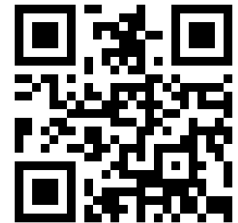


## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination



Wahyudi, Fendy Eko<sup>1</sup>, Subhan, Muhammad<sup>2</sup>, Asniar, Distr<sup>3</sup>, Betie Febriana<sup>4</sup>

<sup>1,2</sup> Department of International Relations, Universitas Diponegoro, Jl. Prof. Sudarto, Semarang, Indonesia 50139

<sup>3</sup> PT. PERTAMINA Lubricants Production Unit Gresik, Jl. Harun Thohir No.77, Singosari, Puloancikan, Kabupaten Gresik, Jawa Timur 61113.

<sup>4</sup> Faculty of Nursing, Universitas Islam Sultan Agung, Jl. Kaligawe Raya, Semarang, Indonesia 50112

**ABSTRACT:** As a market leader for lubricant manufacturers in Indonesia, Pertamina Lubricants continues to increase company value while providing sustainable benefits and added value to stakeholders and the environment. The establishment of Kampung Kreasi is Pertamina Lubricants' Corporate Social Innovation (CSI) initiative by turning Sidokumpul village, Gresik district into an ecotourism destination through waste management, small land utilization, cultural preservation, and capacity building for community groups. CSI is related to the company's core business and competency that can be developed through Life Cycle Assessment (LCA). Moreover, CSI is creating shared value, and the benefits of the CSI program are perceived directly by both the targeted group and the company. The effectiveness of CSI is measured by the Social Return On Investment (SROI) method, intended to determine the outputs and outcomes perceived by various stakeholders and also determine the comparison (ratio) between investment and benefits quantitatively. SROI measurement for Kampung Kreasi Program was organized using an evaluative method by measuring the impact generated over the past 3 years through in-depth interviews with members of youth organizations, tourism awareness groups, family empowerment programs, the Sidokumpul village government, and beneficiary communities. The results of the SROI analysis show that the benefit value is IDR 932,305,501 compared to the investment value of IDR 175,399,800. In other words, every investment of IDR 1 in the Kampung Kreasi program can produce benefits of IDR 5.32 (SROI = 1: 5.32).

**KEYWORDS:** Kampung Kreasi, Waste Management, Social Return on Investment (SROI), Corporate Social Innovation (CSI).

### INTRODUCTION

Corporate Social Responsibility (CSR) is a form of corporate responsibility towards consumers, communities, employees, shareholders, and the environment in all aspects affected by the company's operations (Cahya, 2014). In particular, for companies engaged in and related to natural resources, it is obligatory to organize corporate social and environmental responsibility by Law Number 40 of 2007 concerning Limited Liability Companies through the Corporate Rating Assessment Program (Proper).

Furthermore, as regulated in the Regulation of the Minister of Environment and Forestry No. 1 of 2021 concerning the Corporate Rating Assessment Program (Proper), each company participating in Proper beyond compliance must choose one Community Development program (Comdev) that is proposed as a flagship program that meets the criteria of social innovation. Criteria for social innovation include (1) elements of novelty (process, product, unique, original), (2) related to the company's core business/core competency, (3) answer community needs, (4) increasing social capacity, effective as measured with SROI (Social Return On Investment), (5) the status has met the aspects of scaling, replication, and sustainability.

However, CSR is considered short-term oriented, which focuses on reducing risks to gain corporate reputation, and is not related to the core of the business. In addition, there are no social problems that can be solved by the CSR comprehensively, and it does not generate profits or investment for the company. As a response to the lack of CSR, the concept of Corporate Social Innovation (CSI) was developed which integrates the problems faced by society in company policies, programs and activities. One of the features of CSI is related to the company's core business/core competency and can be developed through a Life Cycle Assessment (LCA) or product life cycle analysis.

## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

PT Pertamina Lubricants is one of the lubricant production units as an integrated energy company in the downstream sector, with a business/operations coverage covering all regions of Indonesia. Through its operating unit, Production Unit Gresik, is trying to create shared values for the wider community and especially for villages in the company's operational areas through the social and environmental responsibility program in order to create good relations with the community, and maintain the environment. PT Pertamina Lubricants organize a holistic approach by implementing CSR inside and outside the company, following the social responsibility guiding standards, namely ISO 26000, and involving all departments in the CSR Task Force to organize CSV. PT Pertamina Lubricants' commitment in CSV is formulated into SPEED 2020 (Strategic Partnership, Engagement, and Empowerment towards sustainable Development).

PT Pertamina Lubricants Production Unit Gresik has several CSR programs spread across various areas that are included in the company's closest area, including in the Sidokumpul village, Gresik regency. Kampung Kreasi, Wisata Sosial Berbasis Daur Ulang Limbah (Waste Recycling-Based Social Tourism) is a form of social innovation managed by PT Pertamina Lubricants to rebuild Sidokumpul village into a slum-free area by recycling waste into valuable goods and turning slum areas into ecotourism destinations. The effectiveness of Kampung Kreasi program can be measured by the SROI method, intended to determine the outputs and outcomes perceived by various stakeholders and also to know the comparison (ratio) between investment and benefits quantitatively.

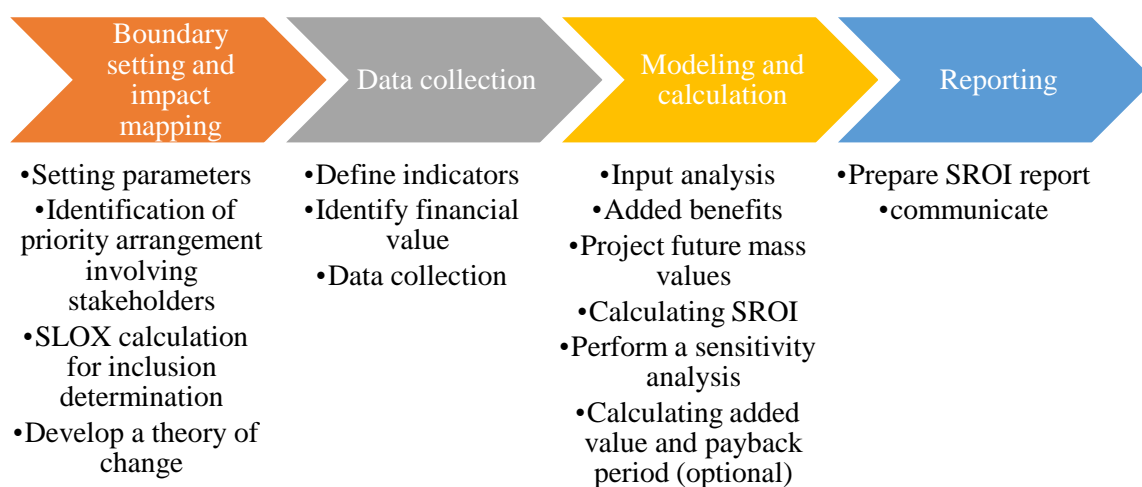
In this study, SROI was used as a method to quantify the Kampung Kreasi program using an evaluative method by measuring the resulting impact. Data was collected through in-depth interviews with members of the youth organization, the Family Welfare Programme, the Sidokumpul village government, beneficiary communities, and Community Development Officers from PT Pertamina Lubricants Production Unit.

### THEORITICAL FRAMEWORK

Social Return on Investment (SROI) is a process of understanding, measuring, and reporting related to social, environmental, and economic value created by organizations. SROI is a measurement approach developed from a cost-benefit analysis, social accounting, and social auditing that captures social value by translating social objectives into financial and non-financial measures (Lawlor et al., 2008). Meanwhile, according to Nicholls et al., (2009), SROI is a framework for measuring and calculating a much broader concept of value including reducing inequality among stakeholders, environmental degradation, and increasing welfare by combining social, environmental, and economic benefits. The SROI ratio is between the value generated and the investment required to achieve an impact.

Moreover, the SROI approach has advantages over other approaches, including comprehensive approach that includes social, economic, and environmental aspects (triple bottom line), accountability, change management, cost and time effectiveness, as well as simple and clear indicators through ratio results (Lawlor et al., 2008). In addition, applying the SROI method in measuring social impact is very feasible and low-cost if the organization already has the desired cost, income, and outcome data (Budiono, 2012).

**Chart I: Stages of SROI Analysis**



The concept of SROI was developed in England in 2008 with seven principles to create a framework, including: (1) Stakeholder involvement, (2) Understanding of change, (3) Assessment of important things, (4) Focus on clear material inputs, (5)

## **Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination**

No excessive claims, (6) Transparency, (7) Verify results (Nicholls et al., 2009). Furthermore, according to Nicholls et al., (2009), the SROI analysis has six stages, including 1) Defining the scope and identifying key stakeholders, 2) Mapping impacts, 3) Proving and assessing impacts, 4) Building impacts, 5) Calculating SROI, 6) Reporting and implementing. Subsequently, SROI has a strategic advantage, namely the involvement of stakeholders in measuring the impact of a program run by the company. Through the involvement of these stakeholders, SROI can provide measurement and analysis results that are far more comprehensive and feasible when compared to conventional investment measuring tools such as cost-benefit and incremental ratios (Purwohedji, 2016).

### **METHODS**

#### **Establish Scope and Identify Stakeholders**

At this stage, it is important to have clear boundaries about the scope of the SROI analysis, who will be involved in the process and in what form the involvement will take place. The term “stakeholder” does need to be explained, even though it is currently used as a matter of course. Who or what the stakeholders are, how they can be identified and why a stakeholder analysis is a core component of any impact measurement. There are several sub-stages, including:

- a. Establishing the basic logic of a project or program within the framework of a theory of change to understand the essential cause-and-effect relationships of an intervention.
- b. Grouping stakeholders into categories and subgroups that tend to have the same perspective.
- c. Placing all stakeholders, together with a preliminary assessment of how they affect or are affected by the program, including positive and negative effects

#### **Performing SLOX Calculations for Determining Inclusion Criteria**

The SLOX (Social License to Operate Index) calculation is carried out by means of a survey to produce a descriptive analytical study which intends to obtain an overview of the SLOX of PT Pertamina Lubricants Production Unit Gresik. On this study, the data analysis technique refers to measuring the level of social acceptance of stakeholders towards company activities. The activity is related to the company’s core business and also the company’s CSR. In this study, data analysis techniques used the SLOX model proposed by Boutilier and Thomson (2011). In their model, Boutilier and Thompson (2011) measure the level of social acceptance of stakeholders towards company activities.

The SLOX in question is based on a number of questions that measure the company’s social license level from four variables, namely:

1. Economic Legitimacy
2. Socio Political-Legitimacy
3. Interactional Trust
4. Institutionalized Trust

The SLOX research has 15 statements to measure the SLOX level of each stakeholder with the following assessment categories:

- a. the answer “Strongly agree” is given a weight value of 5
- b. the answer “Agree” is given a weight value of 4
- c. the answer “Neutral” is given a weight value of 3
- d. the answer “Disagree” is given a weight value of 2
- e. the answer “Disagree” is given a weight value of 1

#### **Mapping the Outcomes of Each Stakeholder**

In this section, we discuss how the activities will be analyzed using certain inputs that will produce outcomes for stakeholders. Basically, this section maps the relationship between input, output, and outcome (theory of change or logic model). There are five stages that will be carried out in this section, including:

- a. Start impact mapping
- b. Identify inputs
- c. Perform an assessment of the input
- d. Clarifying output
- e. Describe the outcomes

From the results of the answers obtained, they are then converted into a value range of 0-100 so that it can then be measured to what extent the level of social license that the company has for each stakeholder. As well as the social license status granted is stronger on which variable side of the four SLOX variables.

# Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

## Establish Indicators and Values for Each Outcome

Indicators are a way to tell if a change has occurred. Indicators are applied to each outcome before moving on to the next stage, namely developing an impact map by explaining one or more indicators for each outcome. After having indicators that are relevant to stakeholders and scope, it is necessary to examine these indicators so that they are not only measurable but can be measured within the scope and resources that have been determined. There are four stages in this section, including:

- a. Developing outcome indicators
- b. Collect outcome data
- c. Determines how long the outcome will last
- d. Assign a value to each outcome

## Impact Fixation

This stage is important to reduce the risk of overclaiming the outcome. There are four sections that must be taken, including:

- a. Deadweight and displacements

Deadweight is a measure of the number of results that will occur even if the activity does not occur. It is calculated as a percentage.

- b. Attribution

Attribution is a judgment about how much of a result is due to the contribution of the organization or other people. Attribution is calculated as a percentage (i.e. the proportion of results attributable to the organization). It indicates the part of the deadweight where we have better information and where we can relate the results to other people or organizations.

- c. Drop off

After the previous stage considers how long the outcomes last. In the coming years, the number of outcomes is likely to be less or, if they are the same, more likely to be influenced by other factors, resulting in lower attribution to the organization. Drop-offs are used to account for this and are only calculated for results lasting more than one year. Drop-offs are usually calculated by subtracting a fixed percentage from the level of outcomes remaining at the end of each year.

- d. Calculating impacts

All of these aspects of impact are usually expressed as a percentage. Except when having more accurate information, it is acceptable to round estimates to the nearest 10%. In some cases, there may be an assumption that there is an increase in value rather than a decrease. However, it is not recommended to increase the impact as a result of considering an issue. In this situation, neither would make a deduction.

## CALCULATING SROI

There are four stages (plus one optional stage) to calculate SROI, including:

- a. Projecting it to a future value

The first step in calculating the ratio is to project the value of all the results achieved in the future. In the previous step, had to decide how long the result would be.

- b. Calculating net present value

To calculate the NPV costs and benefits paid or received in different time periods need to be added up. For this reason, the costs and benefits are proportional to the discount process. The principle of discounting or discounting generally favors receiving money today rather than tomorrow because of the risk (e.g. the money will not be paid) because of the opportunity cost (e.g. the potential return from investing the money elsewhere). This principle is known as "time value of money".

- c. Calculating ratios

The calculation of the initial SROI ratio is done by dividing the benefit discount value by the total investment.

$$SROI\ ratio = \frac{Present\ Value}{Value\ of\ inputs}$$

Alternative calculation of net SROI ratio. This is done by dividing the NPV value by the investment value. Both are acceptable but depending on the needs of the analysis used:

$$Net\ SROI\ ratio = \frac{Net\ Present\ Value}{Value\ of\ inputs}$$

- d. Perform a sensitivity analysis

The purpose of the analysis is to test which assumptions have the greatest influence on the model calculations performed. The suggested approach is to calculate how much we need to change each estimate for social returns to a social return ratio of IDR 1

## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

for an investment of IDR 1. With this calculation the sensitivity analysis carried out to changes in estimates can be shown. This makes it possible to report the amount of change required to change a ratio from positive to negative or vice versa.

### e. Calculating the payback period (operational stage)

The 'payback period' describes how long it takes for the investment to pay off. The basic formula for calculating the payback period:

$$\text{Payback Period in Months} = \frac{\text{Investment}}{\text{Annual impact}/12}$$

## REPORTING SROI

### a. Reporting to Stakeholders

SROI aims to create accountability to stakeholders. Therefore, it is important that the results of the analysis are communicated to stakeholders in an appropriate manner. By conducting this SROI study, that the community empowerment activities can be accessed by stakeholders.

### b. Using the Results

The results of the SROI study will serve as an evaluation for the Company, activity implementers, and the beneficiaries of the program. In addition, through SROI, predictive studies can also be executed to test how feasible a program proposal is to be implemented. This is important so that it can be ensured that each program can be ascertained in as much detail as possible the potential success and benefits of the program.

### c. Changes following the SROI Evaluation Analysis

Evaluation of SROI analysis is also expected to produce changes in the organization. Both at the corporate, executive, and community levels. The organization needs to respond to the findings and think about the implications for organizational goals, governance, systems and work practices of the organization to act on the recommendations and the findings are incorporated into the strategy in the planning process so that it gets better in the future.

### d. Assurance

Assurance is a process by which information in reports is verified. This report has gone through a verification process by independent academics who have knowledge and experience in SROI-based research.

## Theory of Change

Theory of Change is a detailed description of the sequence of events that produces change for a large number of people in a stakeholder group. The diagrams in this section identify the theory of change for the Kampung Kreasi program. This diagram was developed through the results of research in the field, FGDs with stakeholders, especially parties: companies, activity implementers, communities, village government. Besides that, the theory of change for the Kampung Kreasi program is also refined with secondary sources, documentation, activity reports, and activity implementation reports.

The use of the theory of change is important to avoid excessive claims and overvaluation. On the other hand, in order to avoid double counting, it is the long-term end result that is assessed as the impact of a program. This is because although all steps are important to achieve the overall outcome, the end result of the theory of change holds the greatest value to stakeholders and depends on the other steps in the process being achieved.

## RESULTS AND DISCUSSION

In this study, there are several sub-chapters according to the stages in the research methodology described. This section consists of program profiles, stakeholder mapping, outcomes, SROI calculations, and sensitivity analysis and payback period.

### Program Profile

A few years ago, approximately 80 per cent of the Sidokumpul village population worked as scavengers. Therefore, the environmental conditions were very dirty, even ranked in the top 3 slum area in Gresik regency. Many people gave a negative stigma to the village at that time as a slum location, scattered garbage, and a strong smell of garbage. Moreover, Sidokumpul village are very densely populated, access is through narrow alleys, community sanitation and environmental management are not technically standard (garbage is scattered and not properly sorted). Therefore, many outsiders are reluctant to visit or just pass through the village.

On the other hand, PT Pertamina Lubricants, which is located in Sidokumpul village, produces bottled lubricants that produce non-B3 waste (Non-Hazardous and Toxic Waste) in the form of bottles and rolls of sticker paper. Therefore, PT Pertamina Lubricants is trying to present the Kampung Kreasi, Waste Recycling-Based Social Tourism program as an answer to these social and environmental problems. This program involves a number of stakeholders, including the youth organization (Karang Taruna),

## **Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination**

Family Welfare Program (PKK), Tourism Awareness Group (Pokdarwis), Sidokumpul community, MSMEs, and the Trash Coffee Management.

### **Details of the Kampung Kreasi, Waste Recycling-Based Social Tourism Program**

#### **a. Recycle Waste into valuable goods**

Waste Recycling is carried out as a form of utilizing used sticker paper waste at PT Pertamina Lubricants utilizing waste by converting worthless waste into goods that have artistic and economic value. In addition, the people in the Sidokumpul village also process reject bottle waste that does not pass the quality control of PT Pertamina Lubricants. To support urban farming activities, these plastic bottles are transformed into plant pots, home decorations, and recycled fashion clothes.

#### **b. Utilization of narrow land into a hydroponic garden**

Gresik Regency is an industrial area with a high level of air pollution. Therefore, the use of narrow land into hydroponic gardens aims to maintain a balance in the environment so that it becomes greener, more beautiful, and produces cooler air.

#### **c. Capacity Building for the Sidokumpul youth organization (Karang Taruna) and Family Welfare Program (PKK)**

Capacity Building program aim to increase the capacity of community groups to be better prepared to face changes in the future. The training activities that have been organized include knowledge transfer regarding the use of reject bottle waste that does not pass quality control into plant pots and the use of used sticker paper from waste products to become a Gresik Damar Kurung cultural art craft.

In addition, capacity building aims to improve existing programs in Kampung Kreasi such as climate change mitigation adaptation training to keep the environment safe from possible hazards. The training activities include the socialization of the Kampung Kreasi program to create a clean and comfortable environment, and training on household-scale solar panels. Furthermore, Karang Taruna and PKK members were also given digital marketing training to promote Kampung Kreasi on the Internet, which increased the number of visitors.

#### **d. Coffee Pay with Garbage**

Kampung Kreasi also has a Coffee Shop which stands as an area development program with the concept of waste management education, namely the "Pay Coffee with Trash" program. In its implementation, the public or coffee consumers are invited to drink coffee by paying with at least 1 kg of trash. In 2020-2021, Pay Coffee with Trash program succeeded in contributing to reducing the amount of waste to Temporary Disposal Sites (TPS) of 699 Kg of dry waste, such as plastic bottles, glass plastic, and cardboard.

The "Pay Coffee with Trash" program is also able to change the behavior of the people in Sidokumpul village. Around 968 people in Sidokumpul village recycle waste, and change Sidokumpul village to become one of the ecotourism areas in Gresik regency. In addition, with good exposure, the Pay Coffee with Trash program has become a pilot project capable of triggering other coffee entrepreneurs to participate in the waste reduction program through replication of Trash Coffee, including four locations in the Gresik regency area that have implemented the same program. Among them are the Cak Mat Coffee Warung located in Sidorukun village, Pink Coffee Warung located in Sidokumpul village, Warung 58 in Pekelingan village, and finally the program which was modified to Pay Electricity with Garbage in Kertosono village, Gresik Regency.

#### **e. Turning slum areas into Kampung Kreasi Ecotourism destinations**

The program to turn slum areas into Kampung Kreasi ecotourism destinations is conducted by maintaining a socio-economic environmental balance, maintaining existing infrastructure, and adding interesting items to attract visitors. The implementation of these activities was supported by several parties, including local agencies such as the Neighbourhood authorities of Sidokumpul village, the Gresik Environmental Agency, the Gresik Tourism and Culture Office, and the Gresik Regent who directly inaugurated these programs.

To support the sustainability of the program, environmental cadres in Kampung Kreasi organized promotional activities by distributing newspapers and brochures, participating in environmental exhibitions, and disseminating information through social media such as Instagram, YouTube, and websites. Moreover, ecotourism visits to Kampung Kreasi have several tour packages, from playground, and education, to study tours, with only IDR 25,000 to IDR 50,000 per person.

#### **f. Preservation of the Damar Kurung Typical Gresik culture**

Damar Kurung is a wooden lantern in the shape of a rectangle with a top shaped like a triangle or the letter M. On each side of this artwork there is a Damar Kurung painting which depicts illustrations of the life of the Gresik people in the form of two-dimensional works of art (Kompas.com, 2021). In practice, the preservation of Damar Kurung culture is managed in several steps such as introduction to early childhood through thematic drawing competition activities for Damar Kurung, One House One Damar Kurung movement in Sidokumpul village, and the socialization of Damar Kurung cultural values presented by Gresik Regency cultural practitioner to the general public.



# Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

## IDENTIFICATION OF STAKEHOLDERS

The concept of CSR involves partnership responsibilities between government, companies, and local communities that are active and dynamic (Marnelly, 2012). PT Pertamina Lubricants Productions Gresik Unit’s social responsibility program involves various stakeholders to achieve sustainable CSR goals. The parties involved are either affected or can even influence the implementation of the Kampung Kreasi program as follows.

**Table I. Identification of Stakeholders for the Kampung Kreasi Program**

No	Stakeholders	Category	Role
1	Tourism Awareness Group (Pokdarwis), Youth organization (the Jagal Bangkit Karang Taruna group), and the Family Welfare Programme (PKK) of Sidokumpul village	Community groups	Community groups that play a role in running the Program
2	Sidokumpul Society	Direct beneficiary community groups	Community groups beneficiaries of the program
3	MSMEs and local trader	Community groups	Community groups beneficiaries of the program
4	Trash Coffee Manager, Owner of a coffee shop in the Gresik Regency area	Community groups	Community groups beneficiaries of the program
5	CSR Task Force	Company Representative	Assistance, Monitoring and Evaluation
6	Gresik Regency Environmental Office	Government	Support and monitor the Program
7	Gresik Regency Tourism and Culture Office	Government	Support and monitor the Program

## STAKEHOLDER PRIORITY

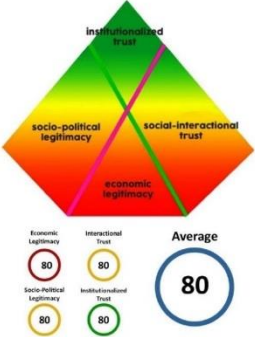
### Beneficiary Inclusion List

Stakeholders have different levels of receiving benefits and engaging in Comdev activities. Beneficiaries who have measurable and significant monetization will be used as input in the SROI calculation. Conversely, beneficiaries who do not have significant monetization value are not included in the calculation. In addition to using monetization value indicators, the inclusion criteria in this SROI calculation use the involvement parameters in social engagement measurements and the SLOX value.

**Table 2. Stakeholders involved**

No	Stakeholders	Reasons for Involvement	Typical SLOX (Sample)
1	Tourism Awareness Group (Pokdarwis) of Gresik Regency, Youth organization (the Jagal Bangkit Karang Taruna group), and the Family Welfare Programme (PKK) in Sidokumpul Village	The benefits received have a measurable and significant monetization value (in terms of knowledge, social roles, skills, economy, etc.). In the social engagement assessment, it has an average acceptance score (SLOX) of more than or equal to 81.25	
2	Sidokumpul Society	The benefits received have a measurable and significant monetization value	
3	MSMEs and home industry	The benefits received have a measurable and significant monetization value	

## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

4	Trash Coffee Manager, Owner of a coffee shop in the Gresik Regency area	The benefits received have a measurable and significant monetization value	
5	CSR Task Force	The benefits received have a measurable and significant monetization value (in terms of income, achievement of key performance indicators (KPI), and work portfolio)	

Based on these activities, inputs to stakeholders analyzed in this SROI are as follows:

Stakeholders	Jumlah Individu (Total)	Program	Biaya	Target Perubahan
The Jagal Bangkit youth organization (Karang Taruna) and Tourism Awareness Group (Pokdarwis) of Sidokumpul village	60	Organizational and institutionalization training of Karang Taruna Jagal Bangkit (2021)	IDR 9,940,000.00	Increased enthusiasm as a member of the Jagal Bangkit youth organisation & Tourism Awareness Group of Sidokumpul village
MSMEs and local seller	14	Kampung Kreasi Branding (2021)	IDR 40,000,000.00	Increasing the added value of the community's economy
Trash Coffee Manager	5	Kampung Kreasi Branding (2021)	IDR 40,000,000.00	increase in Trash Coffee turnover
Jagal Bangkit Karang Taruna and Tourism Awareness Group in Sidokumpul village	60	Screen Printing and Recycling Craft Training(2021)	IDR 5000,000.00	Karang Taruna is able to make screen printing products
Sidokumpul Society	2357	Kampung Kreasi Branding (2021)	IDR 40,000,000.00	Kampung Kreasi branding has increased, resulting in an increase in the number of visitors and an increase in economic added value for the community
		Bio pore Training (2021)	IDR 5,000,000.00	Karang Taruna knows how to make bio pore holes and the rainwater harvesting movement
		Providing bio pore equipment (2021)	IDR 6,500,000.00	The water quality of Kampung Kreasi is increasing
		Hydroponic Equipment Supply (2021)	IDR 10,000,000.00	Reducing carbon emissions and improving air quality in



## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

				Kampung Kreasi due to hydroponic greening
		Hydroponic Equipment Supply (2021)	IDR 21,412,000.00	Increased revenue earned by Karang Taruna from the sale of Screen Printing T-shirts
		Household Scale Solar Cell Training (2022)	IDR 7,260,000.00	The understanding of members of the Jagal Bangkit Karang Taruna group regarding new and renewable energy has increased
		Kampung Kreasi Renovation & Branding - Climate Village (2022)	IDR 11,207,000.00	Kampung Kreasi branding has increased regarding its management in the environmental sector
		One House One Damar Kurung Movement	IDR 11,000,000.00	Sales of Damar Kurung Products Increase
		Climate Village Program Benchmarking and Capacity Building (2022)	IDR 21,680,800.00	Increased enthusiasm as a member of the Jagal bangkit youth organisation & Pokdarwis of Sidokumpul village
CSR Task Force	3		IDR 26,400,000.00	Pride of work and increased experience of community empowerment

### Impact Calculation Approach and Monetization

The Community development activities described above have several medium and long term impacts which can be measured quantized by nominal monetization. The following table shows the outcomes that have been recorded along with their impact values as measured by proxies.

No	Stakeholders	Outcome	Monetization Approach	Proxy Type	Reference source	Unit Impact Value	Impact Value x Number of Beneficiaries
1	The Jagal Bangkit Karang Taruna and Tourism Awareness Group (Pokdarwis) in Sidokumpul Village	Increased enthusiasm as a Member of the Jagal Bangkit Youth organisation & Tourism Awareness Group of Sidokumpul village	the cost of participating in the Self Empowerment training	Financial Proxy	<a href="https://geraiesq.com/product/cfw/the-amazing-you">https://geraiesq.com/product/cfw/the-amazing-you</a>	IDR 650,000	IDR 21,937,500
2	MSMEs and local seller	Increasing the added value of the community's economy	interviews with a number of people how much increase in income they get in one	Financial Proxy	interviews, journals/notes of program implementation	IDR 900,000	IDR 4,725,000

## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

			year due to the existence of Kampung Kreasi.				
3	Trash Coffee Manager	increase in Garbage Coffee turnover	interview and look at the bookkeeping of Trash Coffee	Financial Proxy	Interviews, journals/notes of program implementation	IDR 42,000,000	IDR 39,375,000
4	The Jagal Bangkit Karang Taruna and the Tourism Awareness Group of Sidokumpul Village	Karang Taruna is able to make screen printing products	Independent screen printing training costs	Financial Proxy	<a href="https://vokasi.co.id/tempat-kursus-sablon#">https://vokasi.co.id/tempat-kursus-sablon#</a>	IDR 900,000	IDR 15,187,500
5	Sidokumpul Society	Kampung Kreasi branding has increased, resulting in an increase in the number of visitors and an increase in economic added value for the community.	interviews with a number of communities how much they are willing to pay to have an attractive home environment and become a learning center for people in other areas	Financial Proxy	interviews, journals/notes of program implementation	IDR 500,000	IDR 165,726,563
6		Karang Taruna knows how to make bio pore holes and the rainwater harvesting movement	Cost of classes or sessions for Rainwater Harvesting Training	Financial Proxy	<a href="https://lptm.co.id/pelatihan/11/kelas/30">https://lptm.co.id/pelatihan/11/kelas/30</a>	IDR 1,000,000	IDR 16,875,000
7		The water quality of Kampung Kreasi is increasing	savings on purchasing refill water in 1 month	Financial Proxy	interviews, journals/notes of program implementation	IDR 150,000	IDR 99,435,938
8		Reducing carbon emissions and improving air quality in Kampung Kreasi due to hydroponic greening	the cost citizens are willing to pay for better air quality and the environment	Financial Proxy	Observation of work processes, interviews, journals/records of production activities (annual)	IDR 50,000	IDR 16,572,656

## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

9		Increased revenue earned by Karang Taruna from the sale of Screen Printing T-shirts	Interview with Karang Taruna how much is the sales turnover of screen printing	Financial Proxy	interviews, journals/notes of program implementation	IDR 6,000,000	IDR 1,687,500
10		The understanding of the Jagal Bangkit Karang Taruna group regarding new and renewable energy has increased	Introducing Energy Management System Technical training costs	Financial Proxy	<a href="https://ppsdmkebtke.esdm.go.id/berita/jadwal-pelatihan-2QHmM">https://ppsdmkebtke.esdm.go.id/berita/jadwal-pelatihan-2QHmM</a>	IDR 300,000	IDR 5,062,500
11		Kampung Kreasi branding has increased regarding its management in the environmental sector	interviews with a number of communities how much they are willing to pay to have good environmental management and to become a learning center for the community in other areas	Willingness to Pay	interviews, journals/notes of program implementation	IDR 500,000	IDR 2,531,250
12		Sales of Damar Kurung Products Increase	Increase in sales of resin brackets in 1 year	Financial Proxy	interviews, journals/notes of program implementation	IDR 30,000,000	IDR 8,437,500
13		Increased enthusiasm as a member of the Jagal Bangkit youth organisation & Sidokumpul Tourism Awareness Group	the cost of participating in the Self-Empowerment training	Financial Proxy	<a href="https://geraiesq.com/product/cfw/the-amazing-you">https://geraiesq.com/product/cfw/the-amazing-you</a>	IDR 650,000	IDR 21,937,500
14	CSR Task Force	Pride of work and increased experience of community empowerment	Cost of classes or sessions following motivational training	Financial Proxy	<a href="https://geraiesq.com/product/cfw/the-amazing-you">https://geraiesq.com/product/cfw/the-amazing-you</a>	IDR 650,000	IDR 1,462,500

## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

### Impact Value Adjustment

The calculation of the impact value above has the potential to be overclaimed so that it can be weighted in an adjustment calculation. In this SROI report, adjustment calculations are made by taking into account deadweight (DW), displacement (DP), attribution (AT), and drop off (DO).

- Deadweight, a measure of the number of results that will occur even if the activity does not occur. If the project doesn't exist yet, how will it be? (0% (Hi)- 100%(Lo))
- Displacement, does the project replace other benefits?
- Attribution, an assessment of how much of the result is caused by the contribution of the organization or other people. Attribution is calculated as a percentage (i.e. the proportion of results attributable to the organization). Are the results solely from the project? Or something else? (0% (Hi)-100%(Lo))
- Drop off*, yield decline every year. In the coming years, the number of outcomes is likely to be less or, if they are the same, more likely to be influenced by other factors, resulting in lower attribution to the organization. Drop-offs are used to account for this and are only calculated for results lasting more than one year. Drop-offs are usually calculated by subtracting a fixed percentage from the level of outcomes remaining at the end of each year.

**Table 4. Details of adjustment calculations**

Deadweight	Category	Deadweight Percentage
	Outcomes will not exist without the existence of the program	0
	Outcome will be a small part without the existence of the program	25
	Outcomes will partially exist without the existence of the program	50
	Outcomes would exist largely without the program in existence	75
	Outcomes will exist without the existence of the program	100

Attribution	Category	Attribution Percentage
	Outcome is solely created because of the program	0
	Outcomes are created because there is a small contribution from other parties or programs	25
	Outcomes are created because there are program contributions with other parties or programs	50
	Outcomes are created because there are significant contributions from other parties or programs	75
	Outcomes are solely created because of other parties/programs	100

Displacement	Category	Attribution Percentage
	Outcomes don't replace anything else	0
	Outcomes supersede little else	25
	Outcomes supersede some other things	50
	Outcome replaces most other things	75
	Outcomes replace everything else	100

Drop-Off	Category	Attribution Percentage
	Outcomes will be felt forever	0
	The perceived outcome will decrease by 25% starting from the 2nd year	25
	The perceived outcome will decrease by 50% starting from the 2nd year	50
	The perceived outcome will decrease by 75% starting from the 2nd year	75
	Outcomes will not be felt again when the program is finished	100

### Recap of Impact Value and SROI Calculation

The adjusted impact value is then divided by the investment value (which is the input value), so that the return on investment can be determined. The following table shows SROI values per year from 2021 to 2022, as well as predictive SROI values for 2023 to 2026.

## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

Years	2021	2022	2023	2024	2025	2026
Present value of each year	381,522,656	315,292,969	235,489,876	177,998,113	136,466,328	106,356,728
Total Present Value (PV)	381,522,656	696,815,625	932,305,501	1,110,303,614	1,246,769,942	1,353,126,670
Net Present Value (PV minus the investment)	381,522,656	598,963,625	756,905,701	934,903,814	1,071,370,142	1,177,726,870
Social Return (Value per amount invested)	3.90	3.97	5.32	6.33	7.11	7.71

The results of the SROI analysis for the period 2021 to 2022 show a benefit value of IDR 932,305,501 compared to the investment value of IDR 175,399,800. In other words, every investment of IDR 1 in the Kampung Kreasi program can generate benefits of IDR 5.32 (SROI = 1: 5.32).

### CONCLUSION

Kampung Kreasi program has been implemented by PT Pertamina Lubricants Production Unit Gresik by involving fostered partners or direct beneficiaries, including youth organization, tourism awareness group, and the family welfare programme of Sidokumpul village, Sidokumpul community, MSMEs and local trader, and Waste Coffee Manager. Previously, Sidokumpul village was formerly known as the top 3 slummiest villages in Gresik regency. Through the Kampung Kreasi program, Sidokumpul have turned into a more comfortable and cleaner village.

Kampung Kreasi has proven to have contributed to increasing people's income, reducing crime rates, reducing unemployment rates, improving environmental conditions to make them clean and comfortable. The results of the SROI analysis for the period 2021 to 2022 show a benefit value of Rp. 932,305,501 compared to the investment value of Rp. 175,399,800. In other words, every investment of Rp. 1 in the Kampung Kreasi program can generate benefits of IDR 5.32 (SROI = 1: 5.32).

Currently, housewives and youth are empowered as cadres of Kampung Kreasi administrators, with economic income from the MSME business, visiting ecotourism fees, and gold savings. With the presence of Kampung Kreasi, the level of community cohesiveness has increased considering that previously there were frequent thefts in the Kampung Kreasi area. So that it has a positive impact on the increasing intensity of meetings, and the night patrol system occurs naturally because of the community's need to meet.

### ACKNOWLEDGEMENT

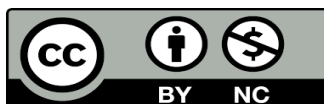
The authors prepared this journal article based on the Kampung Kreasi report, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination. PT Pertamina Lubricants does not fund this work as the program owner. Therefore, the opinions expressed here are those of the author and do not necessarily reflect the views of any institution.

### REFERENCES

- 1) Budiono, A. (2012), Social Impact Measurement: A Literature Review of the Method, Limitations and Applications [Pengukuran Dampak Sosial: Sebuah Tinjauan Literatur Terhadap Metode, Keterbatasan dan Aplikasinya]. Bina Ekonomi Vol 21 No 2, 132-139.
- 2) Cahya, Bayu Tri. (2014), Transformasi Konsep Corporate Social Responsibility (CSR) [Transformation of the Concept of Corporate Social Responsibility (CSR)], Kudus, STAIN, DOI: <http://dx.doi.org/10.21043/iqtishadia.v7i2.1087>
- 3) Lawlor, E., Neitzert, E., & Nicholls, J. (2008). Measuring Value: A Guide to Social Return on Investment (SROI). The New Economics Foundation, Second edition, 56. <https://commdev.org/wp-content/uploads/2015/06/Measuring-Value-A-Guide-to-Social-Return-on-Investment.pdf>
- 4) Law Number 40 of 2007 concerning Limited Liability Companies
- 5) Nicholls, J., Lawlor, E., Neitzer, E., & Goodspeed, T. (2009). A guide to Social Return on Investment. Development, 3 (January), 55. <http://scholar.google.com/scholar?hlmen&btnG=Search&q=intitle:A+guide+to+Social+Return+on+Investment#6>

## Kampung Kreasi, Waste Recycling-Based Social Tourism Program: Turning a Slum Area into a Tourist Destination

- 6) Purwohedi, U. (2016). Social Return on Investment (SROI) - A Technique for Benefit-Measuring/Impact of a Program or Project [Sebuah Teknik untuk Mengukur-Manfaat/Dampak dari Sebuah Program atau Proyek]. June 2016.
- 7) Regulation of the Minister of Environment and Forestry Number 1 of 2021 concerning Programs for Evaluation of Corporate Performance Ratings in Environmental Management [Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor 1 Tahun 2021 tentang Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup]. 1-312.
- 8) Santoso, M. B., Adit Enegara, R. Ismanto, S. U., Mumajad, I., & Mulyono, H. (2018). Assessment of the Impact of CSR Implementation Social Investment. *Jurnal Pemikiran Dan Penelitian Administrasi Bisnis Dan Kewirausahaan*, 3(2), 153-167.
- 9) V. Then et al. (2017). *Special Return on Investment Analysis: Measuring the Impact of Social Investment*. Palgrave Studies in Impact Finance.



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