

Development of Ecotourism Mangrove Rambai Center in Anjir Muara District, Barito Kuala Regency, South Kalimantan Province Based on Local Potential

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Abstract

PT Pertamina Integrated Terminal Banjarmasin is one of the work units of PT Pertamina Patra Niaga which is a state-owned enterprise (BUMN) engaged in managing oil and gas (MIGAS). Like corporations, Pertamina IT Banjarmasin also has a Corporate Program Social Responsibility (CSR) as a form of responsibility and commitment in realizing a business based on sustainability, one of the CSR programs is the Rambai Center Mangrove Ecotourism Program. Method used in implementation until the preparation of scientific papers as outputs is carried out in several stages including elements of planning, implementation, until the results achieved. The results of the activities are shows of Pertamina's participation in increasing community participation through empowerment programs in maximizing local resources that have an impact on increasing economic levels and welfare through the development of MSMEs, contributing to conservation of mangrove ecosystems and proboscis monkeys, to contributing to education by maximizing ecotourism programs as places and facilities. learning and research.

Keywords

pertamina IT; biodiversity; conservation efforts



I. Introduction

PT Pertamina Integrated Terminal Banjarmasin is one of the work units of PT Pertamina Patra Niaga which is a state-owned enterprise (BUMN) engaged in managing oil and gas (MIGAS). Like a corporation, Pertamina IT Banjarmasin also has a responsibility and commitment in realizing a sustainability-based business that is not only for the benefit of the company, but also for environmental and community sustainability, especially for the area around its work area, as stated in the three main pillars of the sustainable business principle. development goals (SDGs) namely *People* (Welfare society), *Profit* (Growth economics), and *Planet* (Conservation environment) (Sutopo et al., 2014) . For this reason, like other large corporations, to realize this, Pertamina IT Banjarmasin also took the initiative to run the *Corporate Social Responsibility* (CSR) program.

Pertamina IT Banjarmasin's CSR in realizing the three pillars above , always implements a commitment to consistently strive to preserve the environment and social life of the community around the operational area, this is realized through commitment from every line including top management. Commitment to the environment and the quality of life of the community as an inseparable part of the company's activities, one of which is through efforts to improve the quality of public health with a community empowerment approach (Imbo et al., 2022) .

CSR Program of PT. Pertamina (Persero) Integrated Terminal Banjarmasin itself has actually carried out conservation and protection of biodiversity from 2015 to 2020, with a focus on the proboscis monkeys Conservation, Rambai Mangrove Restoration, and Wetland Ecosystem carried out at the Temporary Rehabilitation Center-Proboscis Monkey Rescue Center Banjarmasin and on the island of Curiak Kab. Barito Kuala in collaboration with the Friends of the Indonesian Proboscis Monkey Foundation. This activity has helped the conservation of \pm 40 rare tree species and \pm 16 protected animals such as proboscis monkeys, bondol eagles, white eagles, long-tailed monkeys, langurs, etc. in accordance with regulation P.106/MENLHK/SETJEN/KUM.1/12/2018 concerning Protected Types of Plants and Animals and the protection of proboscis monkeys which are included in the red list of the international conservation agency IUCN (International Union for Conservation of nature and Natural Resources) and is classified as Appendix I by CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) as endangered animals.

In an effort to assist the government in protecting and preserving proboscis monkeys in South Kalimantan, Pertamina through its CSR program sub-sector , namely Pertamina Hijau, together with the Indonesian Proboscis Monkeys Foundation and the South Kalimantan Province BKSDA, conduct conservation activities. This proboscis monkey conservation activity is fully supported by Pertamina through the Indonesian Proboscis Monkey Friends to achieve his dream of becoming a Tourism and Educational Conservation Area. With this program, it is hoped that the community will also actively care that humans and the environment must coexist. The activities carried out are not only in the form of proboscis monkey protection but have also led to the empowerment of local communities regarding the benefits of conservation areas for life which can then increase the independence and welfare of the local community.

Proboscis Monkey Conservation Program (*Nasalis larvatus*) and Rambai Mangrove Ecotourism (*Sonneratia caseolaris*) Center is one of the biodiversity programs that is integrated with the local community empowerment program in three village areas, namely Marabahan Baru Village, Anjir Serapat Muara Village, and Anjir Serapat Muara Village I which are included in the Anjir District, Barito Kuala Regency, South Kalimantan Province. The Proboscis Monkey Conservation Program was implemented first in 2015 until 2020, followed by the Comdev . program which was initiated in 2020 through the formation of fishing groups.

The background of this program is Proboscis monkey (*Nasalis larvatus*) an endemic primate of Borneo from the family Cercopithecidae , has been classified as critical by the IUCN. The population decline of 50-80% over the last 36-40 years is the impact of human activities such as land conversion and hunting. Proboscis monkeys are spread across three regions of the country, namely Brunei Darussalam, Indonesia (Kalimantan), and Malaysia (Iskandar et al., 2017) . There are 153 points in Kalimantan which are natural habitats for proboscis monkeys. Habitat destruction is the main cause of the decline in the number of proboscis monkeys in the wild, while 47% of the proboscis monkey habitat has disappeared, over the last 36-40 years there has been at least a 50-80% decline in the proboscis monkey population (Ashbury et al., 2015) . This indicates that proboscis monkeys cannot adapt to habitat destruction. Around the Conservation area of Curiak Island itself, it is a residential area and agricultural land for residents so that Proboscis monkeys are close to residents' activities.

II. Research Method

Rambai's activities are independent in the implementation to the preparation of scientific papers as outputs, it is carried out in several stages, namely the *First* is stages preparation that includes analysis condition field, *second* is Step planning which is step thinking and determine method implementation based on the data obtained from results analysis situation field, *third* is Step implementation which is implementation from activities that have been planned. After that, do it the second stage in the form of analysis results implementation or program implementation. In section result analysis, will conducted an in-depth study of the entire process until the results were carried out using both inductive and deductive steps (Miles & Huberman, 2012). Thus, it is hoped that the results of service activities can fulfill the important elements of scientific writing, namely objective, logical, and systematic (Idris HM Noor, 2010).

III. Result and Discussion

3.1 Implementation of the Rambai Center Mangrove Ecotourism Program

a. Condition of Anjir sub-district, Barito Kuala Regency

Access to ecotourism sites can now be reached by two routes, namely the land route and the water route through the Barito River. For the land route, the infrastructure condition is good because the support from the Barito Kuala Regency government in providing access to land transportation is quite good, the road conditions to Anjir Serapat Muara 1 Village, Anjir Serapat Muara Village, and Marabahan Baru Village, Anjir Muara District, Marabahan Baru Regency have been improved a lot. compared to conditions in 2020 and below. Now the road conditions are generally concrete roads and asphalt roads, including access to the 3 fostered.

For access via waterways, Pertamina seeks to open up opportunities by encouraging the integration of public facilities so that klotok which is usually used to ecotourism locations can run well. This is to encourage drivers The klotok at Kuin Pier next to Pertamina IT Banjarmasin knows the location of Ecotourism in the Anjir Muara District in the future, then there is support from Bank BNI 46 Banjarmasin Branch which helps the Pier in the Ecotourism Area in 2022. In addition, together with Pokdarwis in the 3 assisted villages, Pertamina in the future agreed to create a tourist route as a river crossing activity so that local transportation in the ecotourism area, especially community klotok, can be well absorbed.



Figure 1. Access via river route

Product identification and mapping. Villages, Anjir Serapat Muara 1 Village, Anjir Serapat Muara Village, and Marabahan Baru Village are villages that have good

potential for agricultural, plantation and fishery products. This is because the 3 locations are one of the rice barns in Barito Kuala Regency, the village that produces kweni fruit, the traditional roof of thatch leaves, and the potential for fisheries in the form of catches of seluang fish and giant prawns sourced from direct habitats, namely the waters of the Barito River. Communities in 3 villages have also been trained to use water hyacinth as anti-corrosion laundry soap whose raw materials are considered waste and useless and pollute the ecotourism area . In the future , these products are being developed to become product packages for ecotourism activities for tourists.



Figure 2. Manufacture of processed mangrove products

Habitat in the Rambai Mangrove Area , the potential for ecotourism comes from the rambai mangrove habitat (*sonneratia caseolaris*) is a source of income for the surrounding community who supply seeds for planting activities on Curiak Island which is the Curiak Island Conservation area as a habitat for Proboscis monkeys (*nasalis*). *larvatus*) is a protected animal endemic to Borneo. These two potentials complement each other so that a symbiotic mutualism arises and becomes an economic value for the surrounding community.



Figure 3. Mangrove Ecosystem Area

Digitizing Payments , in order to increase the community's capacity for future technological developments, Pertamina and the fostered group are trying to develop a digital payment system through several media such as Link Aja, Qris system, etc. From this activity, it is hoped that the issue of underdeveloped villages pinned to these 3 assisted villages can previously be answered as a developing village with the gradual start of digitizing the economic system in Pertamina's assisted villages.

Thus, briefly, the problems and potentials of the Anjir Muara sub-district community, Barito kuala district, can be summarized in the following table:

Table 1. Potency and Problem Anjir Muara sub-district

| No | Potency | Problem |
|------------------------------|---|---|
| 2015-2019 program challenges | | |
| 1 | The decline in the proboscis monkey population in Kalimantan is around 50-80% in the last 30 years (Ashbury et al., 2015) | The decline in the proboscis monkey population in Kalimantan is around 50-80% in the last 30 years (Ashbury et al., 2015) |
| 2 | Mangrove trees are a barrier to river abrasion | Karhutla 185.7 Ha South Kalimantan 2015 (BNPB) |
| 3 | Collaboration collaboration between SBI Society-University, Pertamina | 51 people become illegal loggers of mangroves around the island of Curiak (2016) and land conversion on the banks of the Barito river to dock barges that endanger the proboscis monkey ecosystem |
| 4 | The villages of Anjir Serapat Muara, Marabahan Baru and Anjir Serapat Muara I have the potential for landscapes, local wisdom, economy and in-situ conservation areas. | Category IDM Anjir Serapat Muara Village and Anjir Serapat Muara I are left behind |
| 2020-2022 program challenges | | |
| 5 | Marhaban Baru has the potential for landscape, economy and proboscis monkey conservation areas | The community's ability to manage village potential is not yet optimal |
| 6 | Determination of Tourism Villages to be a community attraction | There is no adequate water management system for daily needs |
| 7 | The Rambai Mangrove Ecosystem and the Kanoko River estuary are the source of livelihood for the community and the flora and fauna ecosystem | The community depends on the rice harvest which is only once a year & the low selling price of kweni fruit and seluang fish |
| 8 | <ul style="list-style-type: none"> - The Formation of 3 Conscious Groups - mangrove loggers - The formation of a group of fishermen who care about the environment - The formation of a nursery group rambai mangrove | 51 illegal loggers at the rambai mangroves need alternative jobs |
| 9 | Anjir Muara sub-district is a superior rice-producing area in South Kalimantan, Kweni fruit and the catch of seluang fish and giant prawns which reaches 300 kg/week | Lack of diversification of plantation, agricultural and fishery products |
| 10 | Have skills in selling village agricultural and fishery products | The limitations of alternative jobs for rural communities make people only work as farm laborers or manual laborers |

b. Rambai Center Mangrove Ecotourism Program

Ecotourism Program continues to develop innovative activities , although it is still in process, but there are several activities that have been carried out, namely as follows:

Proboscis Monkey Ecotour , Proboscis Monkey Ecotour is an activity whose purpose is more for Special Interest Tourism because in general tourists are students, academics , researchers but also the general public who want to visit but only the number of visitors is limited due to the capacity and principles of maintaining the proboscis monkey habitat on the island. Curiak that needs to be kept from the crowd. The Bekantan Ecotour activity is in the form of tourist visits to Curiak Island which is located next to the Ecotourism area managed by Friends of Indonesian Proboscis monkeys and Pokdarwis Pesona Batola Setara from Marabahan Baru Village, several activities carried out such as planting mangrove rambai, bird wacathing , proboscis monkey wacathing , river crossing, research at proboscis monkey research stations, etc. which can be seen on the following map:



Figure 4. Proboscis Monkey Ecotour

Patra Bisa's house, Patra Bisa's house or Patra's house "Empowering for Anjir Muara" is a building owned by Friends of Indonesian Proboscis monkeys and will be assisted by Pertamina in the future to be repaired and in the future it is hoped that it will become one of the centers for the production of products from the 3 Assisted Villages in the form of processed seluang, processed shrimp, typical Anjir Muara rice namely karau rice, washing soap products from water hyacinth etc. In addition, Rumah Patra can also be a place for community product galleries when tourists visit the Ecotourism area . Currently the process of repairing Patra Bisa House is still in the process stage, the management of Patra Bisa House will be in collaboration with 3 Pokdarwis Assisted and PKK from each village.



Figure 5. Activity at Creative House

KEMAMURA Resto (Anjir Muara Community Economic Area) The KEMAMURA Facilities which will be built in the Ecotourism area aim to be one of the typical culinary centers of Anjir Muara for tourists, in the future this restaurant is expected by the surrounding community to become a culinary area for visitors and absorb products from the community such as the typical karau rice of Anjir Muara, the catch of fish and shrimp from the fishermen as well as absorbing labor from the local community who from the agreement of the 3 fostered villages are representatives of each village.

c. Pertamina's Role in the Rambai Center Mangrove Ecotourism Program

The program target at the downstream stage is to create several impacts on the economy, education, and environment, which are the *first*, economics. In the economic field, the Ecotourism program aims to improve financial conditions for both direct beneficiaries, indirect beneficiaries for surrounding MSMEs, employment of local communities, additional PAD for villages, merchandise packages, new MSMEs, product marketing places, and encourage group members to become training trainers for making local products, for example becoming trainers for seluang crisphy.

Second, environmental Conservation. The involvement of tourists in conserving mangroves and proboscis monkeys makes visitors into environmental activists, supports the reduction of carbon emissions from the impact of mangrove planting, utilizes the potential of local natural resources, and is expected to make sago palm an alternative to plastic or plastic baskets. *Tird*, field of education. Ecotourism Program from the education sector has become a learning medium for students, academics, researchers and the general public regarding wetland ecosystems. At the program location has produced several national and international research, summer activities course for domestic and foreign students and has

IV. Conclusion

The Ecotourism Program is one of Pertamina IT Banjarmasin's flagship CSR programs that focuses on capacity building activities in the Anjir District, Barito Kuala Regency. This program contains community empowerment to manage the potential of local resources in the form of the Proboscis Monkey ecosystem and the Rambai Mangrove ecosystem. The programs run are Bekantan Ecotour, Patra Bisa House, KEMAMURA Resto (Economic Area of Anjir Muara Community). Through the three activities contained in the Rambai Center Mangrove Ecotourism program, Pertamina IT Banjarmasin succeeded in providing benefits to the surrounding community in the form of increasing the financial capacity of the community through the development of MSMEs, contributing to environmental conservation through mangrove and proboscis monkey conservation. monkeys, to contribute to education by maximizing ecotourism programs. as a place and means of learning and research for students, students, researchers to practitioners and the general public. It can be concluded that Pertamina IT Banjarmasin has been able to encourage community empowerment in maximizing local potential

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