp, fish, Squid; d. Traditional Cakes. Existing creative industry: a. “Batik”; b. Pinisi model; c. Traditional dock. Further, cultural potency such as a. Religious Tourism: Bangsacara dan ragapatmi and b. “Petik Laut”.

3.2. Creativity of Mandangin People

Analysis of the level of creativity of the Mandangin people to process natural resources could be identified using the quality of private entrepreneurship framework. The respondent was asked relevant
There are several questions have been asked. First, the potency of nature, social, economic, and environment that could be developed. Then, They were asked to judge each object that already identified in terms of potency, uniqueness, and attractiveness. This kind of analysis will inform us the level of creativity of the Mandangin people.

Table 1 confirmed the potential of tourism destination, culinary, creative industry and culture in Mandangin Island. There were 12 objects have identified based on the following aspects i.e. potency, uniqueness, and attractiveness. The respondent give the score with Likert Scale from 1 to 5. The lowest represent strongly disagree while the highest one represents strongly agree.

| Tourism Aspects                                      | Potency | Uniqueness | Attractive |
|------------------------------------------------------|---------|------------|------------|
| White sand Beach in the west area (Sunset view)      | 3,1     | 3,5        | 3,2        |
| Candin Small Island and East beach (Sunrise view)    | 4,0     | 3,1        | 3,5        |
| Coastal Tourism                                      | 4,3     | 3,1        | 3,0        |
| Tuna fish paste                                      | 3,3     | 2,9        | 3,2        |
| Crab paste                                           | 3,4     | 3,1        | 2,9        |
| Shrimp, fish, Squid                                  | 3,2     | 3,1        | 2,6        |
| Traditional Cakes                                    | 2,3     | 2,7        | 2,3        |
| “Batik”                                              | 2,8     | 2,9        | 3,1        |
| Pinisi Model                                         | 2,7     | 2,8        | 2,6        |
| Traditional dock                                     | 2,7     | 2,9        | 2,9        |
| Religious Tourism: Bangsacara dan ragapatmi          | 3,1     | 3,4        | 3,1        |
| “Petik Laut”                                         | 3,3     | 2,6        | 2,9        |
| **Total**                                            | **38,1**| **36,2**   | **35,5**   |

Source: Primary Data, 2018

Potency of Tourism destination has the highest score. It means respondents give high scores for all tourism objects. Potency of tourism destination depends on the quality, climate, and physical environment [9]. Score of uniqueness was 36,2. It was relatively low than potency. Some respondents argued that uniqueness of tuna fish paste was lower than potency of tuna fish paste. For attractive variable, the score was lowest. It means the attractiveness of tourism aspect in Mandangin was low. There is no something special that could be improved.

In the potency aspect, coastal tourism has the highest score in two aspects. The coastal tourism got highest score in potency and uniqueness aspects. The coastal tourism is very suitable to develop in east beach nearby Candin. Diving is one of the ecotourism that could be forced to be a main attraction in Mandangin. Since 2016, the new village head of Mandangin supports development of eco-tourism in Mandangin.

Figure 1 explains the comparison between potency-Uniqueness-Attractive of tourism aspects. The coastal tourism got the highest score in potency and high score in uniqueness and attractive. It means the coastal tourism is more potential to be a prospective tourism destination in Mandangin. One of suitable activity is diving in the east-beach and west-beach. This activity could be compared to development of Candin Island and White sand beach. The uniqueness could be improved through providing thematic underwater park. The availability of marine protected area is more important to accelerate rehabilitation of marine ecosystem.

Besides nature tourism, there are many kind of tourism potency such as food and culinary, creative industry and cultural tourism. Mandangin is rich in fishery potency even the quantity and quality tends to decrease. In food and culinary potency, Mandangin people usually make the same traditional cake
dan food from fishery products. From the survey, the score of food and culinary potency is lowest but we have to take attention. The development of tourism has quite relationship to availability of culinary facilities. The result indicates that the society is relatively creative to produce goods based on the marine and fisheries resources, but they faced the constraints in developing new products.

![Figure 1. Comparison Between Potency-Uniqueness-Attractive of Tourism Aspects](image-url)

3.3. *Entrepreneurial Spirit of the Society*

Entrepreneurial spirit is a mindset, manner, and approach to think actively and explore the change. The entrepreneurial spirit could be critical thinking, innovation, and continuous improvement. Identification of entrepreneurial spirit has been accomplished by asking 55 questions to the respondents. From those questions, ten (10) entrepreneurial spirit could be identified, such as opportunity, persistence, contract, quality, risk, objective, information, monitoring, networking, and confidence.

Figure 2 describes the entrepreneurial spirit of the Mandangin people. The objective has the highest score. It was 21. Elements of the determination objective, i.e. thinking of future, avoid worries, Analysis of the level of creativity of the Mandangin people to process natural resources could be identified. The study shows that the respondents have high entrepreneurship spirit. This characteristic is needed to support eco-tourism.

![Figure 2. Entrepreneurial Spirit Of The Mandangin Society (Source: Primary Data, 2019)](image-url)
3.4. The personal entrepreneurship quality of the society

The quality of personal entrepreneurship was high but the society were risk averse. From the facts in the society, it can be concluded that the society in Mandangin Island has good entrepreneurship to support eco-tourism activity but the government should facilitate and educate them with the relevant skills.

Figure 3. Personal Entrepreneurship Quality based on the Sex
Source: Primary Data, 2019

Figure 3 explained that the pattern of personal entrepreneurship of the male differs from the female in the Mandangin Society. The male was better than the female. In the aspect of objective, the score of the male was highest. It means, male was rational in making the decision while the female more sensitive.

Figure 4. Personal Entrepreneurship Quality based on the Income
Source: Primary Data, 2019
In this research, the personal entrepreneurship quality of Mandangin society have analyze based on income. Figure 4 described that the people with the income 350,000-450,000 rupiah per month have a better entrepreneurship quality compared to other groups of income especially in quality, information, and monitoring.

3.5. Human Activities and Marine Protected Area In Mandangin Island

According to respondent, the overfishing is the human activity that closely related to the effectiveness of Marine Protected Area (Figure 5). Besides, the environmental damaged, garbage and domestic waste affected the marine protected area. Overfishing was the most important factor that affect to effectiveness of Marine Protected Area. It is due to the fishing activities tend to damage the fish habitat.

One of the goals of the Marine protected area was to grow the fish habitat and its environment. During the first time of initiation, the marine protected area could be sterile. nobody allowed to enter the area. on the other hand, the fishermen willing to entry to have a fish. If the marine protected area was established, the fishermen were allowed to benefit the resources in the marine protected area. This condition has positive impact on tourism activity.

![Figure 5. Impact to Marine Protected Area](source)

3.6. Marine Protected Area Valuation

Public valuation about marine protected area was still low. They explained that the function of marine protected area was only for enviromental rehabilitation. Figure 6 mentioned that only three respondents who answered that marine protected area have other functions i.e. biodversity and ecosystem improvement. Low of education of the society affect to this condition.
Figure 6. Marine Protected Area Valuation
Source: Primary Data, 2019

As mentioned above, the respondent argued that the development of the marine protected area was expected to be able to increase fish populations as the main source of income for the majority of the people (Figure 7).

Figure 7. Marine Protected Area Development
Source: Primary Data, 2019

4. Conclusion
The tourism potency in Mandangin Island was nature, culinary, creative industry, culture. It means Mandangin Island has opportunity to develop tourism activities. The level of creativity of Madangin Society can be seen through potency, uniqueness and attractive. In term of entrepreneur aspect, personal entrepreneurship quality of the society was high. marine protected area is needed to support tourism development.
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