
THE PROCESS OF SOCIAL INNOVATION PROGRAM CHARM WALAHAR CREATIVE DESTINATION “REVITALIZATION OF LAKE KALIMATI BECOME ECOWISATA (TOURISM RENALDI) AND ENVIRONMENTALLY FRIENDLY ENERGY TECHNOLOGY FOR MANDIRI UKMKM (TEH UMI)” PT PERTAMINA PATRANIAGA FUEL TERMINAL CIKAMPEK

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ABSTRACT

Introduction: Social and Environmental Responsibility Program is an act of the company from its commitment to contribute to sustainable development with an economic, environmental, and social impact. The purpose of this study was to analyze the Walahar Creative Destination program in the form of developing ecotourism and environmentally friendly alternative energy potential through Revitalizing Lake Kalimati into Ecotourism.

Methods: The research method used in this study is a descriptive research method with a qualitative approach.

Result: The social innovation of Revitalizing Lake Kalimati into Ecotourism has gone through the first stage of the process, namely potential analysis and rebranding by conducting an appropriate possible assessment and rebranding the name from Lake Kalimati to Lake Cinta. The second stage is the Forum group discussion (FGD) and agency coordination involving various parties, starting from the Regional Government, Village Government, Perum Jasa Tirta II, and different elements of society. The third stage is the management of permits legally following applicable regulations. The fourth stage is training and coaching to improve soft and hard skills. The last is the execution stage for constructing Lake Cinta facilities and infrastructure. **Conclusion:** The appropriate process stages make applying social innovations to the community easy to accept and use. The resulting benefits can be felt economically, socially, and environmentally.

Keywords: revitalization, ecotourism, solar panels, water hyacinth.

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INTRODUCTION

The Social and Environmental Responsibility Program is an act of the company's commitment to contribute to sustainable development that has an economic, environmental, and social impact.

PT Pertamina Patra Niaga Fuel Terminal Cikampek, which is an energy company that has a major role in the distribution of fuel to various areas of Bekasi, Karawang, Purwakarta, and Subang has a commitment to implementing Social and Environmental Responsibility Programs implemented in various villages, one of which is Walahar Village, Klari District, Karawang Regency.

(Hamdi, 2018) explains that corporate concern is part of corporate social responsibility/CSR manifested in the company's commitment to account for the impacts of business activities carried out in social, and environmental aspects that are in line with the *Triple Bottom Line concept*. In

general, corporate social responsibility. CSR is divided into two parts, namely within the company itself (internal for example to employees and outside the external company environment), for example providing employment to the community, improving community welfare, and maintaining the environment for future generations.

In 2020 PT Pertamina Patraniaga Fuel Terminal Cikampek carried out a social mapping in Walahar Village as a basis for assessment before the determination of the village as a recipient of the Social and Environmental Responsibility Program. Based on the results of the social mapping carried out, the impact of the COVID-19 pandemic on the people of Walahar Village was quite large which included unemployment due to job access and community capacity, the increase due to layoffs (PHK), the decline of MSMEs due to the decline in the economic activity of the community who previously had a lot of activities and Visiting Walahar Village is good for activities as industrial/factory workers, educational activities, and local/other regional tourists who visit for tours, especially Sundanese culinary tourism in Walahar Village and environmental problems such as the lack of waste management and cleanliness of the Citarum River including its streams, one of which which is called the community as Lake Kalimati. In the results of the social mapping of village potential, it was found that Walahar Village, which is a village whose area operates various industries, is included in a village located in a strategic area because it is close to toll access, north coast roads, and main road access that connects various villages, besides Walahar Village. has tourism potential with the existence of Walahar Dam, which is a large historic dam, Citarum River, Kalianti Lake, and the Pepesan Sunda Culinary Center.

Based on the data from the social mapping on the aspects of problems and potential as well as comparisons from various other data, a program involving the community and various agencies involved was then set up which was then established a program entitled the Walahar Creative Destination (Nawacita) Program. The Walahar Creative Destination program combines the potential of human resources and natural resources so that the existing potential can provide economic, social, and environmental benefits.

In 2022 the Walahar Creative Destination Program focuses on developing ecotourism potential and environmentally friendly alternative energy potential through the innovation of Revitalizing Lake Kalimati into Ecotourism and Environmentally Friendly Energy Technology through solar panel system technology to produce electrical energy and biodigester technology with water hyacinth as the main raw material for waste. produce biogas. These innovations are realized to increase the value of benefits of implementing the program economically, socially, and environmentally. Through community-based ecotourism, all citizens must jointly develop ecotourism by paying attention to environmental aspects. With the opening of an ecotourism area, there needs to be a change in how to manage an area that was once just an ordinary village into an ecotourism area (Hijriati & Mardiana, 2014). Therefore, residents use water hyacinth as biogas by residents around the water hyacinth filled with water hyacinth considering the abundance of water hyacinth and at the same time as an effort to preserve the ecosystem in this water area. So, the local community will never run out of water hyacinth, because this plant continues to grow. In addition, if the community really uses water hyacinth for biogas, it means that the problem of water hyacinth waste that accumulates along the water area will be resolved (Mulyati, 2015).

METHOD

The research method used in this research is a descriptive research method with a qualitative approach. The researcher uses a qualitative approach that aims to find out the extent of the impact of program innovations implemented in the Pesona Walahar Creative Destination Program. In addition, this qualitative approach is more appropriate to use because more in-depth and detailed information can be obtained regarding the impact of the innovation of Revitalizing Danua Kalimati into Ecotourism and Environmentally Friendly Energy Technology. The research technique used in this research is descriptive qualitative with data collection techniques used are interviews, non-participatory observations, literature studies, and documentation studies. Data analysis techniques used are data reduction, data presentation (data display), and concluding.

RESULTS AND DISCUSSION

The Walahar Creative Destination Program which is a Social and Environmental Responsibility Program implemented by PT Pertamina Patra Niaga Fuel Terminal Cikampek in Walahar Village, Klari District, Karawang Regency in 2022 is carried out with social innovations Revitalizing Danua Kalimati into Ecotourism and Environmentally Friendly Energy Technology through technology solar panel system to produce electrical energy and biodigester technology with water hyacinth as the main raw material to produce biogas.

A. Social Innovation "Revitalization of the Kalianti Lake into Ecotourism"

Kalimati Lake is a lake formed as a result of deep and extensive excavations which are then drained by water sourced from the Citarum River in the Walahar Village area. Kalyani Lake, which is estimated to have an area of more than 10 hectares, contains unproductive lakeside lands and tends to be used for inappropriate things, such as disposal of garbage, waste, and various community activities that are less productive than the conditions in the lake area. much covered by water hyacinth plants, thereby reducing the beauty of Lake Kalimati. The naming of Kalianti Lake also sounds inaccurate because the meaning of the word Kalimati tends to be connoted with the word not functioning or the meaning of the word being interpreted worse. The potential of Lake Kalimati that has not been utilized in the Walahar Creative Destination Program was carried out by the social innovation of Revitalizing Lake Kalimati to be used as an ecotourism place.

Revitalization is an effort to revitalize an area or part of a city that was once vital/lived but then experienced a decline/degradation. There is a scale of revitalization at the macro and micro levels (Purwantiasning, 2015). The process of revitalizing an area includes the improvement of physical aspects, economic aspects, and social aspects. The revitalization approach must be able to recognize and utilize the potential of the environment (history, meaning, uniqueness of the location, and image of the place) (Yarangga et al., 2021). (Sembiring, 2017) explains that Revitalization itself is not something that is only oriented to the completion of physical beauty, but must also be complemented by improving the economy of the community and introducing the existing culture. To carry out revitalization, community involvement is needed. The involvement in question is not just participating in supporting aspects of formality that require community participation, besides that the people involved are not only the people in the

environment, but the community in a broad sense. With the support of a control mechanism, the revitalization plan must be able to raise regional strategic issues, either in the form of socio-economic activities or activities (Sonjaya et al., 2021).

The Walahar Creative Destination program carries out revitalization innovations with the stages of potential analysis and rebranding, *group discussion forums* with the community and related agencies, licensing arrangements, training and development of management group organizations, and development of ecotourism supporting infrastructure.

There are several stages in the process of developing social innovation to achieve systemic change. Although it is possible that these stages are not passed sequentially and even cross each other. This is highly dependent on cultural differences and levels of capacity. (Farransahat et al., 2020)

i. Potential Analysis and Rebranding

Kalisti Lake has the potential to be enjoyed for its beauty, the land area of the edge of the lake is used, and it is used as a water tourism vehicle with the safety provisions of the rides being very carefully considered. At the stage of measuring the potential of Lake Kalimati, it has road access to a location that is already good and crowded, and even the Local Government is being developed a new access road which in the future strongly support access for tourists to visit. Measurement The potential for beauty and a beautiful atmosphere in the observation has great potential if the lakeside land revitalization and cleaning of the lake area are covered by water hyacinth plants. In addition, based on visual observations through drones, Lake Kalimati has a unique shape that is close to the shape of "Love" (symbol of love). Based on the uniqueness of the shape, the name of Lake Kalimati was then rebranded to become Lake of Love. The name Lake Cinta is very suitable to have meaning and support as the naming of an attractive ecotourism place.

ii. Forum Group Discussion (FGD) and Coordination of Related Agencies

The involvement of the community and related agencies is very important in the planning process, reducing the potential for conflict, and developing the authority of each party in managing the potential of Lake Kalimati which has been rebranded as Lake of Love. In this FGD and Coordination of Related Agencies, the parties involved included Perum Jasa Tirta II, the Regional Government of Karawang Regency represented by the Environment and Hygiene Service, the Office of MSMEs and Cooperatives, as well as the Tourism and Culture Office, the Citarum Harum Task Force, the Walahar Village Government and equipment, Community Representatives, Several MSMEs who are actively involved and PT Pertamina Patraniaga Fuel Terminal Cikampek.

The results in the FGD and Institutional Coordination include:

- a. The Lake Cinta ecotourism management group has been formed, namely the Creative Walahar Group which will then be determined through the Walahar Village Head's Decree
- b. It is necessary to carry out a land use permit process for Perum Jasa Tirta II
- c. It is necessary to create a legal entity established by the Decree of the Ministry of Law and Human Rights

- d. Management of environmental permits in the form of SPPL to the Department of Environment and Cleanliness of Karawang Regency
- e. Management of Proklam SK through the Department of Environment and Cleanliness of Karawang Regency
- f. Management of Pokdarwis SK through the Department of Tourism and Culture of Karawang Regency
- g. Planning for the development of facilities and infrastructure that is beneficial to the community and supports eco-tourism.

iii. Licensing

Based on the results of the group discussion forum (FGD) and the coordination of relevant agencies in security efforts in the implementation of ecotourism activities based on legal certainty following applicable regulations issued by the relevant agencies, including:

- a. Village Head Decree dated September 14, 2021 No 412/Kep.023des/2021 Concerning the Decree on the Determination of MSMEs to Manage Lake Cinta
- b. Decree of the Ministry of Law and Human Rights AHU 0013446.AH.01.04. 2021 Concerning the Ratification of the Pesona Walahar Creative Foundation and the Business Identification Number (NIB) 1250000680741
- c. Land Utilization Permit for Lake Cinta Ecotourism issued by Perum Jasa Tirta No SPPL-06/GM2.DOP/TRM/07/2021
- d. SPPL Environmental Permit Issued by the Department of Environment and Hygiene of Karawang Regency Number 660.1/4261/TL Dated July 14, 2022

iv. Training and Coaching

Improvement of *soft skills* and *hard skills* through training and coaching needs to be done to the community in supporting sustainable development which will have a broad impact on the community. The training and coaching that has been carried out by PT Pertamina Patra Niaga Fuel Terminal Cikampek in the implementation of the Enchantment Walahar Creative Destination Program include:

- a. Coaching by encouraging in dealing with the downturn in the impact of the COVID-19 pandemic
- b. Coaching through mentoring after group formation
- c. MSME organizational and financial management training
- d. Product innovation and product packaging training
- e. Product photography and videography training and ecotourism marketing
- f. Training on the use of social media platforms, especially Tiktok
- g. Canva Business Model Training (MBC)
- h. Routine coaching and mentoring events that are carried out every month

v. Development of Ecotourism Facilities and Infrastructure for Lake Cinta

The construction of facilities and infrastructure begins with the cleaning of the land area on the outskirts of Lake Cinta. Cleaning takes a long time due to the large piles of garbage that have been piling up on the land for a long time, besides that, there are also many weeds

and other pest plants. After the lakeside area was cleared, the cleaning continued to the lake area which had been filled with water hyacinth plants and various other garbage.

After clearing the land area around the lake and lake area, then the construction of building infrastructure and arrangement of outdoor areas that can be used as ecotourism places, MSME galleries and sales centers for MSME products will be carried out, and culinary centers for job training centers, MSME workshops, restaurants and cafes, mushroom and fish cultivation agrotourism, become a place for developing artistic and cultural potential, become a place for education on new and renewable energy (through the use of environmentally friendly energy for its operational activities) and environmental awareness education on climate village programs as well as a place for historical introduction education (Ismail & Fedryansyah, 2022).

B. Social Innovation "Environmentally Friendly Energy Technology for Independent MSMEs"

The use of new and renewable energy as alternative energy is adjusted to the potential possessed by each region. Each region has different potentials to be maximized such as the potential for sunlight, wind, water, biomass, or other alternative energy sources that can reduce dependence on fossil energy. The use of alternative energy is not only beneficial for the direct use of energy as a source of electricity or biogas in economic activities but also contributes to efforts to reduce global warming and environmental damage.

The Pesona Walahar Creative Destination Program which is implemented in Walahar Village, in its activities to improve the standard of living of the community, commits to creating better environmental conditions, one of which is the use of alternative energy as follows:

i. Alternative Energy from the Potential of Sunlight (Solar Panel)

The potential for alternative energy sourced from sunlight through a solar panel system is very large, this is due to Indonesia's position in the equatorial region which always gets sunlight every day in almost all of its territory, including in Walahar Village, Kalari District, Karawang Regency.

The Pesona Walahar Creative Destination program implemented in Walahar Village currently has installed a solar panel system with a capacity of 2.2 KWP or equivalent to 2,200 Watt which has been utilized at the Cinta Lake ecotourism location for various activities that provide benefits and value to improve people's living standards, save costs. PLN's electricity expenditure per month is IDR 381,401 and contributes to the environment in the form of reducing the impact of global warming, / reducing emissions of 2.82 TonCO₂. Besides that, the presence of solar panels in the Lake Cinta ecotourism is used as an educational *showcase* for the wider community regarding new and renewable energy.

(Ramadhan & Rangkuti, 2016) explains that energy needs are increasingly becoming the basic needs of every human being. Humans require increasing amounts of energy for industrial, commercial, domestic, agricultural, and transportation uses. The current energy needs are mostly met by fossil fuel energy such as oil, coal, and natural gas (Sulistiawati & Yuwono, 2019). However, the current supply of energy is decreasing. If not immediately addressed, the possibility of an energy crisis is unavoidable. For this reason, innovation

regarding alternative energy, one alternative that can be applied is innovation regarding solar cell technology that is sourced from solar energy.

Solar energy has advantages compared to fossil energy, including 1. Easy source of energy 2. Environmentally friendly 3. Suitable for various geographical conditions 4. Easy installation and operation 5. Electricity and solar energy can be stored in batteries (Nurlina & Rahmanian, nd).

ii. Alternative Energy from the Utilization of Water Hyacinth Waste.

Walahar Village where the Walahar Creative Destination Program is being held has a geographical area whose village area is located on the Citarum River. The Citarum River in the Walahar Village area is greatly enjoyed, especially with the Walahar Dam which is the gate for the management of the Citarum River in the Walahar area (Yusuf, 2014).

The Citarum River is a large river that has a high pollution problem (Paramita & Ningrum, 2020). The President through Presidential Regulation No. 15 of 2018 concerning the Acceleration of Pollution Control and Damage to the Citarum River Basin invites all elements of society to work together in dealing with Citarum River problems (Halimah et al., 2020). One of the problems is the large and very fast growth of water hyacinth plants which causes the closure of the water surface area, siltation, obstruction of water flow, and various other problems that arise as a result of water hyacinth plants (Mayalanda et al., 2014).

The existence of the water hyacinth problem in the Citarum River, especially in the Walahar Village area, encourages innovation in the Pesona Walahar Creative Destination Program by utilizing water hyacinth waste as the main raw material for alternative energy which is processed by the mechanization of the biodigester system so that it can produce energy in the form of biogas that can light a fire. for MSME production activities whose workshops are located in the Cinta Lake ecotourism area. Biogas produced from a biodigester mechanization system with water hyacinth as raw material at a 4 m³ fix dome installation located in Cinta Lake, produces around 1,600 liters of biogas which is converted from the main composition of 50 kg of water hyacinth waste which is filled every day into the fixed dome through the biogas installation inlet. . A total of 1600 liters of biogas can ignite one stove for 8 hours. The impact of the benefits of biogas, which is the main raw material for water hyacinth waste, is economically able to save more than Rp. 575,000 per month on gas needs and environmentally able to contribute to the handling of water hyacinth waste of more than 18 tons per year.

CONCLUSION

Social innovations for Revitalizing Lake Kalimati to Become Ecotourism and Environmentally Friendly Energy Technology for Independent MSMEs in the form of a solar panel system to generate electrical energy and a biodigester system using water hyacinth as the main raw material for biogas, which was implemented in the Pesona Walahar Creative Destination Program by PT Pertamina Patra Niaga Fuel Terminal Cikampek goes through the stages of the process that has been adapted to the norms that apply in the Walahar Village community, legal regulations, and stages that increase the capacity of the community in *soft skills* and hard skills through various training and coaching. The

appropriate process stages make the application of these social innovations to the community easy to accept and apply so that the benefits generated can be felt directly, both economically, socially, and environmentally. As a suggestion, it is necessary to duplicate social innovations, especially in the aspect of using environmentally friendly energy technology by utilizing water hyacinth waste which is the main raw material for the biodigester system that produces biogas because the amount of water hyacinth waste is very abundant in the Citarum River in the Walahar area and it is very easy to apply the system with simpler and more affordable installation equipment.

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