



Impact analysis of street children empowerment program in the context of social inclusion

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ABSTRACT

Background: PT. XYZ has conducted various community development programs but has never evaluated the impact of these programs using the Social Return on Investment (SROI) framework. This study aims to analyze the impact of one such program, the Street Children Empowerment Program, using SROI in the Tanjung Priok District, DKI Jakarta. Previous research highlights the importance of measuring social value creation to ensure sustainable community development. **Methods:** This research employs a mixed-method approach, combining both quantitative and qualitative methods. Data were collected through interviews and questionnaires with 46 respondents. The outcomes were analyzed using the sustainability compass approach, focusing on four aspects: Nature, Economy, Society, and Wellbeing. **Findings:** The SROI ratio was found to be positive at 1:7.94, with the economic aspect contributing the largest benefits. The most significant impact occurred in 2013, and the stakeholders who benefited the most were the Kumala Foundation. **Conclusion:** The study demonstrates a positive return on investment for the Street Children Empowerment Program, with a notable impact in economic outcomes. The Kumala Foundation emerged as the most significant stakeholder benefiting from the program. **Novelty/Originality of this article:** This study is the first to apply the SROI framework in evaluating PT. XYZ's community development program, offering valuable insights into measuring social value and demonstrating the effectiveness of empowerment initiatives for street children.

KEYWORDS: social return on investment (SROI); community empowerment; street children program.

1. Introduction

Economic growth and development in Indonesia have advanced significantly over the past three decades. Originally an agriculture-based economy, the country has transformed into one with a substantial proportion of manufacturing and services industries. In addressing the challenges of providing infrastructure to support industrial activities, the role of the industrial sector—particularly oil and gas processing—has become a key contributor to the national Gross Domestic Product (GDP). According to the 2015 Performance Report of the Ministry of Industry (2016), the manufacturing sector, including both oil and gas and non-oil and gas industries, has consistently been the largest contributor compared to other sectors, underlining the importance of this sector as an economic driver.

The growth of industries aims not only to meet market demands but also to provide benefits to society, including the creation of job opportunities, state revenue through taxes, and the development of surrounding infrastructure. However, industrial development also

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has negative impacts on the environment and communities, such as social disparities between employees and local residents, environmental degradation like poor air and water quality, and deterioration of public infrastructure.

Various regulations in Indonesia, such as the Investment Law No. 25 of 2007, the Limited Liability Company Law No. 40 of 2007, and Government Regulation No. 47 of 2012 on Social and Environmental Responsibility (TJSL), among others, mandate that companies operate ethically and responsibly for the impact they cause. From a governance perspective, the Ministry of Environment and Forestry (2016) of the Republic of Indonesia also provides guidance for the implementation of CSR programs through the Corporate Performance Rating Program (PROPER). The active participation of corporations in CSR programs can be used as a powerful tool to provide resources for community development, with motivations aimed at creating social value, fulfilling community needs, or improving social conditions.

One method for evaluating the impact of CSR programs is through Social Return on Investment (SROI). Just like any other form of investment, companies expect a return on their investment (ROI), and SROI is a tool that measures the return on investment in terms of social value. SROI assesses the added value of a company's business activities on various social aspects, including environmental, local economic, and community impacts. Thus, the success of a CSR program is not merely measured by the number of programs or budget, but also by the financial return in terms of social benefits. SROI studies are typically conducted at different stages, such as during planning to aid decision-making or during evaluation to assess program outcomes and guide future program development.

Bassa (2014) conducted an SROI study on a program aimed at improving fishery product processing based on Good Manufacturing Practices (GMP) in Kandanghaur District, Indramayu, with a ratio of 14.03%, meaning every 1 Rupiah invested in the program would yield 14.03 Rupiah in social return. Parikesit (2015) conducted an evaluative SROI study on a microfinance program in five districts of Sukabumi, West Java, with an SROI ratio of 11.79%, indicating that every 1 Rupiah invested in the microfinance program generated 11.79 Rupiah in social return after three years. Several other studies have demonstrated that SROI can serve as a decision-making tool for regional development projects.

PT. XYZ, a state-owned company engaged in oil and gas exploration and production, has shown a strong commitment to environmental and community management. As a subsidiary of Persero, PT. XYZ operates in the upstream oil and gas sector, covering the offshore mining area from the northern coast of the Thousand Islands to Cirebon Regency. PT. XYZ's commitment to environmental and community management through CSR/TJSL programs has been recognized by its consistent receipt of the PROPER Green category award from the Ministry of Environment and Forestry, demonstrating that its environmental and community management performance exceeds regulatory compliance.

One of the flagship CSR programs implemented by PT. XYZ since 2012 is the "Non-Hazardous Waste Management through Creative Economy by Street Children" program, aimed at empowering street children, a vulnerable group in North Jakarta. This study evaluates the SROI of PT. XYZ's CSR program using an evaluative approach, as the author believes that assessing the social return on a program that has been running for over a decade is essential to understanding its impact.

This research focuses on measuring the impact of PT. XYZ's street children empowerment program using the Social Return on Investment (SROI) method. By evaluating the social return of this long-running CSR program, the study aims to provide insights into the scale and effectiveness of the program's contributions to the community and the company.

1.1 Definition, scope and benefits of CSR

The definition of Corporate Social Responsibility (CSR) is dynamic following business, environmental, and social developments. According to Rahmatullah & Kurniati (2011), CSR is a major corporate effort to meet the needs of shareholders while increasing positive impacts on the general public. The level of CSR based on its scope and complexity (Radyati,

2014) consists of six levels. Furthermore, through his "Four-Part Model of Corporate Social Responsibility," divided CSR activities into a pyramid with the following levels: Economic Responsibility, which focuses on making a profit; Legal Responsibility, which involves obeying the law; Ethical Responsibility, which emphasizes being ethical in business practices; and Philanthropic Responsibility, which encourages being a good corporate citizen (Rahmatullah & Kurniati, 2011).

According to Susanto (2009), CSR activities provide various benefits for companies, such as reducing risks and accusations of mistreatment, serving as a shield in minimizing the impact of crises, and increasing the involvement and pride of employees who work in companies with good reputations. CSR can also improve relationships with stakeholders and increase sales through consumer loyalty to companies that carry out social responsibility in a sustainable manner. Meanwhile, according to Kotler & Lee (2005), corporate participation in CSR can increase sales and market share, strengthen brand positioning, improve corporate image and influence, and help attract, motivate, and retain employees. In addition, CSR can also reduce operating costs and attract investors. One model that explains the contribution of sustainability factors to business success is the Show-Me-The-Money Model (Blackburn, 2007). Then, Radyati & Simmonds (2012) describe the CSR Life Cycle through several stages such as due diligence, project proposal, planning, implementation, handover, project report/impact evaluation, maintenance & sustainability, CSR report & communication, termination.

1.2 Theory of research variables

The SROI concept is a development of the Cost-Benefit Analysis method with a bottom-up approach from the perspective of individual stakeholders. This is in line with the stakeholder theory which states that a company should not only operate for its own benefit, but should also provide benefits to its stakeholders, as its very existence depends on their support (Freeman in Solihin, 2008; Ghazali & Chariri, 2007). In addition, legitimacy theory emphasizes that companies operate with permission from society, which can be revoked if the company does not fulfill its obligations, such as through the implementation of CSR agreed with the community to utilize natural and human resources responsibly (Yuanita, 2008).

In this case, the sustainability of the company depends on its ability to adapt to the changing demands of society (Yuanita, 2008). Since 2010, CSR has shifted from a philanthropic activity to a social investment that demands measurement of its activities. IPIECA (2008) defines social investment as a company's contribution to the communities in which it operates, while IFC (2010) emphasizes the importance of sustainability and support for corporate objectives through investments that support community development. Furthermore, SROI is also based on a theory of change that considers the chain of events and outcomes of a particular intervention Theory of Change, which serves as a tool for designing intervention programs to create change in comprehensive community initiatives (Radyati, 2016).

There are three approaches to Theory of Change (Clinks, 2014). First, the Planning Triangle, which starts with formulating the final outcome/goal, second, the Logic Model, which is similar to the Planning Triangle but requires a detailed description of the steps to implement the activity. Third, Outcome Chains, which emphasize cause-and-effect relationships to ensure that the activities formulated can bring about the expected changes. In all these approaches, performance indicators such as inputs, outputs, outcomes, and impacts must be formulated and agreed upon by stakeholders.

2. Methods

This study employs a mixed-methods approach, combining both quantitative and qualitative methods through a case study. According to Creswel, "Mixed Methods Research is an approach to inquiry that combines or associates both qualitative and quantitative

forms of research." The combination method integrates or links quantitative and qualitative research methods (Sugiyono, 2010). Creswell further explains that a mixed-method approach is useful when either quantitative or qualitative methods alone are insufficient to address the research problem, and using both methods together provides a more comprehensive understanding (Sugiyono, 2010).

The quantitative approach involves calculating the Social Return on Investment (SROI) ratio as perceived by key stakeholders. Meanwhile, the qualitative approach analyzes data from interviews with selected informants. A case study is an in-depth investigation of an individual, group, institution, or social unit, analyzing relevant variables related to the subject. The key difference between a case study and other qualitative research methods is that the case study focuses on specific cases without involving large populations (Sugiyono, 2010).

2.1 Population and sample

According to Sugiyono (2010), the population is the general area of study consisting of objects or subjects with specific qualities and characteristics determined by the researcher for examination and subsequent conclusions. The population in this study consists of beneficiaries of the CSR program, both direct and indirect recipients. The list of beneficiaries from the "Non-Hazardous Waste Management Program through Creative Economy for Street Children" is as follows.

Table 1. Beneficiary population list of the program

No.	Description	Quantity	Remarks
1.	Yayasan Kumala	8 people	Program management institution
2.	Street Children Involved	82 people	Street children (pure, semi, vulnerable)
3.	Sungai Bambu Community	107 people	Members of waste bank
Total		197 people	

The sample, as defined by Sugiyono (2010), refers to a subset of the population that represents its characteristics. When the population is large and the researcher encounters limitations in terms of budget, manpower, and time, sampling techniques are employed to ensure that the sample is representative of the population. This study adopts purposive sampling, where informants are intentionally selected based on specific criteria or considerations (Sugiyono, 2010). In qualitative research, it is important that informants possess sufficient knowledge of the phenomenon being investigated, as this enables the researcher to gain a deeper understanding of the events from the perspective of the research subject. Several characteristics of a good informant: the informant must be deeply familiar with the culture and act as a direct witness to significant events; the informant should currently be engaged in the field; they must be able to allocate time for interaction with the researcher; and non-analytic individuals are preferable as informants, as they rely on native folk theory or pragmatic common sense. Based on these criteria, the informants for this study are listed in Table 2.

Table 2. Sample/informant list

Stakeholders	Name	Position/Remarks
PT. XYZ	Mr. AS	Community development & relations team leader
	Mrs. S	Environmental, non-B3 waste management
	Mr. YR	Facilities management department
	Mr. AJ	Communications & relations department
Yayasan Kumala	Mr. DK	Executive director, beneficiary
	Mr. BH	Community development division
Street Children Involved	Mr. R	Beneficiary
	Mr. E	Beneficiary
	Mr. D	Beneficiary
	Mr. A	Beneficiary

	Mr. L	Beneficiary
	Mr. K	Beneficiary
	Mrs. D	Beneficiary
	Mrs. A	Beneficiary
	Mrs. N	Beneficiary
Sungai Bambu Community	30 people	Member of waste bank
Jakarta North Social Department	Mrs. WR	Head of social rehabilitation division
Total respondents		46 people

2.2 Data collection methods and analysis

Primary data refers to information obtained firsthand by the researcher, which is directly relevant to the variables of interest and is collected to fulfill specific research objectives (Sugiyono, 2010). In this study, primary data is gathered through a combination of in-depth interviews, focus group discussions, and observations. In-depth interviews are conducted as face-to-face, repeated interactions between the researcher and the subjects, aiming to capture the subjects' perspectives on their experiences, social situations, or views on life in their own words. Similarly, focus group discussions (FGDs) serve as a method for collecting information on particular problems through small group interactions. Furthermore, Observation is necessary to examine activities, physical objects, or events related to the research focus. To collect this data, prior planning can be conducted by determining the conditions, activities, and events that need to be recorded and documented, as well as deciding on the observation techniques to be employed. The results of the observation serve as hard evidence, tangible proof that supports the findings of the evaluation. Statements about the presence or absence, quality, and success or failure of a phenomenon can, in part, be demonstrated through observational data. While survey and in-depth interview data hold significant meaning, they still represent subjective expressions and are strengthened when such statements or opinions are supported by the hard evidence provided through observations (Sugiyono, 2010). Secondary data complements the primary data by including information obtained from various documents such as planning reports, implementation records, evaluations, and other supporting materials. These secondary sources enhance the research by providing a broader context and background information to supplement the findings.

The process of analyzing data in qualitative research is intrinsically linked to data collection, as both occur simultaneously. According to Bogdan (in Sugiyono, 2010), qualitative data analysis involves a systematic process of searching, organizing, and synthesizing materials such as interview transcripts, field notes, and other relevant sources. This process is aimed at increasing understanding and presenting findings in a coherent manner. The analysis entails organizing data into meaningful categories, breaking it into manageable units, synthesizing these units into discernible patterns, and identifying key elements relevant to the research objectives. The findings are then interpreted and conclusions are drawn based on the formulation of the research problem and objectives, ensuring alignment with the study's goals. The analysis technique employed in this study is content analysis, which is a method for systematically categorizing verbal data to facilitate classification, summarization, and tabulation. This approach allows the researcher to derive meaningful insights from qualitative data by organizing it into coherent categories that reflect the research objectives. In this study, the content analysis process is closely aligned with the stages of Social Return on Investment (SROI) calculation, ensuring that the data analysis remains structured and goal-oriented.

The initial step in the process involves defining the scope of the research and identifying relevant stakeholders. This stage is critical for establishing the boundaries of the study and ensuring that all significant parties who are impacted by or contribute to the outcomes are considered. Following this, outcomes are mapped to capture the intended and unintended effects of the activities under investigation. This mapping process provides a

visual representation of how activities lead to various outcomes, creating a foundation for further analysis.

Subsequently, outcome indicators are developed to measure and evaluate these outcomes effectively. Valuation is then performed to assign monetary or other measurable values to these indicators, making the impacts tangible and comparable. The next stage involves determining and calculating the actual impact by considering factors such as attribution, deadweight, and displacement, which ensure that only the true contribution of the intervention is accounted for. Finally, the SROI is calculated using a specific equation 1 (Nicholls et al., 2012)

$$SROI = \frac{\text{Impact Total (Beneficiaries + Company)}}{\text{CSR Investment}} \times 100\% \quad (\text{Eq.1})$$

This formula compares the value of benefits created to the investment made. This calculation not only provides a quantitative measure of the effectiveness of the intervention but also offers insights into areas for improvement and optimization. By integrating content analysis with SROI methodology, this study ensures a thorough and systematic approach to understanding and evaluating the data, producing robust and actionable findings.

The final stage in the Social Return on Investment (SROI) analysis process involves reporting, where the findings from all preceding stages are synthesized and presented in a comprehensive manner. This stage is essential for translating the complex data and insights gathered throughout the analysis into a clear, concise, and accessible format for stakeholders. Reporting involves summarizing key outcomes, indicators, and calculated impacts, highlighting the value created relative to the resources invested. By effectively communicating the results, this stage ensures that stakeholders can understand the social, economic, and environmental benefits generated by the intervention. Moreover, the report serves as a critical tool for decision-making, providing evidence-based recommendations for improving future projects and fostering transparency and accountability. The reporting process adheres to the guidelines outlined by Nicholls et al. (2012), which emphasizes clarity and engagement in presenting findings to diverse audiences.

3. Results and Discussion

3.1 Description of the research object

The object of this research is the street children empowerment program implemented by PT XYZ in collaboration with Yayasan Kreatif Usaha Mandiri Alami (Kumala) in Tanjung Priok District, North Jakarta. In the Strategic Plan for Social and Environmental Responsibility 2016–2020 of PT. XYZ (2016), the program is referred to as “Non-B3 Waste Management through Creative Economy by Street Children” (2016). The empowerment program for street children has been ongoing since 2012, beginning with PT XYZ simple contributions to Yayasan Kumala by sending used office paper and wooden pallets to be processed into creative economic products. The program has been continuously developed, becoming one of PT. XYZ's flagship initiatives to be showcased in the Ministry of Environment and Forestry's PROPER event.

PT. XYZ's CSR policy is one of six key corporate policies. Signed by the President/General Manager on April 1, 2016, point five of this policy asserts the company's commitment to consistently and sustainably implement Social and Environmental Responsibility (TJSL) (2015). PT. XYZ's CSR policies are further detailed in documents such as the TJSL Manual (PT. XYZ-G-PRC-5011), TJSL Procedures (PT. XYZ-G-PRC-5064), and the TJSL Strategic Plan 2016–2020 (PT. XYZ-G-PLA-5023). The implementation of CSR aims to achieve strategic TJSL objectives, emphasizing community development and stakeholder engagement as prerequisites for harmonious operations.

3.2 Overview of the researched CSR program

3.2.1 CSR program profile for street children empowerment

The “Non-Hazardous Waste Management through Creative Economy by Street Children” program is one of PT. XYZ flagship community empowerment programs. Implemented in Tanjung Priok Subdistrict, North Jakarta, this program began in 2012 in collaboration with Yayasan Kreatif Usaha Mandiri Alami (Kumala), which acts as both the beneficiary and program manager, working with street children in the Tanjung Priok area. On one hand, the presence of street children in Tanjung Priok has been a social welfare issue, as they are often associated with criminal activities, including theft (such as stealing car side mirrors and motor vehicles), street robberies, brawls, and more.

However, on the other hand, street children also possess considerable potential that can be developed, including creativity and artistic talent. This potential is harnessed by utilizing non-hazardous waste such as used paper, banana fronds, wooden pallets, and organic waste from the North Jakarta area, which is then recycled into creative products with economic value. Out of approximately 461 people facing social welfare issues in the Tanjung Priok Subdistrict, at least 82 street children in 2016 were undergoing guidance through Yayasan Kumala and PT. XYZ, as detailed in the table below:

Table 3. Characteristics of empowered children

Number	Background	Quantity
1.	Street musicians	52
2.	Street vendors	6
3.	Jockeys	3
4.	Newspaper vendors	1
5.	Food vendors	1
6.	Car washers	5
7.	Shoe polishers	14
Total		82

(Yayasan Kumala, 2014)

At least 25 children skilled in recycling have received Trainer of Trainers (ToT) training to spread their skills to other communities or organizations interested in processing waste into creative economic products. The details of the project and activities conducted by PT. XYZ and Yayasan Kumala to support and develop the potential of the empowered children and their surrounding environment are outlined in the following table 4. PT. XYZ contributes to Yayasan Kumala and the street children in North Jakarta as: (1) program funder, (2) facilitator in developing the capacity of Yayasan Kumala’s management and empowered children, (3) supplier of used office paper as raw material for recycling products, (4) developer of networking and media for the children’s self-actualization across the company’s operational areas.

Table 4. Program and activity details

Program	Non-Hazardous waste management program through creative economy by street children, North Jakarta (5R++ by street children)		
Project	Optimization of non-hazardous waste through creative economy training service on recycling paper & organic waste	Training service on recycling paper & organic waste	Kumala waste bank
Activity	1. Recycling skill training for fostered children	1. Supporting National & Independent Adiwiyata Schools	1. Group initiation 2. Outreach & socialization to potential

	2. Production of creative economy products/handicrafts	2. Dissemination/expansion of recycling skills	individual/institutional clients
	3. Capacity building for fostered children (TOT, etc.)		3. Replication & development of units
Target	- Fostered children of Yayasan Kumala	- Prospective Adiwiyata school - Environmental awareness community groups - Government agencies	- Community - Institutions/agencies around Tanjung Priok
Achievement (per 2016)	- More than 25 types of creative economy products have been produced - 25 children certified as Recycling Trainers	- Supported 4 schools in achieving National Adiwiyata and 1 Independent Adiwiyata	- There is a management team for Kumala Waste Bank - 107 clients have been served

(Yayasan Kumala, 2016)

3.3 Social return on investment (SROI calculation)

3.3.1 Mapping the problems

In calculating the social impact using the Social Return on Investment (SROI) instrument, several factors can reduce the ratio eventually generated. Based on interviews with relevant stakeholders, the problems faced by the company in general and in implementing the program specifically can be categorized into two sources: internal and external problems. Based on further interviews with stakeholders regarding the problems faced and the disharmony in the social, economic, and environmental context, proxies/interventions based on SROI principles such as Deadweight, Attribution, and Drop Off will be considered as components reducing the final SROI results in this study. The detailed findings related to these three proxies are as follows:

Deadweight, measures the potential social, economic, or environmental value that would have occurred without the program. It is calculated by estimating what would have happened to stakeholders without the intervention. For Yayasan Kumala, prior to collaborating with PT. XYZ, the foundation faced delays in receiving government funds for programs, leading them to establish business units to cover operational costs. This shift towards business operations affected their focus on rehabilitating street children. In terms of local competition, while several other organizations in North Jakarta work in similar fields, Yayasan Kumala's presence doesn't significantly hinder their activities as many organizations depend on government funding. The foundation's efforts have been recognized by the Ministry of Social Affairs, maintaining consistent work in street children empowerment since 2006.

Attribution, refers to estimating the share of outcomes attributable to the program's activities. For Yayasan Kumala, before collaborating with PT. XYZ, they worked with both governmental and non-governmental institutions on project-based initiatives but did not focus on internal capacity development. Many other foundations operate in North Jakarta, but the success of such programs is often tied to government support. Regarding street children, there has been a noticeable decrease in both their numbers and related criminal activities due to collaborative actions from the local police and regular interventions by the Social Service.

Drop Off, refers to the decline of outcomes over time, often used to assess the lifespan of provided infrastructure. PT. XYZ began assisting the foundation with infrastructure in

2013, including facilities for recycling, furniture, and technology. When Yayasan Kumala moved to a new location in 2016, some of the infrastructure assets were left behind, while others were relocated to the new secretariat. These assets remain in good condition, continuing to support the foundation's operations. Then, based on interviews with PT. XYZ, the investment cost for implementing the Street Children Empowerment Program in North Jakarta in collaboration with Yayasan Kumala is IDR 527,190,000 (Five Hundred Twenty-Seven Million One Hundred Ninety Thousand Rupiah). This social investment has been ongoing since 2012. The investment breakdown is as follows:

Table 5. Program investment costs for 2013-2016 (Rupiah)

Category	2013	2014	2015	2016	Sub-Total
Raw material supply (used paper)	2,163,000	2,454,000	5,133,000	1,290,000	11,040,000
Infrastructure	15,300,000	-	61,750,000	190,000,000	267,050,000
Institutional capacity improvement	57,400,000	43,100,000	-	-	100,500,000
Beneficiary capacity improvement	-	35,000,000	-	-	35,000,000
Support services	30,000,000	33,600,000	-	-	63,600,000
Environment	-	-	-	50,000,000	50,000,000
Sub-total	104,863,000	114,154,000	66,883,000	241,290,000	
Grand total	527,190,000				

3.3.2 SROI study phase

The calculation of SROI in this study is conducted by calculating the incremental value generated by the program for the beneficiaries. The SROI calculation uses the Sustainability Compass approach, which includes: Nature, Economy, Society, and Wellbeing. The detailed calculation phase will be explained as defining the Scope of Activities and Identifying Stakeholders

This study focuses on the "Non-Hazardous Waste Management Program through Creative Economy by Street Children" in collaboration with Yayasan Kreatif Usaha Mandiri Alami (Kumala) since 2012. The research uses an evaluative SROI approach, which assesses the social impact of the program that has already been implemented by PT. XYZ. Stakeholders involved include PT. XYZ, Yayasan Kumala, street children beneficiaries, local residents of Bambu River, and the North Jakarta Social Service.

Stakeholder involvement is based on their roles in the program, with methods including interviews and surveys. The outcome mapping involves identifying inputs, activities, outputs, and outcomes of each stakeholder, categorized according to the Sustainability Compass (Nature, Economy, Society, and Wellbeing). Inputs are defined as the contributions from stakeholders to the program, with subjective indicators based on assumptions and objective indicators based on factual conditions gathered during fieldwork.

3.3.2.1 Outcome indicators and valuation

In this stage, the study focuses on developing indicators and valuations for the outcomes. The duration of the outcomes is also determined, with the assumption that drop-off is not considered in this research. Therefore, the outcomes are expected to have lasting effects.

Table 6. Outcomes and indicator

Stakeholders	Outcome	Indicator	Proxy
PT. XYZ	(S) Positive image of PT. XYZ among stakeholders	Positive media coverage of PT. XYZ	Cost of relationship/partnership with the mass media

Yayasan Kumala	(W) Employee pride in working at PT. XYZ	Level of pride	Valuation of pride for PT. XYZ
	(E) Increase in revenue from the social investment value of partners	Increase in institutions/agencies collaborating	Management fee value from partnerships
	(E) Increase in revenue from training services & sales of creative economy products	Increase in product orders from buyers	Level of sales from training services and product sales
	(S) Increase in cohesion among the management and fostered children	Level of satisfaction	No proxy
	(S) Increased public acceptance of the foundation's activities	Community participation rate in the foundation's activities	Foundation's "security" costs per year
Fostered street children	(E) Increase in income for fostered children	Increase in annual income of fostered children	Annual income level of fostered children
	(S) Increase in cohesion among fostered children	Level of satisfaction	Valuation of satisfaction for street children in the program
Sungai Bambu community	(W) Increase in dignity/self-esteem of fostered children	Level of pride/self-confidence	Valuation of pride for street children in the program
	(N) Improvement in the quality of the surrounding environment	Amount of waste reduction in circulation	No proxy
	(E) Increase in income for residents from savings	Average savings of waste bank clients	Incremental income from the value of waste bank savings
North Jakarta Social Service	(S) Decrease in the number of street children in North Jakarta	Number of independent fostered children	Decrease in the cost of fostering street children per person per year

As table 6, indicators are established for each outcome, and their conversion to monetary value in Rupiah is based on specific proxies. For PT. XYZ, outcomes include positive media coverage (valued through media partnership costs) and employee pride (valued through pride metrics). Yayasan Kumala's outcomes involve increased revenue from partnerships and training services, with proxies including management fees and sales volume. For street children, indicators focus on income increase, social cohesion, and dignity, valued through annual income and happiness metrics. Local residents benefit from improved environmental quality and increased savings, with proxies for savings growth. Finally, the North Jakarta Social Service tracks a decrease in the number of street children, measured by the cost savings of rehabilitating each child.

3.3.2.2 Determining and calculating impact

Determining and calculating the impact of a program involves evaluating the difference between the outcomes and the contributions from deadweight, attribution, and drop-off. Impact reflects the net effect that the program has had on the stakeholders, after accounting for external factors and natural trends. In this study, the calculation of impact was hindered by the lack of material significance from deadweight, attribution, and drop-off. These factors did not have a substantial influence on the overall outcome of the program.

Furthermore, the difficulty in accurately calculating deadweight, attribution, and drop-off added to the challenges of determining the true impact. These limitations in measurement underscore the complexity of assessing the social return on investment

(SROI) for programs with such diverse and intangible outcomes. Despite these challenges, the study highlights the importance of understanding the broader implications of the program's success and areas for improvement.

3.3.3.3 Calculating SROI value

After determining and calculating the impact, the next step is to calculate the Social Return on Investment (SROI). In this calculation, the discount rate is a crucial factor used to determine the present value of future costs and benefits. The discount rate, defined as the interest rate used to adjust future values, was set at 6.5%, based on the last Bank Indonesia (2016) interest rate as of July 21, 2016. The calculation details are presented in the following table 7.

Table 7. SROI value

Stakeholders	Outcomes	2013	2014	2015	2016
PT. XYZ	Positive image of PT XYZ among stakeholders	-28,000,000	128,000,000	-80,000,000	160,000,000
	Employee pride in working at PT XYZ	160,625,000	160,625,000	160,625,000	160,625,000
Yayasan Kumala	Increase in revenue from the social investment value of partners	220,000,000	52,920,000	505,210,000	125,075,000
	Increase in revenue from training services & sales of creative economy products	1,597,000,000	663,800,000	394,500,000	85,616,000
	Increase in cohesion among the management and fostered children	-	-	-	-
	Increased public acceptance of the foundation's activities	-600,000	-600,000	-600,000	3,600,000
Fostered street children	Increase in income for fostered children	229,824,000	39,096,000	17,280,000	-54,000,000
	Increase in cohesion among fostered children	116,333,333	116,333,333	116,333,333	116,333,333
	Increase in dignity/self-esteem of fostered children	25,777,778	25,777,778	25,777,778	25,777,778

Sungai Bambu community	Improvement in the quality of the surrounding environment	-	-	-	-
	Increase in income for residents from savings	-	-	-	22,454,164
North Jakarta Social Service	Decrease in the number of street children in North Jakarta	-	20,900,000	11,000,000	22,000,000
	Total Net Impact	2,320,960,111	1,206,852,111	1,150,126,111	667,481,275
	PVIF (6.5%)	0.9390	0.8817	0.8278	0.7773
	Total PV Net Impact	2,179,305,269	1,064,032,367	952,130,856	518,848,608

The table shows the outcomes for each stakeholder, including PT. XYZ, Yayasan Kumala, Anak Jalanan Binaan, Warga Sungai Bambu, and Suku Dinas Sosial Jakarta Utara, over the years 2013 to 2016. By applying the 6.5% discount rate (PVIF), the total Net Impact for each year was calculated. The sum of these impacts over the four years results in a total present value (PV) net impact of IDR 4,714,317,099. Based on this, the SROI ratio was calculated as 7.94, meaning that for every IDR 1 invested in the program, the social return is IDR 7.94.

3.3.3.4 Reporting

The SROI ratio generated from the program is 1:7.94. This means that for every 1 Rupiah invested by the company in the Street Children Empowerment Program, the social return is 7.94 Rupiah. The highest impact was experienced in 2013, with a subsequent decline from 2014 to 2016. Referring to the Sustainable Compass dimensions, the Economy dimension in this study was the largest contributor to the outcomes, with a share of 73%. Followed by Wellbeing at 14%, Society at 13%, and Nature at 0%. Meanwhile, the stakeholders that received the highest impact from the program were Yayasan Kumala at 68%, followed by Street Children Beneficiaries at 15%, PT. XYZ at 15%, Riverbank Residents at 1%, and the Social Affairs Office of North Jakarta at 1%.

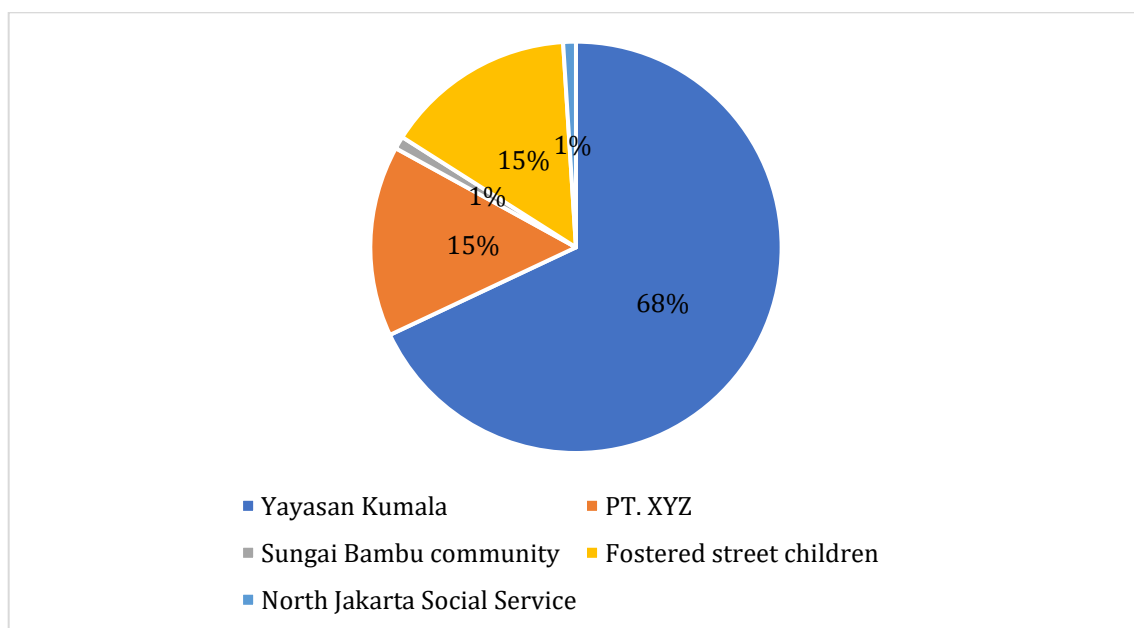


Fig. 1. Program impact share by stakeholders

3.4 SROI Results analysis and recommendations

3.4.1 Impact

The valuation of PT. XYZ employees' pride is relatively high, with an average value of IDR 160,625,000. Meanwhile, the valuation for positive image, assessed through the cost of media relations, shows fluctuations, with an increase in impact in 2014 and 2016, but a significant decline in 2015. According to an interview with Mr. AJ, Communication & Relations staff at PT. XYZ, the relationship/media partnership costs increased in 2015 due to the company's need for public exposure regarding the development and maintenance of oil and gas facilities and the Cilamaya port development project in Karawang, which intersected with the company's operations.

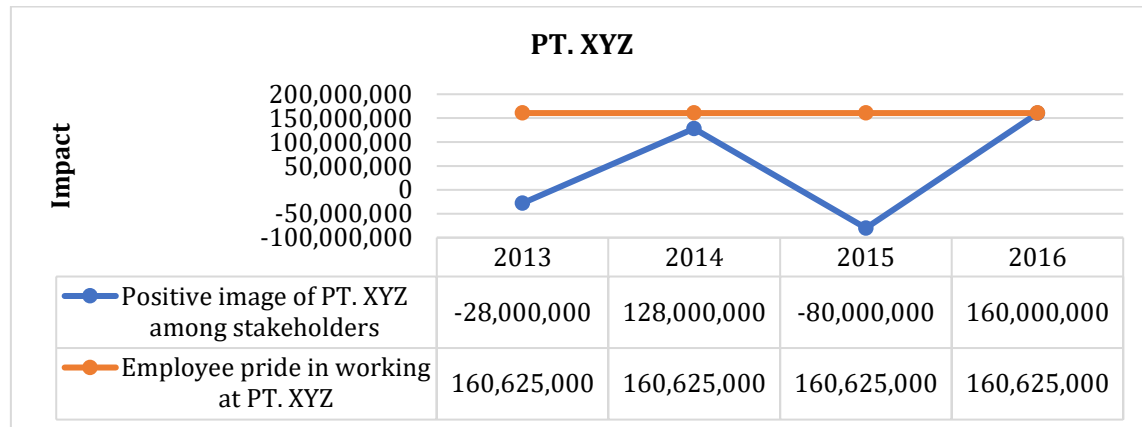


Fig. 2. Impact on the company

The impact on Yayasan Kumala's income from training services and product sales was highest in 2013 and tended to decrease in the following years. On the other hand, the outcome of increased income from social investment value, assessed through management fees, was highest in 2015, amounting to IDR 505,210,000.

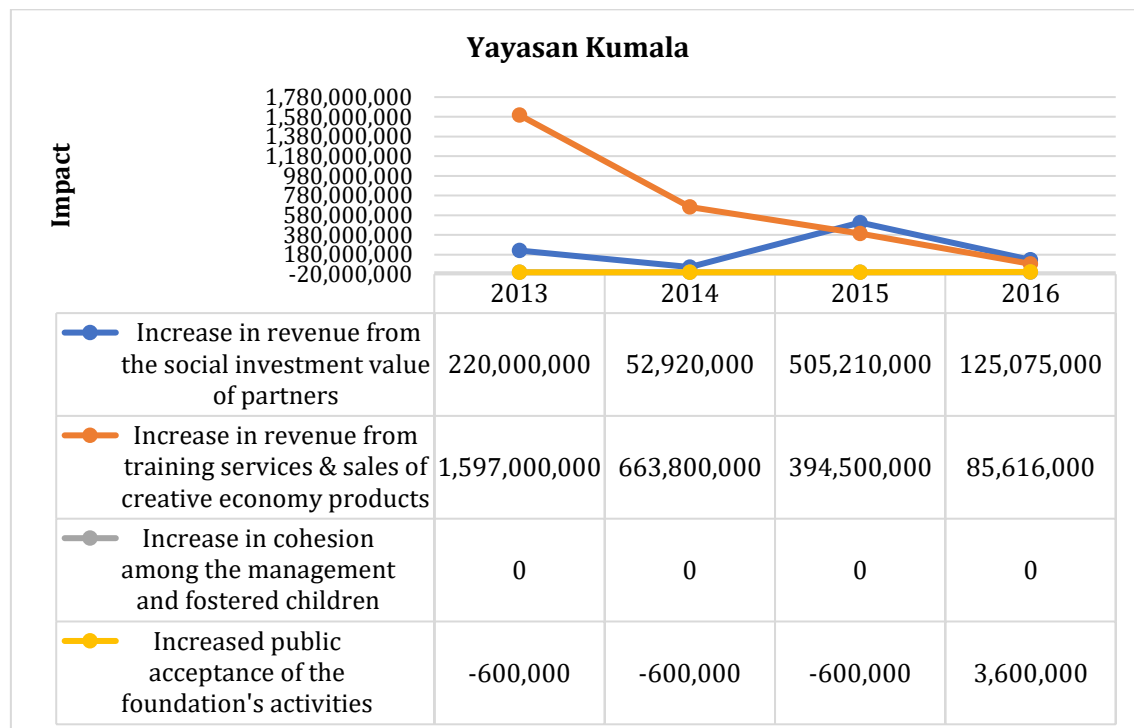


Fig. 3. Impact on the Yayasan Kumala

According to an interview with Executive Director of Yayasan Kumala, the demand for training services and products follows the foundation's capacity to meet requests and participate in exhibition events. The decrease in 2014 was likely due to the foundation's relocation, which temporarily reduced its capacity for recycling production. In 2015, Yayasan Kumala received a partnership contract with an international NGO, a UN agency, worth approximately IDR 3,800,000,000 for empowerment programs in Papua, significantly boosting the foundation's income from management fees. The total investment from partners in 2015 was IDR 4,591,400,000. The breakdown is as follows Figure 3.

The street children beneficiaries expressed enjoyment in participating in the program, not only gaining recycling skills but also feeling a sense of family and support during their activities at the foundation. The enjoyment level was valued at IDR 116,333,333, while the increase in dignity was valued at IDR 25,777,778. The average income of the beneficiaries per month saw a sharp increase from IDR 1,050,000 in 2012 to IDR 3,178,000 in 2013. Income continued to rise in 2014-2015, though at a slower rate compared to 2013. A decline in income occurred in 2016, where it decreased from IDR 3,700,000 in 2015 to IDR 3,200,000 per month. According to Mr. DK, this decline was due to a reduction in orders for training services and recycled products.

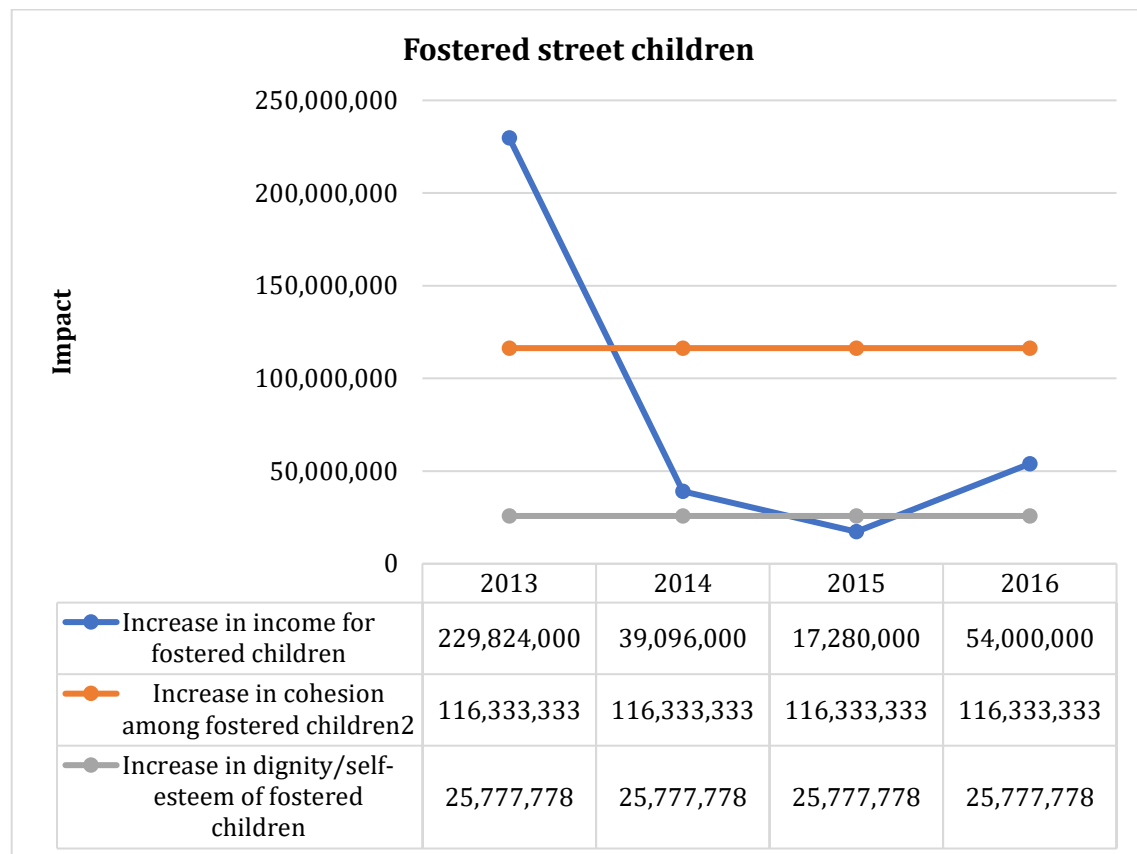


Fig. 4. Impact on street children beneficiaries

3.4.2 Impact on riverbank residents and social affairs office of North Jakarta

Of the two identified outcomes affecting the residents of Sungai Bambu, Tanjung Priok, DKI Jakarta, only one outcome could be evaluated: the increase in income from savings (Kumala waste bank). The Kumala waste bank program was initiated in August 2016, and by the time of the research, it had 107 clients. As such, the impact observed was only measurable in 2016. The average client balance was IDR 209,852, with a total of 3.4 tons of waste managed. The majority of the waste collected was paper at 59% (2,027 kg), followed by plastic at 28% (938 kg), metal at 7% (233 kg), and other types at 6% (217 kg).

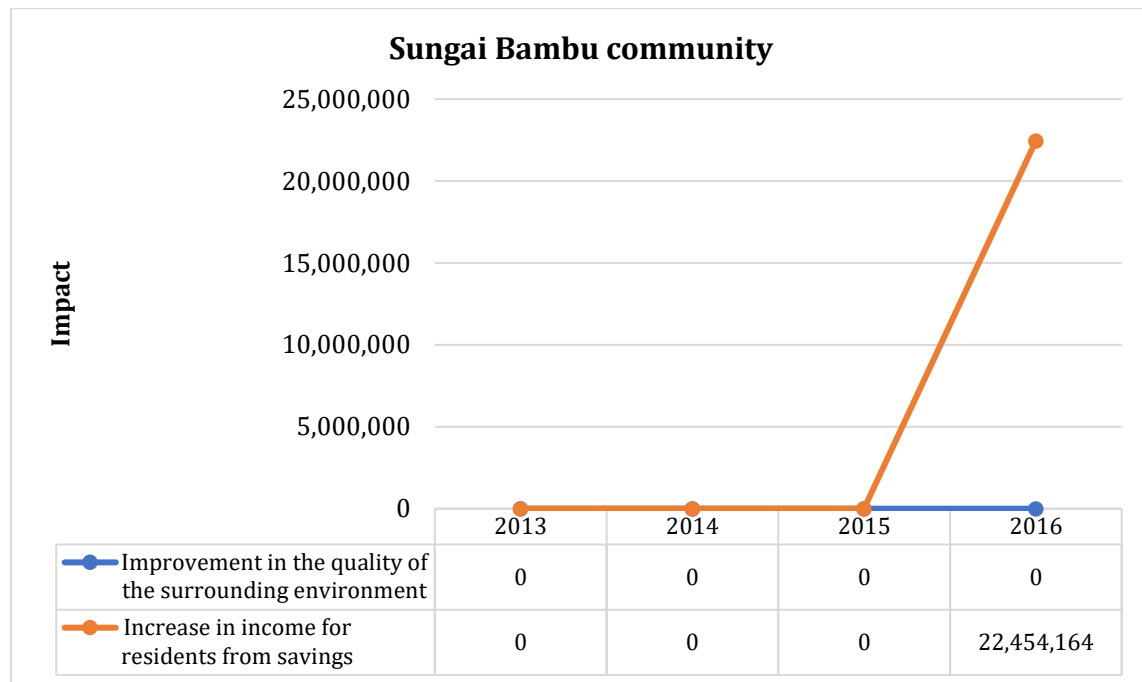


Fig. 5. Riverbank residents: impact on riverbank residents

The impact on the local government of DKI Jakarta, represented by the Social Affairs Office of North Jakarta in this study, is the reduction in the number of street children in the area. According to Ms. WR, Head of Social Rehabilitation Section, a child is considered to no longer be a street child if they are independent, earning a living according to societal norms, and not roaming the streets, which can cause social problems and disturb the public. From Yayasan Kumala, at least 49 street children have become independent and no longer qualify as street children, with 19 children in 2014, 10 in 2015, and 20 in 2016.

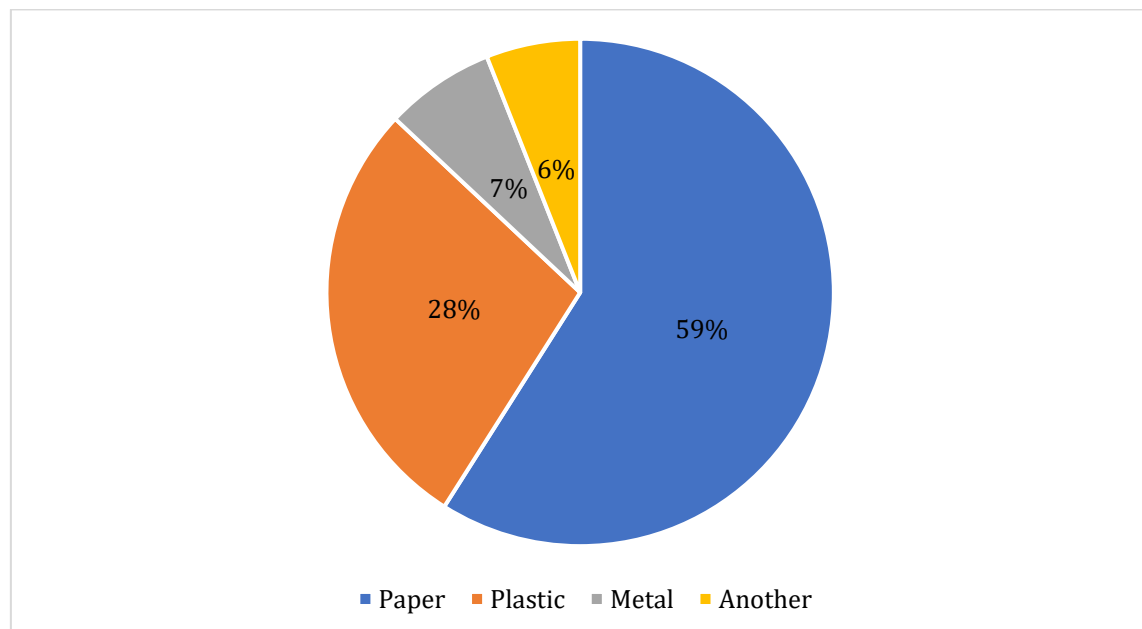


Fig. 6. Waste type management breakdown

According to Mr. DK, Executive Director of Yayasan Kumala, these former street children are now living independently in society with various professions. The valuation used to measure this impact is the government's spending (through the Ministry and Social Affairs, 2015) in the Child Welfare Program, which allocated IDR 1,100,000 per child per

year in 2016 (interview with Ms. WR, Head of Social Rehabilitation Section). Look at this graph to see the impact on social affairs office of North Jakarta.

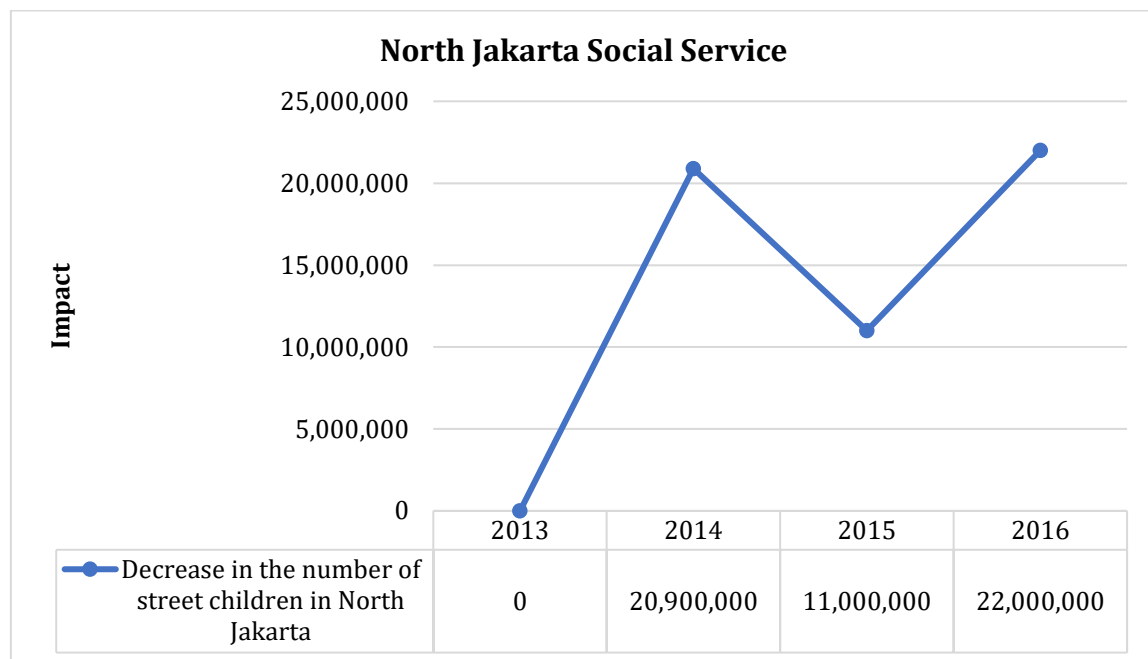


Fig. 7. Impact on social affairs office of North Jakarta

4. Conclusions

Based on the research findings, several key conclusions can be drawn. The SROI calculation for the street children empowerment program, which was implemented by PT. XYZ in collaboration with Yayasan Kumala in 2016, resulted in a ratio of 1:7.94. This means that for every IDR 1 invested by PT. XYZ, a social return of IDR 7.94 was generated, indicating a sevenfold increase in social benefits. These benefits were distributed across various stakeholders, including PT. XYZ, Yayasan Kumala, the street children beneficiaries, the Riverbank community, and the Social Affairs Office of North Jakarta. The findings suggest that the program provided significant social value relative to the initial investment, highlighting the effectiveness of the initiative in creating lasting positive outcomes.

Furthermore, when referring to the four dimensions of the Sustainability Compass, it is evident that the economic aspect generated the highest outcomes, indicating that financial benefits were the most impactful dimension of the program. The peak of these outcomes occurred in 2013, with Yayasan Kumala experiencing the greatest level of impact. This suggests that the economic benefits, particularly related to the increased funding and partnerships received by Yayasan Kumala, played a central role in driving the success of the program and its ability to deliver substantial returns for its stakeholders.

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Author Contribution

This study was designed, data were collected and analyzed, and the manuscript was written collaboratively. Contributions included data interpretation, analysis, and manuscript revision. Both authors approved the final version of the manuscript.

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References

- Bank Indonesia, (2016). *Dasar Suku Bunga Bank Indonesia*. Retrieved from <http://www.bi.go.id/id/moneter/bi-rate/data/Default.aspx>.
- Bassa, N. (2014). Analisa Perencanaan Investasi Corporate Social Responsibility (CSR) dengan Menggunakan Social Return on Investment (SROI). *Tesis*. Program Pascasarjana Magister Management Corporate Social Responsibility, Universitas Trisakti
- Blackburn, R. W. (2007). *The Sustainability Handbook The Complete Management Guide to Achieving Social, Economic and Environmental Responsibility*. Earthscan.
- Clinks. (2014). *Developing a Theory of Change*. Retrieved from <http://www.clinks.org/sites/default/files/TheoryofChangeGuide.pdf>
- Ghozali, I. & Chariri, A. (2007). *Teori Akuntansi*. Badan Penerbit Universitas Diponegoro.
- International Petroleum Industry Environmental Conservation Association (IPIECA). (2008). *Creating to Successful, Sustainable Social Investment for Oil and Gas Industry*. International Petroleum Industry Environmental Conservation Association. Retrieved from <https://www.cdacollaborative.org/wp-content/uploads/2016/02/Guide-to-Successful-Sustainable-Social-Investment-for-the-Oil-and-Gas-Industry.pdf>.
- International Finance Corporation (IFC). (2010). *Strategic Community Investment: A Quick Guide*. International Finance Corporation. Retrieved from <https://documents1.worldbank.org/curated/zh/179101468154465000/pdf/577870WP0v20IF00Box385287B00PUBLIC0.pdf>.
- Ministry of Environment and Forestry of the Republic of Indonesia. (2016). *PROPER 2016: Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup*. Ministry of Environment and Forestry of the Republic of Indonesia.
- Ministry of Industry of the Republic of Indonesia. (2016). *Laporan Kinerja Kementerian Perindustrian Tahun 2015 Kementerian Perindustrian Republik Indonesia*. Ministry of Industry of the Republic of Indonesia.
- Ministry and Social Affairs of the Republic of Indonesia. (2015). *Penilaian Cepat Program Kesejahteraan Sosial Anak (PKSA)*. Ministry and Social Affairs of the Republic of Indonesia.

- Pertamina Hulu Energi. (2015). *Kebijakan Corporate Social Responsibility (CSR)/Tanggung Jawab Sosial dan Lingkungan (TJSL)*. PT. PHE ONWJ
- Kotler, P. & Lee, N. (2005). *Corporate Social Responsibility, Doing the Most Good for Your Company and Your Cause*. John Wiley & Sons Publisher.
- Nicholls, J., Lawlor, E., Neitzert, E., & Goodspeed, T. (2012). *A guide to Social Return on Investment*. The SROI Network. Retrieved from <https://socialvalueselfassessmenttool.org/wp-content/uploads/intranet/758/pdf-guide.pdf>.
- Pertamina Hulu Energi ONWJ. (2016). *Term of Reference - Program Pengelolaan Limbah Non-B3 melalui Ekonomi Kreatif oleh Anak Jalanan*. PT. PHE ONWJ.
- Pertamina Hulu Energi ONWJ. (2016). *Rencana Strategis Tanggung Jawab Sosial dan Lingkungan 2016-2020*. PT. PHE ONWJ.
- Radyati, R. & Simmonds, T. (2012). *Tanggung Jawab Sosial Holistik*. Suara Pembaharuan.
- Radyati, M. (2014). *Sustainable Business dan Corporate Social Responsibility*. Center for Entrepreneurship, Change and Third Sector, Universitas Trisakti.
- Radyati, M. (2016). *Materi SROI – Social Return on Investment*. CECT Universitas Trisakti.
- Rahmatullah & Kurniati, T. (2011). *Panduan Praktis Pengelolaan CSR (Corporate Social Responsibility)*. Samudra Biru.
- Parikesit, B. (2015). *Analisa Dampak Program Microfinance di PT. X Diukur dengan Menggunakan Social Return on Investment*. Tesis. Program Pascasarjana Magister Management Corporate Social Responsibility, Universitas Trisakti
- Solihin, D. (2008). *Materi Penyusunan Indikator Kinerja dan Anggaran Berbasis Kinerja*. Retrieved from <https://www.slideshare.net/slideshow/penyusunan-indikator-kinerja-dan-anggaran-berbasis-kinerja/554177>.
- Sugiyono. (2010). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Penerbit Alfabeta.
- Susanto, A.B. (2009). *Corporate Social Responsibility*. The Jakarta Consulting Group.
- Yayasan Kumala. (2014). *Rencana Strategis Yayasan Kumala 2014-2018*. Yayasan KUMALA.
- Yuanita, R. (2008). *Pengaruh Corporate Social Responsibility terhadap Fiancial Performance dan Profitabilitas Perusahaan BEI Tahun 2007*. Universitas Indonesia.

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