**Environmental Communication Through Corporate Social Responsibility in Overcoming Peatland Fire Problems**

Comunicação Ambiental através da Responsabilidade Social Corporativa na Superação do Problema dos Incêndios em Turfeiras

**Abstract**

This study aims to explain the role of Pertamina's CSR in overcoming environmental problems related to peatland fires in Sei Pakning, Bengkalis Regency. This research uses a qualitative method, namely a case study. The results of this study indicate that Pertamina's CSR plays an important role in preventing forest fires through the "Kampung Gambut Berdikari" program. Environmental CSR communication is carried out by establishing good relations with stakeholders, especially the Tunas Makmur farmer group and the Community Concerns Fire (CCF) forum to tackle and prevent fires on peatlands. Pertamina's environmental CSR communication has an important role in increasing environmental awareness and management in local communities. The development of peat arboretum ecotourism and pineapple plantation development not only improves the welfare of farmers, but also educates the wider community about environmental awareness through peat arboretum ecotourism. This peat arboretum ecotourism has become an important medium to raise awareness not only for the farming community, but also for school students, youth and all visitors. Corporate communication through community-based tourism by managing peat arboretums can increase understanding, change perspectives and influence community behavior in managing the environment. The development of community-based ecotourism can be a solution to overcome peatland fires. However, sustainable tourism development requires the active involvement of other stakeholders.

**Keywords:**

ecotourism; peatlands; sustainable development

**Resumo**

Este estudo visa explicar o papel do CSR da Pertamina na superação de problemas ambientais relacionados a incêndios em turfeiras em Sei Pakning, Regência de Bengkalis. Esta pesquisa utiliza um método qualitativo, ou seja, um estudo de caso. Os resultados deste estudo indicam que a RSE da Pertamina desempenha um papel importante na prevenção de incêndios florestais através do programa "Kampung Gambut Berdikari". A comunicação de RSE ambiental é realizada através do estabelecimento de boas relações com as partes interessadas, especialmente o grupo de agricultores Tunas Makmur e o fórum Community Concerns Fire (CCF) para combater e prevenir incêndios em turfeiras. A comunicação de RSC ambiental da Pertamina tem um papel importante no aumento da conscientização e gestão ambiental nas comunidades locais. O desenvolvimento do ecoturismo de arboreto de turfa e o desenvolvimento de plantações de abacaxi não apenas melhora o bem-estar dos agricultores, mas também educa a comunidade em geral sobre a consciência ambiental por meio do ecoturismo de arboreto de turfa. Este ecoturismo de arboreto de turfa tornou-se um importante meio de sensibilização não só para a comunidade agrícola, mas também para alunos de escolas, jovens e todos os visitantes. A comunicação corporativa por meio do turismo de base comunitária, gerenciando os arboretos de turfa, pode aumentar a compreensão, mudar as perspectivas e influenciar o comportamento da comunidade na gestão do meio ambiente. O desenvolvimento do ecoturismo comunitário pode ser uma solução para superar os incêndios nas turfeiras. No entanto, o desenvolvimento do turismo sustentável requer o envolvimento ativo de outras partes interessadas.

**Palavras-chave:**

ecoturismo; terras de turfa; desenvolvimento sustentável

# Introduction

Forest fires, pollution, climate change, and species extinction can impact on people's lives (Fredriksson and Olsson, 2014). Land and forest fires in Riau in the last few decades have been a source of haze disasters not only in Indonesia, but even in Southeast Asia. Peatland fires, especially in Riau, occur because of very complex problems, such as: routine land clearing by burning, land owned by outsiders, workers from outside the area, and changing crops from rubber plantations to oil palm (Arifudin *et al.*, 2019). This causes suboptimal control of the land, making peatland fires continue to occur and fires can occur at any time without being able to make early prevention. Besides due to land clearing by communities, the fires in Riau also happened because of the actions of several companies. This forest conversion carries short-term economic benefits, but it has major environmental and economic risks, such as health and economic problems due to peat fires, loss of biodiversity and land subsidence that could potentially cause flooding (Uda, Hein and Sumarga, 2017).

In the era of globalization, environmental destruction is global, so environmental protection has become the main concern of civilization in general (Kitic *et al.*, 2015). Biodiversity, which includes: geology, geomorphology, hydrology, and pedology, forms the basis for understanding and managing soils. This understanding helps preserve the natural landscape, which continues to shape Earth's morphology. Natural resources are very important for the welfare of society from their use. Although economic use and inheritance were initially at odds, a balance between the use and protection of natural resources was necessary (Oliveira *et al.*, 2021).

In this case, the balance between use and conservation becomes important. Therefore, environmental communication needs to be developed to improve the community's ability to manage the environment properly. Environmental communication through community-based conservation and restoration programs must continue to be developed by both government and non-government agencies, or even be carried out in an integrated way. One method to manage the environment is to use corporate communication through corporate social responsibility (CSR) to be able to keep the environment sustainable (Bickford *et al.*, 2017; Dubravská *et al.*, 2020). CSR programs should not only be directed at creating a positive corporate image, but should also have an impact on increasing the awareness of internal and external audiences about the environment (Dutta and Imeri, 2016). In addition, CSR programs can also campaign for environmental problems such as forest fires, forest destruction, or climate change. In this case, local communities are the main stakeholders to protect the environment and to achieve sustainable development, particularly in the tourism sector (Lundberg, 2017).

The researchers assumes that environmental communication is important to use in solving environmental crises. On the other hand, corporate communication also has an important role in tourism development because of its strong organizational and financial support. Therefore, this study seeks to explore the role of Pertamina's environmental communication in overcoming the problem of peatland fires through development of peat ecotourism. Management decisions emphasize the importance of efficient corporate communication. The problem of efficient corporate communication is still relevant in social, economic and managerial aspects (Saha, 2014).

Several studies explain that the success of a company, especially in realizing its vision, is closely related to how well and professionally the company communicates with existing resources. Corporate communication as a strategic management function plays an important role in the development and maintenance of corporate image (Johan and Noor, 2013; Basri and Siam, 2019; Morsing and Spence, 2019). This communication makes the company more coordinated for both internal and external communication within the framework of achieving the goal of building and maintaining reputation with stakeholder groups (Pollach *et al.*, 2012; Apolo *et al.*, 2017). he study of CSR communication pay more attention to the effect of CSR on financial performance (Testarmata, Fortuna and Ciaburri, 2018). Basically, corporate communication includes all forms of activities carried out by a company to achieve the company's vision (Mohammad and Bungin, 2020). Inthis case, corporate communication includes public relations, crisis and emergency communication, corporate citizenship, reputation management, community relations, media relations, investor relations, employee relations, marketing communication, management communication, corporate branding, image building and advertising (Saha, 2014).

In modern companies, there is interdependent communication created between individuals, groups, communities, companies and countries so that corporate communications must be connected with all stakeholders. Recently, corporations have generally relied more on CSR activities and publication channels through interactive social media. Social media greatly facilitates interaction with stakeholders because they are more active in using social media (Testarmata, Fortuna and Ciaburri, 2018). In essence, corporate communication is a company-wide effort to communicate effectively and profitably, especially in building corporate values. Corporate communications can also help inform new values ​​such as environmental care. So, its existence is not just to build an image and increase the credibility of the company (Johan and Noor, 2013; Dutta and Imeri, 2016).

Corporate Communications plays an important role in dealing with crises and disasters in oil and gas companies (Saha, 2014). Another studies revealed that the application of management principles has a close relationship with the success of CSR (Kirat, 2015; Dutta and Imeri, 2016; Morsing and Spence, 2019). The company will be successful if it implements CSR and integrates it into all company activities. In addition, CSR activities must also be integrated with the long-term corporate mission that is oriented towards sustainable development (Pollach *et al.*, 2012; Siano *et al.*, 2016). Related to this, CSR theory about the triple bottom line explains that the output of CSR programs must cover the economic, social and environmental fields. First, economic responsibility relates to the company's contribution to the sustainability of the larger economic system. Second, social responsibility pays attention to the company's impact on the local communities where the company operates. Third, the dimension of environmental responsibility which emphasizes the influence of the company's existence on the physical environment (Testarmata, Fortuna and Ciaburri, 2018).

CSR communication has an important contribution in realizing social action and changing people's behavior for the better. Stakeholders can pressure companies to make their implicit CSR communications more explicit (Morsing and Spence, 2019). In this case, corporate communications must emphasize the importance of campaigns and environmental concerns. Companies must integrate environmental communications into company goals. In addition, companies must also communicate environmental concerns to all their stakeholders (Kitic *et al.*, 2015). CSR environmental communication activities can not only overcome environmental damage but their activities can also improve the welfare of the community (Widhagdha, Wahyuni and Sulhan, 2019; Yasir, 2020).

The implementation of CSR tends to still ignore the involvement of the surrounding community, even activities that lead to increasing environmental awareness are still lacking (Dutta and Imeri, 2016; Faisal, Napitupulu and Chariri, 2019). Community involvement is important so that people have a concern for the environment. Even the CSR program still ignores the socio-cultural conditions that exist in the community. In fact, the problem can be solved if the company understands the real needs of the community. Distrust of the CSR program occurs because the company puts too much emphasis on the company's interests, such as being oriented to the company's image, trading the public for media content, so that it does not solve the root problems faced by the community (Dutta and Imeri, 2016; Widhagdha, Wahyuni and Sulhan, 2019). Good environmental communication should be carried out in an integrated manner between stakeholders and based on local wisdom of the community in order to build common understanding, cooperation, and collaboration between stakeholders (Yasir, Nurjanah and Yohana, 2020; YASIR *et al.*, 2021). CSR-based corporate environmental communication should not only be aimed at investors who have an environmental agenda, but also all stakeholders such as environmental groups and political actors (Fredriksson and Olsson, 2014). Therefore, in stakeholder theory there must be four basic aspects, namely: normativity, sustainability, people, and cooperation (Freeman and Phillips, 2021).

Recently, the public has begun to realize how important social, humanitarian and environmental issues are that they have an impact on stakeholder expectations dealing with CSR practices (Testarmata, Fortuna and Ciaburri, 2018). The demands of the community on the company are increasing to be met, in line with efforts to incorporate aspects of the business environment. This trend of increasing CSR should be followed by increased awareness accompanied by communication (Faisal, Napitupulu and Chariri, 2019). Environmentally based performance indicators are very important for a company. Therefore, corporate environmental communication becomes a fundamental element to gain legitimacy from stakeholders.

CSR is considered committed if its activities have a positive impact on changes in local communities and their environment. Corporate communication is ethical if it maintains and enhances the life of the business. In addition, CSR communication also contributes to the development of tourism and the community's economy. Several studies show that corporate CSR has an important role in development, but has not focused on community environmental education (Kirat, 2015; Dutta and Imeri, 2016). The contribution of corporate environmental communication has been developed through CSR research (Ramya, Shereen and Baral, 2020). Although corporate environmental communication is commercial and political in nature, corporate environmental communication is basically a form of responsibility in society, especially those who are at risk of environmental damage (Fredriksson and Olsson, 2014). Corporate environmental communication through social activities, websites, social media, and releases, is often the main means of communication aimed at stakeholders and is also considered a reporting tool (Ramya, Shereen and Baral, 2020). However, often what is presented in the media is not found to be in accordance with reality. Communication about environmental risks requires understanding the needs and perspectives of stakeholders (DeLorme *et al.*, 2018).

Environmental communication is the process of exchanging messages that occur on, from, for, and about the natural environment around humans (Jurin, Roush and Danter, 2010). Environmental communication is also defined as a planned and strategic communication process to support effective policy making, increase public participation and implementation of projects aimed at environmental sustainability (OECD, 1999). This communication also refers to the use of approaches, principles, strategies, and communication techniques in managing and protecting the environment (Flor and Cangara, 2018; Yasir, 2020). In addition, this environmental communication can act as a constitutive and pragmatic means. Pragmatically, communication activities function as: campaigning, educating, raising awareness, convincing, mobilizing, and assisting humans in overcoming environmental problems. While constitutively, environmental communication can compose, organize, and represent environmental problems as the subject of human understanding (Cox, 2010).

Today, environmental communication functions in environmental decision-making through public participation. This environmental communication emphasizes dialogue, so that it can create awareness of concern for the environment (Gunathilaka, 2020). The perspective of environmental communication in this paper departs from the assumption that communication has an important role in creating good human and environmental qualities.

Environmental campaigns based on ecotourism development by companies are still rarely studied. Whereas the company's environmental communication has a contribution in preserving the environment. Communication in the context of forest conservation through ecotourism development requires the active participation of local communities as the main actors (Rusdianti and Sunito, 2012; Gunathilaka, 2020). Community Based Tourism is an ecotourism management that prioritizes local communities as a form of redistribution of wealth, power and tourism resources (Giampiccoli and Glassom, 2020). Nature conservation and community-based ecotourism development can be an alternative to current tourism activities. In the era of a competitive tourism market, the development of tourism based on local resources can improve the image of ecotourism and provide more opinions to attract or encourage people to visit (Fan *et al.*, 2018).

Sustainable development requires the involvement of local communities. The role of the company in solving the problem of peat forest fires by involving local communities is crucial for research. The existence of local communities living in peatland areas, on the one hand, are the targets of CSR programs, on the other hand they are the main actors of change. Local communities are the most important stakeholders for the achievement of sustainable development in the tourism sector (Lundberg, 2017). The basic principle of CSR is that companies have social responsibility (Bickford *et al.*, 2017). This paper assumes that strengthening community institutions and developing community-based tourism can be a solution in overcoming peatland fires, and even increasing the economic welfare of the community.

# Methodology and Data

This study used a qualitative research method with a case study approach. Case study research leads to exploring a complex phenomenon in order to develop a theory or evaluate program (Baxter and Jack, 2015). In this case, qualitative research methods have several benefits for developing environmental and risk communication projects (DeLorme *et al.*, 2018). The emphasis of this study is the handling of environmental damage to peat by PT Pertamina's CSR through the development of ecotourism. Pertamina is an Indonesian state oil company that operates from upstream to downstream industries. CSR Pertamina Refinery Unit II Sei Pakning makes farmers the target of the program. This case is interesting to study because it can reduce the risk of fire in peatlands. The research was carried out in the range of 2020-2021. The location of this research is in Bukit Batu District, Bengkalis Regency, Riau-Indonesia, where Pertamina's oil refinery operates. Bengkalis Regency, where the company operates, has a large area of ​​peat forest which is subject to frequent fires. The subjects of the research were the implementers of the CSR program or Community Development officer (CDO) of Pertamina Sei Pakning, members of the Tunas Makmur Farmer Group, members of the Community Concerned Fire (CCF), and government employees who handle tourism and environmental issues. Subject informants were selected purposively according to the data needs of this study.

Researchers collect primary data and secondary data. Data were obtained through interview techniques with CDO and several community leaders. There are informants from CDO, Miftah Farid and Wahyu as implementers of the CSR program. Meanwhile, there were four informants from the local community, namely Samsul as the head of the farmer group and Sadikin as the head of the CCF. One of the informants came from a government official, namely Agus Susanto. There are a total of eight informants. In addition, researchers also observed and collected various documentation related to this research. Observations were made by observing directly the object under study related to environmental communication in the development of peat land ecotourism. Researchers also collect data through documentation, namely collecting records of communication activities, posting activities on social media, news releases, Pertamina's internal regulations, and policies produced by the government. Researchers analyzed the data with an interactive model developed by Miles and Huberman (Moleong, 2010). In addition, the researchers also used a technique to check the validity of the data, namely by using triangulation through various sources, checking fellow researchers and using an extension of the research time.

# Results

## CSR Communication in Handling Peatlands Fires

As one of the State-Owned Enterprises (BUMN) that mines and distributes oil in Indonesia, Pertamina is required by the government to have a concern for the environment through its CSR program. Pertamina's CSR activities focus on Pertamina Green (Environment), Pertamina Berdikari (Community Empowerment), Pertamina Smart (Education), and Pertamina Sehat (Health) (Pertamina, 2020). This CSR program is carried out always adjusting to the needs of each operational area. In this case, the Government of Indonesia through Law Number 40 of 2007 concerning Limited Liability Companies and Government Regulation Number 47 of 2012 concerning Social and Environmental Responsibility has regulated how CSR activities should be carried out.

CSR communication has a function to stimulate better social action, not implicitly but more explicitly (Morsing and Spence, 2019). Even the company's success will be seen in the achievement of sustainable development through community involvement (Dubravská et al., 2020). In this case, Pertamina Rafinery Unit (RU) II Sei Pakning through CDO carried out social mapping, made work plans to strategic plans to produce outputs, namely the Berdikari Peat Village program. Pertamina's CSR activities create the Berdikari Peat Village program which aims to overcome problems that are always experienced by the community, namely land and forest fires. This program provides assistance with extinguishing equipment, fire fight training, disaster mitigation and land management development by cultivating pineapples. To conserve and raise awareness of local and general communities, the facilities used are to develop communities in managing peat ecotourism based on peat arboretums and peat love schools. The choice of this program is based on problem mapping and analysis. The CDO determines the target audience for this program by referring to the community affiliated with the Tunas Makmur Farmer Group in Kampung Jawa, Sei Pakning Village, Bukit Batu District. This group is a community that is very affected because they live in peatland areas that are often burned. Pertamina Sei Pakning CDO Coordinator said:

“Our first step is to conduct participatory mapping, which involves the community and local government. We did a survey and then we held FGD. In the meeting, the participants discussed what the problem was. From here emerge recommendations and programs to be implemented... The main problem is that peatlands are prone to fire, the most vulnerable are the people living around peatlands, they are small farmers. So that the target group of the program is them. In the first year, we focused on capacity building. We often go to the location, focusing on approaching the community to accept us. The communication process takes place in stages. After they are able to accept us, in the next year we teach and provide training to strengthen the competencies they need. If they can, we will help with the equipment. We prioritize more humanistic interpersonal communication. I also reminded the team that we must be willing to listen to their stories (Miftah Farid, Interview, August 1, 2020).

In carrying out the CSR program, the CDOs of this company are very concerned about good relations with the target audience. This community relationship is carried out to maintain and strengthen the cohesiveness of the internal group of farmers and to bridge external relations to cooperate with other parties. This form of social responsibility with an environmental communication perspective has an important impact on the implementation of CSR programs. This participatory communication activity is able to create social relationships that can build environmental awareness. This social relationship between the company and the community has increased the community's skills to control fires, preserve the environment and improve the community's economy.

These forest and peatland fires are a common problem for both the community and the Pertamina company. The CSR program focuses on dealing with peatland fires in Bukit Batu District by providing assistance to the community through entrepreneurship training, utilization of burnt land as pineapple farming areas, and training on processing pineapple products to increase community income. The implementation of the CSR program in Berdikari Gambut Village was developed by carrying out community development focused on Java Village in Sei Pakning Village which developed peat arboretum-based ecotourism. This assistance and guidance was carried out due to the rampant forest and land fires from 2013 to 2016. In 2017, Pertamina through CSR began to focus more on developing community groups in Kampung Jawa Village with the "Berdikari Peat Village" program by empowering farmer group communities.

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| Petani & Pertamina Dongkak  Perekonomian  Warga Sei Pakning Dengan  Budidaya Nanas di Lahan Gambut | Daun Nanas Diolah Jadi Tas • Petrominer |
| Source: CDO Pertamina  Figure 1: Farmers and their pineapple plants | Source: CDO Pertamina  Figure 2: Female farmers and their pineapple products |

The land that was once prone to fires and abandoned due to fires has now become a pineapple plantation area with high economic value and part of it has become a conservation area. The head of the farmer group said:

”There used to be fires almost every year, especially from 2011 to 2015. This area also often experiences drought due to the clearing of oil palm land, whose land is also prone to fire. Starting in 2016, we tried to plant the burned land with pineapple plants. Seeing our efforts, Pertamina tried to help. Pertamina not only helps in agriculture but also helps fire care groups (CCF) with training on fire fighting, fire prevention and infrastructure assistance such as hoses and water pump machines. Even in agriculture, Pertamina trained us by bringing in trainers from Bandung who are experts in the pineapple field. The trainers provide training in management, pineapple cultivation, maintenance techniques, and processed products” (Interview, Samsul, July 27, 2020).

The guidance for the Tunas Makmur farmer group is also directed at managing peat forests whose land belongs to the community to be used as a Peat Arboretum. The peat arboretum area is expected to have high learning value for local communities, students, students and even visitors or the general public in managing and maintaining the peat environment. The purpose of environmental communication through the “Berdikari Peat Village” program is not only to establish good relations between Pertamina and the community, but also to provide awareness to the community to care and have the ability to manage the peat environment. In this case, environmental communication is very important in increasing awareness, motivation, and awareness of the community, government and companies in conserving and using nature responsibly (Yasir, Nurjanah and Yohana, 2020).

Through the Berdikari Peat Village program, Pertamina seeks to restore the peat environment as well as empower the community, especially in Pertamina's operational areas. Pertamina through this CSR Communication program can change people's mindsets about peatlands which previously only considered them as a source of fire and smoke disasters. CSR programs like this have a limited range of influence, but they play a role in creating a society that is able to conserve natural resources. Even tourism objects that are developed have an impact on environmental education for school children and the wider community through social media and news in the mass media. The point is that CSR programs can not only improve welfare in terms of economic, social and public health, but also raise awareness for the environment. Environmental communication through this CSR program will not succeed without working with existing stakeholders, especially local communities as the main target. All stakeholder groups are at the same level regarding the importance of protecting the environment. This coordination makes discussions on solving environmental problems and tourism development easier with local communities because all groups are connected with interests to solve common problems (Lundberg, 2017).

Communication between companies, farmer groups and the Fire Care Community group plays a role in fire control. Pertamina even bridges the Fire Care Community (CCF) between villages. This collection of village CCF groups is known as the Fire Care Community Communication Forum, which consists of five villages that are prone to fire disasters. This effort is to coordinate and mitigate fires in the land around them. This CCF communication forum succeeded in developing the Hydrant well innovation that allows people to find water sources to extinguish fires without having to use a fire engine. People only make instant wells when they want to extinguish fires by sticking a stick of wood into peat soil which has a lot of water reserves. Next, the water is sucked in using a hose with a pump type machine. To facilitate the activities of the CCF communication forum, Pertamina provided five pumping machines and other Hydrant well equipment.

Pertamina's CSR environmental communication model by fostering and connecting with several other groups in its operational area becomes effective in controlling land fires. This Pertamina CSR communication contributes not only to changing people's lifestyles, but their activities are also able to keep the peat ecosystem environment sustainable. Biodiversity in the Peat Arboretum as part of peatland conservation is an attraction for tourists to visit. This peat arboretum tourism provides environmental education and insight to the public about the natural wealth of the peat ecosystem. Endemic plant species to the island of Sumatra include those that are almost extinct and tropical pitcher plants such as: Nepenthes Rafflesiana, Nepenthes Mirabilis, Nepenthes Ampullaria Jack, Nepenthes Gracilis Korth and Nepenthes Spectabilis.

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| Third slide | Foto: Belajar Sambil Bermain di Arboretum Gambut Riau        (5) |
| Source: https://kehatipertaminaru2spk.com/#/home Figure 3: Peat arboretum ecotourism entrance | Source: https://kehatipertaminaru2spk.com/#/home Figure 4: school students playing in the peat arboretum |

Pertamina's CSR has changed the mindset of the community, which originally saw peatlands as a carrier of disaster, now people see it as a blessing. This area has started to become an ecotourism area and tourism-based tourism managed by the Tunas Makmur Farmer group. Pertamina RU II Sungai Pakning's commitment to preserve peat forests and empower communities by developing tourist destinations is an effective environmental communication. The Peat Arboretum area is a means of education and tourism, especially for the younger generation. Edutourism plays a role in introducing the function of peatlands as the main buffer for the ecosystem. Ecotourism is nature-based tourism by incorporating aspects of education and interpretation of the natural environment and community culture for the management of ecological sustainability (Strydom, Mangope and Henama, 2019). Related to this, the Riau University academic said that Pertamina's CSR program should contribute more to the development of the local community, not just for the company's image

“Corporate CSR programs in Riau should be able to make a real contribution to development programs. However, the CSR programs implemented still do not touch the real root of the community's problems. The company still considers itself the party who best understands the needs of the community, while the community is seen as a marginal group that needs the company's help. CSR activities only promote a positive company reputation, not for the sake of improving the quality of life of the community in the long term. The strength of its resources, this large company is able to form an impressive public opinion as if they have implemented CSR” (Tampubolon, 20 Desember 2021).

Ecotourism development can increase public awareness and participation in peatland conservation activities. Peat can be conserved and utilized as needed, not to be left alone. Therefore, Pertamina's CSR communication in developing this peat arboretum must be supported, both by the local government and other stakeholders. Sustainable tourism development requires a comprehensive, coordinated and integrated tourism communication policy and planning (Yasir, 2020). Therefore, the tourism development strategy should not be oriented to the economic approach alone but must be directed at the environmental, cultural and community empowerment approaches. This empowerment approach is measured by the ability to explore the unique potential, wisdom, values ​​and culture of the local community.

Pertamina's CSR contribution in overcoming the peat problem has been exaggerated by the media. The scope of success in fostering the Tunas Makmur Farmer Group consists of 47 people, of which 18 are housewives. There are three activities developed to make the Berdikari Peat Village program a success, namely: pineapple cultivation, peat arboretum area, and development of pineapple processed products. These activities received the attention of the public, the government and became the subject of widespread news. So that Pertamina through this CSR program has received recognition and awards from various national institutions and events such as the Indonesian Sustainable Development Goals Award (ISDA), and the CSR Nusantara Award, Gold PROPER from the Ministry of Environment, and other awards. However, the peat arboretum ecotourism development program involving local youth managers and the development of the Love Peat School curriculum for elementary and junior high school students can be beneficial for sustainable environmental development.

## Corporate Environmental Communication Through Community-Based Ecotourism

Intensive communication with an interpersonal approach is the hallmark of Pertamina's CDO. Peatland conservation for ecotourism is a joint initiative as a result of regular meetings. The development of peat arboretum and pineapple plantations is an effort to overcome forest and peatland fires. The community also realized that restoration and shifting from planting oil palm to pineapple was the right choice to avoid repeated peatland fires. The company's CDO plays a role in increasing public environmental awareness. Fire disaster mitigation is carried out by fostering CCF and creating conservation areas as ecotourism. Pertamina's CSR uses a community-based tourism (CBT) perspective in solving environmental problems. The CBT approach is a form of tourism that is managed based on the needs, cultural, environmental, and economic characteristics of the local community that prioritizes the principle of sustainability (Giampiccoli and Glassom, 2020).

CSR communication for the development of group-based ecotourism begins with the CDO's steps to familiarize each member of the Tunas Makmur Farmer group. This farmer group is then connected with other stakeholders by discussing to find solutions to environmental problems. The cohesiveness of farmer groups who are members of the “Tunas Makmur Cooperative” attracts Pertamina's CSR to provide guidance so that the community has the ability to manage peat arboretums as ecotourism. Wahyu as one of the CDOs said:

“This peat arboretum tourism was originally intended to conserve peatlands with existing biodiversity. This area is intended to educate visitors to protect rare peat plants. We try to involve the community to carry out activities at the location on a regular basis. Now we have a youth cadre named “Pemuda Cinta Peat” who has also been formed in eight high schools. Even for elementary school we have a Peat Love School program. We hope that they regularly invite students from their respective schools to carry out activities at the arboretum. We also hope that this peat arboretum ecotourism can exist not only for the people who live in the vicinity, but also for people who come from outside the Bukit Batu area. This ecotourism manager is a group of farmers and youth, under our guidance. Our target is that they can be independent in five years” (Interview, Wahyu, Agustus 3, 2020).

Environmental communication requires understanding stakeholder needs, perspectives, and appropriate use of media. Long-term communication between CDOs and stakeholders can be facilitated by stakeholder focus groups. The target group of this program can be used effectively in the development of communication media, messages or content in reaching a wider public in spreading environmental messages. (DeLorme *et al.*, 2018). The CDOs, as Pertamina's CSR implementers, together with other stakeholders, such as the community, village government officials, and local governments held a meeting (FGD) to map out problems and find solutions to forest fires. Over time and repeatedly meeting with the community, the idea of ​​​​peatland management for pineapple plantations and peat arboretum tourism emerged. The communication is based on friendship, deliberation and mutual cooperation with the local community (Yasir et al., 2020).

As the main target audience, Tunas Makmur Farmers have strong social cohesion. Tunas Makmur Farmers Group consists of 47 people, most of whom still have family relationships. Most of them are of Javanese descent who came in the 1950-1960s period. Traits of having in common kinship and ethnicity make communication and coordination easier. This farmer group has a tradition of helping each other with the work of other members, such as those affected by a disaster, who are having a party. In this context, this habit greatly influences social cohesion at the internal level of farmer groups. The strong bond between members is caused by their internal similarities with the problems they face, similarities in kinship, ethnicity, culture, occupation, geographical area. These common problems and characteristics make this group the right target for Pertamina's CSR program.

This cohesive group is not only the main target audience, but also as a message, public relations content, and an effective communication channel in influencing the wider community through peat arboretum ecotourism. Various forms of communication, publicity, and reporting as well as the use of social media are utilized by Pertamina's PR to obtain a positive corporate image. Environmental communication is carried out by making the Tunas Makmur Farmer Group as material or content, a communication channel as well as the main target of ecotourism management. As a result, this communication model is quite effective in changing the knowledge, views and behavior of the community, especially the farmer groups themselves. This group has even become a role model for other groups.

The next group is the Community Concerned Fire (CCF) communication forum between villages. Most of the members of the CCF group come from the Tunas Makmur farmer group. Even Sadikin, as the head of the peat arboretum ecotourism manager, is also a member of a farmer's group as well as the head of the village CCF. This group, which is almost in every village, has an association called the Inter-Fire Village Communication Community Communication Forum. This meeting between CCF groups from other villages is a form of communication to bridge and connect bridging groups or relationships initiated by Pertamina's CSR role to coordinate in monitoring the presence of fires. Pertamina also connects all existing community groups and stakeholders to overcome this land fire problem. Pertamina through CDO facilitates deliberations to address existing environmental problems, especially peatland fires.

The communication pattern of bridging relationships through forums between CCFs is weaker than the first, namely fellow farmers who are members of the Tunas Makmur Cooperative. However, the involvement of stakeholders in the CCF forum such as the community, government, TNI, Polri and Pertamina CDO itself facilitates coordination to address fire problems, environmental and other social issues. In addition, there is also a linking relationship that is carried out by Pertamina's CDO to connect the community with groups that have power, namely the local government. This form of bonding, bridging and linking social relations is important to be maintained through intensive, open and participatory communication to create healthy and sustainable social relationships (See figure 2). Communication, coordination and relationships among these stakeholders can then determine success in tackling forest fires and also in managing the environment.

Peat Arboretum Ecotourism

Peat ecosystem

Source: Research data 2020

Figure 5:

CSR Communication Model in handling and preventing peatland fires

Pertamina's environmental communication method places more emphasis on farmer groups and the CCF Forum group as the main targets in overcoming the problem of forest and peat fires. Strengthening local capacity in environmental management can be the basis for improving social interaction policies (Vlibeigi, Sarhangi and Karevani, 2020). Intensive communication continues to be carried out using interpersonal communication channels. Environmental communication is continued with group communication channels. Group coaching is the right choice, because environmental communication must be institutionalized by involving all group members. However, this community-based CSR communication needs to be integrated with the use of multiple communication channels (Pollach *et al.*, 2012).

In addition, CSR activities must also use a mix of communication channels for internet-based publications, this is not only because it targets a wide audience, but the cost is also cheaper (Bosco, 2017; Linos, 2018). The group communication channel through the CCF forum with a larger number of members is certainly effective because it is able to influence an audience that has a wide reach, but its existence is not sustainable. Group and interpersonal communication channels are not widely used face-to-face, but mostly use social media. Social media can even be used to send and receive information to strengthen relationships and social bonds between them, so this communication plays an important role, especially the breadth and speed in spreading the message of developing tourist destinations (Bakti, Hafiar and Budiana, 2017).

CDO in carrying out CSR activities always decides its policies in the perspective of community needs. CSR managers also map out problems and establish good relationships with target groups. Then CDO fosters target groups, develops tourism facilities, and helps manage peat areas to become tourist destinations. This CDO communication is able to overcome social and environmental problems of farmer groups. The community even has the expertise to manage peat arboretums and pineapple farming. It is not surprising that Pertamina Public Relations utilizes these farmer groups as communicators, media, target audiences, content, and communication channels to spread messages of environmental concern. With this activity the company gains a positive reputation and good image. Corporate communication by integrating into the community as a disseminator of environmental messages on social media is able to facilitate interaction with many stakeholders (Cho, Furey and Mohr, 2017; Testarmata, Fortuna and Ciaburri, 2018; Santoso, Rinjany and Bafadhal, 2020). Even through social media and other internet-based media, companies can strengthen CSR communication by directly involving the wider community (Bosco, 2017; Linos, 2018). Internet-based interactions and conversations can directly influence stakeholder interest in engaging in corporate social and environmental performance (Siano *et al.*, 2016).

The existence of the Marsawa Peat Arboretum has attracted public interest to visit. It's just that it's currently constrained by the COVID-19 disease outbreak, so it was once closed, and recently reopened. People come from all walks of life, especially students and college students. As an educational tour, this Peat Arboretum has a message that Pertamina wants to campaign, namely "Sekolah Cinta Peat" or "Youth Love Peat". Tourism communication planning that emphasizes ecotourism is focused on tourists' desires for education, silence, comfort, adventure, and their interest in environmental issues. In this case, school children and teenagers as the main target can enjoy time in the natural environment to be alone, enjoy the silence and serenity that can attract their attention (Cini, Leone and Passafaro, 2012).

Corporate CSR has a role and responsibility in assisting the sustainable development of ecotourism (Bickford *et al.*, 2017). Tourism marketing communication is carried out by Pertamina CDO by visiting schools, meeting with government agencies, mass media and online media communication channels with an integrated marketing communication approach. The public's interest in visiting is expected to increase awareness of the environment, especially peat. The peat arboretum is a harmonious idea, purpose, message whose existence has a stronger resonance to be interpreted and disseminated. Word of mouth marketing strategies, especially social media, share experiences while visiting, this can help build a virtual experience before someone visits, and help shape the image of a tourism destination (Fan *et al.*, 2018). Sustainable tourism is a form of tourism that focuses on environmental issues that go beyond just balancing economic, social or environmental factors, and also solves the problem of poverty for people in the community (Sangchumnong, 2019).

Empowerment of local communities by CSR to manage ecotourism and the environment so that it remains sustainable is not only used as a natural tourist destination, but also as a means of educating the peat ecosystem. This tourism development activity is in accordance with the Indonesian government's policy in the Minister of Home Affairs Regulation number 33 of 2009 concerning Guidelines for Ecotourism Development in the Region. This regulation stipulates that ecotourism development must empower local communities (Pemerintah Indonesian, 2009). Therefore, environmental communication through CSR programs by empowering farming communities not only builds harmonious social relations between the company and the community, but can also protect the environment. CSR-based environmental communication management in collaboration with multi-stakeholders can increase public awareness and participation in implementing sustainable environmental management (Widhagdha, Wahyuni and Sulhan, 2019). CSR has become an important concept where companies integrate social, environmental, human rights, ethics and consumer concerns into their business activities (Testarmata, Fortuna and Ciaburri, 2018).

The findings of this study indicate that corporate communication contributes to increasing target group participation and increasing public awareness so as to reduce forest and peatland fires. CSR communication by establishing relationships and developing community-based peat ecotourism can be used as a reference for other regions that have similar problems. In this case, environmental communication plays a role in motivating and changing people's behavior in managing the environment responsibly. Communication through empowering local communities can improve the economic welfare of the community and preserve the environment in a sustainable manner. This communication model can be a solution in overcoming the problem of peat fires and in particular how to empower people who live in fire-prone lands. Communities have the ability to find alternatives in optimizing peatlands without relying on oil palm plantations. Peatlands can be an alternative to pineapple plantations, create pineapple processed products and develop peat arboretum tourism areas that are integrated with pineapple agro-tourism. Thus, CSR environmental communication activities can be integrated and contribute to the achievement of sustainable development goals.

# Conclusion

CSR environmental communication plays an important role in overcoming the problem of peatland fires. This success is achieved by building good social relations between community groups and companies through implementing CSR (CDO). Pertamina (Persero) Refinery Unit II Sei Pakning as an oil and gas State-Owned Enterprise (BUMN) empowers communities around oil refinery operations through the Berdikari Gambut Village CSR program. This program was originally intended to assist communities in dealing with peatland fires by fostering village Fire Care Community (CCF), and linking with other village CFFs. After establishing a good relationship, the community is invited to manage the environment by planting plants according to the characteristics of the soil, namely pineapple. In addition, the community is equipped with expertise in managing education-based ecotourism, namely peat arboetum.

Environmental communication through CSR focuses on the Tunas Makmur Farmer Group to manage peat arboretum ecotourism. This group is used as a target, content, media and communication channel to spread the message to care about peat. But CSR environmental communication is still not well coordinated and integrated with other stakeholders, especially with local governments and universities. So there is no integrated ecotourism development plan and policy for the long term. This model of environmental communication through community-based tourism is interesting to develop because it emphasizes the principles of deliberation and mutual cooperation as community local wisdom. The communication model that runs according to company rules and values ​​with the synergy of local wisdom is very appropriate to continue to be developed and disseminated.

Therefore, Pertamina's CSR party must manage environmental communication not only focusing on integrated communication channels and media, but also with all other stakeholders more intensively. This form of communication can serve to support policy making, increase community participation, and facilitate the acceleration of sustainable development. The development of peat ecotourism requires a careful planning process, especially for integrated tourism areas as tourist destinations that are worth visiting. Further research will be more interesting by examining environmental communication based on culture and local wisdom with an ethnographic approach to communication. This study also suggests that future research on the topic of CSR should focus on the local community's perspective on the planned or already implemented programs.

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