Independent Community Building Model through Environmental-based Tourism Management in “Masdarling” Program

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Abstract

Village tourism program is one of programs that can boost positive contributions to community development. This study aimed to design an independent community building model through environmental-based tourism management. Using primary and secondary data, the researchers used qualitative descriptive analysis to obtain a model of independent community building through environmental-based tourism management by forming a group named environmental awareness community group or Masdarling. In this way, regional potential can be used maximally, while masdarling tourism development was done using Community Based Tourism (CBT). A participative community empowerment became the main instrument to increase environmental living standard and preservation. Based on the mapping of problem patterns, the crucial programs to develop covered tourism awareness community; joint business group and integrated waste management efforts. It was expected that the development of tourism village through several kinds of village groups could explore various and sustainable tourism concepts. As a result, this development could fulfill the criteria of access, attraction, amenities. Upon this achievement, new tourism spots in Bontang City and the increase in community income can be obtained. Also, village economy and environment quality were resulted through the indirect effects of this development.

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INTRODUCTION

Tourism is the whole series of temporary activities done by human by travelling from their home to other places with no specific purpose, such as earning some money (Gunn, 2002; Zakaria, 2014). It is an economic driving sector that needs more attention to better develop (Zakaria, 2014). In Indonesia, tourism even becomes one of its economic pillars and not only attract domestic tourists, but also other people coming from all over the world.

In terms of economy, there are at least eight benefits that a country will obtain from development of tourism. First, increasing business opportunity. Second, increasing job opportunity. Third, increasing tax revenue. Fourth, increasing national income. Fifth, accelerating income distribution process. Sixth, increasing the added value of cultural products. Seventh, expanding domestic product market. Eighth, providing multiplier effects on economy as a result of transaction done by both tourists and investors. (Yoeti, 2008).

Progress in tourism is in line with the rapid development of infrastructure in the designated area. Unfortunately, the tourism sector has not been able to significantly give a welfare to the surrounding community due to the domination of investors in its management. Therefore, Community Based Tourism (CBT) concepts are expected to give an answer that tourism can be managed by community around the tourism objects.

According to Hausler in Purnamasari (2011), CBT is an approach to develop tourism by having direct and indirect involvement of local community. There are three activities that support CBT, namely cultural travel, ecotourism, and adventure travel. The involvement of community in the decision on community income, job opportunity, and environmental conservation will trigger community identity and independence in the designated tourism area. Through CBT concepts, the incomes of people’s economy that is carried out by community can be enjoyed by the community themselves. (Nugroho, 2015). As a result, community welfare can be increased, while the poverty can be alleviated. One form of CBT is the development of tourism village. Tourism village is a rural area that has several specific characteristics to be a tourism object. The area which are designed to be this tourism objects at least have a relatively original tradition and culture (Yoeti, 1996; Zakaria, 2014). Tourism village development is an effort to reduce poverty and utilize local potential of a particular area through the fund collected from tourists. Regulation of the Minister of Tourism of the Republic of Indonesia Number 29 of 2015 states that the development of tourism village will encourage the tourism economic activities in the village and further prevent from urbanization. It will also conserve environment and reduce global warming. Therefore, the development of tourism village will serve economic benefits for regional and community economy from new sources of income. Besides, in terms of environment, this development will prevent from any harmful activities since it prioritizes the aspect of environmental beauty to promote the tourism objects.

Given the above descriptions, tourism village development takes a role as a community empowerment program that will provide beneficial effects on the community. This effort suits to Indonesia as a country which has various potential both natural and cultural. When the potential is managed correctly, Indonesia tourism global competitiveness can be increased. (Sufika, 2015). However, this potential has not been maximally optimized by the community. One of which is in Bontang City. As a city in coastal area, Bontang has abundant potential to develop. Apart from its maritime resources, it has contoured areas such as mountains or hills which offer beautiful views. As a part of Bontang City, Gunung Telihan Village owns this beauty, specifically in neighborhood (RT) 26. Community in this village makes use of this beautiful views as a tourism object. They formed a group called Environmental Awareness Community “Masyarakat Sadar Lingkungan” or abbreviated as Masdarling. Through this group, the community maximizes regional potential
using Community Based Tourism approach (CBT).

Given intensive efforts to run CBT, support from various parties, funding, monitoring and evaluation of activities are required so that Masdarling activities are in line with the desired goals. For this reason, Badak LNG through its CSR program participates in supporting and advancing community development as a form of service to the country. Badak LNG, which has a commitment to participate in realizing Sustainable Development Goals (SDGs) sees the potential of Masdarling in the community empowerment program in Bontang City, East Kalimantan and tries to capture this potential through its CSR program.

Furthermore, the aim of this study was to design a model of independent community building through the environmental-based tourism management through Masdarling program to realize community that is economically and socially independent.

RESEARCH METHODS

This study was a qualitative research that used primary and secondary data. The secondary data were collected from masdarling performance report, Badak LNG community development (comdev) report, and BPS of Bontang City. Meanwhile, the primary data were from the collection of observation and Focus Group Discussion (FGD) data.

Observation technique was used by the researchers by directly observing how a local hero as an empowerment agent shared understanding and insight about environment so that the community can utilize it to develop ecotourism that is beneficial for environment and community economy.

FGD is a process of collecting information about a particular and specific problem through group discussion (Irwanto, 1998). This method was carried out with the aim of increasing community participation in developing program so that the program would be in line with the direction and common goals. The results of FGD was formulated into a work plan and became feedback for the preparation of a strategic plan document.

To analyze the data, the researchers used qualitative descriptive approach. This approach is aimed at describing human behavior, field events, and particular events thoroughly and in depth. Additionally, descriptive study is a study that is attempted to describe a variable related to problems investigated without questioning relationships between variables.

The researchers used interactive model analysis so that the findings of this study valid. Interactive model is a sustainable, repetitive and continuous effort (Miles and Huberman, 2014). Steps in interactive model analysis are data reduction, data presentation, and conclusion drawing. The results of this model will be an overview of the success of an interconnected process to analyze the data. For more, the researchers also used credibility test to examine the validity of the findings, namely triangulation technique.

RESULTS AND DISCUSSION

Masdarling village is a village that is administratively registered to RT 26, Gunung Telihan Village. It occupies an area of 33 hectares. Masdarling has been inhibited by original Javanese tribe so that the community tends to be united and has high mutual cooperation spirit.

Other than united people, Masdarling Village experienced a bit complex problems. Most of its villagers earned below minimum wage since they worked as daily workers (laborers, maid, and field hand) whose income is unstable. As a result, the majority of adolescents in Masdarling Village could only finish their education up to high school level. They chose to work and did not continue their studies at the tertiary level because their parents' daily labor income was not enough to pay for college.

Masdarling Village also faced pretty serious environmental problems, namely the absence of integrated waste management. The villagers preferred to dispose their household waste by burning rubbish in the yard of their
houses. This has a negative impact on the environment and the health of residents. In addition to this, the village has natural potential to exploit, namely abundant agricultural and garden product to support tourism activities in Masdarling Village. Even though the education level of the villagers was found low, most of them were expert at agriculture which in turn can be utilized to be a tourism attraction. For example, to give education on organic agriculture, compost making, and agricultural product-based snack processing.

Based on the problems and potential, a group of people initiated to deal with the environmental problems regarding community low awareness to conserve and manage environment. It became the underlying reason for Badak LNG to facilitate the villagers of Masdarling Village through Community Development program. This program was aimed at empowering community through tourism management by focusing on environmental-based tourism development. Badak LNG discovered the potential of Masdarling Village that seemed beneficial to be developed into a tourism village, given the easy access to this village from Bontang City. Thus, a tourism object was developed as a solution to answer the potential and problems in RT 26 Gunung Telihan Village. To do so, an Environmental Awareness Community (Masdarling) was formed.

Masdarling tourism awareness community was formed on September 19, 2018. It is a community organization that is social, open, and economic. This organization consists of (a group of adult and adolescents) and or social institutions that prepared to manage and care any tourism management efforts together with community in a fair, beneficial, and sustainable way. Masdarling tourism awareness community is based on the principles of justice, democracy, openness, togetherness, equality, mutual cooperation, equal rights and obligations, consensus agreement in accordance with human values. This group aims to increase the empowerment of the people of Masdarling Village and the parties in order to realize the tourism management of Masdarling Village to improve the quality of the environment and a just and sustainable economy.

Masdarling development was based on community-based tourism development in which the management is fully managed by the community through tourism awareness community. CBT is tourism development activities which are fully done by community. The ideas and management are done actively and the benefits can be directly enjoyed by local community (Dewi, 2013). The tourism concept developed by CBT is in form of tourism objects development through local community empowerment in which the community are involved in planning, management, and decision making on the tourism development. The community actively participate in planning, implementation, monitoring, and evaluation. Monitoring and evaluation activities are always carried out periodically by Badak LNG Comdev team, covering the steps of planning, programs implementation, programs monitoring and evaluation, until the report of programs.

Masdarling Village program was initiated at the end of 2018. In the beginning, there were programs socialization and coordination activities done by Badak LNG as the initiator, Gunung Telihan Village as regulator, and RT 26 villagers as subjects who carry out the program. In the implementation, there were 50 Masdarling Pokdarwis members who were responsible for the management of kampung asri, kampung sehat, kampung main, kampung oleh-oleh, kampung jajan, and kampung narsis. In detail, the road map of Masdarling program is presented in the following. Masdarling Village programs were run using bottom up approach by setting up the community as the subject of development. This way made the community participation as the main component in fostering independence and empowerment process (Adiyoso, 2009). If the community is reluctant to participate in the development of tourism village, failure may be predicted to happen soon (Nasikun, 1997). On the contrary, if the community are empowered. Regarding masdarling activity, the targeted groups consisted of villagers who became father, mother and adolescents.
According to Widjaja (2011), the core of empowerment is an effort to awaken the whole abilities of a villager to pursue goals. It can be achieved by encouraging motivation, initiation, and creativity to advance economy and bring welfare to a village. One of the realization of Masdarling empowerment was through tourism activities offered. The activities supported community empowerment and integrated environmental management so that the programs are sustainable and advantageous for community economy.

As an initial step in performing community-based community empowerment, Masdarling designed short-term, long-term programs, and exit programs. It was expected that these programs serve basic principles for Masdarling to achieve the desired goals. The followings are short-term, long-term, and exit programs of Masdarling. The designed programs were followed up by Masdarling and resulted a village which features various excellence. Masdarling has succeeded to create six villages which offer many tourism packages along with their uniqueness. The six villages are explained as follows.

First, Kampung Asri. Kampung Asri is one of tourist attraction located in Masdarling Village. Here, there are several tourism activities to do, such as fruit picking tours, harvesting organic vegetables and germinating seeds. Kampung Asri also offers agricultural education tourism that involves Pokdarwis members to transfer their knowledge about how to perform organic farming to tourists. Besides, the tourists can also directly practice how to process organic waste into compost. These whole activities are accessible for tourists during weekdays and weekend by booking in advance. The offered price is also varied, starting from Rp 5,000/person for compost education package, organic vegetables harvest and seed germination package of Rp 5,000 – Rp 40,000/person (depending on the size of polybag), and fruit picking tourism package is offered for Rp 20,000 – Rp 40,000/kg (depending on the kinds of fruit picked).
Second, Kampung Sehat. This object also belongs to a series of tourist attraction offered in Masdarling Village. Here, tourists can access various tourism activities, such as bicycle tracks and therapeutic walk. Those who cycle will gain personal impression during the track. It is because the track passed by the tourists is full of the views of garden and beautiful cliffs. If they cannot afford for long distance cycling, Masdarling Village offers three kinds of bicycle track with various distance and difficulties. The tracks cover junior track with 818 meters distance (it has sloped land and not so heavy terrain for beginners), senior track with 318 meters distance (uphill track conditions in hilly areas), and super pro with 2,2 km distance (steep incline track conditions with extreme contours and the farthest distance). If visitors want to cycle without bringing bicycles from home, Masdarling Village also provides bicycles that can be rented by visitors. The rental price of 1 bicycle is Rp 10,000 / hour. In Kampung Sehat, there are also another alternative for visitors who don't want to cycle, namely therapeutic walk. The walk that was built along 100 meters can be utilized by the community for health therapy and at the same time provide education to visitors regarding the nerve center of the body.

Third, Kampung Main. This object was created to preserve children traditional games that are currently displaced by gadgets and to minimize school children in Masdarling Village to play games using electronic media. There are some traditional games tourists can play in Kampung Main, namely dregang (similar to stilts), bakiak (similar to clogs), jump rope, gobak sodor, gundu, and so on. These games are free of charge for tourists. Fourth, Kampung Oleh-Oleh. Tourists who visit Masdarling Village can enjoy many souvenir products made from farmers’ plantation products. The idea of creating this object came from the abundant plantation products that had not been maximally processed by the community. Some housewives initiated made products using the harvested plantation products from farmers. As a results, some snacks are made and sold to tourists, such as onde-onde ketawa, pare chips, tahu pong, mustard sticks, cassava leaf chips, purple yam sticks, etc. These souvenirs are packaged attractively using environmentally friendly packaging with affordable product selling prices ranging from Rp 10,000 - Rp 12,500. Fifth, Kampung Jajan. This object offers various typical culinary of Indonesia for tourists. There are some favourite menus tourists can taste, such as nasi bakar Masdarling,

**Figure 2: Masdarling Programs from Short-Term until Exit Program**

*Source: Masdarling Strategic Plan 2018-2022*
soto, gado-gado, and Masdarling fruit soup with affordable prices. Similar to Kampung Oleh-Oleh, the menus in this object are also made of Masdarling farmers’ plantation products. While eating, tourists can also enjoy beautiful scenery around Masdarling Village. Sixth, Kampung Narsis. As a proof tourists have visited Masdarling Village, they can take some photos at Kampung Narsis, Here, there built a 4-meters permanent photo spot with Masdarling Village letters in it. Besides, tourists can also find another photo spot made from the community cooperation in form of a replica of robot made of used bottles as high as 2.5 meters. The making of this replica was a form of environmental care by RT 26 community as the realization of environmental conservation.

To check the implementation of programs, there is a need for monitoring and evaluation. Shapiro states that monitoring is done as systematic information collection and analysis on the progress of a program. It is done for the efficiency and effectiveness of both program and organization. For sure, this activity needs to be conducted continuously and periodically to track the implementation and direction of programs based on what was planned (Nabris, 2002). The following is a chart of the evaluation of Masdarling program benefits.

![Figure 3. The Diagram of Masdarling Program Benefits Evaluation](image)

Besides monitoring, evaluation is also needed. Evaluation is done as a process of collecting information of an object, examining an object, and comparing it with criteria, standards, and indicators (Hadi, 2011).

The study of benefit evaluation and monitoring was also carried out in these Masdarling programs. There, these activities covered preparation and analysis of benchmark (baseline) of targeted data (location, community, and related stakeholders), benefit monitoring during the programs implementation, and effects after the programs ended for several years (benefit evaluation). The study of program input would gain indicators of physical and financial resources that the program includes into its utilization. Meanwhile, the output study would provide information about goods and services resulted by the program. Both studies were resulted through middle indicators conducted during the program. The final indicators, especially after the program had finished/utilized for current time, might be used to measure and understand the outcomes and impacts of the program. The expected indicators of Masdarling program are presented on the following table.

Tourism awareness community of Masdarling compiled measured program indicators as the reference to measure the target achievement applied in order to monitor and evaluate to the extent to which Masdarling programs successfully reached the target applied in line with strategic plans made. The indicators in document of strategic plans included Outreach Program (input, output, outcome & impact). Middle indicators consist of input and output.
indicator. Input indicators measure the amount of resource such as budget, human resources, equipment, materials, and other inputs used to conduct the activities. By reviewing the distribution of resources, the allocation of resources in relation to strategic plans can be determined.

**Table 1. Masdarling Program Indicators**

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<thead>
<tr>
<th>Middle Indicators</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coordination with stakeholders</td>
<td>The existence of tourism objects groups' capacities</td>
</tr>
<tr>
<td></td>
<td>Plantation for reforestation</td>
<td>Clean and healthy environment</td>
</tr>
<tr>
<td></td>
<td>Waste processing as community participation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supporting facilities construction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Training for capacity reinforcement of tourism management</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Final Indicators</th>
<th>Outcomes</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The existence of business and tourism opportunities</td>
<td>Group control on tourism management</td>
</tr>
<tr>
<td></td>
<td>The existence of media/ organization for community to deliver their opinion</td>
<td>The harmonious and beautiful environment of Gunung Telihan community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing economy utilization</td>
</tr>
</tbody>
</table>

Source: Badak LNG CSR Company Report

Meanwhile, the output indicators cover area (villages, subdistricts, and regencies) of program targets, members (person) of business community that gain benefits from programs including several new business communities that have been formed, and many activities performed based on the field (education, social economy, health, Community Security and Order and environment).

Furthermore, the final indicators cover outcome and impact indicators. Study of outcomes results in information about access, utilization, and users satisfactory, while study of impact provides information about program effects on users' empowerment and welfare in general (Agusta, 2004). Outcome indicators consist increasing the income of partner groups, having sense of entrepreneurship and ability to analyze business opportunities, community awareness of the important of education, health, and environment quality, transferring knowledge and skills such as market information, product standards (quantity and quality), network, financial management, and good business and institutional management. Then, impact indicators provide a harmonious relationship between companies, community, and government, environment either internal or external that is healthy and well-managed, the improvement of community lives quality both social and economic, so community independency can be realized in political, economic, and cultural fields, good company images in public and government, and operational activities of company ran safely.

Eventually, those indicators lead to the improvement of welfare indicators. These indicators present the whole empowerment results from natural resources development to community who are directly involved. In each tourism activity, unconsciously there is great potential of a village, namely human resources. If they who work in informal sector are led to develop superior products of the village, this circumstance would be great human resources asset (Sumodiningrat, 2016). According to Rocharungsat (2008) in Prabawati (2013, criteria of CBT success are community involvement,
equal distribution of utilization to all community, good tourism management, strong partnership both inside and outside, attraction unique, and preserved environment conservation.

Based on figure 4, the sustainable development programs were carried out with various activities including nature conservation, welfare improvement, and community social activities. Apparently, the programs were able to encourage participation of community, especially community groups who were the actors of activities.

### Table 2. Indicators of Masdarling Programs Success

<table>
<thead>
<tr>
<th>Indicators of Masdarling Programs Success</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructing program supporting facilities</td>
<td>Output</td>
</tr>
<tr>
<td>Compost training</td>
<td>66 families in Masdarling Village were able to manage and develop the business in environmental-based tourism</td>
</tr>
<tr>
<td>Entrepreneurship training</td>
<td>Income increase for Masdarling tourism management group of Rp 5.000,000</td>
</tr>
<tr>
<td>Community-based tourism development training</td>
<td>Processing household waste into compost.</td>
</tr>
<tr>
<td>Masdarling Village became a pioneer of pilot that aware of environment</td>
<td></td>
</tr>
<tr>
<td>Masdarling becomes the first environment tourism village in Bontang</td>
<td></td>
</tr>
<tr>
<td>Increasing the income of community members of Masdarling</td>
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</tr>
</tbody>
</table>

Source: Badak LNG CSR Company Report

The results of the activities confirmed the understanding that communal empowerment participation-based still became an effective way to improve living standards of community and environment. The Masdarling impact included impact on environment, economy, social, and welfare is elaborated on the next description.

Nature impact measured the positive impact of Masdarling programs on environment. Masdarling tourism village consists of 6 tourism villages that provide wonderful tourism spots. It led the community to be more aware to sustainably keep and manage the environment. The form of their awareness could be seen form their behavior by not using fertilizer and chemical pesticide, not burning the waste in their houses, and starting to filtering the organic and non-organic waste. Additionally, through the tourism activities, community have been accustomed to categorically process and utilize the waste into compost with economic value. Masdarling community began to innovate in developing waste-based handicraft products such as sculptures made from a mixture of rice waste and wood dust waste and handicraft made from used bottles. The lifestyle of Gunung Teihan community RT 26 was getting better and more concerned to the environment. Tourism village development based on preservation of beautiful and comfortable village could indirectly maintain the quality of environment.

In the economic impact, the development of tourism would later become added value for the economy activities of this area. The developed attraction definitely absorbed labors through many kind of business such as restaurants, souvenirs store, etc. It surely improved lives of the community economically by utilizing the available local potential. This aspect measured the economic benefits from Masdarling programs. One of benefits felt by community could be seen from their income increase by Rp 250,000 – 500,000/person gained from the sale of tour package. Additionally, the result of compost selling from the utilization of household waste was Rp 6,950,000.
In terms of social impact, this program formed Masdarling for the community. In the organizational structure of Pokdarwis, there has been 50 members coming from all community elements, such as housewives who manage MSMEs and typical culinary of Masdarling, adolescents who take care of handicrafts made from waste utilization, and a group of men who manage greening the environment. This group of people are under the management of Masdarling Pokdarwis that collaborate each other. Another social impact gained from this development was the willingness of group members to promote the tourism to outside parties and resulted 1,115 visitors to Masdarling Village.

There is also welfare impact that indicates the extent to which the programs provide welfare to the group members. In running Masdarling Village programs, the adolescents comprehended knowledge and skills in tourism and business management. It was showed by confidence of the group members in practicing their skills and confidence to promote Masdarling Village to attract tourists. Apart from this benefit, there found a new system exists among the community that can change their habits from the inability to process waste management to the ability to process waste management into compost. The selling of compost finally can be an additional income for the group members.

According to the findings (quantitative), the success of Masdarling Village programs measured using Community Satisfaction Index (CSI) showed that the programs of Masdarling Village carried out by Badak LNG gained very good results with A grade (3.3). This result was obtained from an independent and credible party in CSR (community empowerment) field. Alternatively, when related to SDGs points, Masdarling Village programs have been able to accomplish several points of SDGs, namely point 8 (Decent Work and Economic Growth) in sub-point 8.9.1 concerning number of tourists that impact economic growth. Upon the calculation of the tourists, Badak LNG and Masdarling Village have contributed 0.003775% (or 755 people) in supporting the national goals, namely increasing the number of foreign tourists to 20 million in 2019 (2014: 9 million). This is how it was calculated: (755 / 20,000,000) x 100% = 0.003775%. From this results, it showed that Masdarling Village tourism has contributed in increasing the number of foreign tourists who visit Indonesia.
CONCLUSION

Participatory community empowerment has been being one of the major instrument to increase the living standards and environmental conservation. Masdarling group is a proof of participatory-based development. Based on the mapping of problems patterns, the crucial programs to develop are training for tourism awareness community, joint business group, and integrated waste management. Through the development of tourism village by involving various village groups, there obtains a various and sustainable tourism concept. As a result, the development can fulfill the criteria of Access, Attraction, and Amenities. Other impacts are the development of a new tourism spot in Bontang City, and the increase in the income of community group involved. There are also indirect impacts are the movement of the village economy and improving the quality of the environment.

REFERENCES