Community development in the advancement Kawal Darat Shells Hill (BKKD) site area as a tool for green tourism in Bintan

Defri Elias Simatupang*
North Sumatera Archeology Center, Medan, Indonesia
defri.simatupang@kemdikbud.go.id

Robert Sibarani
Syafriuddin Pohan
University of Sumatera Utara, Medan, Indonesia
robert@usu.ac.id
pohansyafruddin@usu.co.id

Rita Margaretha Setianingsih
Medan Tourism Polytechnic, Faculty of Postgraduate, Medan, Indonesia
rita_ms2004@yahoo.com

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Abstract
After a period of archaeological research, concerns have emerged about environmental damage to the Bukit Kerang Kawal Darat (BKKD) site area in Bintan Island. The threat of floods and site collapse is a universal message that must be responded to. From descriptive analysis on stakeholder communication, the most realistic expectation is the development of communities around the site. They can work together to advance and save the environment of the BKKD Site area. The model offered is basically frameworks so that other stakeholders respond to realize the stages of cooperation will be easier to do in a sustainable manner around the site areas.

Keywords:
Green tourism, BKKD site
1 Introduction

Starting from the passing of the Law (UU) of the Republic of Indonesia (RI) No. 5/2017 (hereinafter abbreviated to the Law on the Advancement of Culture). The author as an archaeological researcher (archaeologist) is interested in seeing the usefulness of this law in relation to the protection of objects of cultural advancement in the Kerang Kawal Darat Site Area (hereinafter abbreviated as BKKD Site). It is interesting to study this law because it is broader in scope than the Republic of Indonesia Law No. 11/2010 on Cultural Heritage (hereinafter abbreviated as the Cultural Heritage Law). But the state seems not to realize that culture needs to be protected as an investment to build a future in the midst of world civilization. The progress of the BKKD Site area in the context of development is a basic thing for the public to know, including physical and non-physical progress. So green tourism is a term used for sustainable tourism practices that are substantively included in environmental, economic and socio-cultural sustainability. Mobility will affect the acceleration of progress of an area and its supporting community. Non-physical progress is related to the quantity and quality of human resources in the BKKD Site area. Non-physical progress prioritizes human resources, because non-physical progress is the basis for awareness of the physical progress of the BKKD Site area. Therefore, the researchers who have conducted research at the BKKD Site can carry out a measurable evaluation of the involvement of media functions in the framework of making communication models between stakeholders. Mass media and social media are educational facilities to increase public awareness/participation, as well as social control in disseminating information especially in developing For Green Tourism In Bintan Island. The study of making environmental communication models is believed to be very helpful in efforts to promote culture. Stakeholders will be directed to take part from the early stages and continue to be committed to being involved in the stage of advancing the environmentally friendly BKKD Site cultural heritage area (Simatupang, 2019, 2020).

2 Literature Review

Environmental communication is a study of understanding environmental planning so that it functions effectively to provide maximum benefits for the creation of community behavior that is conducive to the environment, with the support of the government's political will which must be carried out in an integrated manner, embracing the government, NGOs, mass media, companies/industry and the younger generation to participate and contribute according to their respective abilities (Lestari, Kusumayudha & Parijurna, 2016; Wahyudin, 2017; Ngoyo, 2015). Cooperation with stakeholders is needed, including efforts to empower local communities in making the BKKD Site a green tourism project as well as cultural promotion efforts. The definition of culture in the Law for the Advancement of Culture states that culture is everything related to the creation, taste, intention, and work of the community (Tomy, 2018; Jenks, 2013). The cultural model that will be made is a formulation of the framework offered in an effort to advance the BKKD Site Area. Article 49 of the Law for the Advancement
of Culture states that the Central Government is obliged to establish a Cultural Trust Fund. This is directly proportional to the mandate of the cultural heritage law, article 22 states that compensation/incentives are given to encourage conservation by cultural heritage managers (Surbakti, 2017). Compensation is possible because the two Cultural Laws work together in an effort to promote cultural heritage areas and cultural heritage objects in mutual cooperation. Sibarani in his research related to gotong royong stated that gotong royong was used as non-material capital to improve socio-economic development. They don’t spend money, because each family has its own representative managing the irrigation together. Social activities are carried out collectively and are maintained because social interaction is highly valued (Sibarani, 2018). For the BKKD Site area, it is necessary to disseminate information to the public regarding the urgency of maintaining cultural objects (BKKD sites and objects of cultural progress), with continuous tourism (technical guidance, promotion, and collaboration with BKKD).

3 Methodology

However, the problem is, the use of media for the sake of environmental preservation is very dependent on media orientation, which is influenced by state conditions, and various institutional regulations, reporting functions (Herutomo, 2013; Susanto, 2013). Considering that the mass media often emphasizes the commercial aspect, it is necessary to conduct a study by identifying objects of cultural promotion in the BKKD Site area, using the two Cultural Laws. Furthermore, the analysis is described in a model related to the environment, which is expected to be easily understood by the community. Such studies are dynamic, because they try to bring to life truly free thinking about standard views and habits. With an ethnographic approach, researchers observe and conduct interviews to the people living around the area of the bkd site. Cultural performances/shows will give an impressive image of cultural exploration as a place that is oriented towards the friendliness of local residents and immigrants or tourists. A welcoming place means showing a friendly message because of the appearance of its culture or traditions and the people who live there (Sibarani, 2020).

4 Findings

4.1 The Law on Cultural Advancement in Relation to the BKKD Site Area

It seems that through the Law for the Advancement of Culture, the government invites people to care about using their culture. The Law for the Advancement of Culture then initiated the Integrated Cultural Data Collection System as a cultural database, to minimize and protect potential claims by foreigners. The collection of cultural objects includes physical and non-physical objects, both of which are cultural resources that must be recorded in the BKKD Site area. Once noted, it is necessary to provide support/assistance for its advancement. The private sector also has the capacity to support not only in the form of direct CSR funds but also in creating programs for communities and their employees. Government agencies only need to carry out
supervision so as not to deviate from the legal umbrella, and their respective responsibilities in the community empowerment agenda around the BKKD Site area. So a conceptual model is needed for the progress of the BKKD Site area which includes the determination of policy plans, implementation strategies, and monitoring.

### 4.2 The Important Value of Resources for the Development of the BKKD Site Area

All resources in the BKKD Site area, if seen as an important unit by the local community, will certainly be more effective in optimizing them. The following table provides a more detailed description of the various resources, which are identified as in the table 1 below:

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<th>Table 1: Four Parameters of Important Value of BKKD Site Area for Develop Resources in green tourism projects</th>
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From the table above, the community around the BKKD Site area has the potential to be a driving force for progress. The need for assistance to them, so that they are able to plan measurable actions so that they are more independent in making promotion programs for the BKKD Site Area. As a separate note, cultural performances/shows will give an impressive picture of cultural exploration as a place that has a record of being oriented towards the friendliness of local residents and immigrants or tourists. A friendly place means showing a friendly message because of the appearance of its culture or tradition and the people who live there (Sibarani, 2020:5). The community is concerned and conducts environmental conservation tourism campaigns in the site area to site visitors. If this is realized, then cultural preservation in the BKKD Site area will be better maintained in the future, including efforts to minimize hazards such as potential environmental damage.

5 Discussion

5.1 Potential Environmental Damage as the BKKD Site green tourism campaign

The potential for environmental damage in this case includes the danger of the BKKD Site collapsing and flooding due to overflow of the Kawal River. These two negative potentials must be an important note that forms the basis for the importance of environmental communication in the BKKD Site area. The prediction of the failure of the BKKD site was obtained from the results of technical modeling using shell samples and tested in the laboratory in 2018. The results of the lab test resulted in mathematical calculations with empirical equations that could be used to estimate the effect of settlement on additional loads. The empirical equation is \( y = 0.0005x + 1.6847 \), where \( x \) = increase in load and \( y \) = decrease that occurs. What should be noted from the sample load of 75 kg/m\(^2\), the soil is good enough to accept the weight of the mollusk hill itself, this is an indication that the reduction potential that occurs is still at a reasonable threshold (< 2 cm means the load above is below 300 Kg/M2). However, if there is a load above 300 Kg/M2, it will most likely interfere with the maximum carrying capacity.

A kind of hypothesis can be made if 4-5 adult humans standing at the BKKD location have the potential to lower the height of the hill due to the compactness of the shell and the soil that forms the hill begins to collapse due to disturbance. Furthermore, the second potential environmental damage is flooding due to the overflow of the Kawal River which will inundate the BKKD location itself. The results of observations of satellite images regarding changes in land subsidence and changes in environmental conditions in the site area in 2015 - 2020, there is non-vegetation growth. The changes are very visible, especially in the upstream coast of the Kawal watershed, which is increasingly being used as an oil palm plantation by PT Tirta Madu. The results of observations of satellite imagery in 2015 - 2020, predicts the comparison between 2030 and 2050 will decrease with a variation of 1 meter / 10 years.
5.2 Four variants of the environmental communication model for the promotion of the BKKD site

It is hoped that the threat of environmental damage needs to be communicated, by starting to create an environmental communication model project to advance the BKKD Site area as stated in the local community empowerment model. There are four variants of the model that represent each stakeholder as a communicant, so one of the stakeholders is needed as the most serious communicator, namely: the community around the location. Other stakeholders (communities around the site, government agencies, private institutions, and mass media companies) have unrealistic weaknesses to initiate this promotion effort. This weakness is in the form of leadership that is always changing which causes the potential for changes in leadership perspectives to occur frequently. Meanwhile, local communities only need assistance until they are independent. Later there will be several community groups who will become influential figures in this activity to produce technical planning agreements (a kind of blueprint) for the progress of the BKKD Site area. Community-based environmental collaboration is formed based on mutual agreement, voluntary, and there are no binding legal sanctions. However, there is sufficient space to involve every stakeholder who supports the effectiveness of collaboration with their respective roles (Hapsari, 2016; Kurniawan, 2018).

5.3 Local Community Development Model Around the BKKD Site Area

Empowerment of local communities in the BKKD Site area is influenced by the type of environmental communication model applied. Their role can be used by environmental activists as an access/entrance to convey environmental communication messages that educate environmental awareness in addition to the potential for economic improvement. Individuals who join when they know each other, then the interaction is more fluid using formal and informal communication, which aims to make it easier for the network to be expanded (Awza & Yazid, 2016; Bakti, 2017). The role of other stakeholders (especially government agencies) is only to facilitate, ensure that they do not violate the law. This model does stipulate that stakeholders other than the community act passively until they enter a more serious stage related to funding, for example. Ideally, the funds raised are a form of investment that will return with the agreed economic benefits if successful in advancing the site area. The work of making a blueprint for the progress of the BKKD Site area is not an easy job for people who are not used to doing it. This is where archaeologists/cultural institutions help until they understand the measurable technical steps they can take. One concrete example: by regularly cleaning the site location. From observations, the community is independent in cleaning the environment regularly, even making a signboard for the BKKD Site. Based on observations, young people in the community around the BKKD location have great potential with their creativity. In discussions with them, they want to be involved in the management of the site area. This is certainly a good idea, but until 2020 it has not been realized, due to obstacles including the COVID-19 pandemic. Ideally, even though it has not received firm support from the local government, it is still carried out using various
media, messages about the importance of preserving the environment in the BKKD Site area can be conveyed verbally and non-verbally to other stakeholders (the community). These messages become a stimulus from the communicator, which of course is expected to get a response from the communicant (not all). Stimulus – responses that occur repeatedly will produce a kind of blueprint for measurable technical steps to advance the BKKD Site area.

6 Conclusion & Recommendations

By raising the issue of community strengthening with green destination tourism around the BKKD Site area, various stakeholders can be involved in the hope of large-scale cooperation to save the environment in the BKKD Site area as well as develop it as a tourist attraction. Environmental communication models designed based on local communities, especially young people, are now helping to more seriously identify the importance of significant potential resources to be communicated appropriately among stakeholders for the progress of the BKKD Site area. Significant in this case because it is proven that the potential factor for environmental damage in the BKKD Site area which is predicted to occur in the future can be prevented, with measurable concrete steps to make a green tourism business with a pattern as well as to encourage sustainable socio-economic and environmental preservation of local communities.

This paper has a contribution to the study of management archaeology because the object is an archaeological site. In addition, the study of environmental communication through efforts to create various models of environmentally friendly area management and for the development of tourism based on local community empowerment.

7 References


RI Law No. 5 of 2017 concerning the Advancement of Culture.

RI Law No. 11 of 2010 concerning Cultural Conservation.


