Banpu Public Company Limited

Corporate Framework on Social Impact Measurement

Management Standard

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Introduction

At Banpu, community engagement seeks to improve quality of life. Effective community engagement results in mutual benefit and shared responsibility among community members. Community engagement helps to build community capacity in order to address issues and take advantage of opportunities, find common ground and balance competing interests. This leads to the ultimate goal of Banpu's community engagement - sustainability.

Objective

The objective of this standard is to equip community engagement practitioners with the tools to evaluate the social impacts which are generated from community engagement activities. The result of the social impacts will help communicate and form the key message about our social contribution to local communities where we operate.

Scope

This manual shall be used for Banpu and our subsidiaries which Banpu has management control. Moreover, this document should be promoted to our joint ventures and throughout the supply chain.

Definitions

SROI Social Return on Investment (SROI) is a method for measuring values that are not traditionally reflected in financial statements, including social, economic, and environmental factors to identify how effectively a company uses its capital and other resources to create value for the community.

CEMS The Community Engagement Data Management System (CEMS) is an application of a data collection system designed to store, retrieve, and manage community engagement data in Banpu's database.

Process / Content

1. Community Engagement Strategy

The Company has a strong belief in strengthening and empowering the communities so that they become self-reliant in the long run. There are 6-Dimension of community engagement projects which consist of:

1) Economic Development and Income Generation to build sustainable economic income to community.
2) Educational Development to promote community's capability through education.
3) Basic Infrastructure Development to support sustainable infrastructure that meets community basic living requirements.
4) Health and Sanitation Development to improve health in communities and increase access to health care especially pregnant women, elderly as well as pre-school children.
5) Environmental Conservation to promote a good sense of environment and create community ownership & stewardship.
6) Social, Cultural Promotion and Community Relation to conserve community's uniqueness & identity including relationship enhancement among local people.

Figure 1 - Banpu Community Engagement Strategy

A good community engagement strategy should:

Strategic:

- Set a well-defined strategy (objectives, criteria, guiding principles) linked to a clear business case and assessment of risks and opportunities.
- Addresses both short and long-term objectives.
- Focuses selectively on a few key areas for greatest impact where Banpu can most effectively leverage its unique role and competencies to address community priorities.
- Looks beyond financial resources and considers how to make best use of company assets, resources, expertise, advocacy, and relationships to benefit local communities.
- Evolves with the business phase and uses different approaches along the project cycle.

Aligned:

- Aligns the strategic issues of the business with the development priorities of local communities, civil society, and government to create "shared value".
- Coordinates community development with other company policies and practices that affect communities, such as impact management, stakeholder engagement, and local hiring and procurement.
- Promotes cross-functional coordination and responsibility for supporting community development objectives among all business units that interact with local stakeholders.

Multi-stakeholder driven:

- Positions the company as a partner in multi-stakeholder processes rather than as the principal actor in promoting local development.
- Recognizes that a multi-stakeholder approach reduces company control but adds value by building local ownership and complementarity around shared interests.
- Supports communities and local governments in defining and meeting their own development goals and aspirations through participatory planning and decision making.

Sustainable:

- Seeks to avoid dependency, encourage self-reliance, and create long-term benefits that can outlast company support.
- Does not commence activities without a viable exit or handover strategy.

• Invests heavily in capacity building, participatory processes, and organizational development to enable local communities, institutions, and partners to take progressively greater roles and responsibilities.
• Reinforces, rather than replaces, indigenous institutions and processes where feasible.

Measurable:

• Measures return on community development to both the company and the community.
• Uses outcome and impact indicators to measure the quantity and quality of change.
• Tracks changes in community perceptions to gain real-time feedback on performance.
• Uses participatory methods of monitoring and evaluation to build trust and local ownership of outcomes.
• Proactively communicates the value generated by community development to internal and external audiences.

2. Programs and Initiatives

Through community engagement strategy, Banpu implements a variety of programs and initiatives. The projects and initiatives are selected based on the objectives establish in the strategy and the following principles:

• Promote community participation: Banpu emphasizes the importance of local communities, indigenous peoples, and vulnerable groups aiming for sustainable development. We respect their interests and rights, encourage open and transparent dialogue, and promote cooperation among stakeholders. Banpu promotes racial, ethnic, and gender equality and encourages proactive communication and meaningful engagement with communities and stakeholders.
• Place community involvement in decision-making: Banpu places a priority for community representatives to take part in decision-making processes, starting from inception to completion, which include but are not limited to land acquisition, resettlement, land use, community engagement initiatives, asset closure, and relevant activities that required to promote ownership among community members.
• Focus on common benefits and create shared value: Banpu prioritizes long-term sustainable values for stakeholders and society, which can help narrow the social gaps. In doing so, Banpu commits to working closely with community members on shared value initiatives that meet their needs while supporting social progress through the development of grassroots innovations, considering sustainable resource utilization. The initiatives aim at improving local well-being, providing local employment opportunities, supporting local procurement, promoting local workforce training, and related quality of life improvement programs.
• Enhance a culture of transparency: Banpu is responsible for sharing information about its operations, including potential impacts and mitigation strategies, which builds trust and enables informed discussions. This includes the standard management of grievance mechanisms across the group for receiving, processing, and responding to community feedback, concerns, and suggestions, as transparency is fundamental to meaningful engagement.
• Encourage employee involvement: All employees are encouraged to participate in community engagement initiatives. With the available resources and diverse expertise, Banpu promotes employees' assistance to the community to strengthen good relationships, uplift the community's quality of life and achieve sustainable outcomes.

3. Project Performance Evaluation

Banpu has developed performance evaluation indicators. The tool has been developed in alignment with community engagement framework and provided a template to guide the evaluation process. It is the responsibility of community engagement practitioners to implement the template and complete the process.

Figure 2 - CE Project Performance Evaluation Process

Step 1: Establish objectives.

Community engagement practitioner establishes clear objectives for individual community engagement program. This will help to evaluate the success of program implementation.

Step 2: Select performance indicators and identify targets.

The second step is to select indicators according to the framework and to consider the indicators against the established objectives. Banpu has established a set of performance indicators which consists of general indicators that apply to all projects. Then, the practitioner is to select indicators according to the type of project. Targets will also be set to understand whether the objective has been met. Performance indicators are the metrics for evaluating whether a target has been achieved.

Step 3: Collect data.

To evaluate whether a target has been achieved it is important to establish the baseline at the project commencement. The changes will be evaluated against the baseline.

Then, the practitioner will collect data per selected indicators and will monitor the data throughout the implementation period. Systematic data collection will help reduce the delays in completing an evaluation.

Step 4: Evaluate the outcomes.

This step is to evaluate the community engagement program. The focus is on whether the implementation has met its objectives – which should be informed by the monitoring results.

Step 5: Reporting

The final step is reporting. The practitioner will report the outcomes of step 4 through selected communication channel that suit to each stakeholder group. The reporting help present the social impact incurred.

List of performance evaluation indicators

These are the performance evaluation indicators which categorized according to community development framework. The detail is as follows:

Performance Evaluation Indicators Categorized by Framework

GENERAL INDICATORS	
Required for all projects	• Number of direct project beneficiaries
	• Number of males
	• Number of females
	• Total number of Banpu employee volunteers on project
	• Total number of Banpu employee volunteer hours on project
	• Number of government institutions or non-profit organizations with enhanced capacity, if applicable? (pls. specify i.e. name & support)
	• Approximately how many public events that CD unit join? (i.e. fair and exhibition - please identify)
	• Number of partner organizations leveraged for cash contributions (please identify)
	• Number of partner organizations leveraged for in-kind contributions (please identify)
	• Number of positive articles about the project
ECONOMIC DEVELOPMENT INDICATORS	
Develop local workforce	• Number of training courses
	• Number of individuals completing workforce development and vocational training
	• Number of hours of workforce development and vocational training provided
	• Number of trainees getting a new job
	• Number of local individuals trained that become vendors, contractors, sub-contractors, or employees
Support local small businesses	• Number of local businesses supported
	• Number of local business workers under this project
	• This business has ability to generate higher revenues and ready to invest in the next batch (Y/N)
	• Amount of money purchases from local suppliers
HEALTH INDICATORS	
Enhance capacity in local health officer	• Number of local health officers trained
	• Number of training courses provided
	• Number of workshops or courses on basic sanitation, nutrition, or other health issues
Health knowledge training	• Number of workshops or courses on basic sanitation, nutrition, or other health issues provided to community members
	• Number of community members attending workshops on basic sanitation, nutrition, or other health issues
Mobile medical check up	Students
	• Number of students receiving treatment/service
	• Percentage of students that found health problems
	• Number of new projects initiated to solve health problems found from mobile medical check-up service
	Elderly
	• Number of people receiving treatment/service
	• Percentage of elderly that found health problems
	• Number of new projects initiated to solve health problems found from mobile medical check-up service
Maternal and Child health	• Number of pregnancy & mother receiving services
	• Number of children under 5 years receiving services
	• Number of maternal & child health events arranged
	• Percentage of children under 5 years that found underweight

HEALTH INDICATORS	
Support medical equipment	• Number of health center supported
Support HIV/AIDS Projects	• Number of campaign/trainings on HIV/AIDS awareness initiatives
	• Number of individuals participating in HIV/AIDS awareness initiatives
Drug abuse	• Number of campaign/trainings on drug abuse awareness initiatives
	• Number of individuals participating in drug abuse awareness initiatives
Improve access to clean water (Health & Sanitation)	• Number of project member with access to safe drinking water
	• Number of moneys generated from the operation
	• Number of total amount of water produced/supplied (m3 / bottles)
	• Number of populations receiving the service
	• Number of households receiving the service
EDUCATION INDICATORS	
Improve access to quality general education	• Number of fostered schools
	• Number students participating in supported project
	• Number of scholarships awarded
	• Number of courses of teacher training
	• Number of teachers trained
	• Number of hours of teacher training
	• Number enrolment in primary and secondary education
	• Number of educational items donated i.e., backpacks, computers, books
	• Number of students getting job
	• Result of national test score
INFRASTRUCTURE INDICATORS	
Improve well-being of local community	• Number of service places constructed such as road, bridge, mosques, and public building
	• Number of people accessing to the service
	• Number of partner involvement in the construction & maintenance i.e., government, contractors and private sectors (please specify)
	• Amount of money leveraged for contributions from partners
	• Community involvement in the infrastructure maintenance (Y/N)
ENVIRONMENTAL INDICATORS	
Support Green Environment & Enhance Biodiversity	• Number of trees planted
	• Number of lands restored
	• Number of activities to preserve and restore natural resources
	• Number of community waste-recycle activities
	• Number of green environmental activity group resulted from the project
SOCIAL, CULTURAL, & COMMUNITY INDICATORS	
Support community / conserve local cultural	• Number of activities/events/exhibition/performances organized
	• Number of local people participated in activities
	• Number of local community cultural groups supported

PHILANTHROPY & CHARITABLE GIVING INDICATORS	
Enhance relationship & immediate support to victims affected by natural disasters	• Number of people benefited from the donation
	• Number of organizations benefited by the service supported by donation from the company
	• Number of organizations benefited by the service supported by donation from the company
	• Value (i.e., in term of money) of material donated
	• Sum of money donated, raised, contributed to community initiatives
	• Number of events supported

4. Project Performance Evaluation Tools

4.1 Social Return on Investment (SROI)

Social Return on Investment (SROI) is a framework for measuring and accounting for this much broader concept of value; it seeks to reduce inequality and environmental degradation and improve wellbeing by incorporating social, environmental, and economic costs and benefits.

Figure 3 – Social Return On Investment (SROI)

SROI measures change in ways that are relevant to the people or organizations that experience or contribute to social value. This shows how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. This enables a ratio of benefits to costs to be calculated.

SROI compares the amount of money invested in a program or initiative against the social impacts or benefits achieved. For example, a ratio of 3:1 indicates that an investment of $1, delivers $3 of social value.

The 7 principles of SROI

SROI was developed from social accounting and cost-benefit analysis and is based on seven principles. These principles underpin how SROI should be applied.

1) Involve stakeholders – involve stakeholders by informing them what gets measured and how.

2) Understand what changes – articulate how change is created and evaluate this.

3) Value the things that matter – use financial proxies in order that the value of the outcomes can be recognized.

4) Only include what is material – determine what information and evidence must be included.

5) Do not over-claim – only claim the value that you are responsible for creating.

6) Be transparent – demonstrate the basis on which the analysis is considered.

7) Verify the result – ensure appropriate independent assurance to show decisions made are reasonable.

Benefits of SROI

	SROI helps make better decisions, improve impact and be accountable to stakeholders. An SROI analysis can fulfil a range of purposes. It can be used as a tool for strategic planning and improvement, for communicating impact and attracting investment, or for making investment decisions. It can also help guide choices which managers face when deciding where they should spend time and money. Besides that, it has been mentioned that SROI generates value for all stakeholders, mobilizes capital into positive social impact creation and creates increased transparency and accountability.

The output of SROI is a single figure, which describes a company's performance and impact. Although this figure is important, it is only one indicator of social performance. It is important that this indicator is supported by other metrics; for example, quantified outcomes as well as qualitative narrative to ensure a complete understanding of the impact or benefit associated with a CD program or initiative.

SROI can be applied to determine whether the investment was worthwhile. However, it can also be used prior to investing in a program to predict the likely benefits or impacts.

There are two types of SROI:

Evaluative	which is conducted retrospectively and based on actual outcomes that have already taken place.
Forecast	which predicts how much social value will be created if the activities meet their intended outcomes.

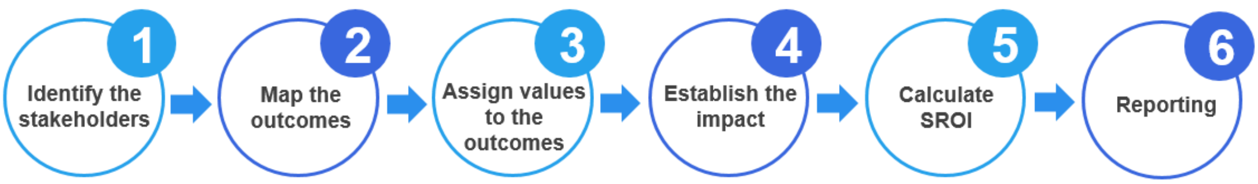
Evaluation tool
Development of the tool has been guided by industry best practice; for example, Social Value International and London Benchmarking Group (LBG).

- Social Value International provides a clear framework of SROI for measuring, managing, and accounting for social value or social impact.
- LBG provides a recognized standard for measuring social investment. This includes a framework for measuring and reporting the achievement of social investment.

SROI Assessment Process

The process of assessing the social return on investment involves 6 steps which are described below.

Figure 4 – SROI Assessment Process



Step 1: Identify the stakeholders.
It is important to have clear boundaries about what your SROI analysis will cover, who will be involved in the process and how.

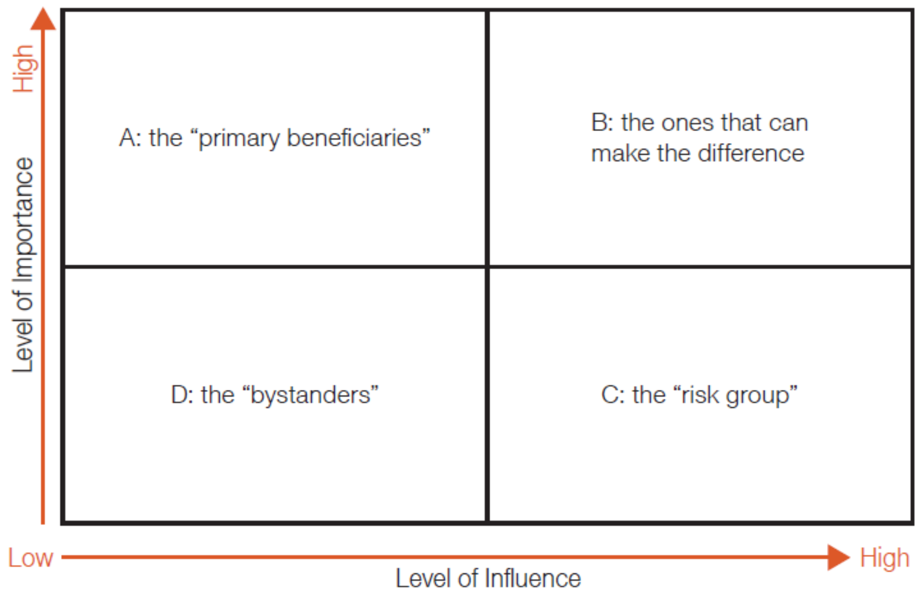
As a first step, you need to clarify what you are going to measure and why you are initiating a measurement process. The scoping phase helps to define the boundaries of your analysis, and this is critical to make your SROI analysis doable. In the scoping phase, explicit boundaries are defined regarding what you consider necessary to include or exclude in the measurements.

In this phase, you have to be clear about the audience and relevance of the SROI results and about the basic background of the project. You also have to determine what is feasible to measure and what you want to learn from the SROI. The scope also requires defining the period and the geographic scope of the initiative that you are going to measure.

Once you are clear about the scope of SROI, the next step is to identify and involve your stakeholders. 'Stakeholders' are people, groups or organizations that will experience change as a result of the intervention, whether negative or positive; or will contribute to that change.

To identify the stakeholders, list all those actors who may be affected or will be affected by the activities within your scope, as well as those actors who influence the initiative (either negatively or positively). Then, you will have to identify the key stakeholders and their (potential) role. The use of a simple Importance – Influence Stakeholder Analysis Matrix, see Figure 5, has proven to be a useful tool to assist with the selection of key stakeholders.

Importance & Influence Matrix



The level of influence (X axis) indicates how much power stakeholders have over the project.

Step 2: Map the outcomes.
Through engaging with your stakeholders, you will develop an impact map, or theory of change, which helps to define the inputs, outputs and outcomes associated with the CD program or initiative being evaluated.

Based on the information gained from the selected stakeholders described in the previous step, you will now be able to articulate a Theory of Change (ToC). This is one of the most important steps within the SROI framework: it tells the story of how stakeholders were (are) involved in the project and their perception and belief of how their lives have changed or will change.

Inputs, Outputs and Outcomes

Term	Description
Input	Inputs are the contributions or resources needed to undertake the investment program or initiative. The focus is on the investment that Banpu has made. This includes, but is not limited to: • Direct financial contributions (e.g., scholarships, sponsorship, infrastructure). • Management cost (e.g., salaries, overhead costs, consultant fees); • In-kind contributions (e.g., donated materials); and • Volunteer hours (e.g., from staff).
Output	Investments produce outputs. They are often (but not always) tangible and quantifiable.
Outcome	Outcome can be defined as the likely or achieved short-term effects of an intervention's total set of outputs. Outcomes can be seen as the actual use of the outputs.

To make a project possible, input need to be provided. In this step you will identify what has been contributed to make the project possible. What resources were brought to the project? In general, these contributions can be categorized as money, material, human resources, or a combination of these factors. Once the inputs have been calculated, the next step is to identify the outputs and outcomes from the investment.

The outputs of a project are tangible (easily measurable, practical), immediate and intended results to be produced through sound management of the agreed inputs. Examples of outputs include goods, services or infrastructure produced by a project that are meant to help realize its purpose. These may also include changes, resulting from the intervention, that are needed to achieve the outcomes at the purpose level.

Outcomes are the changes that have occurred as a result of an investment. Outcomes can be positive or negative, primary, and secondary, long-term effects in the lives of people and their natural environment, which are produced by a development intervention, directly or indirectly, and can either be intended or unintended. Table 4 provides examples of outputs and outcomes. It is unlikely that there will be an outcome for every output.

Example of Outputs and Outcomes

The terms outputs and outcomes are often confused. An easy way to remember the difference is that outputs relate to 'what we do' whereas outcomes refers to 'what difference did we make'.

Outputs	Outcomes
Establishment of eight new nature trails	Improved visitor experience due to the establishment of new nature trails
Development and installation of interpretation materials along nature trails	Increased awareness and understanding within the community of local biodiversity values due to the installation of new interpretation materials along existing nature trails
Establishment of a new tiger research program	Enhanced protection of key biodiversity values through the development of an informed (through ongoing research) and effective management plan

Step 3: Assign values to the outcomes.

This stage involves finding data to show whether outcomes have happened and then valuing them. This is to develop outcome indicators and select financial proxies. The purpose of valuation is to reveal the value of outcomes and show how important they are relative to the value of other outcomes. As well as revealing missing value it will help determine how significant an outcome is. To identify appropriate financial values is a way of presenting the relative importance to a stakeholder of the changes they experience.

The process of valuation is often referred to as monetization because we assign a monetary value to things that do not have a market price. All the prices that we use in our day-to-day lives are approximations – 'proxies' – for the value that the buyer and the seller gain and lose in the transaction. The value that we get will be different for different people in different situations. All values are, in the end, subjective.

Indicators and Financial Proxies

Term	Description
Indicator	Indicators provide a means of demonstrating or proving that change. (i.e., outcome) has occurred and by how much.
Financial Proxy	An approximation of the value where it is not possible to obtain an exact measure. Financial proxies to calculate the return on investment, and to compare impact across outcomes / themes.

Indicators are ways of knowing that change has happened. In SROI they are applied to outcomes as these are the measures of change that we are interested in. You will need indicators that can tell you both whether the outcome has occurred, and by how much. Indicators are often expressed using terms like 'more', 'fewer', 'less' or 'increased'.

In order to know whether the number of the indicators has changed, you will need to know the actual number of the indicators before and after the activity.

Once indicators have been selected, a monitoring program should be established. The monitoring program helps ensure that relevant data is collected over time. Systematic data collection will help to prevent any delays in completing a SROI evaluation. It is suggested to establish the monitoring program at the commencement of an investment.

Upon selecting indicators, the next step is to determine how long the outcome will last. The duration is likely to vary by outcome even within a single investment. It is acceptable to estimate the duration. Then, you will have to assign value to the outcome. In SROI, financial proxies are used to estimate the value.

The following table gives examples of indicators and financial proxies that have been used in previous SROI analyses.

Examples of Indicators and Financial Proxies

Stakeholder	Outcome	Indicators	Possible proxies
Local community	Improved access to local services	• Number of times use those services, and by whom	• Savings in time and travel costs of being able to access services locally
Person with physical health problem	Improved physical health	• Number of visits to doctor • Extent of improvements in health (self-reported) • How often they exercise	• Cost of visiting doctor at public or private hospital/clinic • Cost of health insurance
The environment	Less waste	• Amount of waste going to landfill	• Cost of landfill charges
The environment	Prevent disasters i.e., flood	• Number of reforested areas	• Reduce in cost of disaster support
Local community	Improved perception of the local area	• Residents report improvements in local area	• Change in property prices Amount spent on home improvements
Local community	Improved economic	• Additional income / full time job	• Wages

Step 4: Establish the impact.
The impact establishment focuses on understanding what part of the outcome the direct result of the investment is. This step is considered important as it reduces the risk of overclaiming and means that your story will be more credible. At this point, there are key issues that need to be considered – deadweight, attribution, and drop-off.

Dead weight ('what would have happened anyway')
All people and communities are continually subject to change as a result of a number of different internal and external factors. This means that there are influences outside of the purview of a project that may have positive or negative impacts on individuals who are a part of your project. This means that you need to account for this in some way. This can be done by following comparable individuals or finding ways to estimate the changes that are happening through other sources, like external statistical measurements, where available.

Attribution ('who else helped')
Attribution is an assessment of how much of the outcome was caused by the contribution of other organizations or people. There might be other organizations (government, contractors, or other NGOs) working on achieving similar impacts. Therefore, not all results can be claimed by this particular project, as other actors are intervening in the same sector. In order to estimate the attribution of the project, ask the participants in the SROI analysis if they can name other organizations or processes that may have helped in obtaining better results and what they would estimate to be the level of this influence. This can be done verbally or with games and other such activities. They may mention other programs, both good and bad. For example, the participants might decide that the project accounts for 80% of results obtained.

Deadweight and attribution will be measured as a percentage and then that percentage of the outcome is deducted from the total quantity of the outcome.

Deadweight and Attribution Considerations

Although deadweight and attribution will need to be determined on a case-by-case basis, there are a few issues that may be useful to considering when determining both. The easiest way to assess deadweight is to look at trends over time. There are two key questions to ask:

Displacement
It is another component of impact and is an assessment of how much of the outcome displaced other outcomes. This does not apply in every SROI analysis, but it is important to be aware of the possibility. If you think that displacement is relevant and your activities are displacing outcomes, you may find that there is now another stakeholder being affected by the displacement. You could go back and introduce the new stakeholder into the impact map, or you could estimate the percentage of your outcomes that are double counted because there is some displacement, calculate the amount using this percentage and deduct it from the total.

Drop-off
In future years, the amount of outcome is likely to be less or, if the same, will be more likely to be influenced by other factors, so attribution to your organization is lower. Drop-off is used to account for this and is only calculated for outcomes that last more than one year.

Drop-off is usually calculated by deducting a fixed percentage from the remaining level of outcome at the end of each year. For example, an outcome of 100 that lasts for three years but drops off by 10% per annum would be 100 in the first year, 90 in the second (100 less 10%) and 81 in the third (90 less 10%).

Calculate the impact.
All of these aspects of impact are normally expressed as percentages. Unless you have more accurate information it is acceptable to round estimates to the nearest 10%.

In some cases, you might consider that there is an increase in the value rather than a reduction. However, we do not recommend that you increase your impact as a result of considering these issues. In this situation you would simply not make a deduction.

Your Impact Map should now have percentages filled in for deadweight, attribution, drop-off and (if applicable) displacement.

You can calculate your impact for each outcome as follows:

- Financial proxy multiplied by the quantity of the outcome gives you a total value.
- From this total you deduct any percentages for deadweight or attribution.
- Repeat this for each outcome (to arrive at the impact for each)
- Add up the total (to arrive at the overall impact of the outcomes you have included)

Step 5: Calculate the return on investment.
You will now have collected all the information together to enable you to calculate your SROI. You will also have recorded qualitative and quantitative information that you will need in the report.

This stage sets out how to summarize the financial information that you have recorded in the previous stages. The basic idea is to calculate the financial value of the investment and the financial value of the social costs and benefits. This results in two numbers – and there are several different ways of reporting on the relationship between these numbers.

If you are carrying out an evaluative SROI analysis, then the evaluation should ideally take place after the period for which the outcome was expected to last. However, interim evaluations will still be useful in order to assess how well the intervention is working and to provide information to support any changes. If you are comparing actual results against a forecast, you will need the information relating to the time periods over which your outcomes last.

There are five steps to calculating the ratio as follows:
Step 5.1: Projecting into the future.
Step 5.2: Calculating the net present value.
Step 5.3: Calculating the ratio.
Step 5.4: Sensitivity analysis.
Step 5.5: Payback period.

Step 5.1: Projecting into the future
The first step in calculating the ratio is to project the value of all the outcomes achieved into the future. Therefore, you will now need to:

- set out the value of the impact for each outcome for one time period (usually 1 year).
- copy the value for each outcome across the number of time periods it will last; then.
- subtract any drop-off you identified for each of the future time periods after the first year.

Step 5.2: Calculating the net present value.
In order to calculate the NPV the costs and benefits paid or received in different time periods need to be added up. In order that these costs and benefits are comparable a process called discounting is used. Discounting recognizes that people generally prefer to receive money today rather than tomorrow because there is a risk (i.e., that the money will not be paid) or because there is an opportunity cost (i.e., potential gains from investing the money elsewhere). This is known as the 'time value of money'.

$$\text{Present Value} = \frac{\text{Value of impact in Year 1}}{(1+r)} + \frac{\text{Value of impact in Year 2}}{(1+r)^2} + \frac{\text{Value of impact in Year 3}}{(1+r)^3} + \frac{\text{Value of impact in Year 4}}{(1+r)^4} + \frac{\text{Value of impact in Year 5}}{(1+r)^5}$$

Step 5.3: Calculating the ratio.

This is a simple SROI ratio calculation: you divide the value of benefits, discounted with dead weight, attribution, and inflation, by the total investment.

$$\text{SROI ratio} = \frac{\text{Present value}}{\text{Total value of inputs}}$$

Or to put it in other words:

$$\text{SROI ratio} = \frac{\text{Total results x deadweight x attribution x inflation adjustment}}{\text{Total value of inputs}}$$

An alternative calculation is the net SROI ratio. This divides the NPV by the value of the investment. Both are acceptable but you need to be clear which you have used.

$$\text{Net SROI ratio} = \frac{\text{Net present value}}{\text{Value of inputs}}$$

Step 5.4: Sensitivity analysis

After calculating the ratio, it is important to assess the extent to which your results would change if you changed some of the assumptions you made in the previous stages. The aim of such an analysis is to test which assumptions have the greatest effect on your model. The standard requirement is to check changes to:

- Estimates of deadweight, attribution, and drop-off.
- Financial proxies.
- The quantity of the outcome; and
- The value of inputs, where you have valued non-financial inputs.

The recommended approach is to calculate how much you need to change each estimate in order to make the social return become a social return ratio of $1 value for $1 investment. By calculating this, the sensitivity of your analysis to changes in estimates can be shown. This allows you to report the amount of change necessary to make the ratio change from positive to negative or vice versa.

We are interested in which changes have a significant impact on the overall ratio. It is these that you would consider as potential priority areas in managing the value you are creating. For example, if your result is sensitive to changes in a particular indicator you may want to prioritize investment in systems to manage (and resources to improve performance in) that indicator.

In general, the greater the change that you need to make in order for the SROI to become $1 for every $1 invested, the more likely it is that the result is not sensitive. It is also possible that a choice you made earlier between two proxies is now resolved because the choice doesn't affect the overall ratio. All these findings should be discussed in the final SROI report.

This focus on significant issues will help you keep your report short.

Step 5.5: Payback period

The 'payback period' describes how long it would take for an investment to be paid off. Specifically, it answers the question: at what point in time does the value of the social returns start to exceed the investment?

Often the investment will be paid back over a period of months rather than whole years and so is reported in months. Assuming that the annual impact is the same each year, the first step is to divide the annual impact for all participants by 12 to get impact per month. Then divide the investment by the impact per month to get payback period in months.

The basic formula is:

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

Step 6: Reporting

The last step is reporting the outcomes from the SROI assessment. The report should provide readers an understanding of the inputs, outputs, outcomes, and impacts associated with the SI program or initiative and the return received on the investment. The return on investment should be presented as a ratio – i.e. for every $x invested a return of $x is achieved.

SROI aims to create accountability to stakeholders. As such it is important that the results are communicated to stakeholders in a meaningful way. You may well find that external stakeholders are very interested to hear about your work with SROI – both the process you went through and the results.

The report should include enough information to allow another person to be assured that your calculations are robust and accurate. That is, it needs to include all the decisions and assumptions you made along the way. To help your organization improve it should include all the information that you were able to find out about the performance of the organization which might be useful to strategic planning and the way it conducts its activities. You will need to be aware of commercial sensitivities in deciding what you include in the report.

SROI report should be as short as possible while meeting principles of transparency and materiality. It should also be consistent, using a structured framework that allows comparison between reports

Return on Investment

Most investments are able to achieve, at a minimum, a ratio of 1:1. However, the more effective investments tend to achieve a return of 9 or 10 for every 1 dollar invested. The higher returns tend to be experienced by those programs or initiatives that have longer term impacts, as the return continues over a longer period of time.

As part of the reporting process, the materiality assessment should be revisited. It will be important that key stakeholder issues (i.e. material issues) are, to the extent possible, addressed during the reporting process.

The final report should include a description of the assumptions that have been made in calculating the SROI and the sources of information used (i.e., financial proxies).

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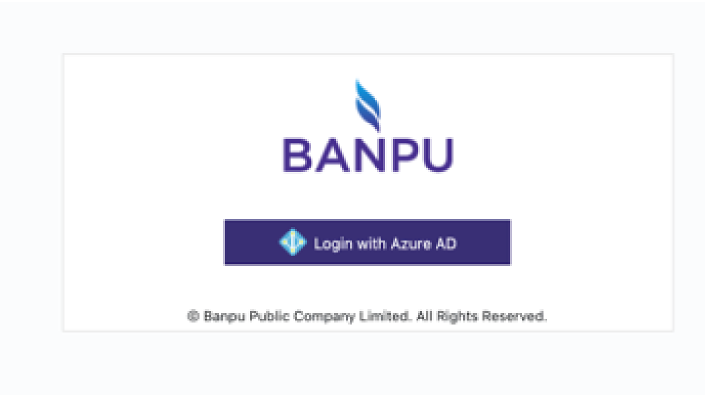
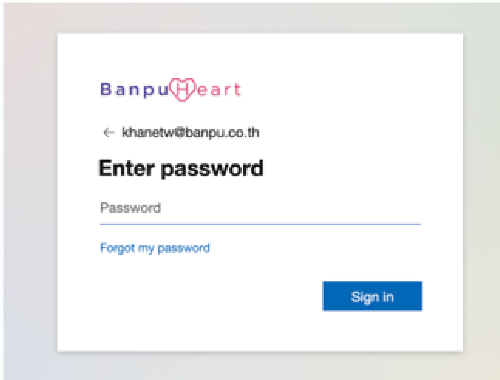
4.2 Community Engagement Data Management System (CEMS)

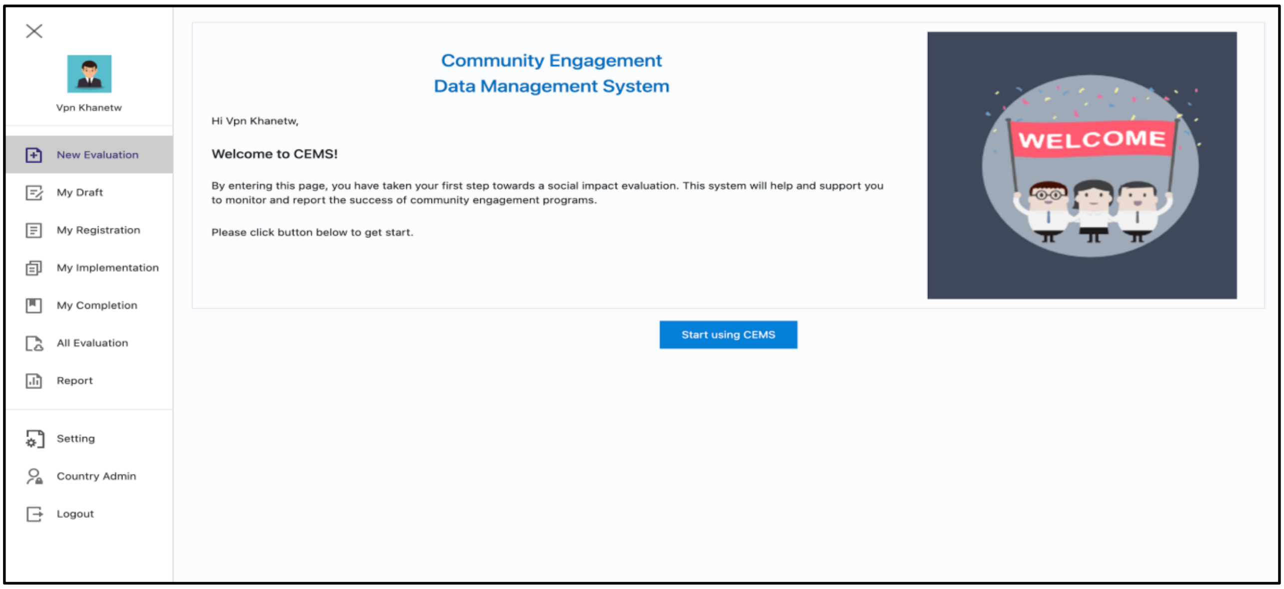
CEMS is an application designed to store, retrieve, and manage impact data of community engagement projects in a database. It uses to improve a responding to community stakeholders including but limited to monitoring of project progress, reviewing budget utilization, accessing data, and developing a concrete social impact result. Users can access the system through link below:

https://app2.banpu.co.th/hsec-ce-ui





CEMS is using the Azure Active Directory (AAD) authentication method. The users can use their usual username and password for Windows to login to the system.



CEMS consists of 3 main steps as registration, implementation, and completion. Users need to start with their new project registration which falls under 7 categories of Banpu community engagement framework.

- Economic development projects
- Health projects
- Education projects
- Infrastructure projects
- Environmental projects
- Social, Cultural, & Community projects
- Philanthropy & Charitable Giving projects

The social impact indicators will be identified once users register their projects. These indicators are the same as the indicator sets identified under topic number 2. Upon implementing and/or completing projects, users will have to input social impact data into CEMS. Please refer to CEMS user manual for instructions.

In addition, the social impact report is available to all CEMS users for further communication with stakeholders. There are 4 types of report which are:

- Village level — Summary of all project evaluations inside the selected village.
- Site level — Summary of all project evaluations inside the selected site.
- Country — Summary of all project evaluations inside the selected country.
- Corporate — Summary of all project evaluations across Banpu Group.

Reference

- http://socialvalueint.org/
- http://www.socialvalueuk.org
- http://www.lbg-online.net/
- BP-GCS-SP-005 CEMS User Guide
- BP-GCS-SP-008 CEMS Manual