

Social Return on Investment (SROI) Program of Drilled Well Construction in Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara in Achieving Sustainable Development Goals (SGDs)

Sri Adam Dewi Setyaningrat¹, Dwi Ratnasari²

¹Surabaya Yatim Mandiri Ziswaf Institution

²Surabaya Yatim Mandiri Ziswaf Institution

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ABSTRACT

Drilled well have a vital role in fulfilling the water needs in a community, especially for people in Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara. It is because those people have to spend IDR 3,000 per 20 liters of water to fulfill their need for clean water. Normally one person spends 49.9 liters of clean water a day in 1 month (30 days), which means they require 49.9 liters of clean water x 30 days = IDR 1,497 per liter of water a month. If 20 liters cost IDR 3,000, then the total need for one person in a month is IDR 224,550. This number is multiplied by the number of residents; 870 is the total population of Kayang village. This research assesses the impacts of the construction of a drilled well program conducted by LAZNAS Yatim Mandiri by applying the Social Return on Investment method (SROI) in Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara. This method calculates the extent of the social impact resulting from the programs that have been carried out. SROI calculation is taken from the value of input from the construction of drilled well, assistance in the management of drilled well, sustainable use of clean water, and operational costs. Meanwhile, the value of impact is monetized by increasing the quality of human life, improving health, and minimizing environmental damage. The outcome of value impact was 2.97, which means that each LAZNAS Yatim Mandiri investment of IDR 1 has a social benefit of IDR 2.97. In other words, the social benefits of the program generated are more significant than the funds distributed. This can encourage the growth of the economic activities of the surrounding community with money as capital for a business rather than for buying clean water. This also means achieving the goals of the Sustainable Development Goals (SDGs), namely regions free from poverty, healthy and quality lives, the availability of clean water, and proper sanitation.

Keywords: Social Return on Investment, The construction of Drilled well, SDGs

INTRODUCTION

Water is the primary need for every living thing. In the life process, humans need water as a basic need, so water poses as the natural resource on which life depends. The community requires clean water for all needs, such as drinking water, cooking, washing, bathing, watering plants, and cleaning their vehicles in large quantities. Hence, the need for clean water also increases. However, in reality, the quality

and the quantity of the water resources cannot meet the needs of the people, especially those who live in rural areas.

The availability of clean water service in rural areas is far beyond the ability to meet the need, so efforts to develop a clean water distribution system are needed (Lakbeh, I. F., Messakh, J. J., & Tamelan, 2021).

One of which is Kayang Village. The Kayang Village is in Pantar Barat Laut

District, Alor Regency, Province of East Nusa Tenggara, Indonesia. It is one out of seven villages and wards in the District of Pantar Barat Laut. The villagers are a majority of Alor Tribes, with a population of 870, a livelihood as farmers, and an area of 11.50/km².

In research titled "Study of Clean Water Distribution Systems in Tribur Village Alor Regency, East Nusa Tenggara Province" by Ilwinto Folino Lakbeh, Jakobis J. Messakh, and Paul G. Tamelan explained *"The presence of Tribur Village, a village located right next to Kayang Village, there was a gravity delivery system and the unit of public hydrant service. Unfortunately, not all villagers got their share of the clean water. It was due to that the pipes used were very limited, and some taps were dysfunctional. It was worsened by the fact that the water did not flow for 24 hours, only for a short time, even so, not quite much in quantity. Moreover, sometimes it stops flowing at all"* (Lakbeh, I. F., Messakh, J. J., & Tamelan, 2021).

Similar to the conditions in Tribur Village, based on interviews and two-way communication between Yatim Mandiri and Kayang Village stakeholders, it was found that one hamlet and one Islamic boarding school were not able to meet the need for clean water. To meet their need for clean water, residents had to buy per can or 20 liters of clean water for IDR 3,000. Whereas normally, one Indonesian needs an average consumption of 49.9 liters of clean water per day, based on WHO recommendations for household use in the basic access category of 20 - 49.9 liters per capita per day (Howard G. & J., 2003). One person in one month (30 days) should spend 49.9 liters of clean water x 30 days = IDR 1,497 per liter of clean water. If per 20 liters IDR 3,000, then the total need for one person per month is IDR 224,550 multiplied by the population of Kayang Village, 870 people, which is IDR 195,358,500.

Based on the research done by Retno Suryani and friends (Suryani et al., 2022) entitled "Evaluasi Implementasi Program Pendekar (Implementation Evaluation of the Warrior Program) (Penderes Badeg, Karang Sari Village)" using the SROI method, the empowerment program of warrior community (Penderes Badeg Karang Sari) obtained the SROI 2.34, which means that the program could be carried out because it offered the return of IDR 2.34. Budi Asmita's research (Asmita et al., 2021) which measured the value of the social investment impact of the village BAZNAS microfinance program, used the Social Return on Investment or SROI method. The value obtained was 2.66 (> 1), which means that every BAZNAS investment in the BMD program of IDR 1 had a social benefit of IDR 2.66. In other words, the program's social benefits are greater than the funds disbursed. Meanwhile, research from Meilanny Budiarti Santoso et al. (Santoso et al., 2018), the SROI method could be used to measure the impact of social investment in implementing CSR programs. The acquisition of an SROI ratio of 3.70 means that every investment of IDR 1 gets an impact or benefit of IDR 3.70. The biggest benefit from Posdaya Baramulyo was the increase in access to early childhood education, which was 66.5% of the total outcome value, and an increase in income of 14.09%.

By considering the phenomena and problems in Kayang Village, Yatim Mandiri is interested in assessing the impact of social innovation in the construction of drilled well by using the SROI method because so far, there has been no research that has measured the impact of the drilled well construction program. This program involves the village stakeholders as supporting pillars from the Seven Main Principles of Social Return on Investment (SROI) so that the community, as the agents of change and the ones facing them, can optimize the outcomes and impact of the good construction continuation. This

program's final goal is to implement social innovation in community empowerment that can solve problems or social needs (more effective than the present solution). It encourages capability and social improvement and uses natural resource assets to the best of it (The Regulation of Ministry of Environment and Forestry No. 1 2021).

In the long term, the social innovation program in the construction of drilled well is hoped to be a sustainable and benchmark program for the other institutions that want to develop social innovation with SROI methodology, which can later achieve the Sustainable Development Goals.

LITERATURE REVIEW

Social Return on Investment (SROI)

Social Return on Investment (SROI) is a method used to measure social impact. It not only talks about the value of money but also measures a broader value, including social values, the economy, and the environment. SROI has a strategic advantage compared to other investment measurement tools that highly focus on calculating financial aspects. SROI involves stakeholders from a program or project to be analyzed to explore the various impacts enjoyed once upon running (Santoso et al., 2018).

Calculation of the impact of this social investment can be done by measuring Social Return on Investment (SROI). SROI is not only about value for money but also about the broader value, which includes social, economic, and environmental values (Asmita et al., 2021). The SROI calculation involves stakeholders from a project/program to analyze the various impacts arising after the program/project is implemented. Compared to other measuring instruments, SROI is a more comprehensive and implementable analysis tool (Purwohedi, 2016). SROI principles

that must be carried out include: (1) Involving stakeholders, (2) Understanding what the changes are, (3) Identifying important values, (4) Only using clear materials, (5) Avoiding excessive claims, (6) Transparency, and (7) Verifying the results (Nicholls et al., 2012).

Development

Development is a social change process with broad participation in a community intended to promote social and material progress (including increased equity, freedom, and other valued qualities) for most people through the greater control they gain from their environment (Bayu et al. al., 2018). While the physical facility development is tools or facilities that can be directly benefited by the community, such as:

- a) Transportation Infrastructure: roads and bridges;
- b) Infrastructure and Marketing: buildings and markets;
- c) Social Infrastructure: school buildings, worship houses, and public health centers; and
- d) Waterway production infrastructure.

From the explanation above, it is clear that development is a changing process to a better one that will work well when involving humans in the planning, execution, utilization, and evaluation of the outcomes (Bayu et al., 2018).

Groundwater

Groundwater is necessary as one of the suppliers to meet life's needs, as surface water cannot fulfill this needs. The long use of groundwater can cause groundwater extraction that exceeds the reserves in the groundwater basin. To maintain a balance between extraction and recharge, the utilization of groundwater must go through certain stages (Ministry, 2017).

Groundwater management is meant to balance conservation efforts and groundwater utilization. The implementation of these activities needs to be adjusted to the behavior of groundwater, such as availability and distribution, and potentially encompasses the quality and quantity of groundwater and soil environment. The need for clean water is very crucial, so it is required for the construction of drilled well (Bayu et al., 2018).

Sustainable Development Goals (SDGs)

The 2030 Sustainable Development Goals (*The 2030 Agenda for Sustainable Development or SDGs*) are a new development agreement that encourages shifts towards sustainable development based on human rights and equity to promote social, economic, and environmental development. The SDGs were ratified on September 25, 2015, replacing the previous program, namely the Millennium Development Goals (MDGs) as a joint development goal which ended in 2015 and had been approved by many countries in the United Nations forum in New York (Bappenas, 2015).

In maintaining the balance of these three dimensions of development, the SDGs have five main foundations: Humans, Planet, Prosperity, Peace, and Partnerships. Those five aims to achieve the three noble goals in 2030 by ending poverty, achieving equality, and tackling climate change. Poverty is still the most important and major issue, in addition to two other achievements (Sampedro, 2021). To achieve those three noble goals, 17 Global Goals have been established (Dahlia, 2021).

The 17 Global Goals from SDGs are as follows:

1. No Poverty. No poverty in any other form throughout the world;
2. No Hunger. No more hungry people,

- achieving food security, nutrition improvement, and encouraging sustainable agricultural cultivation;
3. Good Health and Welfare. Ensuring healthy life and encouraging welfare for all society from all ages;
4. Qualified Education. Ensuring equitable distribution of quality and improving educational opportunity for everybody, ensuring fair, inclusive education, and encouraging long-life education opportunities for everybody;
5. Gender Equity. Achieving gender equity and empowering women and mothers;
6. Clean Water and Sanitation. Ensuring the availability of clean water and sanitation continually for all people;
7. Clean and Affordable Energy. Ensuring access to affordable energy resources, reliable continuation, and modernity for everyone;
8. Economic Growth and Proper Jobs. Supporting sustainable and inclusive economic development, many productive job vacancies that are proper for everyone;
9. Industry, Innovation, and Infrastructure. Developing qualified industries, encouraging the increase of inclusive and sustainable industries, and forging innovation;
10. Reducing the Social Gaps. Reducing the inequity in a country and within the countries in the world;
11. Community. Developing cities and settlements that are inclusive, qualified, enduring, and sustainable;
12. Responsible Consumption and Production. Ensuring the continuity of consumption and production pattern;
13. Action toward Climate. Giving fast responses to fight against climate

- change and its effects;
14. Underwater Life. Preserving and maintaining the sustainability of the sea and marine life resources for sustainable development;
 15. Life on Land. Protect, restore, and increase the sustainable use of terrestrial ecosystems, sustainably manage forests; reduce barren land and land swaps; combat desertification; stop and restore soil degradation; and stop biodiversity loss;
 16. Strong Judicial Institution and Peace. Promoting peace in society for sustainable development, providing access to justice for all people, including institutions, and being responsible for all levels and establishing effective, accountable, and inclusive institutions at all levels; and
 17. Partnership to Achieve the Goals. Strengthening the implementation and reviving the global partnership for continuity development.

In response to those 17 global goals, the UN General Assembly's president asserted that the UN members' ambition would be granted if the world had been in peace and safety. Respect for human rights is not only in a world where the investments in armaments and wars are so large as to destroy the resources that have been committed to the investment in sustainable development (Sampedro, 2021).

METHODOLOGY

Design, Time, and Place of the Research

This research was conducted regarding the methods, principles, and guidelines for SROI measurement initiated by the SROI Network UK. The type of data used is cross-sectional, namely data collection. The information is collected only at a particular time. The data was collected in August

2022. The research was conducted in Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara. The location was chosen purposely because it was the region where clean water was scarce, so expenses were required to obtain it.

Data Collection Method

The types of data used are primary and secondary. Primary data was gained through a deep interview method with the stakeholders. Secondary data was collected from books, literature, or websites correlated with the research topic.

Data Analysis Technique

The data analysis technique used was the one with the SROI method. The stages of calculating SROI are based on the book *A Guide to Social Return on Investment* (Nicholls et al., 2012) as follows:

- 1) Defining the scope and identifying the stakeholders,
- 2) Mapping the impacts,
- 3) Proving the presence of impacts and assessing it,
- 4) Setting the impact value (monetized impacts),
- 5) Calculating SROI ratio, and
- 6) Reporting, utilizing, and implementing.

In the simplest form, the SROI Ratio can be calculated as follow:

$$\text{SROI Ratio} = \frac{\text{Present Value of Impact}}{\text{Value of Input}}$$

- Present Value of Impact = The present value over social impact gained from measuring the money unit
- Value of Input = the value of all

investment funds spent to carry out the program

RESULT

Location Identification and Construction Design of the Drilled Well

1. Identifying the Location

National Amil Zakat Institution Yatim Mandiri has made some efforts to provide clean water for people where water was scarce in two places since the beginning of 2022. It was from April to July, the development of drilled well was conducted in Gedoro Hamlet, Nglegi Ward, Kapanewon Patuk, Gunung Kidul Regency, and in Krajan Hamlet, Watu Bonang village, Badegan

District, Ponorogo Regency, from June to August.

The plan for constructing the drilled well for people in Alor, East Nusa Tenggara, is the third work in 2022 as the effort to implement one of the goals of *Sustainable Development Goals* (SDGs) in the environmental sector, making sure that people can reach universal access to clean water and sanitation. Sanitation and clean water will be elaborately discussed in the sixth goal of SDGs.

Here is the general description of the well location, the beneficiary coverage, the development method and cost, and compensation. It is all stated in Table 1 below.

Table 1. Design of Drilled Well Construction

Location	Beneficiary Scope	Method and Expenses	Compensation
Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara	It can be utilized by the community in one hamlet and an Islamic boarding school in that hamlet	Drilled Well The cost of the project is IDR 118,160,000. The depth is around 70 meters with an expense of IDR 900.000/meter (recommended by the community) .	Full branding on Bathing, Washing, and Toilet (BWT) is two units, and the branding is on water storage, including the branding on the nameplate on the well. The publication is on the national media and online.

2. Design of Construction Program

The design plan for drilled well construction in Kayang Village,

Pantar Barat Laut, Alor Regency, East Nusa Tenggara is as follows:



Figure 1. Construction Plan of Drilled Well

Identification of the Stakeholders

Stakeholder identification is traced based on their involvement and role in constructing the drilled well. Those stakeholders are as follows:

- a. The people of Kayang Village and one Islamic boarding school, Markaz RTQ Sinergy Ummat, Marica Branch. They are the main stakeholders who receive direct beneficiaries of clean water upon drilling the well.
- b. LAZNAS Yatim Mandiri is an

institution familiar to the people in Alor Regency and will gain more trust from the communities there.

Impact Mapping

Tracing the impact on each stakeholder is carried out by conducting interviews with village officials, mosque administrators, and *mustahiq* and observing data in program documents. Impact mapping is done by mapping the drilled well program's inputs, outputs, and outcomes. This can be seen in Table 2.

Table 2. Impact Mapping

No.	Stakeholders	Input (Investment)	Output	Impact (Outcome)
1.	The community of Kayang Village and one Islamic Boarding School, Markaz RTQ Sinergy Ummat, Marica Branch	The construction of drilled well	Increasing the amount of clean water and proper sanitation	Improving the quality of life
			Decreasing daily life expenditure due to the availability of clean water without purchasing it	Reducing the level of poverty sustainably, free access availability of clean water in a long term
			Adequate mineral needs in the body with the consumption of clean water	Improving the community's health
		Assistance in the management of drilled well and sustainable use of clean water	Increasing the knowledge in water management so that it will no clean water exploitation	Minimizing the environmental damage with the presence of groundwater's withdrawing activities
2.	LAZNAS Yatim Mandiri	Conducting a partnership program implementation	The published of LAZNAS Yatim Mandiri Program	The increased awareness of LAZNAS Yatim Mandiri Program

Calculation of Value of Input

The calculation of input (investment) in the implementation of the program

construction of drilled well is in Table 3 below:

Table 3. Calculation on Value of Input

No.	Stakeholders	Types of Input (Investment)	Calculation of Input
1.	The community of Kayang Village and one Islamic Boarding School, Markaz RTQ Sinergy Ummat, Marica Branch	The construction of drilled well	<p>Every resident of Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara gets clean water facilities which can be converted per gallon or per 20 liters of clean water is IDR 3,000. Whereas the average need for clean water for one Indonesian is 49.9 liters per day, based on WHO recommendations for household use in the basic access category of 20 - 49.9 liters per capita per day (Howard G., Bartram J. Domestic Water Quantity, Service Level and Health. WHO; Geneva, Switzerland: 2003).</p> <p>In general, from the data displayed, it can be concluded that one person in one month (30 days) normally spends $49.9 \times 30 \text{ days} = 1,497$ per liter. If per 20 liters is IDR 3,000, the total need for one person per month is IDR 224,550. This amount is multiplied by 870, the total number of residents in Kayang Village.</p> <p>The cost of the social innovation development program in the construction of drilled well is IDR 92,460,000, the depth is approximately 70 meters which costs IDR 900,000 per meter (recommended by the community) in Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara</p>
2.		Assistance in the management of drilled well and sustainable use of clean water	The cost of social assistance and supervision of Social Innovation Development of a drilled well is IDR 10,000,000 in Kayang Village, Pantar Barat Laut District, Alor Regency, NTT
3.		Total operational cost in drilled well construction	The social operational cost of drilled well construction is IDR 15,700,000 in Kayang Village, Pantar Barat Laut District, Alor Regency, NTT
	Total Investment Input of social innovation program of drilled well construction program		The construction cost + cost of social assistance management + operational cost Kayang Village, Pantar Barat Laut District, Alor Regency, NTT = IDR 92,460,000 + IDR 10,000,000 + IDR 15,700,000 = IDR 118,160,000

*The calculation of the Program Impact
(Impact Monetization)*

An overview of the impact calculation approach and the financial valuation approach (monetization) of each impact parameter is identified in table 4 below:

Table 4. Impact Monetization

No.	Impact	Monetization Approach	Value Impact
1.	Improving the life quality of humans	Life quality can be measured from proper life standards to humans that are monetized by real expenses adapted per capita as an alternative. The real expenditure indicator can also show the indicator of the income of the community and levels of prosperity enjoyed by the population as the output of economic activities.	One of the indicators to measure human life quality Human Development Index by Central Statistics (2021) is by measuring the proper life standard for humans, based on Central bureau Statistic (2021), The real expenditure data can be used as an indicator because the expenditure in a region reflects there is income and stable economic turnover there. The adjusted average real expenditure per capita in Indonesia is IDR 11,156,000, while the real expenditure per capita in Alor Regency is IDR 6,751,000. It shows that the expenditure amount in Alor Regency is still far below the average real expenditure in Indonesia. Impact Indicators of quality improvement of social innovation toward the construction of drilled well is an increase of 0.14% or IDR 15,618 per person so that it can catch up with other districts or cities in Indonesia.
2.	Reducing poverty levels in a sustainable, long-term way from the availability of free clean water	Calculating the difference between the amount of expenditure made by PM in meeting the need for clean water before and after the availability of it for free	Through the presentation of the input assessment, it can be concluded that naturally, one person in 1 month (30 days) spends 49.9 liters of clean water x 30 days = IDR 1,497 liters. If per 20 liters IDR 3,000, then the total need for one person per month is IDR 224,550 multiplied by the number of residents, the total population of Kayang Village is 870 people. The existence of this program can reduce poverty by IDR 195,358,500 per month. Indicators of Impact on Poverty Reduction Social innovation on the Construction of drilled well is IDR 195,358,500 out of a total population of 870 people in Kayang Village, Alor Barat Daya District, Alor Regency, EAST NUSA TENGGARA
3.	Increasing the public health	Calculated from the cost approach incurred to overcome diseases caused by the unavailability of clean water	According to the book Clean Water Supply in Indonesia: The Role of Government, Local Government, Private and Community published by the Secretariat General, one of the impacts of a lack of clean water is diarrheal disease. Reported from https://mediakom.kemkes.go.id 2019 that there were 243,983 cases of diarrhea in 2018. The costs incurred for patients with diarrhea in 2018 amounted to IDR 304.25 billion. The budget is quite large for the treatment of diarrhea which should be prevented with clean and healthy living habits and improvements in environmental sanitation and the availability of clean water so the cost spent for diarrhea patients was 304.25 billion compared to 243,983 diarrhea cases in 2018 which mean IDR

No.	Impact	Monetization Approach	Value Impact
			<p>1.247.013 was spent per patient. The prevalence of diarrhea that occurs in rural areas is estimated at 10% as stated in the Diarrhea Bulletin book of the Indonesian Ministry of Health.</p> <p>Improving public health by minimizing diarrhea cases through social innovation of drilled well construction so that access to clean water is available for a total of 870 residents in Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara.</p> <p>As much as IDR 247,013 was spent for each patient times 870 people at risk with diarrhea. The percentage of at-risk people was 10%, which was equal to IDR 108,490,131 per year.</p>
4.	<p>Minimizing the risk of environmental damage due to groundwater extraction activities through assisting in the management of drilled well and sustainable use of clean water</p>	<p>Calculated from the clean water management training cost approach from GRC Training</p>	<p>This training provides comprehensive knowledge regarding a Complete Introduction to Clean Water Treatment, Introduction to Drinking Water Provision Techniques, Quality and Health Aspects, Drinking Water Supply Systems, Water Treatment Systems, General characteristics of raw water based on source: examples of water sources, water pollutant content, alternatives process unit and water treatment operation, the working principle of several operation units, organic and inorganic characteristics of water. The costs incurred for training are IDR 900,000 per participant. The training is Team Training.</p> <p>Improving the community's knowledge and skills with clean water management training so that it is ready for consumption by people in Kayang Village, Pantar Barat Laut District, Alor Regency, East Nusa Tenggara.</p> <p>IDR 10,800,000 the costs incurred for 12 training participants consisting of the Board of Trustees of Islamic Boarding Schools under the Shohwatul Islam Foundation, Hamlet Heads, Village Heads, and their Staff.</p>
5.	<p>Increasing public trust and institutional brand sustainably</p>	<p>The calculation uses Public Relations (PR) Value</p>	<p>Public Relations (PR) Value is the value gained from a brand or the related figure after the news is published in news portals.</p> <p>The calculation of PR Value external media:</p> <ol style="list-style-type: none"> 1. Yatim Mandiri = Advertisement Value (AD) x IDR 2,500 x 3 = 345 x IDR 2,500 x 3 = IDR 2,587,500 2. Zakat Forum = Advertisement Value (AD) x IDR 2,500 x 3 = 345 x IDR 2,500 x 3 = IDR 2,587,500 3. Kumparan = Advertisement Value (AD) x 3 = IDR 1,149,000 x 3 = IDR 3,447,000 4. Republika = Advertisement Value (AD) x 3 = IDR 1,149,000 x 3

No.	Impact	Monetization Approach	Value Impact
			= IDR 3,447,000 5. Kompasiana = Advertisement Value (AD) x 3 = IDR 2,199,000 x 3 = IDR 6,597,000 Total of PR Value of External Media is IDR 18,666,000 Calculating the PR Value of Social Media = Advertisement Value (AD) x 3 = IDR 25,000,000 x 3 = IDR 75,000,000 The total PR Value of Social Media is IDR 75,000,000 So that the total PR Value realized is = IDR 18,666,000 + IDR 25,000,000 = IDR 93,666,000 Explanation: Advertisement Value (AD) is the cost spent for advertisement. The target news portal is an external news portal, such as Kumparan, Republika, Kompasiana, Forum Zakat, and Yatim Mandiri News. The costs incurred for each portal are based on the Press Release News Portal of External Media or by using the PR Value calculation formula. The package published on social media and Yatim Mandiri news portal is IDR 25,000,000. From the above formula, the calculation of the PR Value exposed for LAZNAS Yatim Mandiri is IDR 93,666,000.

SROI Ratio Calculation

Upon the calculation of impact monetization, the calculation of the SROI

Ratio is worked on. The calculation of that ratio on the construction of drilled well is presented in table 5 below:

Table 5. SROI Calculation

Explanation	Total
Value of input	
Pawn Investment of 1 drilled well in Kayang Village	IDR 118,160,000
The residents of Kayang Village invested in drilled well; 5 BWT: [5 x (1.5 m x 1.5 m)] + 1 drilled well; (3 m x 2 m) = 17.25 meters ² , the cost per meter square is IDR 400,000	IDR 6,900,000
Total Investment Impact	IDR 125,060,000
Value of impact	
Impact Monetization of 1 well	IDR 314,648,631

Explanation		Total
a. Increasing poverty	IDR 195,358,500	
b. Improving health	IDR 108,490,131	
c. Minimizing environmental damage	IDR 10,800,000	
PR Value [IDR 0 while the news of the construction has not appeared in publication media, yet]		IDR 93,666,000
Total Impact		IDR 408,314,631
5% attribution		IDR 20,415,731.55
Total Impact upon 5% Attribution		IDR 387,898,899.45
Discount Rate [4.75% BI Rate October 2022]		IDR 16,485,703.23
Net Present Value of Impact		IDR 371,413,196.22
SROI Ratio		2.97

Assumption:

The discount Factor is assumed as follows:

- 1) Deadweight value = 0 (nil) assuming that the utilizers are other than the members of the group that is in relatively stable condition.
- 2) The attribution or role of other parties (outside Laznas Yatim Mandiri) for the success of the program is 5%, after all the support from the local government has contributed to the success of the program.
- 3) For the calculation of the discount rate of interest value, it uses the Bank Indonesia interest rate (SBBI) per August 2022 is 4.75%.

The Report, Use, and Implementation

The results of calculating the impact using the SROI method of 2.97 means that each LAZNAS Yatim Mandiri investment of IDR 1 has a social benefit of IDR 2.97, in other words, the social benefits of the program generated are greater than the funds distributed. This can also encourage the growth of the economic activities of the surrounding community by using money as capital to run a business rather than buying clean water.

This can also realize the goal of the first SGDs, namely alleviating poverty, where savings of IDR 195,358,500 per month which is used to purchase clean water. Apart from that, it can improve public health, following the third goal of SGDs, namely by minimizing the occurrence of diarrheal diseases through social innovation of drilled well development so that clean water is available for a total population of 870 people in Kayang Village, Pantar Barat Daya District, Alor Regency, East Nusa Tenggara. In the sixth point, the goal of sustainable development is also met by the existence of clean water and proper sanitation for the community, which causes water consumption for daily needs to be fulfilled.

CONCLUSION

The need for water sources is an absolute thing in life. This is because water is a basic human need in everyday life. Thus, in the need for water sources, it is necessary to make drilled well in dryland areas (areas far from water sources).

The drilled well construction program has been successfully carried out by LAZNAS Yatim Mandiri in Ponorogo Regency. The positive impact has been enjoyed by *mustahiq* and the environment

outside *mustahiq*. This is what prompted LAZNAS Yatim Mandiri to expand *mustahiq* to other areas, namely in Kayang Village. It was shown by the results of impact measurement using the SROI method which reached a value of 2.97 (> 1), where the value of input was IDR 125,060,000 and the value of impact was IDR 371,413,196.22. In other words, this drilled well development program can be realized because it will give more benefits to *mustahiq*.

The impact indicator with the greatest monetization value is reducing the poverty rate by IDR 195,358,500, or a cost of IDR 3,000 per 20 liters of water for one person or per month, IDR 224,550 times the number of residents, 870 people in Kayang Village, spent by the community can be eliminated.

The most influential social impact indicator is the increase in the quality of human life where people can meet a decent standard of living, namely changes in income and changes in the health and education conditions of the community. This also encourages the implementation of sustainable programs (SGDs) which can eradicate poverty, improve health, availability, and sustainable management of clean water and sanitation for all, healthy lives, and support prosperity for all people from all ages, and support inclusive and sustainable economic growth.

For further research, it is hoped that it will be able to measure the impact of the drilled well development program with other more effective and efficient methods so that it can be used as a reference in the development of other community empowerment activity programs.

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