Community Empowerment Through Organic Waste Management Fostered by PT Pertamina Patra Niaga Integrated Jakarta as an Implementation of Corporate Social Responsibility

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ABSTRACT
Waste is still a quite complicated problem in DKI Jakarta. Waste generation in the Province has a waste generation of 8,607.26 tons per day. These problems require effective and sustainable solutions. The waste problem is the effect of the development process, and the lack of waste management, as well as the lack of public education on how to manage waste. PT Pertamina Niaga Integrated Jakarta collaborated with RW 07, North Rawa Badak Village, Koja District, North Jakarta City to conduct coaching in the form of organic waste management activities through maggot cultivation. This community empowerment program, conducted within the operational vicinity of PT Pertamina Patra Niaga Integrated Jakarta, holds significance as it serves as a corporate social responsibility endeavor. Its primary objectives are to educate the community about waste management practices and to mitigate waste generation. This research employs qualitative methodology, specifically adopting a descriptive research design. The results of the study show that the Company's social responsibility program has fulfilled the concept of three triple bottom line dimensions.

INTRODUCTION
Waste is one of the problems for people's lives in Jakarta that must be solved by various policy makers (Aprilia, 2021). These problems need to be overcome with effective and sustainable solutions. Based on data from the National Waste Management Information System of the Ministry of Environment and Forestry (SIPSN KLHK), throughout 2023 it was recorded that waste generation in DKI Jakarta reached 8,607.26 tons per day, while the amount of food waste or organic waste is one of the dominant types with a percentage of 25.5% (SIPSN KLHK, 2023). In 2020, the DKI Jakarta Provincial Government has made efforts to make a policy in handling and managing waste. This policy is contained in the Jakarta Governor's Regulation number 77 of 2020 concerning the Management, Reduction and Handling of Household Waste at the Rukun Warga Level. The regulation stipulates that each RW in the village has a waste management unit with the main activities of limiting waste generation, and reusing waste through waste banks (Muliawaty et al., 2022). The regulation also encourages various stakeholders to help carry out waste management at the community level. One of the stakeholders in question is PT Pertamina Patra Niaga Integrated Jakarta which conducts organic waste management coaching in RW 07, North Rawa Badak Village, Koja District, North Jakarta City. These activities are carried out by the company as a form of corporate social responsibility carried out around the company's operational area. The activity was then called the Abang Cinte None program (Let's Build Non-Emission Ecological Love) which aims to reduce waste generation and reduce environmental emissions.
The program carried out by Pertamina Patra Niaga Integrated Jakarta is a corporate social responsibility in the context of social concern by protecting and contributing to the community in the environment around the Company's operational area. Matten & Moon (2022) said that the main point of corporate social responsibility is the idea that reflects social obligations and consequences in business success. Thus, corporate social responsibility concretely consists of policies and practices that are combined into corporate social responsibility programs for the good of the wider community, especially the communities adjacent to the Company's location. According to Kickul & Lyons in (Kickul & Lyons, 2020) there are three conceptual dimensions in the approach to social and environmental responsibility in the Company called the Triple Bottom Line, namely economic, social, and environmental dimensions. In these three dimensions, companies need to seek a balanced approach in carrying out their business activities, considering economic, social, and environmental impacts holistically. The triple bottom line approach in social and environmental responsibility encourages the company to not only focus on the financial aspect alone, but also pay attention to social welfare and environmental conservation, thereby creating long-term value for all stakeholders. The company's Economic Dimension is expected to generate reasonable and sustainable profits and make a positive contribution to the economy in general (Cantele & Zardini, 2018). The company's Social Dimension is expected to pay attention to and promote social justice, human rights, equality, job security, employment opportunities, community engagement, and other social responsibilities. This dimension includes the company's impact on the natural environment and efforts to minimize damage and promote environmental sustainability. The company is expected to manage resources efficiently, reduce emissions and waste, protect biodiversity, and contribute to environmental conservation.

Indonesia has positioned social responsibility as a concern by making its implementation mandatory for companies engaged in natural resource management and their business activities have a direct impact on the environment. The company conducts CSR in the form of commitment to the country and society by using the principles of sustainable development. The most prominent approach in its implementation is community empowerment which aims to build independence and create an empowered society (Christens, 2019). There are several regulations that regulate Corporate Social Responsibility such as Law Number 22 of 2001 concerning Oil and Gas article 40 paragraph 5, Law Number 25 of 2007 concerning Foreign Investment article 15.b. Furthermore, in Law Number 40 of 2007 concerning Limited Liability Companies article 74 paragraph 1 which states that companies that carry out business activities in the field and/or related to natural resources are obliged to carry out social and environmental responsibilities, this Law also has a derivative regulation, namely Government Regulation No. 47/2012 concerning Social and Environmental Responsibility of Limited Liability Companies. In addition, there are still other regulations that regulate companies with SOE status, namely the Regulation of the Minister of SOEs No.08/MBU/2013 concerning the Partnership and Community Development Program (PKBL).

Social and Environmental Responsibility carried out by the Company is inseparable from the process of community empowerment or development. According to Adi (2021), there are two approaches in community development, namely the directive approach (instructive) and the non-directive approach (practicative). The Directive Approach means that the Company that intervenes in the community knows what is needed and beneficial to the Community, while the Non-Directive approach is based on the belief that individuals are aware of their needs and what is best for them. Community development can be said to be a planned change that focuses on the community to improve the quality of human resources and can be studied using a multidisciplinary perspective. Historical background can show differences in cultural values and norms between one community and another and requires the implementation of development to adjust the values and norms of the target community (Midgley, 2020). Community development can also be understood as a way of working that essentially starts from the needs and aspirations of underprivileged groups (Howard & Wheeler, 2015). Therefore, community development can also be defined as the ability to provide community resources such as opportunities, knowledge, and skills to increase their capacity to choose their own destiny and take part in the fulfillment of their community (Morley et al., 2019). The objective of community development is to facilitate collective collaboration among individuals, enabling them to identify communal needs and undertake unified actions to address them. This process encompasses several endeavors. Initially,
Community members require developmental programs that furnish them with necessary resources and support to fulfill their requirements. Subsequently, social campaigns and initiatives are imperative, enabling stakeholders to cater to the needs of marginalized populations (Iswadi, 2019).

**METHODS**

The approach used in this study uses a qualitative approach, this approach aims to explore data in depth, accurately and comprehensively (Hamidani, 2019). This approach is used to look deeply at the corporate social responsibility carried out by PT Pertamina Patra Niaga which is associated with three dimensional concepts based on the triple bottom line. According to Denzin and Lincoln (2016) stated that qualitative research is a process used to gain a deep understanding of social phenomena by collecting data through interaction with research participants. Furthermore, this type of research uses descriptive research. Descriptive research aims to describe the research with words, type classifications, or outlines Steps to answer questions such as who, when, where, and how (Hamidani, 2019). By using the type of descriptive research, this research is to describe systematically, in-depth, detailedly, and factually related to the organic waste management empowerment program as a form of corporate social responsibility carried out by PT Pertamina Patra Niaga Integrated Jakarta. The program is carried out around the Company's operational area, namely in RW 07, North Rawa Badak Village, Koja District, North Jakarta City.

**RESULTS and DISCUSSION**

The collaboration program between the Company and RW 07, North Rawa Badak Village has been carried out since 2021. Based on research from RW 07 Rawa Badak Utara Village, which at that time was inhabited by as many as 714 people, has been estimated to produce a considerable amount of organic waste with an estimated 33.5 kilograms per day or around 1,005 kilograms per month. When estimated on an annual basis, the residents of RW 07 Rawa Badak Utara Village are estimated to be able to produce around 12.06 tons of organic waste per year. The estimated total generation of organic waste generated by residents of RW 07 Rawa Badak Utara Village per day is equivalent to contributing 0.0024% of the total daily waste generation at the North Jakarta Administrative City level which reaches 1,382.36 tons per day. The organic waste was previously not managed and was directly disposed of at a temporary disposal site (TPS) which is located adjacent to RW 07 Rawa Badak Utara Village, namely the Koja Waste Depot.

Different from the waste bank program in general which tends to focus on handling inorganic waste, organic waste management in RW 07 Rawa Badak Utara Village is actually committed to carrying out the mission of handling organic waste produced by local residents. This commitment is based on concerns about the generation of organic waste which is one of the dominant waste generators and actually causes many problems such as bad odors, becoming a nest of flies, and producing methane gas which tends to be bad for the environment (Naworio, 2022). Awareness of the importance of dealing with the problem of organic waste generation in RW 07 is the basis for formulating an organic waste management model that can create new income streams to attract the attention of other residents to participate. The reason is, residents tend not to be interested in taking care of the problem of organic waste which is dirty and does not generate income (Parizeau et al., 2015).

Furthermore, the development of organic waste management methods into new economic potential is inseparable from the development of PT Pertamina Patra Niaga Integrated Terminal Jakarta through the Abang Cinte None program. PT Pertamina Patra Niaga Integrated Terminal Jakarta supports the organic waste management initiative of RW 07 Rawa Badak Utara Village in managing organic waste with the bioconversion method assisted by maggot larvae Black Soldier Fly (BSF). The waste management utilizes a narrow land belonging to the RW 07 inventory at the end of a residential alley as an organic waste management area so that it does not disturb local residents. The management of organic waste RW 07 has resulted in several product diversifications such as fresh maggot, dried maggot in packaging, and organic fertilizer used maggot (kasgot) that can be sold and generate economic turnover for its managers.
PT Pertamina Patra Niaga Integrated Jakarta has tried to provide increased insight and knowledge to the community (Akma & Sokarina, 2024). This is in line with the findings in the field regarding the behavior patterns of people who previously did not sort organic waste, now they have managed organic waste by depositing waste to waste management administrators. Every day, the community can deposit their organic waste to the management. The organic waste is usually in the form of food scraps, fruits and vegetables that have decayed which are then handed over to the organic waste management site which is close to the RW 07 secretariat. The organic waste is then used for maggot feed carried out by the management. The management provides organic waste every day which is done alternately with a predetermined picket schedule (O’Neill, 2019). Subsequently, for approximately two weeks, the maggot was harvested which was then dried with a dryer. This rotary dryer is a novelty of the organic waste management program through maggot cultivation. At this drying stage, the Company collaborates with the Faculty of Animal Husbandry, Bogor Agricultural University to train and provide assistance to the management. As a result, the management can produce dried maggot which is sold for Rp.30,000 per kilogram.

An interesting aspect of the handling of organic waste carried out by RW 07 Rawa Badak Utara Village is the ability of its managers to recognize business opportunities that can be generated from organic waste management into products with economic value. The identified business opportunities are the basis for maintaining the sustainability of organic waste management activities in RW 07 so that they are not economically constrained. With the economic value produced, these conditions can increase the development opportunities of organic waste handling activities carried out (Chaher et al., 2020). In addition, the uniqueness of RW 07 organic waste management is related to women's empowerment. A total of 10 people out of 11 organic waste management administrators are women. The management integration consists of several community groups such as PKK cadres, Jumantik cadres, Dasawisma cadres.

The 2020 Jakarta Governor's Regulation on waste management at the community level has encouraged one of the companies, namely PT Pertamina Patra Niaga Integrated Jakarta, to carry out corporate social responsibility in the form of community empowerment in managing organic waste. As a Company, PT Pertamina Patra Niaga Integrated Jakarta has implemented the concept of the triple bottom line, namely the economic dimension, social dimension, and environmental dimension (Kickul & Lyons, 2020) which is described as follows:

a. Economic Dimension

The economic dimension or profit in question is that the Company is not only looking for profits generated, but can also contribute to the economy in general. The findings obtained in the field show that PT Pertamina Patra Niaga Integrated Jakarta is empowering the community around the Company's operations (Aliyas et al., 2024). The collaboration program with RW 07 in the form of organic waste management through maggot cultivation has produced a positive side in the form of increasing processed products that have economic value. In 2023, the Company's focus is on developing the diversification of processed maggot through training on diversification of processed maggot and the provision of production tools. PT Pertamina Patra Niaga collaborates with the Faculty of Animal Husbandry, Bogor Agricultural University as a coach for the diversification of processed maggots. The results of the debridement of processed maggot into dried maggot have an impact on the increase in prices sold at Rp.30,000 per kilogram.

b. Social Dimension

In this concept, the Company carried out empowerment carried out in RW 07, North Rawa Badak Village, including opportunities and involvement of community members to be more empowered. The findings in the field show that the Company conducts coaching through various trainings provided (EL Hajjar & Alkhanaizi, 2018). The trainings provided include waste sorting training, training on the basics of maggot cultivation, training on diversification of processed maggot and training on the use of casgott (used maggot). The training is a means of education for the community and an increase in knowledge on how to utilize household waste or organic waste properly and correctly. That way the community becomes more aware of the problem of waste in the house or the surrounding environment.

c. Environmental Dimensions
The results of field findings show that the organic waste management program called Abang Cinte None (Let's Build Non-Emission Ecology) has an impact on the environment. With good and correct organic waste management, of course, it will reduce waste generation so as to reduce the release and pollution of CH4 and CO2 into the air through the implementation of activities. Organic waste management through maggot cultivation is one of the alternative solutions to reduce the impact of environmental damage created by waste generation (Singh & Kumari, 2019).

CONCLUSION

Community empowerment through the Corporate Social Responsibility program carried out by PT Pertamina Patra Niaga Integrated Jakarta which is reviewed from the perspective of the triple bottom line concept has covered all three economic, social, and environmental dimensions. Community empowerment carried out by the Company implements providing opportunities for community groups to take advantage of economic opportunities and contribute to improving environmental quality. Organic waste management through maggot cultivation has finally succeeded in seeking community development through training and providing insight into environmental issues. In tandem, this program is one of the alternatives to reduce waste that causes environmental damage.

REFERENCES


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Integrated Jakarta as an Implementation of Corporate Social Responsibility


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