

Community Satisfaction Index as a Tool for Monitoring and Evaluation in CSR Programs: A Case Study from Coastal Indonesia

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Abstract:

BERLIAN PULAU KUNDUR is one of the community empowerment programmes in Sawang Laut Village, West Kundur Subdistrict, Karimun Regency by PT TIMAH Tbk Kundur Processing and Smelting Division, as a form of commitment and contribution to flora and fauna conservation through a biodiversity protection programme. This study aims to evaluate, measure, and calculate the impact of the programme's implementation on the recipient community groups comprehensively from environmental, economic, welfare, and social perspectives through guided questionnaire interviews. The questionnaire to calculate the Community Satisfaction Index (CSI) was designed with closed-ended questions using a Likert scale and several open-ended questions to gather additional information to support the quantitative data. The CSI survey results were 3.487, or 87.180 when converted (very satisfied category), indicating that the beneficiaries considered the programme to be highly relevant, beneficial, and sustainable. These results are expected to provide an overview of community satisfaction as programme beneficiaries while also conveying input and suggestions for improving future community empowerment programmes. The company can continue to develop the programmes offered to expand the coverage of beneficiaries.

Keywords — Community Satisfaction Index (CSI), Corporate Social Responsibility (CSR), Community Empowerment, BERLIAN PULAU KUNDUR.

I. INTRODUCTION

The implementation of Corporate Social Responsibility (CSR) programmes and community empowerment has become an important necessity for companies, especially those operating in coastal areas[1]. As business actors at the heart of community life, companies need to maintain good relations with local communities through CSR programmes, which are intended to serve as a link between companies and communities[2]. CSR programmes in coastal areas are implemented to

address various social and environmental issues in the surrounding area. CSR is not just an option, but a form of corporate response to the real conditions of coastal communities[3]. Research conducted by Mohammed et al[4] in Ghana shows that coastal communities have high expectations of the role of companies in improving social and environmental welfare through CSR. This is in line with previous research stating that social and economic issues are the main indicators of community satisfaction with CSR implementation[5].

The conversion of mangrove forests into residential areas and aquaculture by local communities can result in mangrove forest destruction[6]. The main causes of biodiversity change in coastal areas, impacts on local ecosystems, human health, and socio-economics are mangrove ecosystem destruction[7]. Inappropriate behaviour towards the potential of coastal communities will have a negative impact on the environment[8].

The geographical condition of Sawang Laut Village, which is located in a coastal area, gives the village great potential in the aquatic sector. PT TIMAH Tbk's Kundur Processing and Smelting Division implements programmes that can optimise the village's potential, such as Silvofishery Polyculture. Silvofishery is a traditional agricultural system that combines fishing with mangrove planting, followed by the introduction of a management system that minimises inputs and reduces environmental impact[9]. Silvofishery polyculture includes white snapper farming with floating net cages, mangrove management, making shrimp paste from rebon shrimp caught by gumbang, hydroponic and vertical vegetable cultivation, making biological stimulants from snapper waste water, waste management through the Waste Bank, and broiler chicken farming.

This study was conducted to measure the level of satisfaction of coastal communities with CSR programmes using the Likert Scale-based CSI method, evaluate the contribution of CSR programmes in improving community welfare, environmental sustainability, and social participation, and offer a community satisfaction-based programme evaluation model that can be used as a reference for improving CSR strategies in the future. In Agam Regency, this Likert Scale-based CSI method is effective because respondents find it easier to understand the answer choices[10]. Likert Scale was also employed by Alamineh et al[11] in evaluating community perceptions of the social, economic, and environmental impacts of development projects.

II. METHODOLOGY

The data source in this study is primary data obtained directly from respondents through interviews using a guided questionnaire. The questionnaire for calculating the CSI was designed with closed questions using a Likert Scale, as follows:

- 1: Not satisfied
- 2: Less satisfied
- 3: Satisfied
- 4: Very satisfied

In addition to closed questions to calculate the community satisfaction index, the questionnaire also included several open questions to explore additional information to support the quantitative data.

The CSI calculation using the Likert Scale in this study refers to Permen PAN & RB No. 14 of 2017 concerning Guidelines for Compiling Community Satisfaction Surveys. In academic or international research, variations of the 1–4 or 1–7 scale are also often used, for example to measure participation levels, satisfaction, or ecological perceptions[12].

The CSI indicators used in the questionnaire include: a) Programme Relevance; b) Programme Benefits; c) Programme Sustainability; d) Community Participation; f) Company Synergy; g) Community Acceptability; h) Officer Responsibility; i) Officer Capacity; j) Planning Consistency with Implementation; k) Method Accuracy and Clarity; l) Method or Programme Reliability; m) Fairness in Programme Implementation; n) Company Responsiveness.

The respondents in this study were representatives of community groups that received empowerment programmes. The characteristics of the respondents in this study were based on age, education level, occupation, and income, as shown in the following table:

TABLE I
RESPONDENT CHARACTERISTICS

No	Category	Sub-Category	Frequency	Percentage
1	Age	< 25 years	-	-
		26 – 45 years	19	40.43%
		46 – 65 years	26	55.32%
		>65 years	2	4.26%

2	Education	Not attending School	6	12.77%
		Primary School	11	23.40%
		Junior High School	9	19.15%
		Senior High School	15	31.91%
		Diploma	6	12.77%
3	Work	Entrepreneur	5	10.64%
		Others	42	89.36%
4	Income	<Rp 1,000,000	20	42.55%
		Rp 1,000,000,-s/d Rp 3,000,000	24	51.06%
		Rp 3,000,000,-s/d Rp 5,000,000	3	6.38%
		>Rp 5,000,000	-	-

From the table above, it can be seen that based on age, most respondents were aged 46–65 years. In terms of education level, respondents were spread across all levels. Five respondents worked as entrepreneurs and the rest worked in other fields, including housewives, fishermen, rubber farmers, livestock farmers, and teachers.

The respondents' answers were then tabulated using a computer application program in the form of Microsoft Excel. The data will be processed to determine the CSI value for the implemented programme in the following manner:

- Average Score per Question

$$= \frac{\text{Total Score per Question}}{\text{Number of Completed Questionnaires}}$$
- Weighting per Question

$$= \frac{1}{\text{Number of Questions}}$$
- Weighted Average Score per Question

$$= \text{Average Score per Question} \times \text{Weight per Question}$$
- Converted Community Satisfaction Index Score

$$= \text{Weighted Average Score per Question} \times 25$$
- Interpretation of the Community Satisfaction Index

The interpretation or explanation of the calculated public satisfaction index is as follows:

TABLE II
INTERPRETATION OF CSI VALUES

No	Converted Public Satisfaction Index Score	Description
1	0 – 25	Not satisfied
2	25 – 50	Less satisfied
3	50 – 75	Satisfied
4	75 – 100	Very satisfied

III. RESULT AND DISCUSSION

BERLIAN PULAU KUNDUR empowerment programme aims to provide solutions to problems and develop the potential of Sawang Laut Village. In addition, this programme also aims to improve the knowledge, skills, quality of life and income of the community.

CSI survey was conducted as a form of monitoring and evaluation of the implementation of the community empowerment programme in quantitative terms. In addition, input, criticism, and suggestions are also very important to improve the quality of community empowerment programmes in the coming year. This survey involved 47 community representatives who received community empowerment programmes from PT TIMAH Tbk's Kundur Processing and Smelting Division. The scope of this survey covers three aspects, namely the overall programme, programme management, and programme distribution and services. This survey was also conducted to measure the level of success and satisfaction of programme recipients.

a. CSI for the Overall Programme

CSI for the overall programme aspect is measured based on the relevance of the programme to community needs in terms of problems and potential, programme benefits, and programme sustainability. The survey results are presented in the following diagram:

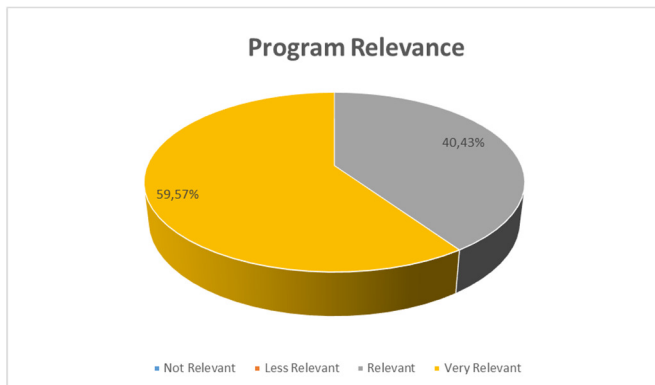


Fig. 1 Survey Results on the Relevance of the BERLIAN PULAU KUNDUR Programme

Based on the survey conducted, it can be seen that the community empowerment programmes provided by PT TIMAH Tbk's Kundur Processing and Smelting Division, particularly the BERLIAN PULAU KUNDUR programme, were considered relevant by 40.43% of respondents and very relevant by 59.57% of respondents. This indicates that, according to the community, the programmes provided can help overcome problems and develop existing potential in Sawang Laut Village.

In addition to the relevance of the programmes, the community satisfaction index was also measured in terms of the benefits of the programmes. The benefits of the programmes were assessed in terms of increased knowledge, improved skills, improved environmental quality, and increased community income. The survey results regarding the benefits of the programmes are presented in the following table:

TABLE III
SURVEY RESULTS ON THE BENEFITS OF THE BERLIAN PULAU KUNDUR PROGRAMME

Program Benefits	Survey Results			
	No Improvement	Slight Improvement	Improvement	Significant Improvement
Improved Knowledge	0%	0%	40.43%	59.57%
Improved Skills	0%	0%	44.68%	55.32%
Improved Environmental Quality	0%	0%	55.32%	44.68%
Increased Income	0%	8.51%	55.32%	36.17%

Based on the survey results in the table above, it can be concluded that this community

empowerment programme can simultaneously have an impact on the economy, society and the environment. This is in line with the findings of Siswoyo et al[13], who stated that the development of silvofishery on the coast of North Sumatra increased fish production while restoring the mangrove ecosystem.

The overall programme was also assessed in terms of its sustainability, which was analysed based on the continuity of the programme that had been implemented and the community's commitment to continuing the programme without assistance from the company. The survey results are presented in the following diagram:

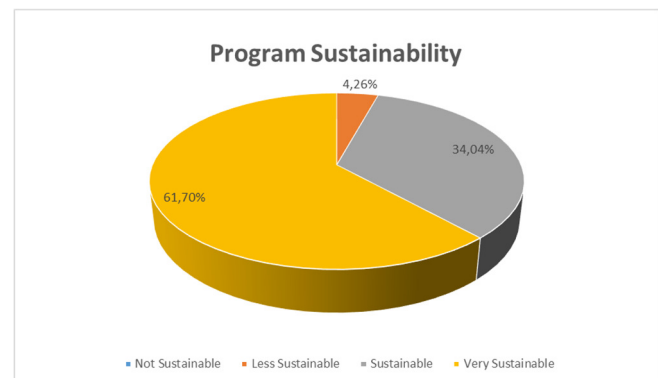


Fig. 2 Survey Results for the Sustainability of the BERLIAN PULAU KUNDUR Programme

Based on the survey results, it can be seen that 4.26% of respondents felt that this empowerment programme lacked continuity, 34.04% of respondents felt that this empowerment programme was continuous, and 61.70% of respondents felt that this empowerment programme was very continuous. Although a small number of respondents feel that this programme lacks sustainability, all respondents admit that they still need assistance from the company. The community has also shared the knowledge and skills they have gained from this programme with others, such as family, neighbours and the surrounding community, as a form of commitment to maintaining the sustainability of the programme.

After processing the data on the relevance, benefits, and sustainability of the programme, the CSI score for the overall BERLIAN PULAU KUNDUR programme is as follows:

TABLE IV
CSI PROGRAMME BERLIAN PULAU KUNDUR OVERALL

Index Score	Converted CSI	Description
3.519	87.965	Very Satisfied

b. CSI for the Programme Management

CSI for programme management aspects is measured based on the participation of programme beneficiaries, stakeholder synergy, and the performance of facilitators or Community Development Officers (CDOs). The survey results related to community participation are presented in the following table:

TABLE V
SURVEY RESULTS ON COMMUNITY PARTICIPATION IN THE BERLIAN PULAU KUNDUR PROGRAMME

Community Participation	Survey Results			
	Not Good	Not Very Good	Good	Very Good
Planning	0%	8.51%	44.68%	46.81%
Implementation	0%	2.13%	40.43%	57.45%
Monitoring and Evaluation	0%	17.02%	40.43%	42.55%

From the table above, it can be concluded that some respondents feel that community involvement is still lacking, but the company has made efforts to involve the community in this case through the BERLIAN PULAU KUNDUR Programme in terms of planning, implementation, monitoring and evaluation of the programmes to be carried out.

The survey results related to synergy show that 44.68% of respondents stated that PT Timah Tbk's Kunder Processing and Smelting Division is capable of synergising with other stakeholders, and 55.32% of respondents stated that it is very capable of synergising with other stakeholders in implementing the BERLIAN PULAU KUNDUR community empowerment programme. The performance of facilitators or Community Development Officers (CDOs) is measured in terms of their closeness to the community, adaptability, responsibility, and competence in the field. The results of the survey related to the performance of

facilitators or Community Development Officers (CDOs) are presented in the following table:

TABLE VI
SURVEY RESULTS FOR THE PERFORMANCE OF FACILITATORS/CDOs OF THE BERLIAN PULAU KUNDUR PROGRAMME

Facilitator/CDO Performance	Survey Results			
	Not Good	Not Very Good	Good	Very Good
Proximity to the Community	0%	0%	46.81%	53.19%
Adaptability	0%	0%	46.81%	53.19%
Responsibility	0%	0%	40.43%	59.57%
Competence	0%	0%	53.19%	46.81%

After processing data on community participation, synergy, and the performance of facilitators or Community Development Officers (CDOs), the following CSI for programme management of the BERLIAN PULAU KUNDUR Programme was produced:

TABLE VII
CSI MANAGEMENT OF THE BERLIAN PULAU KUNDUR PROGRAMME

Index Score	Converted CSI	Description
3.484	87.101	Very Satisfied

c. CSI for Program Distribution and Services

CSI for programme delivery and service aspects is measured based on the accuracy and clarity of methods or programmes, the reliability of methods or programmes, fairness, and responsiveness. The survey results related to the accuracy and clarity of methods or programmes are presented in the following diagram:

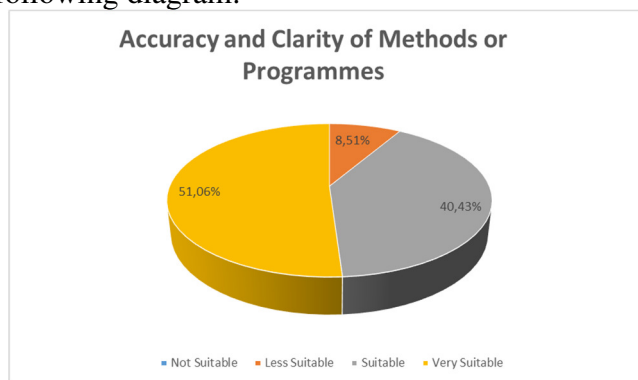


Fig. 3 Survey Results for Accuracy and Clarity

From the survey above, it is known that 8.51% of respondents feel that the methods or programmes provided are still not appropriate or suitable for the conditions and characteristics of the recipient community. However, for the majority of respondents, the programmes provided are appropriate, clear, and very suitable for the conditions of the recipient community.

The accuracy and equity of the recipients of the community empowerment programme provided are indicators for assessing fairness in this aspect. Based on the survey results, 48.94% of respondents assessed that the accuracy and equity of this programme were good, while the remaining 51.06% assessed that the accuracy and equity of the programme were very good. Meanwhile, the element of responsiveness to criticism, input, and suggestions was also rated as good by 51.06% of respondents and very good by 48.94% of respondents.

After processing the data on the accuracy and clarity of the methods or programmes, the reliability of the methods or programmes, fairness, and responsiveness, the CSI for the distribution and service of the BERLIAN PULAU KUNDUR Programme is as follows:

TABLE VIII
CSI DISTRIBUTION AND SERVICE OF THE BERLIAN PULAU KUNDUR PROGRAMME

<i>Index Score</i>	<i>Converted CSI</i>	<i>Description</i>
3.459	87.474	Very Satisfied

d. Total CSI

CSI calculation results for the three aspects or the overall total of the BERLIAN PULAU KUNDUR Programme as the recipient of the community empowerment programme of PT TIMAH Tbk's Kundur Processing and Smelting Division can be seen in the following table:

TABLE IX
TOTAL CSI RESULTS

<i>Index Score</i>	<i>Converted CSI</i>	<i>Description</i>
3.487	87.180	Very Satisfied

It can be seen that the CSI value for the BERLIAN PULAU KUNDUR programme is

3.487, or 87.180 when converted, which means it falls into the very satisfied/very good category. When compared to previous research related to the CSI of the Tuna Fishermen Group in the coastal area of Dumai conducted by Hildawati[14], which obtained an CSI value of 3.25 or converted to 81.25, which means it falls into the good category. This may be influenced by the category of respondents who filled out the CSI survey. In her study, Hildawati only selected the tuna fishing community as her research respondents, while in this study, the respondents were not only fishermen but also came from various fields such as entrepreneurs, housewives, fishermen, rubber farmers, ranchers, and teachers.

Different from Hildawati's research[14], the research conducted by Lutfi & Gunawan[15] obtained a higher CSI value of 88.9. This may be due to several factors, such as the number and characteristics of respondents, which were very different. This study involved 47 respondents, the majority of whom had junior high school/high school education, while the study by Lutfi & Gunawan involved 134 respondents, the majority of whom were college graduates. The way people assess a programme is influenced by a higher level of education, where social literacy and better understanding tend to result in positive assessments[15].

Furthermore, regarding community participation, some respondents said that community involvement in the programme was still considered poor. A similar situation occurred in a study in Thailand by Sattayapanich et al[16]

en though the programme activities were well received.

IV. CONCLUSIONS

The total public satisfaction index for the BERLIAN PULAU KUNDUR programme in Sawang Laut Village, West Kundur Subdistrict, Karimun Regency, was 3.487, or a converted public satisfaction index of 87.180, indicating a high level of satisfaction. The beneficiaries of the BERLIAN PULAU KUNDUR programme hope that PT

TIMAH Tbk's Kundur Processing and Smelting Division will continue this utilisation programme until the community is truly capable of managing the cultivation of white snapper and mangroves in a sustainable manner. The main hope of the recipients of the BERLIAN PULAU KUNDUR programme is an increase in capacity and additional training in mangrove cultivation and sustainable sea bass seed development. In addition, PT TIMAH Tbk's Kundur Processing and Smelting Division must also develop the programmes provided so that the coverage of beneficiaries is even wider.

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