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Assessing the Cocoa Farmer Empowerment Program through the Lens of Stufflebeam's Evaluation Framework: A Farmer-Centric Approach

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Abstract. This study evaluates the effectiveness of PT. Berau Coal's Corporate Social Responsibility (CSR) program for empowering cocoa farmers in Berau Regency, Indonesia, using Stufflebeam's Context, Input, Process, and Product (CIPP) evaluation model. Through in-depth interviews, focus group discussions, and observations involving 28 key informants, including representatives from PT. Berau Coal, local government, NGOs, and cocoa farmers, the study assesses the program's alignment with farmers' needs, the provision of resources and training, implementation challenges, and outcomes. The findings reveal that the program addresses farmers' aspirations for economic improvement and capacity building, with PT. Berau Coal providing essential facilities, knowledge-sharing opportunities, and a supportive environment. However, challenges persist, including the need for enhanced collaboration with the government, expanded socialization efforts, and a comprehensive monitoring and evaluation system. Despite these challenges, the program has yielded positive results, such as increased cocoa production and sales, and the emergence of skilled farmer champions. The study recommends strengthening partnerships within the cocoa value chain and continuously adapting the program to ensure its long-term sustainability and scalability in driving the empowerment of cocoa farmers in Berau Regency.

Keywords: Cocoa Farmer Empowerment, CIPP Evaluation Model, Collaborative Governance, Sustainable Livelihoods.

1. INTRODUCTION

Indonesia's position on the equator creates the ideal climate for cocoa cultivation. According to the Indonesian Minister of Agriculture, cocoa plays a vital role in the country's economy as a source of foreign exchange, income for farmers, job creation, and driver of agribusiness, agroindustry and regional development (Managanta, 2022; Basri, 2023). Large-scale cocoa development can also support green economic development and is environmentally friendly, making it well-suited for sustainable development (Nikoi, 2024; Lamidi, 2024; Parra Paitan, 2024). Based on data from the International Cocoa Organization (ICCO), Indonesia is the sixth largest cocoa bean producer in the world after Ivory Coast, Ghana, Ecuador, Nigeria, and Cameroon with a production volume reaching 180,000 tons in 2021 to 2022 (Kongor et al 2024).

East Kalimantan is one of the regions with promising cocoa potential as a main livelihood, with Berau Regency being one of the centers of cocoa cultivation. The Berau Regency Plantation Office has designated a cocoa development area of 516.85 hectares based on the Berau Regent Decree Number 490 of 2023. Since 2016, the Berau Regency government has designated cocoa as one of the main commodities as outlined in the Berau Regency Medium Term Development Plan (RPJMD) which emphasizes cocoa development efforts.

Government Regulation Number 47 of 2012 concerning Corporate Social and Environmental Responsibility serves as a reference for Limited Liability Companies to implement CSR programs as an obligation, as stated in articles 2 and 3. This aligns with the Regulation of the Minister of Energy and Mineral Resources Number 41 of 2016 Article 1 which defines community development and empowerment as efforts to encourage improvement of the economy, sociocultural education, health, and environmental life of communities around mining, both individually and collectively.

The cocoa potential in Berau Regency has also received attention from the private sector, namely PT. Berau Coal, a coal mining company that has a Corporate Social Responsibility (CSR) program for empowering cocoa farmers (Baon et al, 2014; Asta et al, 2015). Since 2010, PT. Berau Coal has run a Community Development and Empowerment (PPM) program through cocoa cultivation which aims to increase the capacity of cocoa farmers, develop technological innovations, and support the sustainability of the cocoa industry in Indonesia. This program is carried out on an area of 600 hectares and involves around 197 farmers. The presence of PT. Berau Coal's CSR program also helps farmers who face obstacles when there is no market that can absorb cocoa production when it is abundant.

The collaboration between PT. Berau Coal, the Government and farmer groups has achieved notable results (Obidzinski & Barr, 2003; Darmono & Ramdan, 2024). In this collaboration, PT. Berau Coal through Berau Cocoa plays a role in processing cocoa beans so that they can be sold in ready-to-consume products and providing training to cocoa farmers. The Coffee and Cocoa Research Center (PUSLITKOKA) Jember provides recommendations for superior cocoa seeds. In 2022, the Ministry of Law and Human Rights (Kemenkumham) awarded Berau's fermented cocoa beans with a Geographical Indication (GI) Certificate, which is the first cocoa certificate in Indonesia. This achievement serves as a means of promoting Berau cocoa, which was named the Best National Fermented Cocoa Bean on National Cocoa Day, resulting in increased demand for Berau cocoa beans both domestically and abroad.

Despite the successes, cocoa farmers still face challenges such as lack of markets to absorb abundant cocoa production (Leksono et al, 2021; Fudjaja et al, 2024; Tham-Agyekum et al, 2024). PT. Berau Coal's achievements

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in the CSR & PDB Awards 2024 and Berau Cocoa being named the Best National Cocoa in 2022 were made possible by the cooperation between PT. Berau Coal, the Government and Farmer Groups. Therefore, this study will refer to the Evaluation of the Collaborative Process in the CSR Program for Empowerment of Cocoa Farmers in Berau Regency using Stufflebeam's evaluation framework with a farmer-centric approach.

Evaluating the collaborative process in the CSR program for cocoa farmer empowerment in Berau Regency is crucial for several reasons. Firstly, it provides valuable insights into the effectiveness of the multi-stakeholder collaboration between PT. Berau Coal, the government, and farmer groups in achieving the program's objectives. Secondly, by adopting a farmer-centric approach and utilizing Stufflebeam's CIPP evaluation model, this study offers a comprehensive assessment of the program's context, inputs, processes, and products from the perspective of the primary beneficiaries - the cocoa farmers. This approach ensures that the farmers' voices are heard and their needs are prioritized in the evaluation process. Thirdly, the findings of this research can inform future decision-making and policy formulation related to CSR programs and collaborative governance in the agricultural sector, not only in Berau Regency but also in other regions facing similar challenges. By identifying the strengths, weaknesses, and areas for improvement in the collaborative process, this study contributes to the growing body of knowledge on effective strategies for empowering smallholder farmers and promoting sustainable rural development through public-private partnerships.

2. METHOD

This study will employ a qualitative approach with a case study design to explore the success of the CSR program in empowering cocoa farmers in Berau Regency. The research will involve 28 key informants, including 2 representatives from the Social Enterprise Department of PT. Berau Coal, 2 from the Berau Regency Plantation Office, 1 from the Coffee and Cocoa Research Center, 2 from Berau Cocoa, 1 from the Kalimajari Foundation, and 20 cocoa farmers. Data will be collected through in-depth interviews, focus group discussions (FGDs), and document analysis. The study locations include the PT. Berau Coal Head Office, Berau Cocoa Factory, Berau Regency Plantation Office, and various cocoa farmer sites for FGDs.

To ensure the validity and reliability of the findings, the study will employ several strategies. Data will be triangulated from multiple sources, including the government, PT. Berau Coal, NGOs, and cocoa farmers. Member checking will be conducted by bringing the findings back to the participants for feedback on accuracy and relevance. Rich, thick descriptions of the collaborative program will be provided to allow readers to vicariously experience the field setting. Researcher biases will be clarified to ensure openness and honesty in the analysis. Transcripts will be checked for accuracy, coding consistency will be maintained, and codes will be cross-checked among different researchers to ensure consistent interpretation of the data. The data analysis will follow Miles, Huberman, and Saldana, (2014) approach, involving data reduction, data display, and conclusion drawing/verification

3. RESULT AND DISCUSSION

3.1. Context Evaluation

The context evaluation revealed that the cocoa farmers joined the PT. Berau Coal empowerment program at different times, ranging from less than a year to over five years. Despite the varying durations, the farmers demonstrated a clear understanding of the program's objectives, which primarily revolve around improving their economic conditions, fostering economic independence, and enhancing their overall well-being. Additionally, the program aims to increase the farmers' knowledge of cocoa cultivation techniques.

The farmers expressed a common goal in joining the program: to boost their income, acquire additional knowledge about cocoa farming, and expand their network with other farmers and the private sector, specifically PT. Berau Coal. The company's commitment to providing facilities such as seeds, fertilizers, pesticides, and integrated pest control training has made the farmers feel supported and valued. Moreover, PT. Berau Coal's unique point system, which rewards farmers for their sales, and the regular presence of expert trainers from PUSLITKOKA Jember have set the program apart from others.

The context evaluation highlights the program's alignment with the farmers' needs and aspirations. By addressing their economic challenges and offering targeted support, PT. Berau Coal has created a program that resonates with the farmers and encourages their active participation. The provision of essential resources and the emphasis on knowledge-sharing demonstrate the company's genuine commitment to empowering the cocoa farming community (Muilerman, 2019; Resell & Prestegård, 2024; Garcia et al, 2024)

However, to further strengthen the program's context, it is recommended that PT. Berau Coal enhance its collaboration with the local government. By working in synergy with government agencies, the program can leverage additional resources, expertise (Rusliadi & Aina, 2024), and reach, thereby maximizing its impact on the cocoa farming sector in Berau Regency. Improved coordination and communication between PT. Berau Coal and the government will ensure a more comprehensive and sustainable approach to cocoa farmer empowerment.

3.2. Input Evaluation

The input evaluation focused on the provision of facilities, training, and the allocation of funds by the cocoa farmers during their participation in the PT. Berau Coal empowerment program. The company has been proactive in supplying the farmers with essential inputs such as seeds, fertilizers, dolomite, pest control solutions, and even grass-cutting machines. These resources have been instrumental in supporting the farmers' cocoa

cultivation efforts and have contributed to their success.

PT. Berau Coal's training initiatives, particularly the field schools conducted directly in the farmers' villages, have been highly effective in imparting valuable knowledge and skills. The company's approach of sending farmers to PUSLITKOKA Jember for intensive training has also yielded positive results, as evidenced by the farmers' ability to implement advanced techniques like grafting and share their knowledge with fellow farmers upon their return.

The farmers' active participation in providing suggestions and ideas to PT. Berau Coal highlights the program's inclusivity and responsiveness. The company's openness to feedback has fostered a sense of ownership and empowerment among the farmers, enabling them to contribute to the program's continuous improvement (Civera et at, 2019; Dushkova & Ivlieva, 2024). Furthermore, the farmers' ability to allocate funds effectively for cocoa cultivation demonstrates their growing financial literacy and management skills (Tham-Agyekuma et al, 2021; Amanah et al, 2021; Unnikrishnan et al, 2022).

While the input evaluation showcases the program's strengths, there is room for improvement in terms of record-keeping. Encouraging and assisting farmers in maintaining accurate records of their personal expenses and investments related to cocoa farming will provide valuable data for assessing the program's long-term impact and sustainability. Additionally, PT. Berau Coal could consider expanding its training programs to include financial management and entrepreneurship, equipping farmers with the skills necessary to transform their cocoa farming into thriving agribusinesses.

3.3. Process Evaluation

The process evaluation examined the implementation of the cocoa farmer empowerment program, the challenges encountered, the farmers' participation in evaluations, and the program's unique advantages. As of August 2024, the farmers were actively engaged in various cocoa tree maintenance activities, such as fertilizing, pest and disease control, fruit spraying, pruning, and sanitation, while awaiting the main harvest in October. Some farmers even ventured into experimental cocoa seedling production, demonstrating their initiative and the application of knowledge gained from the program.

Interestingly, several farmers reported not encountering any significant obstacles during their participation in the program. However, others identified challenges related to cocoa seedlings, incomplete maintenance leading to suboptimal fruit quality, insufficient pest and disease control, imperfect pruning, irregular fertilization, lack of maintenance tools, limited knowledge of cocoa cultivation, and distant water sources. These challenges highlight the need for ongoing support and capacity building to ensure the farmers can effectively address the various aspects of cocoa farming.

The process evaluation revealed that the farmers had not been involved in formal evaluations conducted by PT. Berau Coal. Instead, they primarily provided direct feedback, suggestions, and ideas during field school sessions when the Berau Cocoa team visited their villages and farms, or during data sharing programs with PUSLITKOKA Jember expert technicians. The farmers expressed a desire for more frequent socialization activities, recognizing the growing interest in cocoa farming among the local community and the need to support new farmers who may lack sufficient knowledge and skills.

PT. Berau Coal's commitment to empowering farmers sets its program apart from others. The company's provision of facilities, training, and regular farm visits demonstrates its dedication to the farmers' success. Moreover, PT. Berau Coal's willingness to purchase cocoa beans from farmers, regardless of quality or quantity, and its efforts to provide further training to improve bean quality, showcase its long-term vision for the program's sustainability.

To enhance the process evaluation, it is recommended that PT. Berau Coal establish a formal evaluation mechanism that actively involves the farmers. Regular feedback sessions, surveys, or focus group discussions will provide valuable insights into the program's effectiveness, identify areas for improvement, and foster a sense of ownership among the farmers (Cancino et al, 2022; Nkansah-Dwamena, 2023). Additionally, expanding socialization efforts to reach a wider audience, including new and potential cocoa farmers, will contribute to the program's growth and impact in Berau Regency.

3.4. Product Evaluation

The product evaluation assesses the program's effectiveness in achieving its intended outcomes. While the previous indicators (context, input, and process) provide important insights, the ultimate test of the program's success lies in its impact on the cocoa farmers' livelihoods, productivity, and overall well-being.A promising indication of the program's effectiveness is the increase in cocoa bean production and sales. Data from January to August 2024 reveals that several farmers have achieved significant milestones, with some ranking among the top producers and sellers. These accomplishments can be attributed to the program's comprehensive support, including the provision of quality seedlings, fertilizers, pest control measures, and training on best practices in cocoa cultivation.

Moreover, the program's focus on empowering farmers through knowledge and skill development has yielded tangible results. Farmers who have attended intensive training sessions at PUSLITKOKA Jember have not only improved their own cocoa farming practices but have also become valuable resources for their communities, sharing their expertise and serving as local champions. This transfer of knowledge has the potential to create a ripple effect, benefiting a wider network of cocoa farmers in Berau Regency.

However, to fully assess the program's long-term impact, it is crucial to establish a robust monitoring and evaluation system that tracks key performance indicators over time. This system should not only measure production and sales figures but also consider broader socio-economic factors such as income growth, livelihood diversification, and overall quality of life improvements among the cocoa farming communities. Regular impact assessments will provide valuable insights into the program's effectiveness and help identify areas where adjustments or additional support may be necessary.

Furthermore, to ensure the sustainability and scalability of the program's success, PT. Berau Coal should explore opportunities for collaboration and partnership with other stakeholders in the cocoa value chain. Engaging with local cooperatives, financial institutions, and market players can help create an enabling environment for cocoa farmers to thrive, access better markets, and secure fair prices for their products (Borda et al, 2021; Pereira, 2024). By fostering a supportive ecosystem, the program can contribute to the long-term resilience and prosperity of the cocoa farming sector in Berau Regency.

The product evaluation highlights the positive outcomes achieved by the PT. Berau Coal cocoa farmer empowerment program. The increased production and sales, coupled with the knowledge and skills gained by the farmers, demonstrate the program's effectiveness in driving change and improving livelihoods. However, to ensure the program's long-term success and scalability, it is recommended that PT. Berau Coal establish a comprehensive monitoring and evaluation system, foster partnerships within the cocoa value chain, and continue to adapt and innovate based on the evolving needs of the cocoa farming communities in Berau Regency.

4. CONCLUSION

The evaluation of PT. Berau Coal's CSR program for empowering cocoa farmers in Berau Regency using Stufflebeam's CIPP model has provided valuable insights into the program's strengths, challenges, and opportunities for improvement. The context evaluation reveals that the program aligns well with the farmers' needs and aspirations, addressing their economic challenges and providing targeted support. The input evaluation highlights the company's proactive approach in providing essential resources and training, while also fostering a sense of ownership and empowerment among the farmers.

The process evaluation sheds light on the program's implementation, with farmers actively engaged in cocoa tree maintenance and experimental initiatives. While some farmers reported no significant obstacles, others identified challenges related to seedlings, maintenance, pest control, and limited knowledge. The absence of formal evaluations involving farmers and the need for expanded socialization efforts are areas that require attention.The product evaluation demonstrates the program's positive outcomes, with increased cocoa production and sales, and the emergence of skilled farmer champions. However, establishing a comprehensive monitoring and evaluation system and fostering partnerships within the cocoa value chain are crucial for ensuring the program's long-term success and scalability.

PT. Berau Coal's CSR program has shown promising results in empowering cocoa farmers in Berau Regency. By addressing the identified challenges and recommendations, the program has the potential to drive sustainable change and improve the livelihoods of the cocoa farming communities. Continuous adaptation, innovation, and collaboration will be key to the program's ongoing success in contributing to the resilience and prosperity of the cocoa farming sector in Berau Regency.

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