



Social Return on Investment of PT Badak NGL SALIN SWARA Program

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Article Information Abstract

History of Article

Received April 2022

Accepted June 2022

Published August 2022

Keywords:

PT Badak NGL, Corporate Social Responsibility, Social Return on Investment

PT Badak NGL through its CSR (Corporate Social Responsibility) programs contributes to Sustainable Development (SDGs) realization. One of its CSR programs is Salin Swara which is related to a community waste program aiming at creating society's collective awareness of common waste and household waste management to preserve the environment. This quasi-qualitative study attempted to assess the social impact received by salin swara stakeholders and the amount of social impact resulting from this program compared to the investment made by PT Badak NGL. In data analysis, this study used triangulation techniques to map the advantages of this program (qualitative) and the Social Return on Investment-SROI method (quantitative). To collect the data, in-depth interviews, Focus Group Discussions, and secondary data reviews were done. Practically this study provides an overview for companies to evaluate their CSR programs using the SROI method, while the results can be a basis for optimizing the next CSR program. Based on the SROI method, Salin Swara program gained a score of 2.33, meaning that the program benefitted 2.33 times the investment issued. In addition, the value of its benefit was Rp.31,302,849 with a total investment of Rp.13,437,500.00. The outcome value was dominated by the outcome of the workers Social Security Agency or BPJS Ketenagakerjaan death insurance claims (67%). It shows good program performance because the payback period has been obtained in the same year when the program was carried out.

INTRODUCTION

Before the Millenium Development Goals (MDGs) campaign ended, in September 2015 in New York, United States the United Nations has hold the 70th General Assembly which became a new point of global development by agreeing on Sustainable Development Goals containing 17 goals and 169 targets as the follow-up of the Millennium Development Goals agendum that had not yet been realized (Panuluh, S., & Fitri, M. R, 2016). The United Nations (UN) Declaration was then followed up by the government with the signing of Presidential Regulation no. 59 of 2017 on July 4, 2017 regarding the implementation of the Achievement of the Sustainable Development Goals. ISO 26000 also supports the implementation of the Corporate Social Responsibility as a function of ISO (International Organization for Standardization) and develops the "ISO 26000 Guidance Standard" based on the widespread belief that social responsibility is very important for organization survivability (ISO 26000 and the SDGs, 2018).

A company must realize society's welfare as a part of its business expansion which may harm environmental and social balance. Some efforts to realize this welfare are by providing society with various benefit programs, such as improving the facilities of education, health, economy, environment and others called Corporate Social Responsibility (CSR). A company that adopts this program often expands its business to a site that enables them to give contributions to society. One thing to note is today's CSR must support sustainable development (Elalfy *et al.*, 2020; Lu *et al.*, 2021)

As a leading natural gas company in Indonesia, PT Badak NGL located in Bontang City, East Kalimantan Province its demanded to meet social obligations or CSR through participation in community empowerment projects. Community empowerment considered an alternative to foster the welfare of people surrounding the company by solving particular problems. This program is realized through development initiated by the community to improve their situations.

The community empowerment done by PT Badak NGL was located in Tanjung Laut Indah Village in Bontang City. This region is often get flooded due to piles of garbage in the river or community residential areas that produce waste every day. Because of the indiscipline of residents in disposing of waste, the waste accumulates at several points so that water is blocked from flowing and causes flooding.

Knowing the previously mentioned problem, the CSR team of PT Badak NGL planned Salin Swara (Community Independent Waste Program) run by Bank Sampah Pesisir group, a group that manages waste banks, as a community that cares about waste and a community forum empowerment. The spirit of realizing Sustainable Development Goals (SDGs) and solving waste issues in Tanjung Laut Village encouraged PT Badak NGL with support from the community to do CSR to help manage waste. Here, PT Badak NGL is more likely to be responsible for the consequences or outcome than the output during these CSR activities. It is because an output technique is not considered the best way to assess program success. A good program will benefit and improve its participants. Hence, Social Return on Investment (SROI) helps to achieve sustainable development because every program will be evaluated in terms of effectiveness after knowing the results (Wibisono, *et al.*, 2021). According to New Economics Foundation, SROI is an analytical study that converts any impact into currency based on selected indicators aiming at managing welfare, economy, society, and environment, and it compares the pre and post-condition of money being invested. SROI also promotes long-term sustainable achievement because every program will be evaluated based on it's effectiveness according to the subsequent consequences.

Regarding the previous explanation, this study aimed to evaluate the social impact of Salin Swara waste management on the stakeholders and the amount of social impact compared to the investment made by PT Badak NGL calculated using the SROI method. There are less studies who use SROI to explain the research problems become the gap of this research.

RESEARCH METHODS

This study was quasi-qualitative research. It is a research design related to post-positivism (Bungin, 2020). Before dealing with difficulty, it starts with a theory first. In the beginning, researchers required the use of theories in the positivism paradigm to answer phenomena and social situations. This concept is used during the formulation of problems, data collection, and data analysis. After that, the researchers used a triangulation method qualitatively to check the beneficial effects of this program. This method is suitable for learning SROI because it has its framework to direct the researchers through research and strengthen qualitative arguments.

This study focused on the social impact of the waste management program Salin Swara of PT. Badak NGL was calculated using the SROI ratio. Here, the data were collected from the Salin Swara research sites in Tanjung Laut Indah and Kampung Selangan, Bontang Lestari Village in South Bontang Sub-district, Bontang City, East Kalimantan Province. In terms of data, this study used primary and secondary data collected using a qualitative method, namely purposive sampling. Purposive sampling was done to map the outcome of all parties involved (key stakeholders), especially the beneficiaries.

In collecting the data, the researchers used in-depth interviews with key informants, Focus Group Discussion (FGD), and secondary data reviews in a way to collect information. Triangulation (qualitative) and Social Return on Investment (SROI) were the analysis tools in the quasi-qualitative method (quantitative). In a qualitative study, the validity test covers trust, transferability, dependence, and confirmability (Sugiyono, 2007). SROI is considered well-developed social impact valuation tool and has been widely used in the UK, Europe, and North America (Watson & Whitley, 2017). However, not many empirical studies have been conducted to provide evidence of the implementation of the SROI method (especially in Indonesia) to evaluate CSR programs.

RESULTS AND DISCUSSION

PT Badak NGL in Bontang City, East Kalimantan Province contributes to the realization of Sustainable Development Goals through its CSR program or known as Comdev (Community Development). Its mission is to hold community empowerment programs that are independent and based on the environment, and actively participate in community development which later will create shared value for stakeholders.

People who live in Tanjung Laut Village, a village situated in coastal areas tend to have a littering habit. It causes the environment to become dirty and shabby when the flood hits. Besides, this bad habit causes a health problems in form of skin disease. What motivates the littering is the location a landfill site that is considered far away by the community, even for people in Kampung Selangan who live in the middle of the Southern waterlogged area of Bontang City. The people in this village must take a boat to the mainland to throw garbage in a landfill site, and it surely costs a lot of time and money. What is more, the majority of people in Tanjung Laut Indah Village and Kampung Selangan have low economic levels whose occupations are fishermen and seaweed farmers.

Concerning this situation, PT Badak NGL attempted to solve this problem by running CSR programs on the basis of the Community Independent Waste Program (Salin Swara) with helps of the Bank Sampah Pesisir group. Salin Swara program supported the implementation of the Bontang City Regional Long Term Development Plan (RPJMD) year 2016-2021. Its vision is "Strengthening Bontang as a Maritime City with Industrial Culture that Relies on the Quality of Human Resources and the Environment for Community Welfare" (Bappeda Kaltim, 2016).

Recommendations and regulations are considered no longer effective but involving community initiatives directly can be a breakthrough that is more effective through community empowerment which will be led by the Bank Sampah Pesisir group as an

environmental care group in Bontang City. With the Salin Swara program, it was hoped that the community will be able to independently manage the waste in their environment to improve the quality of the environment.

PT Badak NGL focuses more on outcomes for the community than output. To facilitate the assessment of its impact the researchers used a SROI method. This method uses a financial quantification (monetization) calculation approach to evaluate program impact. In carrying out this task, the impact scores are compared to the value of investment costs spent. SROI is a metric that can be used to decide whether a program is beneficial for the short term or long term.

This strategy helps determine who receives benefits and the amount of money from a particular program. In this way, the advantages of a program can be distributed fairly or unfairly based on the main goals, or it is centered on a party when the less advantaged party is supposed to earn benefits. SROI is a method that analyzes and explores the effects of a program after being implemented. Compared to other investment tool such as incremental ratio, SROI will give more comprehensive analyses (Purwohedi, 2016). In PT Badak NGL, the SROI calculation mechanisms in the impact of CSR management referred to the order written in (Nicholls, et al., 2009).

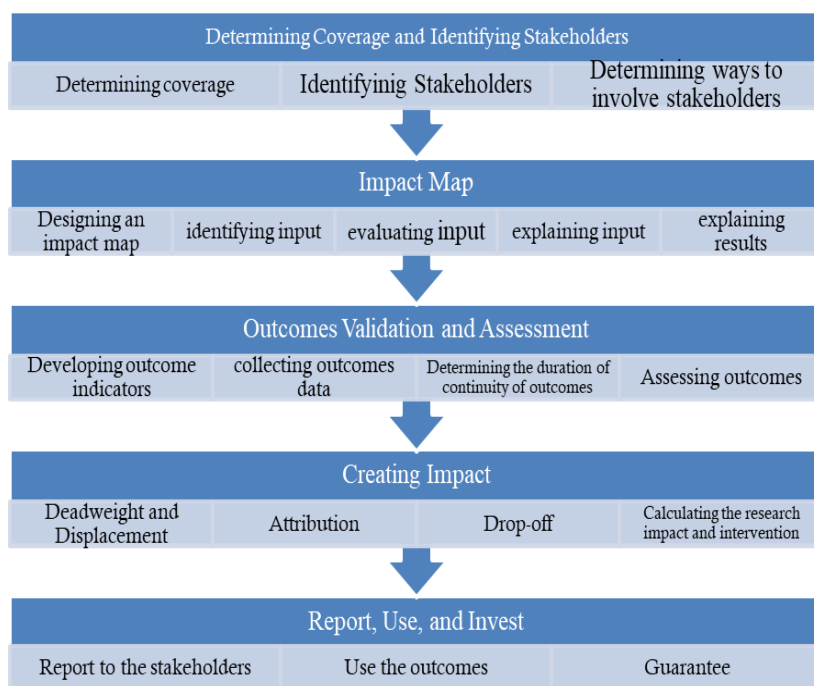


Figure 1. SROI Calculation Stages for PT Badak NGL SALIN SWARA Program
Source: (Nicholls, et al., 2009)

The stakeholders mentioned in this analysis were those who had great influence and receive the greatest benefits from this program. In the Salin Swara program, the major target was the customers of Bank Sampah Pesisir or waste

bank in Selangan unit. Another recipient was PT Badak NGL as the funding support. In details, the benefits received by the stakeholders are explained as follows:

Table 1. Stakeholders as the Beneficiaries of the Salin Swara Program

Stakeholder	Information
Customers of <i>Bank Sampah Pesisir</i>	A total of 49 people, the majority of whom work as fishermen and are responsible for sorting and collecting family waste to create a cleaner and healthier household waste environment and increase income through the gold savings system.
Customers of <i>Bank Sampah</i> in Selangan Unit PT Badak NGL	A total of 22 people, the majority of whom work as fishermen The host of the programs run by the CSR Unit and in collaboration with external parties, commits to improving the welfare of the people of Tanjung Laut Indah Village.
BPJS Ketenagakerjaan in Bontang	The company engaged in the field of employment security. It cooperates in the Salin Swara program by providing a waste-saving service as a substitute for the monthly premium fee.
PT Pegadaian	The company engaged in pawning and gold savings. It cooperates with the Salin Swara Program by providing gold savings services using waste savings.

Source: SROI 2021 research data processing.

Besides the above stakeholders, some parties contributed to the success of the program, They were the Bontang Environment Agency as supervisor and coach, Kelompok Duta Peduli Sampah or waste care group which worked together in education, socialization, and human resources in several activities, and Tupperware as a sponsor in several events. Despite being involved in the Salin Swara program as a supporting party, those parties cannot be included in the SROI assessment because their contributions have not been able to provide benefits up to the outcome level.

The researchers used an effect calculation approach and financial assessment (monetization) for each parameter of the impact after identifying which stakeholders to include, their participation in the implementation, and their influence. This theory of change is part of phase 2 of the SROI which involves impact mapping. According to (Krliev, et al., 2013) SROI produces solid data that can be used to

communicate with boards, stakeholders, and the general public about how the organization has an impact. In addition, these findings provide internal management with information about strategic decision-making and project selection.

Input and output identification was done after knowing the stakeholders who became the target of Salin Swara program. However, the SROI assessment of the beneficiaries which was related to the time spent was not included an input value. Therefore, the input value of this program was the result of the expenditure provided by PT Badak NGL in carrying out program activities.

Table 2. The Input and Output of SALIN SWARA Program

No	Activity	Input Value	Output
1.	Facilitated 1-time trash pick-up at the Ocean Day and Environment Day commemoration events.	Rp. 6,320,500.00	A total of 2,800 kg of waste from along the coast was picked up
2.	Socialization of the waste saving system and the gold saving system from waste in collaboration with PT Pegadaian.	Rp. 3,142,000.00	The registration of 71 waste bank customers to become members of the gold savings account.
3.	Waste sorting and weighing at the Waste Bank.	Rp. 800,000,00	The registration of 30 people as customers of PT Pegadaian and BPJS Ketenagakerjaan.
4.	FGD by <i>Bank Sampah Pesisir</i> group.	Rp. 2,025,000,00	The establishment of the <i>Bank Sampah Pesisir</i> and <i>Bank Sampah</i> in Selangan Unit
5.	Group Licensing and Legality Management (Forming Group Notary Deed)	Rp. 750,000,00	
6.	Surveying the location of the <i>Bank Sampah</i> in Selangan.	Rp. 400,000,00	

Source: SROI research data processing, 2021

The success of the programs run by PT Badak NGL, Tanjung Laut Indah Villagers in the South Bontang Sub-district, and the supporting community can be seen from changes found after the programs. In detail, the outcome of various activities and overview of changes from the beneficiaries can be seen in table 3. Prior to SROI, two steps were carried out, namely deciding the outcome value and impact fixation (NEF, 2009, 2010; Ryan and Lyne, 2008).

First stage: determining outcome value. This value was calculated using several indicators based on the information provided by the stakeholders. The number of households that achieved benefits from the sub-program fluctuated depending on the number of their improvement. Hence, evaluation was made based on standard price.

Table 3. The Outcome Assessment Salin Swara

No	Outcome	Indicator	Assessment Approach; (year/1x time)	Information source
Ocean Day and Environment Day Commemoration				
1.	The community was able to create a clean beach environment and did not have the potential to damage coral reef ecosystems in the high seas which is felt by the entire general public (Rp. 1,400,000)	Savings on waste transportation costs.	The standard price for waste transportation services by Bontang City environmental agency is the accumulation of one transportation (Rp. 500,000/ton)	Customer interviews & internet resources.

No	Outcome	Indicator	Assessment Approach; (year/1x time)	Information source
Socialization of the Waste Savings System				
2.	The community of Tanjung Laut Indah and Selangan Villages could manage their household waste into gold savings balances through participation as customers of the Gold Savings Account, which was obtained by 71 people (Rp. 16,330,000)	Savings in administration fees per year and registration fees for Waste Bank customers who are members of gold savings; and gold savings were obtained from the results of the customers' waste savings.	The Registration fee is Rp. 50,000, while the administration fee per year is Rp. 30,000. It was known that the average value of the customer's gold savings was Rp. 150,000	Interview with the Head of the Waste Bank and the BPJS Ketenagakerjaan of Bontang City.
Waste Sorting and Weighing in the Waste Bank				
3.	People who are the users of BPJS Ketenagakerjaan users gained a social safety net. This outcome was obtained by 30 people (Rp. 6,048,000)	People can pay their monthly BPJS Ketenagakerjaan fee using waste saving	Payment of insurance premiums per year per customer is Rp. 201,600.	Interview with customers and employments of Waste Bank.
Waste sorting and weighing at the Waste Bank				
4.	Obtaining a BPJS Ketenagakerjaan death insurance by 1 family (Rp. 42,000,000)	The cost of claiming is Rp. 42,000,000.	The Death insurance claim by 1 customer is Rp. 42,000,000	Interview with the chief of <i>Bank Sampah Pesisir</i>

Source: SROI 2021 research data processing

Second stage: Impact Fixation. Salin Swara program has successfully gained its best performance through the support from PT Badak NGL. There are four considerable factors in determining a value, namely deadweight, displacement, attribution, and drop-off (the SROI Network, 2012). The first factor, deadweight, achieved 50% due to the contribution of waste bank officers in socializing BJS. It achieved such a percentage in the outcomes of the BPJS of the Waste Bank and BPJS death claim. Salin Swara only facilitated the collection and weighting of waste in BPJS of the Waste Bank and BPJS insurance claim. Therefore, the outcome value of this program in this activity was Rp. 3,024,000. The second factor, displacement gained 0% in all sub-programs outcomes or there was no single person

who got disadvantaged in this program. The third factor, attribution was realized in the activity of the Gold Saving System. It was calculated by dividing the intervention fund from PT Pegadaian per person by IDR 80,000 with the investment fund from PT Badak NGL per person by IDR 44,250 plus interview funds from the pawnshop per person of IDR 80,000. Here, the result obtained was 64% because of an investment intervention from PT Pegadaian who facilitated the beneficiaries who became it's customers of it. The fourth factor, drop off showed no decline in participation of the beneficiaries indicated by its value of 0%.

SROI calculation of PT Badak NGL Salin Swara program resulted in 2.33. It explained that the social program outcomes gained 2.33 times greater than the investment

fund. It was noted that the outcome value was Rp.31,302,849, while the total investment was Rp.13,437,500. The investment made by PT Badak NGL through the Salin Swara program has passed the investment break-even point.

Table 4. The Results of SROI Value and Payback Period Calculation

PT Badak SROI Calculation	
Outcome/Year	Amount
1. Improvement in clean beaches which are not potential to harm coral reef ecosystems on the high seas	Rp1,400,000
2. Ownership of gold savings from waste sorting activities	Rp5,878,800
3. Ownership of social security net from waste sorting activities	Rp3,024,000
4. Obtaining BPJS Ketenagakerjaan insurance claim (death insurance)	Rp21,000,000
Total Outcome	Rp31,302,800
Disc Factor	1
PV Total Outcome	Rp31,302,800
<i>Salin Swara</i> Program Investment	Rp13,437,500
Disc Factor	1
PV Total Investment	Rp13,437,500
SROI Value	2,33

Source: SROI research data processing, 2021

Sensitivity analysis was carried out to determine which factor had the greatest impact on the SROI calculation model. In this study, it was done to the outcome aspect without including the outcome of the insurance claim to know the amount of SROI if the insurance claim was not obtained.

In the sensitivity analysis, there applied an assumption of outcome increased by 50% for all programs. Based on table 5, the most sensitive activity was BPJS insurance claim by 33.54%. It indicated that the outcome from this aspect gained the greatest contribution from the total

value of outcomes, although the investment made in this aspect was not the greatest. The sensitivity scenario of BPJS claim without outcome showed the SROI value of 0.77 with the program has not yet received a payback. In other activities, the 50% increase scenario appeared after BPJS claims, followed by gold savings with a variance value (9.99%), and waste bank activities (4.83%). Meanwhile, the coastal repair was known to only have the smallest variation of change, namely 2.17% of the SROI value, although it had the highest investment value than other activities.

Table 5. The Results of SROI Values on Sensitivity Analysis of the Salin Swara Program

Skenario	Sensitivity	SROI Changes	Variance
Beach Reparation Outcome	50 %	2.39	2,17%
Gold Saving Outcome	50 %	2.55	9,99%
Waste Bank Outcome	50 %	2.44	4.83%
Insurance Claim BPJS Outcome	50 %	3.11	33,54%
Without Insurance Claim BPJS Outcome	-100%	0.77	-66,95%

Source: SROI research data processing, 2022

Regarding the results of this analysis, efforts need to be made for gold savings since it had the highest variation (when there is no outcome from the BPJS insurance claim). The more waste managed, the higher gold savings to obtain and the cleaner environment will be. However, if one member is only able to manage limited waste, it can be promoted by applying this gold saving scheme to other people.

CONCLUSION

This study gives a practical contribution by providing an overview for companies to evaluate their CSR programs through SROI method. It is because the results of this method can be used as a basis for program optimization. In this study, the SROI value of Salin Swara program in Tanjung Laut Indah Village and Kampung Selangan was 2.33. It is the accumulated benefits felt by the community within 2021. This value means that the value of program has surpassed its total investment, so there is no need to analyze the value projection since SROI has exceeded the payback figure.

Even though the SROI value has surpassed the payback, the Salin Swara program needs to do some improvements, namely: 1) performing a monitoring activity and periodic evaluation in World Ocean Day to make the program sustained. In addition, publication needs to be expanded to increase people attention and interests to participate. In this way, people will keep participating and improving sustainable marine ecosystem. 2) Expanding the community network of waste bank beneficiaries. There needs some efforts to optimize services to the community in waste collection, particularly in the waste collection agenda. Additional human resources can be done to create more optimum services to the community. When the services become more optimal, the community will be more encouraged to join this activity. 3) facilitating training and assisting eco enzyme production (compost and simple composter) to the stage of marketing their products to the public. A project feasibility study on the beneficiaries needs to be conducted with hope that there will be economic motivation in

production activities. 4) strengthening relation among stakeholders and all beneficiaries to increase participation in innovation.

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