Indonesian Journal of Sustainability Accounting and Management
ISSN 2597–6214 | e–ISSN 2597–6222
DOI: 10.28992/ijsam.v8i1.989

Concept And Implementation Social Return On Investment (SROI): Case Study On MSME Culinary Redesign Program

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Abstract: This research aims to review the Social Return on Investment (SROI) concept and analyze Corporate Social Responsibility (CSR) activities conducted by a State-Owned Enterprises (SOEs), namely PT Semen Indonesia. This research uses the survey method which employs a questionnaire, along with a literature review, focus group discussions, and interviews. This study analyzes the impact from the point of view of the stakeholders (the community and other affected parties). The result of the SROI calculation shows that the CSR program conducted by PT Semen Indonesia has resulted in a positive, significant, and substantial impact on the stakeholders. SROI ratio for CSR program is calculated at 3,46. It means that for every 1 rupiah spent, the social return on investment gained 3,46 rupiah. The CSR Program increased sales, reduced gasoline costs (economics), reduced carbon emissions (environment), and increased SME owners as well as consumers happiness (social). The stakeholders are aware of the benefits of social investment, which supports the theory of change. The limitation of this research is the complexity of calculating SROI, especially monetizing the social benefits and the social costs, which relies upon several assumptions.

Keywords: performance measurement, effectiveness, corporate social responsibility, social return on investment, theory of change.

Article info: Received 28 April 2023 | revised 9 May 2024 | accepted 27 May 2024

Recommended citation: Saraswati, E., Diamastuti, E., Prastiwi, A., & Dewi, A. A. (2023). Concept And Implementation Social Return On Investment (SROI): Case Study On MSME Culinary Redesign Program. *Indonesian Journal of Sustainability Accounting and Management, 8*(1), 249–260. https://doi.org/10.28992/ijsam.v8i1.989

INTRODUCTION

Over the last few decades, corporate social responsibility (CSR) has become a worldwide concern with regard to issues of global warming (Jaworska, 2018; Bianco, 2020), carbon emissions (Nguyen, & Ngo, 2022; Ahmad et al., 2023), and tropical forests conservation (Ranängen, & Zobel, 2014; Colaço & Simão, 2018); meanwhile, transparency, accountability, and sustainability have grown in importance for all organizations (Hapuhennedige et al., 2020; Wong et al., 2021). Therefore, the needs and demands for society to be socially, economically, and environmentally responsible are increasing (Maldonado & Corbey, 2016; Hariram et al., 2023). Moreover, these problems are exacerbated by the impacts of externalities due to ambitious economic developments, causing an imbalance in the pattern of human life, especially economic, social, and environmental

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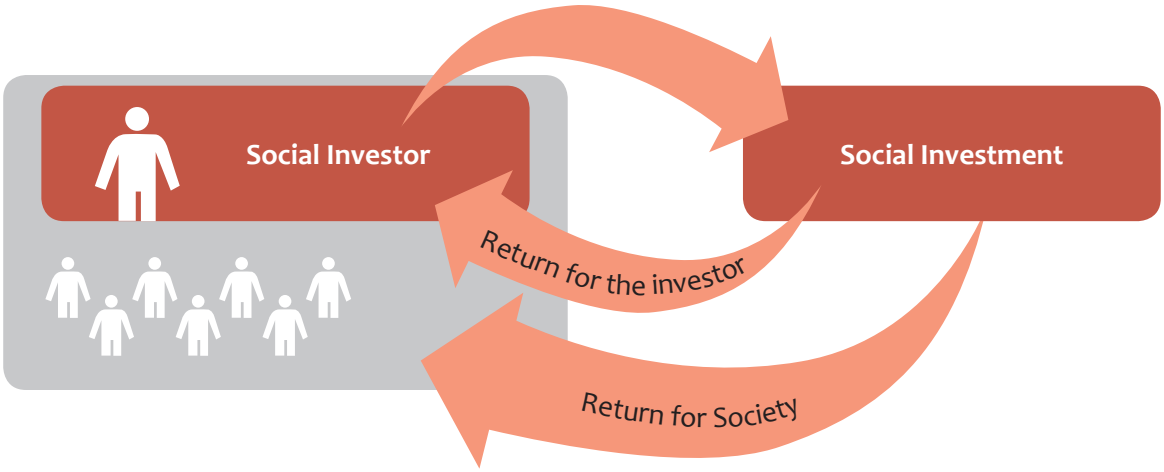
issues (Purwohedi, 2016; Ghisellini et al., 2016). This situation requires an approach that measures the impact of investments that considers three aspects (the economy, society, and the environment), and one of the methods to do this is through the concept of Social Return on Investment (Yates & Marra, 2017; Saenz, 2021).

Social Return on Investment (SROI) is a framework for measuring and calculating the value created by CSR program initiatives, in addition to financial value (Ali et al., 2019; Kim & Ji, 2020). This includes social, environmental, and economic costs and benefits (Gambhir et al., 2017) and is a systematic way of aggregating social values across multiple stakeholders (Vluggen et al., 2020). SROI is a measure to assess a company's social performance which is analogous to Return on Investment (ROI), but which places more emphasis on the monetization of social costs and social benefits in achieving an outcome or set of outcomes from a program (Cordes, 2017). This is in line with the concept of sustainability since each program will measure its effectiveness by referring to the impact generated by the program (Purwohedi, 2016; Cordes, 2017).

SROI is a method that can be used to calculate the return value of a company's social investment activities and that can describe changes and impacts on stakeholders (Lombardo et al., 2019; Ariza-Montes et al., 2021). SROI is a value-created concept, which does not only take into account stakeholder profits but also includes benefits or broad impacts on social, economic, and environmental aspects of the community (Hamelmann et al., 2017; Maldonado & Corbey, 2016; Vluggen et al., 2020). Therefore, SROI analysis is needed to examine the effectiveness of the CSR activities that have been initiated by the company to find out the benefits of changing the impact experienced by the stakeholders.

Social Return on Investment (SROI) and its implications for companies is defined by various studies in the literature: According to Hamelmann et al. (2017), Maldonado & Corbey (2016), Vluggen et al., (2020), SROI is a value-created concept that covers the benefits or broad impacts on social, economic and environmental aspects, in addition to stakeholder profits. SROI analysis is in line with the concept of sustainability. It can be concluded that SROI is an analysis that makes an assessment in terms of financial, economic, social and environmental benefits, especially for stakeholders (triple bottom line), so it accords with the concept of sustainability (Krlev et al., 2013; Cordes, 2017; and Lambardo et al., 2019). SROI places more emphasis on the impacts on stakeholders (see Figure 1).



Source: Krlev et al. (2013)

Figure 1 Investment Impact

Research conducted by Moroń & Klimowicz (2021) on SROI found that SROI is useful for measuring social project implications on quantitative base. SROI focused on long-term effects of a project and can be justified with current timeframe to understand the impact better. SROI is also useful for understanding the cost-benefit of social projects better. The unintended side-effects can be computed together to provide deeper net-benefit calculations. The results can be used to forecast other projects prepared in different settings, thanks to SROI consistency. However, SROI depend on many assumptions and proxies as stated before. It could limit the true SROI value.

To reduce SROI weaknesses, some strategies can be implemented as stated by Vluggen et al. (2020). Trust among parties involved in SROI analysis is crucial. SROI analysis is easier when the activities are insourced by management. However, professional engagement in conducting SROI can give the difference in results. To obtain reliable social impact analysis, accurate scanning of social impact as Theory of Change stated should be conducted extensively. The ability to do reliable analysis could increase SROI generalization towards similar projects (Ariza-Montes et al., 2021).

The Ministry of State-Owned Enterprises requires all State-Owned Enterprises (SOEs) to carry out their social activities (CSR) and these activities will be evaluated, as well as monitored through Ministerial Regulation No. PER-05/MBU/04/2021. Large amounts of money are spent on the CSR programs of many SOEs, so measuring the effectiveness of these programs is needed to determine social, economic and environmental returns, considering that the funds issued are a form of investment.

PT Semen Indonesia is a building material manufacturer owned by the government. As part of a manufacturing company, PT Semen Indonesia produces various building materials such as cement. This makes PT Semen Indonesia main business closely related with many stakeholders i.e. consumer, locals, and employees. Thus, PT Semen Indonesia decided to respond many necessities of its stakeholders, including culinary seller problem that located near the factory. Pandemic caused the number of food court visitors to drop. PT Semen Indonesia allocated CSR fund to solve this problem onto MSME development training (packaging, branding, e-marketing, and services) and food court redesign. This study aims to analyze the concept of SROI according to previous studies and apply its calculations towards Guidance and Assistance for MSME (Micro, Small, and Medium Enterprises) Culinary Redesign Program.

METHODS

The research methods used are: 1) A literature review to explain the definition of SROI as well as the principles and stages of the concept; 2) Conduct a survey to identify the stakeholders affected by creating an impact map; 3) Interviews and Focus Group Discussions (FGDs) to understand the value of outcomes.

As an analytical method, SROI is a combination of frameworks and techniques to measure and assess the broader value concept. It is a technique that measures socio-economic and environmental impacts, as well as a combination of cost and benefit analysis, stakeholder engagement, financial proxies and project improvement (Maldonado & Corbey, 2016). The goal is to reduce inequality and environmental degradation, along with improving welfare through the incorporation of social, environmental, and economic costs and benefits (Nicholls et al., 2015; Davies et al., 2019). SROI is a tool to answer: "How much value are we creating?".

SROI can be applied from two perspectives of time: 1) Evaluative: This is an analysis of activities that have been carried out and based on actual outcomes that have occurred; 2) Forecast: This analysis predicts how much social value will be generated if the activity's outcomes are in accordance with what was desired.

According to several studies in the literature (Pathak & Dattani, 2014; Corvo et al., 2022), SROI consists of a set of principles that ensure that the implementation process is carried out robustly and transparently, and engages stakeholders, which forms the basis for the six-step approach.

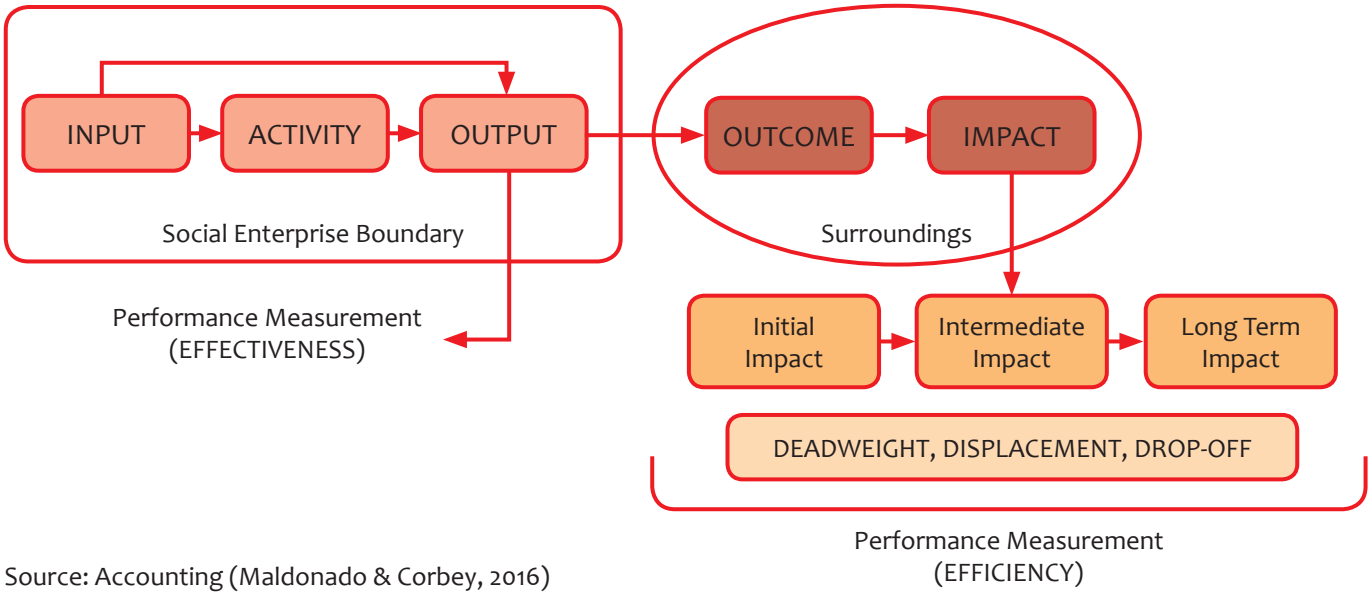
SROI was developed from social accounting and cost-benefit analysis, which has seven principles that must be applied. The seven principles are: 1) involve stakeholders; 2) understand what changes; 3) value the things that matter; 4) only include what is material; 5) do not over-claim; 6) be transparent: and 7) verify the result.

SROI principles are mapped starting with input, then activity, and finally output. Output indicators will be analyzed to see outcomes for stakeholders related to the activity or program. An SROI analysis is expected to show that program activities can improve the quality of life by encouraging challenges to think about the economy, society, and the environment (Watson & Whitley, 2017).

There are six stages in analyzing SROI which are derived from the seven SROI principles. The six stages are as follows. In Stage 1, the scope or boundaries of the program are defined, and the main stakeholders are selected and involved. In Stage 2, outcome mapping, with impact map development, is modeled through stakeholder engagement (see Figure 2). An impact map describes the relationship between inputs (resources), outputs (results of the change process), outcomes (impacts that will soon occur), and impacts (a long-term impact per year that will consider other factors that influence it).

After the outcomes are identified, the next step (Stage 3) is to assess the impact using several indicators. Since some outcomes cannot be directly seen in the form of financial value, assumptions and proxies are needed.

Stage 4 is the calculation or determination of impact. There are various ways of assigning a monetary value to outcomes and what proportion should be isolated and added to them. This process will later have an impact. Determining the impact is important to reduce the risk of over-claims so that the process of assigning value to the outcome can be trusted. Stage 4 includes; a) Deadweight, a measure of the number of outcomes that will occur, even though the activity or program does not occur (none); b) Displacement, another component of the impact that is an assessment of how much an outcome replaces another outcome (which is a substitution effect); c) Attribution, an assessment of how many outcomes are obtained from other parties (in the form of a percentage which will later be deducted from the outcome); and finally d) Drop-off, this is a concept that recognizes that the benefits obtained by stakeholders will not last long (see Figure 2).



Source: Accounting (Maldonado & Corbey, 2016)

Figure 2 Impact Map

Stage 5 is the SROI ratio calculation. The data and information that have been collected, both quantitative and qualitative, are needed to calculate and analyze the SROI ratio. This stage is a way to summarize the financial information that has been obtained in the previous stage. The basic idea of SROI is to calculate the monetary value of an investment, as well as the monetary value of its social costs and benefits. If the SROI analysis is for evaluation purposes (evaluative SROI), then ideally the evaluation is carried out after the outcome period is expected to last. However, an ongoing evaluation (interim evaluation) is still needed to ensure the program is running and provide information on any changes that have occurred. If it is necessary to compare the actual with the prediction (forecast SROI), then information is needed on how long the outcome will last. The calculation of the SROI ratio is as follows:

$$\textbf{Net SROI ratio} = \frac{\text{Net Present Value of Impact}}{\text{Value of Input (Investment)}}$$

The value of the SROI ratio is 4:1. It indicates that each investment of IDR 1 gives a return value of IDR 4. SROI analysis is inseparable from assumptions and proxies, so sensitivity analysis is needed. Sensitivity analysis is an analysis to test several possibilities that give the best ratio by changing the model based on certain assumptions. The next stage (Stage 6) is to provide recommendations or make reports to stakeholders.

Several advantages of using SROI are as follows. 1) The triple bottom line: it provides a comprehensive approach to deliver economic, environmental, and social value. SROI is a comprehensive approach by analyzing positive and negative impacts. 2) Accountability: it provides accountability for both numbers and data support behind the numbers so that the SROI calculation results are more transparent for the public. In addition, the calculation results from the SROI can be used as a medium of communication between stakeholders. 3) Cost and time effectiveness – focusing on impact, SROI is a way to learn about changes in a project or organization, which support the organization theory. 4) SROI is useful as a management tool: the SROI ratio tends to be simple and serves as an indicator of what value an organization gives to stakeholders. SROI can help to estimate, plan, and manage social activities. Several studies mention the weaknesses of SROI as follows. 1) It requires resources to study SROI (time, money, information and experts). 2) It is difficult to quantify the value of impact through financial indicators and proxies. 3) It is difficult to measure deadweight, displacement and attribution. 6) Aspects of allocation in accounting, related to direct and indirect costs, are difficult.

The implementation of the SROI analysis was carried out at PT Semen Indonesia, a state-owned company, and two programs analyzed were those demanded by the community in the vicinity of the company. The programs are Guidance and Assistance for MSME Culinary Redesign. The research design are presented in Figure 3.

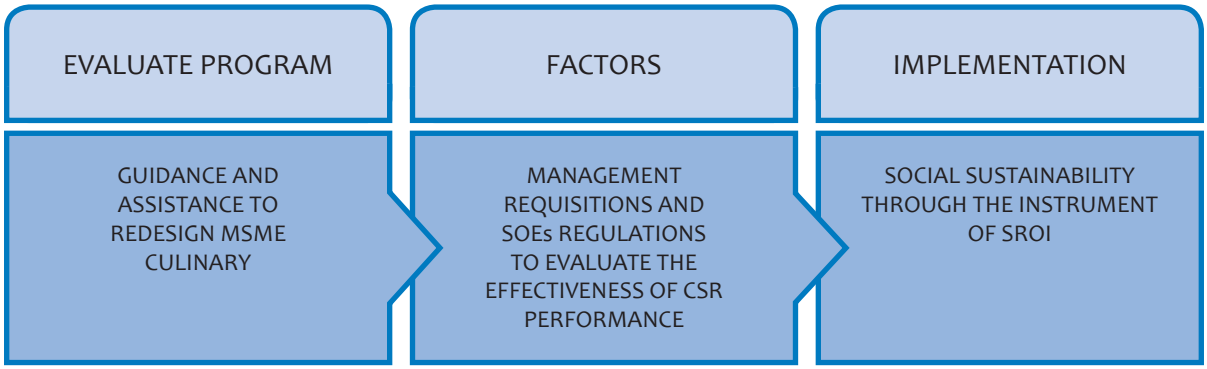


Figure 3 Research Design

After defining the scope of the research, the first stage of an SROI analysis is to identify the stakeholders who are defined as individuals or organizations that are affected or changed by the existence of the CSR program. Data were obtained through surveys using questionnaire, interviews and FGDs. Secondary data were obtained from PT Semen Indonesia, contractors, social media, and existing documentation. This research was conducted in 2021 when the COVID-19 pandemic in Indonesia was relatively high (4,178,164 cases) (Kemenkes, 2021). Therefore, some of the data were obtained online, namely data that were obtained from dealing directly with informants. The data used in this study are primary, secondary, quantitative and qualitative data. The implementation of SROI is calculated in the form of evaluating SROI, and the research was conducted at the end of 2021. Therefore, the SROI valuation was only calculated for one year.Data collection sources are summarized in Table 1.

Table 1 Summary of Data Collection

Stages of SROI	Data Collection
Stakeholders	Interview Focus Group Discussion Survey with questionnaire
Inputs	Management of PT Semen Indonesia Vendor (Contractor) Participation data Benchmarking
Outputs	Benchmarking Participation data
Outcomes	Benchmarking Participation data Literature review Various secondary data

The monetization assessment for outcomes uses the relevant assumptions. Some use benchmarking from outside parties for the same program—for example, the benefits of training on MSME development programs—are compared to training programs from outside, assuming these programs provide similar benefits. The level of MSME income is assumed to be almost equal for MSME actors in the area. The use of assumptions is also based on the results of previous studies.

RESULTS AND DISCUSSION

The scope of the research is the benefit of the MSME training program and the renovation of MSME culinary places. This is the first stage of the analysis of SROI. The MSME training and renovation program is based on the complaints and demands of the community during the pandemic era due to declining income. PT Semen Indonesia allocates funds for MSME development activities or training programs (product packaging, branding, e-marketing, excellent service) and renovation or redesign of MSME culinary facilities (change of tables, chairs, expansion, additional space for entertainment, and repairs to parking lots) which were conducted in January 2021.

The calculation of SROI in MSME development training programs and the renovation or redesign of culinary facilities require data from stakeholders who are affected or get benefit from these programs. These stakeholders experience both direct and indirect impacts. Based on the results of the survey and discussion on the CSR program, PT. Semen Indonesia's stakeholders consist of the company itself, MSME owners, MSME assistant workers, visitors from elements of the public, local traders, and contractors/project community workers. The identification of these stakeholders has been carried out simultaneously with the training program and redesign for MSMEs (Stage 2).

Impact map based on the results of the interviews are presented in Figure 4.

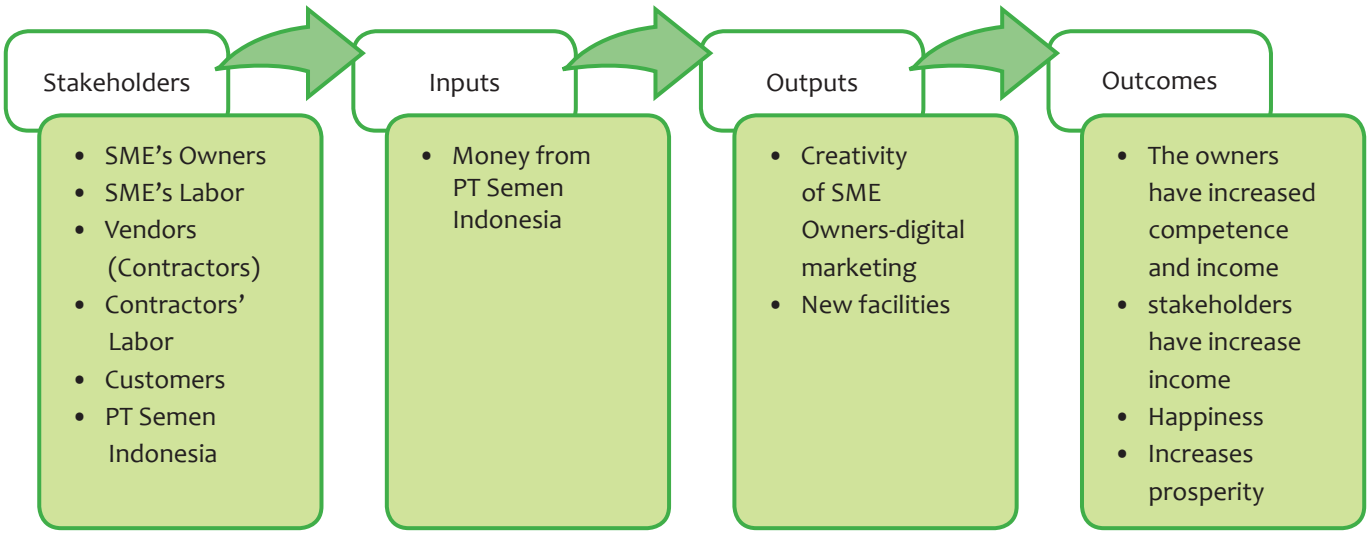


Figure 4 Impact Map

The next stage is to assign values to existing and material outcomes (Stage 3 and 4). This stage uses indicators, benchmarking, and assumptions, and some use literature review as an approach to assessing outcomes. The owners of SMEs, labor, vendors, and PT Semen Indonesia get economic benefits in the form of increased income. The data are obtained from interviews with those beneficiaries.

Table 2 shows calculated input and outcome as well as the proxies used for every beneficiary. The increase in income from MSME owners comes from increased sales from convenient facilities and digital marketing. According to research, digital marketing can increase sales (Gumilang, 2019; Purnama et al., 2022; Gao et al., 2023).

Other stakeholders, namely consumers in the vicinity of SME buildings, can save on transportation costs (they usually make purchases in the city 2 km away). Assuming 1 liter of premium gasoline (costing IDR 10,000) allows up to 30 km of travel, so the economic savings per 1 km will be IDR 10,000/30 km = IDR 333. Meanwhile, premium gasoline produces 2,003.40 gr/liter of carbon emissions (Nurdjanah, 2014), so the reduction in carbon emissions should be (2 km/30 km x 1 liter) x 2,003.40 gr/liter = 134.023 grams.

The social benefits obtained by SME owners and consumers are happiness (interacting with visitors or consumers) and prosperity in the long term. The impact determination for deadweight, attribution and drop-off is presented in Table 3.

Table 2 SROI Calculations (in Rupiah)

Input	
MSME training program	150,000,000
Pujasera redesign assistance	400,000,000
Facility improvement	105,000,000
Total Input	**655,000,000**
PV Input (r = 3,5%)	**632,850,242**
Outcome	
MSME Owners	
Amount of budget savings in the participation of similar training programs	280,000,000
Increased income due to social media, e-commerse, improvement in performance, and location comfort	1,893,600,000
MSME Workers	
Increased income of MSME auxiliary workers	70,200,000
Visitors	
Savings for expenditure to SIG Cullinary location	22,280,960
Vendor	
Increased revenue of vendor redesign of SIG culinary	52,650,000
Increased income of MSME training vendors	48,000,000
Project Workers	
Increased income as direct personnel in the process of developing SIG culinary redesign	135,000,000
PT Semen Indonesia	
The absorption of Semen Gresik products used in road construction	17,500,000
Total Outcome	2,519,230,960

Table 3 Impact Determination

No	Impact	Remarks	Value Determination	Rational Basis
1	Deadweight	Measurement of the number of outcomes that will occur even though the activity/project does not exist. If there are no similar programs that produce the same outcome, the deadweight value is 0%.	0	This culinary place existed before. If there is no development program in the form of training to increase competence and redesign it so that the location is cleaner and more comfortable, no one else will do it. This is because the location is clearly under the authority of PT Semen Indonesia.
2	Attribution	Contributions from other parties to an outcome, for example the outcome of increasing group income, are not only obtained from program benefits.	10%	Outcomes that have been identified are also the outcomes of contributions from other activities, for example the existence of loyal customers at culinary places that existed long before the PT Semen Indonesia Training and Redesign program.
3	Dropoff	Indicators if the outcome from year to year is different or has decreased.	5%	The culinary building is a fixed asset that has a certain useful life, so every year there is a decrease in the benefit value; it is assumed to be useful for 20 years.

Based on the data collected from interviews, FGDs, benchmarking, company sustainability reports, and the literature review, the values obtained will be:

Input (Fund from PT Semen Indonesia)	IDR 655,000,000
Outcome (from various stakeholder beneficiaries)	IDR 2,267,307,864

SROI Calculation (Stage 5):

$$\text{Net SROI ratio} = \frac{\text{Net Present Value of Impact}}{\text{Value of Input (Investment)}}$$

$$= \frac{\text{PV } 2,267,307,864}{\text{PV } 655,000,000}$$

$$= \frac{2,190,635,617}{632,850,242}$$

$$= 3,46$$

The results of the SROI analysis show that an investment of IDR 1 will provide a benefit of IDR 3.46. This means that PT Semen Indonesia's CSR program activities provide significant positive results and substantial economic, social, and environmental benefits. Economics benefits are mainly enjoyed by external beneficiaries. In this social project, the main beneficiaries should be MSME Owners. The results showed the intended outcome as MSME owners get the biggest cake in Guidance and Assistance for MSME Culinary Redesign. SROI analysis gives justification for social program by identifying each outcome and made possible attribution of those analysis towards initial goal quantitatively (Banke-Thomas et al., 2015; Vik, 2017; Ruiz-Lozano et al., 2020).

The group of MSME owners comprises 28 owners offering different culinary attractions. Owners really feel the benefits of digital marketing training and it has a significant impact on increasing revenue. The visitors or consumers not only come from the vicinity of the culinary area, but with digital marketing, consumers also come from outside that area. Data was obtained from 28 MSME owners, 15 of whom use assistant workers, thereby indicating that the income of the assistant workers increases as well. This analysis is in line with Ruiz-Lozano et al. (2020) argumentation. SROI have the advantage to analyze not only the impact on main program beneficiaries but also on other possible beneficiaries as well.

Moving to environment, Guidance and Assistance for MSME Culinary Redesign Program reduce 134.023 grams carbon emissions. Transportation mode is the leading contributor of carbon emissions. Especially, transportations fueled by gasoline are the main drivers (Schipper et al., 2011; Cheng et al., 2015; Fan et al., 2018; Aminzadegan et al., 2022). Thus, reducing carbon emissions in transportation is necessary for minimizing negative effects towards climate change.

The implication for PT Semen Indonesia, apart from experiencing economic improvement, the company garners a good image in accordance with the legitimacy theory. Community demands are well appreciated and provide economic benefits for people in need (Bijker et al., 2014).

CONCLUSION

This study aims to determine the impact of investment in its CSR program by PT Semen Indonesia which is one of the biggest SOEs in Indonesia. The analysis using SROI—which can assess economic, social, and environmental benefits—is in accordance with the concept of sustainability. Research results show that one of CSR programs of PT Semen Indonesia delivers positive value in terms of SROI, namely the MSME Culinary Training and Redesign

Program contributes to providing economic, social, and environmental benefits. SROI ratio for CSR program is calculated at 3,46. It means that for every 1 rupiah spent, the social return on investment gained 3,46 rupiah. CSR Program increased sales, reducing gasoline costs (economics), reducing carbon emissions (environment), and increased SME owners as well consumers happiness (social). The limitations of this research are (1) the lack of field data due to the circumstances surrounding the COVID-19 pandemic at the time when this research was being conducted; moreover, (2) the monetization of the impacts for SROI analysis uses several assumptions and benchmarking which cannot be separated from the subjectivity of the researcher. Future research is advised to multiply the data fields to address these limitations.

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