

Building the Culture of Sustainability on Panjang Island through Mangrove Eco-edutourism: An Analysis

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Introduction

This topic of research is chosen because it is believed that all people should have equal sustainable living standards, and that includes the Panjang Island community. Sustainability is a dynamic equilibrium in the process of interaction between a population and the carrying capacity of its environment such that the population develops to express its full potential without producing irreversible, adverse effects on the environment (Ben-li, 2015). Panjang Island is an Island near Banten, a Province on the western part of Java Island, Indonesia. It is a remote island inhabited by 3340 people. The island possesses vast economical and environmental potential which they do not make the most of it. Therefore, many problems occurred such as the sea water intrusion which created brackish water for their daily use. By doing the research on this island, it is expected to find a solution that both helps the concerning condition and also a solution that does not change the Panjang Island people's tradition or cultural behavior. The sustainability that we refer in this paper is the culture of sustainability. Culture of sustainability is a social lifestyle in which the pillars of sustainability (environment, economy, and society) are inherent and can be implemented in daily life (Wagner & Andreas, 2012). The three pillars of sustainability each has its own connection with cultural sustainability. Culture is also not a fixed end product, but rather a continuous process of creating, negotiating, and reflecting on social practice, which constantly needs to be revised and, subsequently, realigned (Wagner & Andreas, 2012). Therefore, in order to achieve cultural sustainability for the Panjang Island people, it is acknowledged that they must achieve economic, social, and environmental stability. Tourism, in particular, is acknowledged as a feasible way to help Panjang Island locals to build their culture of sustainability. Moreover, tourism is aligned with the government development plan for the area. However, what kind of tourism is the most suitable for Panjang Island? This research proposes the Mangrove eco-edutourism. Hence, the purpose of this research is to analyze to what extent does the mangrove eco-edutourism is beneficial to build the culture of sustainability in Panjang Island.

Methodology

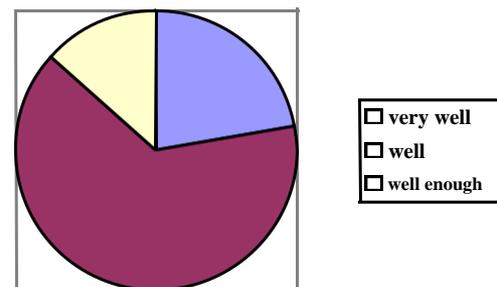
Mixed method research is chosen for this analysis, namely the qualitative and quantitative methods. There are three main steps of research to be conducted: Observation, Closed-questionnaire, and In-depth Interview. In observation, the researchers picked a random sample. In

this case, random, but important key informants from each village. Moreover, environmental condition is also observed, such as the water quality, the soil condition (whether it supports the activity to farm or not), the well-being of the people there. Meanwhile, in closed-questionnaire, a questionnaire was distributed 450 individuals, which is about 100 individuals every village. Lastly, the in-depth interview was given to 10 key informants. Key informants are informants that represent not just their own individual's opinion but the whole village's opinion. The key informants are the head of Citizen and Neighborhood Association (*Rukun Tetangga*), or people from the community that actually got involved in maintaining the environment health.

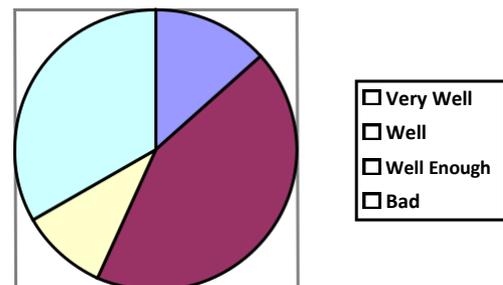
Results

Out of 15 key informant respondents, here are the results.

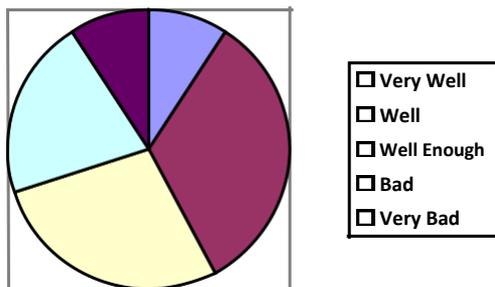
SOCIAL ACTIVITES



ENVIRONMENT (Water Quality, Soil Condition)



**MANMADE ENVIRONMENT
(Road Condition, House Condition, Food Availability,
Transportation Facility, Security, Health Services,
Electricity Availability, etc.)**



We acquired such information from both observing the existing condition of Panjang Island, and by distributing the closed-questionnaire. From the table, it has been analyzed that culture sustainability has not been achieved yet. Since it has a great opportunity as a tourism site, it is plausible to build an eco-edutourism site at Panjang Island. Moreover, if the eco-edutourism gave satisfying results then culture sustainability is near.

Conclusion

The results concluded that cultural stability is not available yet. In order to achieve it economic, social, and environment crisis must be avoided. It is advisable for the Panjang Island people to develop the island as a tourism site in accordance with the government development plan for the island. Secondly, by developing the Mangrove ecosystem, the sea water intrusion could be reduced and abrasion could be averted. Thirdly, by developing such tourism, people could be more aware of the land pollution and avoid to litter. Lastly, the tourism certainly will boost their economy. Hence, with environment, society, and economy, all the three pillars are achieved through the Mangrove eco edu-tourism plan, it is believed that the Panjang Island people would nurture their culture of sustainability.

References

1. Ben-li, M. (2015). Sustainability: Definition and five core principles. Retrieved 07 07, 2018, from <http://www.sustainabilitylabs.org>
2. Wagner, F., & Andreas, M. (2012). A Culture of Sustainability. *Realizing Utopia: Ecovillage Endeavors and Academic*(8), 55-72. Retrieved 07 01, 2018, from <http://www.jstor.org>

Strength	Weakness
<p>Environment: A healthy ecosystem of mangrove, unpolluted air, healthy sea ecosystem, and rich animal species.</p> <p>Society: Many indigenous cultural products, such as <i>gotong royong</i> (communal cooperation), <i>pencak silat</i> (Indonesian indigenous martial arts), traditional music, handicrafts like <i>bubu</i> (traps designed for fishes), and traditional food like <i>dodol</i> (some sort delicacy that at the other regions made from glutinous rice, but in Panjang Island they made it from seaweed).</p> <p>Economy: They rely on fishing and coconut selling for their living.</p>	<p>Environment: Considerable amount of trash pollution, some area has been intruded by sea water creating brackish water, and the sand on the coastal area is thinning due to mindless extraction by the people to build houses</p> <p>Society: People are ignorant about littering.</p> <p>Economy: They only rely on fishing and coconut selling for their living. No other business sector is visible.</p>
Opportunity	Threat
<p>Environment: With a healthy ecosystem of mangrove and rich animal species, it is possible to build a tourist attraction such as eco edutourism.</p> <p>Society: With a rich cultural tradition, it can also be an attraction for tourist.</p> <p>Economy: The local government has plans for Panjang Island, to be a tourist attraction that will mimic the tourist attractions at other nearby islands. If the tourist attraction really does come true, it would be a great income for the people there. They finally could expand their businesses.</p>	<p>Environment: If the sea water continues to intrude the ground water, then the Panjang Island people will have no more freshwater to use for their daily lives in the future. Moreover, if the trash keeps piling up, then the mangrove's ecosystem, and animal's habitat will get disturbed. The production of <i>dodol</i> is also at risk, due to factory waste from a sugar factory at the tip of Banten province.</p> <p>Society: Due to lack of fixed head village, it is difficult for the people to do something decisive and often causes problems. It is also an obstacle for the community to innovate, thus causing many controversial in the community.</p> <p>Economy: -</p>