

Eco-Sustainable Development in Puncak Bintang Jawa Barat Indonesia

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Abstract--- *Eco-sustainable development is a conscious and planned effort that integrates the environment, including the resources, into the development process to ensure the welfare and the quality of present and past life generations. Converting a production forest into excursion is a form of eco-sustainable development. This study seeks to provide an overview of the role of communication in eco-sustainable development in North Bandung, specifically Puncak Bintang, in the success of the forest conversion. This research used qualitative method with case study approach. Considering the approach, the researchers collected data from many sources related to the topic under study. They observed a number of activities of Perum Perhutani and the community at several excursion forests and interviewed the head of Perum Perhutani KPH Bandung Utara, forest villagers and visitors to collect primary data. Secondary data were obtained from literature review on relevant documents. The results showed that Community-Based Forest Management (CBFM) proclaimed by the State-Owned Forestry Enterprise (Perhutani) is an implementation of eco-sustainable development. The communication between the company and the forest villagers, that was once top-down, linear and unidirectional, thanks to CBFM, is now transformed into horizontal, interactive, and dialogical. This led to a solid foundation for the success of forest conversion in Puncak Bintang that it eventually improved the welfare of the villagers as well as preserved the forest for the next generations.*

Keywords--- *Development Communication, Sustainable Development, Eco-Sustainable Development, Forest Conversion, Puncak Bintang.*

I. INTRODUCTION

Puncak Bintang is a forest in Kawasan Bandung Utara (KBU) which has been converted into an excursion forest, a form of conservation. A conservation has typical characteristics to preserve the diversity of plants, animals, and their ecosystems. It consists of nature reserve, wildlife reserve, bird park and nature conservation reserve, including national park and excursion forest[1]. Puncak Bintang is a pilot project of the State-Owned Forestry Enterprise (Perhutani) of KPH Bandung Utara to make a sustainable development in North Bandung.

KBU has been established as a protected and conservation area since 1982 through Governor Decree No. 181. Therefore, it should have been maintained by all stakeholders, particularly people around the area. But, in fact, there were forest destructions during 1998-2010, involving massive illegal logging by the native forest villagers. These has aggravated the condition of the KBU. According to Asep Aan Darsana, Deputy Administrator for Perhutani KPH Bandung Utara, the forest area of the KBU has now only 10,230 hectares or only about 30% of the original area functioning as a catchment area for the basin of Bandung [2].

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Considering the alarming condition of the forests there and the benefits of their existence, the problems, which were caused by improper handling, become the concerns of all stakeholders—not only the government and related institutions, but also all walks of life. Perhutani, in their functions, in addition to the national economic system, plays a huge role in supporting the environmental sustainability and socio-cultural system, particularly in empowering the forest villagers, and overcoming the problems. Perhutani is in charge of helping the community so that they can benefit from the existence of the forests. The community should be encouraged to feel that they own the forests near their homes, so that they can be involved in forest management and to save them from illegal logging.

Based on Government Regulation No. 72 of 2010, the purpose and objective of Perhutani is to conduct business aimed at public benefit in the form of providing goods and/or services related to forest management and quality forest products at affordable prices based on the principles of sustainable forest management and good corporate governance[3].

In order to manage these forests and their products, Perhutani seeks to involve the public to develop the forests into a tourist spot while maintaining the environmental sustainability. To support this, Perhutani built a system known as Community-Based Forest Management (CBFM) through Decree Number 136/KPTS/DIR/2001[4]. This opens an opportunity for the forest villagers to be actively involved in forest management. Wismo Tri Kancono, Administrator of Perhutani KPH Bandung Utara, stated that to nurture the sense of ownership, the community should benefit from the forests. They should be introduced and encouraged to exploit the forests wisely, without destructing them and disrupting their functions. One of which is by converting several conservations into excursion forests. This allows Perhutani to increase the community income while upholding the main functions of the forests. This is an improvement that is in line with the principle of conservation, not only achieving economic aspect but also social, the main aspect in the development of excursion forest Puncak Bintang.

Eco-sustainable development combines development process with environmental potential. Development cannot be achieved if environmental capability continues to decline. Likewise, the environment cannot be protected and maintained if the development in an area is of low quality because it will not have enough funds and technology for maintaining itself. Development and conservation are two things that must go hand in hand. If a development does not consider environment and is not future-oriented, it must be avoided. It is that we humans as social and intelligent beings should not only think of our own welfare, but also that of our future generations.

Eco-sustainable development in Law No. 23 of 1997 UUPH is stated as a conscious and planned effort that integrates with the environment, including the resources, into development process to ensure the welfare and the quality of life of present and future generations. It requires solid integration and coordination in the exploitation of natural, human, and artificial resources in a period of time and certain space so that it will be effective and efficient. Therefore, every development decision must consider environmental aspects, in addition to poverty alleviation and consumption patterns, to create a development that will provide the best results for improving the quality of human life[5].

Thus, the facts above triggered the researchers to study the concept of eco-sustainable development in Puncak Bintang as the pilot project of forest conversion in North Bandung.

II. LITERATURE REVIEW

Several previous studies have been conducted by the author regarding the development and management of several ecotourism in West Java Province. The research article about “The Perception Of Local People On Forest Conversion In Pangandaran Regency, West Java, Indonesia, showed that local people who lived in Dusun Gunung Tiga Desa Cinta Ratu Pangandaran District perceived the forest conversion positively. The positive perception on Jojogan –as a ecotourism- also shows that the tourism management of Jojogan has referred to management principles that emphasize the values of natural environment sustainability, community, and social, so it enables tourists to enjoy tourism activities and benefits local people [6].

The other previous studies is about “The Perception of Local People on Forest Conversion in “Geger Bintang Matahari” in Mount Putri, West Java, Indonesia” showed that the forest villagers around Mount Putri perceive positively the presence of Geger Bintang Matahari as an excursion forest that is able to attract visitors while maintaining the sustainability of the forest. This positive result is based on the attention, expectation, and motivation that rise within the villagers thanks to the presence of Geger Bintang Matahari[7].

According to Law number 41 of 1999 regarding forestry, forest is an ecosystem unit in term of a plot of land containing bio-natural resources dominated by vegetation in integrated unity of environment thereof [8]. Forest is a community association of plants and animals dominated by vegetation in certain area so as to form a micro-climate and certain ecological conditions. Suparmoko also states that the functions of the forest are as follows: (1) to manage water, prevent and resolve flood and erosion, and maintain soil fertility; (2) to provide forest products for community and industry so as to support economic development; (3) to maintain climate and provide good influence; (4) to provide natural beauty in form of nature reserves, wildlife reserves, hunting park, and excursion park as well as a lab for science, education, and tourism; (4) one element of national development strategies [1].

III. RESEARCH METHOD

This research used qualitative method to reveal the communication process in eco-sustainable development. It explored a social problem and was carried out in a natural setting. Cresswell states that qualitative research is a process of exploring social and human problems[9]. In this study, the researchers tried to build a complex and comprehensive picture, analyze words, report the details of the respondents' views and do all of these in a natural setting.

This study used case study approach to provide a comprehensive description of the object under study. This is in accordance with what Mulyana states that case study is a comprehensive description of various aspects of an individual, a group, an organization (community), a program or a social situation[10]. By thoroughly learning an individual, a group or an event, the researchers want to provide a complete and in-depth view of the subject under study.

Ragin said that case study approach considers a comprehensive entity case and not a collection of parts or scores of variables[10]. So, it is holistic and multisource. According to Yin, a case study research can be conducted based on six different evidences: documentation, archive, interview, direct observation, participant observation, and

physical device[11]. In this research, the researchers collected data from various sources related to the topic. Primary data of this study were obtained from direct observation on the activities of Perhutani and the community in Puncak Bintang and in-depth interviews with Administrator of Perhutani KPH Bandung Utara Wismo Tri Kancono, some members of Forest Village Community (LMDH) and the visitors. In addition, the authors conducted a literature study on relevant documents and archives for collecting secondary data.

Data was analyzed by interactive model of Matthew B. Miles & Michael A. Huberman[12]. The model explained that data is analyzed in three stages: (1) data reduction, i.e. focusing on simplification, abstraction, raw data transformation; (2) data display, i.e. describing a collection of processed information; (3) conclusion drawing and verification. The researchers sought the meaning of every symptom they obtained in the field, recorded the pattern of explanation and configuration that might exist, the flow of causality, and propositions. During the whole research, any conclusion would be continuously verified until valid and solid.

IV. RESULT AND DISCUSSION

Puncak Bintang as a Pilot Project of Forest Conversion in North Bandung

Originally, Puncak Bintang was only a pine plantation and local community farming area. Nearby, there is Waroeng Daweung, or so-called Moko, a cafe for nature lovers to enjoy the landscape of Bandung and its special cuisine. Moko is quite well-known among Bandung people because there they can get an amazing visual of their city from a height. In addition, visitors also often go to the plantation area in the north of Moko to take pictures. From here, Dadang Taryana, chairman of the Forest Village Community (LMDH) and owner of a farm, advised the administrator of Perhutani Bandung to make the plantation a tourist spot.

Finally, after a discussion and agreement between Taryana and Perhutani, a tourism attraction called Puncak Bintang was established on July 25, 2014 with a rate of Rp5,000 (US\$0.3) for entry tickets. During the trial period, Perhutani gave a condition to Taryana: 5,000 tickets must be sold within six months. However, just in four months, 20,000 tickets had been sold—exceeded the expectation. This great result was due to a great public interest in Puncak Bintang. Hence, the legal support of tourism attraction was then strengthened and the area is continuously developed.

This 4-year-old natural tourist spot is very crowded, especially on the weekends. With only less than a dollar, visitors can enjoy the beauty of the pine forest and the city landscape of Bandung, as if it were under their feet. Puncak Bintang (lit.: Star Summit) is not only a name. There is a big star in the pine forest. It was deliberately made by Perhutani to symbolize the place. Its access is still a difficult one—dirt rocky road which will be slippery after the rain. But this does not dampen the enthusiasm of the visitors to get to Puncak Bintang. If they cannot reach it by their vehicles, they will park them near the local community settlement and then walk. The majority of the visitors is young people. They usually hunt amazing photographs of beautiful natural sceneries as well as the moment of sunrise and sunset. Hence, they intentionally come before sunrise and sunset. In fact, many of them use this place to take pre-wedding photos.

In addition to a place to enjoy the beauty of nature and the landscape of Bandung from a height of 1,442 masl, Puncak Bintang also provides camping areas that receive a very good response from the community. Many students have enjoyed the beauty of Puncak Bintang by camping. Do not worry if you want to camp there when you don't have camping gears. The organizer provides them at affordable rates.

Recently Puncak Bintang has been increasingly crowded with visitors since its establishment, said Taryana. Therefore, Perhutani has planned a mature development to make it an elite tour which includes sports areas, jogging tracks and children playgrounds.

Participatory Development Communication as the beginning of eco-sustainable development at Puncak Bintang

Participatory Development Communication (PDC), which has been popular since the mid of the 1990's, is a form of social communication [13]. This concept was then followed by 'Participatory Communication or Participatory Communication for Social Change'[14]. The later concept is in line with the shifting of development communication paradigm—from diffusion to empowerment. On the other hand, it can be an alternative answer to the lack of contribution of communication to development in developing countries during the first decade, which was launched by the United Nations that greatly hoped that mass communication could be an agent of change as promoted by Schramm[15].

PDC is an activity which is planned and based on participatory process on the one hand and the use of face-to-face communication and communication media on the other, where it aims to facilitate dialogue among different stakeholders on the formulation of problems or targets for joint development to find solutions for mutual interests[13].

Here, participatory process refers to the participation of the community, in this case LMDH, in drafting, designing, and deciding on ways and efforts to develop excursion forests by sticking to conservation-based forestry. In PDC, the meaning of communication in general has changed slightly due to a shift in its role, from informing the community and persuading them to change to facilitating different stakeholders to resolve shared problems. This means top-down, linear and unidirectional approach has been transformed into horizontal, interactive and dialogical.

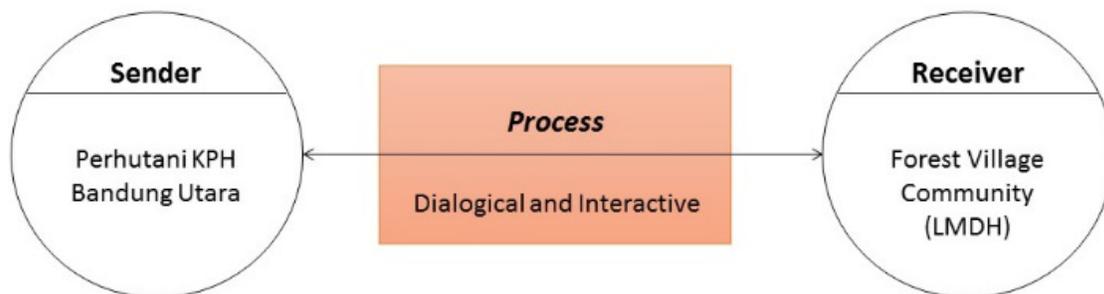


Figure 1: Participatory Development Communication Process between Perhutani KPH Bandung Utara and Forest Village Community (LMDH) in Puncak Bintang

Source : Research Result, 2018

The PDC is more oriented to receiver than sender. This process may take place when the entry point is not only the problems of the development itself, but also its objectives that are determined together at the level of community[16]. LMDH in North Bandung, as a partner of Perhutani, was invited to identify together various problems in the area that would be developed as an excursion forest. As a comparative study, Perhutani KPH Bandung Utara, in this case Administrator Wismo Tri Kancono along with some of his staff, took the members of LMDH to visit several tourism spots in South Bandung, such as Kawah Putih, Ranca Upas and Cimanggu Hot Spring. Reconsider the sentence they finally got a view on a good one. They realized that it was a great idea to make the forest where they lived a tourist attraction. Hence, they wanted to develop plans and concepts for it. This indicates that the LMDH is responsible for determining the purpose of developing the excursion forest, while Perhutani facilitating them.

PDC leads to the new role of communication, which emphasized more on helping the entire process by exchanging information interactively or transactionally. LMDH identifies the needs for information and communication and is positioned as an equal partner in developing messages and creating communication media to develop the excursion forest. Through participatory communication, the possibility of conflict between groups, communities and other stakeholders can be avoided.

According to Uphoff community participation in the development of a program is divided into four different types[17] (1) implementation, i.e. the community is actively mobilized to take part in the actualization of the program and they are given the responsibility to conduct certain tasks; (2) evaluation, i.e. after the completion of the program, the community is invited to evaluate the success or failure of the implemented program; (3) merit, i.e. the community can enjoy the results of the program; and (4) decision making, i.e. the community is invited to start and discuss the concept of a program. In the context of conservation and development of excursion forests in North Bandung, all of these were carried out by LMDH.

Implementation of Eco-Sustainable Development in Puncak Bintang

Various efforts by Perhutani KPH Bandung Utara have changed the behavior of the members of LMDH, the representatives of the forest villagers. Those, who previously did not know how to develop their forest, are now aware of the right forestry without eliminating the actual function of the forest. In addition, those, who initially did not have the desire to develop the forest, are now willing to start and make the most suitable concepts to achieve the best results. Hence, those, who initially were not able to realize their dream, are now able. All of these contribute to the success of Puncak Bintang, which then became the start of the realization of CBFM Program in North Bandung as an effort to preserve excursion forests.

This is a form of eco-sustainable development in North Bandung, particularly in Puncak Bintang. It is a conscious and planned effort that integrates the environment, including resources, into the development process to ensure the welfare and quality of life of present and future generations. The development of Puncak Bintang has been environmentally sound, and thereby it continues to uphold conservation. All the resources within will never be lost and continue to benefit the people who live nearby and beyond. The use of natural resources always considers

their carrying capacity, and is well managed by all stakeholders—Perum Perhutani, LMDH, village officials, and other communities in Puncak Bintang.

The development of Puncak Bintang began with the aim to improve the quality of life of the forest villagers. According to Taryana, aspect that drove LMDH to build the excursion forest was that the community's coffee plantation was less profitable. This led to the idea of building a forestry-based tourist attraction. Since the beginning, this forest excursion is expected to improve the quality of life and long-term oriented, so that it will be beneficial for all generations.

The development of Puncak Bintang is always integrated with conservation—its main principle. The most prominent form of its implementation is that food businesses are not allowed to open food stalls or sell food in the forest area. Otherwise, it will look slum and dirty and the possibility of environmental damage will be greater and adversely affect the wildlife, including monkeys, wild boars, birds and mongooses. Although many visitors don't like this condition, they eventually support this policy because they can still go in and out to buy food and drinks whenever they need them.

In addition, in the development of Puncak Bintang as an excursion forest, the organizer always tries to exploit unrenewable natural resources wisely to guarantee their availability and improve their quality. The construction of various facilities and infrastructure always considers natural ecology and the potential of the environment. Buildings in the forest do not sacrifice environmental elements, both for short- and long-term goals. It is seen from, among others, the construction of an eco-friendly children playground and meeting space. They use woods and other forest products, instead of concrete and metal that can damage the environment. Many games and events can be played and held in this outdoor facility, in line with the principle of eco-sustainable development.

In general, eco-sustainable development in Puncak Bintang is fully-oriented to achieve ecological, social and economic goals. This is possible if there is a good participatory development communication between all stakeholders, particularly Perhutani KPH Bandung Utara as the land owner and the LMDH as the field officers who are responsible for every aspect in the development of the excursion forest. The model is illustrated as follows:

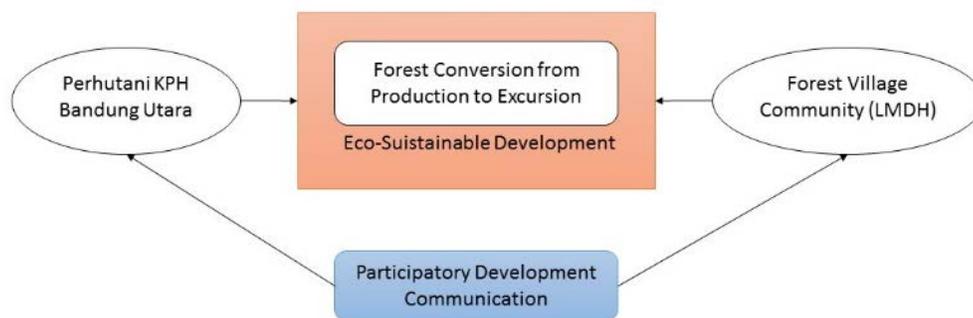


Figure 2: Implementation of Eco-Sustainable Development in Puncak Bintang

Source : Research Result, 2018

V. CONCLUSION

The development program of Puncak Bintang excursion forest is an implementation of eco-sustainable development. The development is carried out consciously and planned, by integrating the environment as an important resource to provide welfare and a better quality of life for the community both now and in the future. The communication between Perhutani and the forest villagers, that was once top-down, linear and unidirectional, is now transformed into horizontal, interactive, and dialogical. This leads to a solid foundation for the success of forest conversion in Puncak Bintang that it eventually improves the welfare of the villagers as well as preserves the forest for the next generations.

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