

A Project Assessment Framework

for Adaptive Planning,
Impacts Generation,
and Scaling

Acknowledgment

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Further details of the 10YFP SLE Programme can be accessed at:

<http://www.oneplanetnetwork.org/sustainable-lifestyles-and-education>

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1.1 Background

Project supporting behaviour and practice changes for sustainability

Initiatives for sustainable societies have gained momentum following recent global agreements on sustainable development, including the 2030 Agenda and the Sustainable Development Goals adopted at the United Nations Sustainable Development Summit in 2015. In a reflection of the ambitious visions shown in these agreements, an increasing numbers of programmes are taking place at the international and national levels. Meanwhile, the importance of small and medium scale initiatives at the ground level should also be recognised. These include projects that encourage individuals or organisations to shift to more sustainable behaviours or practices, and to refrain from unsustainable ones, together with endogenous projects derived from the day-to-day concerns and aspirations of the people that have developed through mutual learning among the participants. Although the changes made by individuals or organisations at the ground level may seem minor compared to those of large-scale development projects or international business schemes, they are essential in shaping our societies together with the large initiatives.

The importance of learning

However, efforts to support changes in the behaviour and practices of individuals and organisations generally involve complex challenges that require continuous adaptation through reflection and learning. Actions for such purposes require the engagement of multiple actors, who have differing and sometimes contesting views of the contexts, of the potential solutions, and of the desired visions for the future. Moreover, the actions undertaken lead to unexpected feedbacks from ecosystems and socio-economic systems. Therefore, these challenges do not allow us to proceed straight towards pre-set goals. In addressing complex issues,¹ it is usually counterproductive to stick to predesigned solutions without an adequate account of what is occurring on the ground and flexibly adapting to the emerging contexts. Therefore, projects require continuous adaptation in order to reflect the various feedbacks from the ecosystems and socioeconomic systems, as well as the various voices of the participants. To support the adaptive response of such projects, it is sometimes unhelpful to conduct *summative evaluations* by means of monitoring pre-set indicators at the end-point or the ex-post phase.² Moreover, this means that efforts to support changes in the behaviour and practices of individuals and organisations will prompt us to reconsider the pathways of scaling. Classically, emphasis has been placed on the *scaling out* (increase in the size of the “target” population, for instance) or *scaling up* (influence on and uptake by different levels, such as policy) of “best practices.” However, both the complexity and the context-dependency of these challenges makes it almost impossible to identify “the best” that can be replicated to wider contexts or adopted at policy level, at least through simply evaluating “the success” of the realisation of the expected outcomes. Therefore, deeper reflection is required regarding why and what specific aspects of the project can be scaled, why and how it should be done, and by whom the scaling should be guided.³

1 Complex issues involve a wide variety of stakeholders who both influence and are influenced by the situation; are based on the multiple and tangled-up root causes, and are sensitive to contexts. Adaptive response is effective in addressing these issues (Cabaj 2017).

2 Summative evaluation is to make a judgement of the project’s benefits, while formative evaluation is to improve a project model. Recently, developmental evaluation to support the innovation through continuous development and adaptation is gaining attention. The combination of these evaluation throughout project cycle is preferable (Gamble 2008).

3 Recent literature explores wider aspects of scaling. See, for example, Riddell and Moore (2015) arguing *scaling deep* which refers to “impacting cultural roots” through “changing relationships, cultural values and beliefs” in contrast with *scaling up for impacting laws and policy* and *scaling out* for “impacting greater numbers.” The exercise on scalability in this framework partly adopts “why, what, who, and how” framework from Cooley (2016) and Mickelsson (2018).

1.2 The assessment toolkit

The development of the assessment toolkit

Given this background, a toolkit for assessing the project was developed by the coordination desk of the Sustainable Lifestyles and Education Programme (SLE Programme) of the United Nations 10 Year Framework of Programmes for Sustainable Consumption and Production Patterns (10YFP). Its objectives were to integrate the principles and practices of sustainable lifestyles across all sectors of society, and to develop tools and incentives that would empower individuals to adopt more sustainable lifestyles. The SLE programme has so far identified more than 10 projects to promote sustainable lifestyles in developing countries. They are intended to have an impact on the ground and to create opportunities for learning and for experimentation with innovative practices that support the shift towards more sustainable lifestyles. This is done through their unique activities that cover the areas of resource management, waste reduction, and the utilisation of renewable energies, and education and awareness-raising for sustainable lifestyles. In addition, these projects will provide meaningful lessons for the programme by addressing the key area of sustainability, and indicating the potential of spreading the innovative initiatives.

In order to support the implementation of these projects and assist them in delivering impacts by means of their monitoring and evaluation activities, the SLE programme's coordination desk formed the Monitoring and Evaluation (M&E) team, and prepared the initial version of the assessment toolkit that had four key features. Firstly, it was designed to guide the users – typically the project implementers and evaluators – in **tracking progress by using a set of pre-determined indicators of outcomes and impacts**. The measurement of indicators is not only essential to ensuring the accountability of projects and their ability to respond to the specific requirements of the programme or of the donor agencies, but it is also necessary in order to keep abreast of the emerging situation and to respond to systemic changes in a timely manner in order to improve the planning. Secondly, the toolkit was designed to assist the users to **clarify the purposes of the projects, together with the pathways by which changes could be made**. The toolkit therefore encourages in-depth thinking based on a distinction between changes in the key actors and the enabling or constraining conditions that surround them. In addition, it suggested that the users should consider impacts in terms of environmental, social, and economic sustainability, in addition to the direct outcomes of the projects. Thirdly, it was intended to **facilitate learning for adaptive planning and implementation**, and did this through guiding productive dialogue between the stakeholders, including the project implementers, the evaluators, and particularly the donors. Fourthly, the toolkit included a consideration of **scaling by means of reflecting on what had been achieved on the ground**.

Further emphasis on learning and scaling

During the period from October 2017 to March 2018, the SLE programme's M&E team visited the project sites of ten of the projects and carried out collaborative exercises using the initial version of the toolkit. In most cases, the M&E team participated in site visits – including interviews with the project participants (the beneficiaries, together with primary and secondary partners, such as governments and community organisations) – or attended project workshops together with the project implementers. The visits turned out to be very helpful in tracking progress, identifying challenges, discussing the potential adjustment of

project activities, and building trust between the project implementers and the M&E team. Furthermore, certain additional benefits and lessons were identified. While the summary report of the lessons learned from the experience of applying the initial version of the toolkit is still being prepared, the following highlights can be summarised:

- **Dialogues are not only effective for considering the appropriateness of assumptions and the designs of actions, but they are also effective for clarifying the overall concept and purpose of a project.** Dialogues enable the stakeholders to reconsider the socioeconomic context, and the challenges and opportunities of a project. This informs the identification of the most strategic partners that the project should engage with, together with its longer-term goals beyond the initial project period. In short, dialogues among the different stakeholders bring together differing and sometimes contesting perspectives. This enables the stakeholders to consider the project design and the local contexts, and helps them to revisit the purpose of the project itself. When it is difficult to convene all the relevant stakeholders, it is suggested that at least the project implementers and evaluators should engage in frequent dialogues.
- **It is effective to start dialogues from the earliest possible point.** In some projects, considerable differences were observed between the pre-assumed context and the reality. If these observations had been available at earlier stages, a wider range of options for adapting to the emergent situations could have been explored. When the M&E team were able to visit at a relatively early stage and participate in the discussions with the project team and their partners, it was easier to identify the means for adapting the project by adding or eliminating actions, or by reaching out to additional strategic partners.
- **Scaling can occur in many ways in addition to scaling up and scaling out after completion.** The M&E team and the project implementers did not carry out the scaling exercise for identifying the needs and strategies for scaling up and out that was included in the initial version of the toolkit. However, the dialogues made it clear that, as the recent literature suggests, pathways of scaling can occur in more ways than scaling out (expansion or replication) and scaling up (mainstreaming)⁴. For example, one of the projects started with the intention of testing the technical feasibility of introducing certain appliances, and training households to reduce resource consumption. However, the intensive discussion among the stakeholders indicated to the team that the issue was not only the amount of resources consumed by individual households, but the increasing inequality and instability of resource consumption caused by the rapid economic development of the region. Therefore, although the project was still in its early stages, the team discussed ways of engaging with the local government and the educational sector in order to address such fundamental challenges.

Such experiences prompted the M&E team to update the assessment toolkit. They realised that it required more emphasis on the **facilitation of learning from an early point, the adaptability of project planning and implementation, and wider pathways of scaling**. Therefore, the M&E team organised a workshop in June 2018. They invited some of the project implementers to discuss the lessons they had learned, and to update the assessment toolkit by incorporating the above aspects. These new aspects complement the previously emphasised features of **tracking impacts and outcomes and clarifying intended systemic changes**.

4 See footnote 3 above.

1.3 The scope of the document

This document includes five **exercise sheets** that are used at various stages of project preparation, implementation, and reflection, together with the **users' guide** for the exercises.

The **exercise sheets** facilitate collaboration between the stakeholders (the project implementers, coordinators, evaluators, and donors) in order to bring in different ideas and co-produce knowledge at all the stages of the project. For example, they are intended to guide the sharing of ideas concerning the challenges and opportunities of the project, including the socioeconomic context and the assumptions made at the project's preparatory stage. They help in summarising what has been observed on the ground, and they later help in reflecting on and adapting to the emergent situation. This is not to say that these exercises are the most effective means of facilitating the encounter of different ideas. Therefore, it is strongly recommended that the sheets are filled in during the dialogues and collaboration between the different stakeholders, rather than simply being filled by one side (such as the project implementer). To enable such collaboration, the role of the facilitator is not to "judge" the projects, but rather to create the space for the participants in the exercises to share their own thoughts and therefore to trigger learnings⁵.

The **user's guide** provides practical guidance for the exercises and support in the form of five sheets. The users are encouraged to read the text, which can help them to design and review project activities. The guide and the exercise sheets are intended to be used throughout the project cycle, which includes preparation, implementation (learning by doing), and completion (reflection and way forward).

The proposed toolkit was developed and tested by applying it to the projects that are supported by the SLE programme. However, it can also be applied to other initiatives that contribute to social, economic, and environmental sustainability by supporting changes in behaviour or practices of both individuals and organisations.

5 For more details see Wals (2007).

2.1 Principles

This section provides basic guidance on the use of the five assessment sheets for the joint-exercises included in this assessment toolkit. Efforts at creating sustainable societies require the engagement of multiple actors, who have differing and sometimes conflicting views of the contexts, the potential solutions, and desired visions for the future. In addition, the actions undertaken lead to unexpected feedback from the ecosystems and socio-economic systems. Such challenges do not allow one to proceed straight to the pre-set goals. In addressing complex challenges, it is usually counterproductive to adhere to predesigned solutions without an adequate understanding of what is happening on the ground and a willingness to flexibly adapt to the emerging contexts. Rather, projects require continuous adaptation in order to reflect to diverse feedback from both the ecosystems and the socioeconomic systems, as well as from the various participants.⁶

Therefore, the exercises introduced in this document are designed to support the projects and the programme through a) developing shared ideas concerning implementation, b) continually obtaining feedback through implementation, and c) fostering consideration regarding “what is achieved” and “what can be further done.” A few features are worthy of attention here.

Firstly, while the exercises are placed in the typical order of project preparation and implementation, they can be used throughout all the phases of the project. **All the sheets are working documents that can be continually or periodically revised** on the basis of what has been learnt on the ground, or in the dialogues between the stakeholders.

Secondly, each sheet contains a few **key questions that should be revisited many times**. The questions will prompt the users to consider whether they have acquired new knowledge through implementation, and will suggest that they rework the sheets that were previously filled in.

Thirdly, it is strongly recommended that these exercises should **involve at least a few stakeholders from different backgrounds**, such as beneficiaries, participants, project implementers, evaluators, and donors. All of these sheets are designed to co-produce knowledge by bringing different ideas and perspectives together and by identifying the challenges, opportunities, contexts, and desired futures, together with the pathways to such futures. Therefore, the exercises are most effective when conducted by means of productive discussions with people from different backgrounds.

These features of the exercise mean that the facilitator of the discussion plays a key role, and is typically a project implementer or evaluator. It is the facilitator who creates and manages the space(s) of learning in which people with different perspectives are able to learn from each other and reach a required level of commonality. To this end, the facilitator's role includes the following:

a. Raising questions rather than answers

The questions raised may include: Why is the project needed? What outcomes and impacts will it generate? How can it be done effectively? Whose voice are they concerned with, and who is involved? Such questions from an outsider's perspective will prompt people to consider what they are doing from different angles. It is not advisable for the facilitator to give answers or judgements, unless these are requested by the project implementer or the other participants.

⁶ See footnote 1 above.

b. Controlling the focus and duration of the dialogue

Together with the participants in the dialogue, the facilitator will start by clarifying the goals of the dialogue with regard to the topic and the extent of agreement required. When bringing different ideas together, it is possible for the discussion to go off on a tangent. If the discussion digresses too far from the initial goals, the facilitator may need to redirect the participants' attention to it.

c. Being sensitive to power relations and to those without a voice

The facilitator is advised to pay constant attention to the power relations among the participants and the other stakeholders. Sometimes it is only certain people who speak during dialogues, while the others remain silent. Sometimes only a specific category of people are able to participate. The facilitator should prompt those who are silent to speak, or ask the participants what those who are absent from the space would think.

2.2 Basic flow – with continuous iteration

The following subsection introduces the five sheets for the exercises. For the readers' convenience, this is presented in the order of the basic flow of the project preparation and implementation. However, in order to enable adaptive implementation that reflects learning through implementation, it is suggested that the project implementer and the other stakeholders revisit these sheets at any time. Moreover, some of the exercises that are usually done after the completing the project, particularly "harvesting" and "scaling," can be done during the implementation phase.

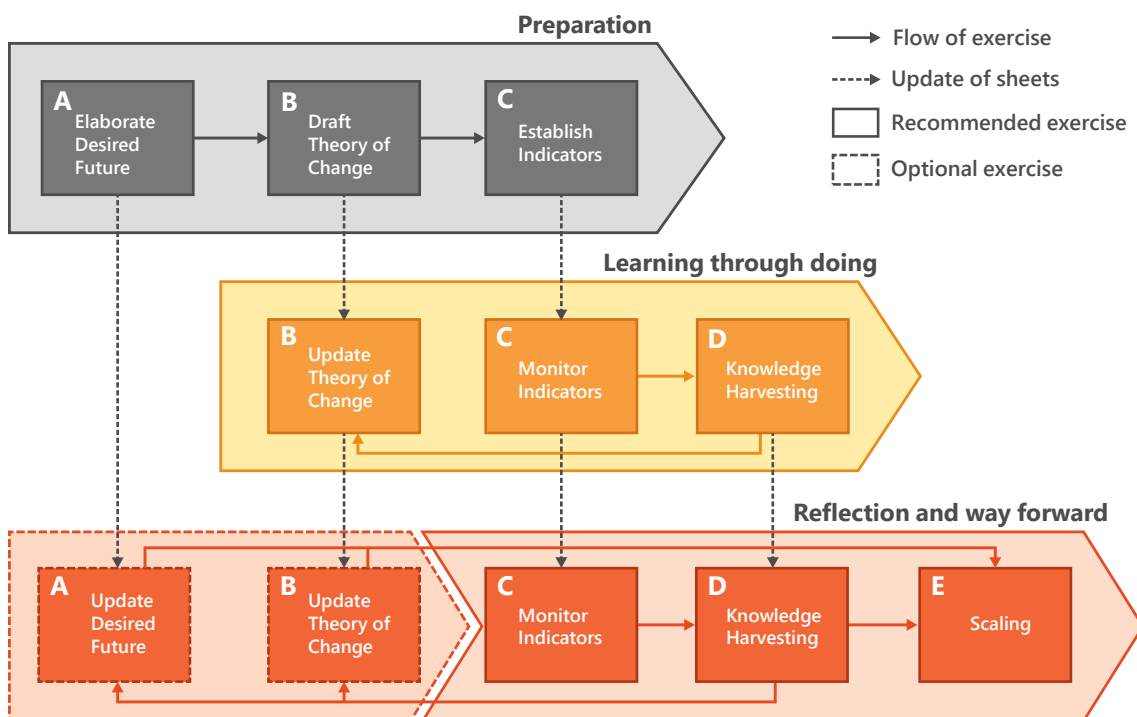


Figure 1. Basic Flow of the Project Assessment Exercise

Source: authors

Preparation

Some of the exercises can be used before the launch of the project, including by the programme coordinator or donor during the period of project selection and during the development of the implementation plan. The creation of a cooperative relationship between the stakeholders (such as the programme coordinator and the project implementer) at the earliest point is highly recommended.

Sheet
A

Current and Desired Future Status

This sheet identifies the current status of specific aspects (e.g., forms, behaviours) of the main actors (beneficiaries, participants, and primary and secondary partners), together with the conditions that enable and constrain these specific aspects. The desirable futures of these aspects are then also depicted in order to identify what is required to reach the desired future status.

Sheet
B

Working Theory of Change

This sheet indicates the logical flow of how specific activities and their outputs cause intended changes, including outcomes and impacts, in the form of the Theory of Change diagram. The diagram also identifies certain assumptions behind the project design.

Sheet
C

Indicators

This sheet sets quantitative and descriptive indicators to track the progress of the flow, which is illustrated in the Theory of Change diagram. The outcomes and impacts are selected from those identified in the Theory of Change diagram. This sheet can either replace or complement the log-frame indicators, depending on the requirement of the donor.

Learning through doing

The project implementers, main actors, evaluators, and donors may gain various types of information through the project implementation, including both the expected and unexpected conditions of the main partners, contexts, and so on. To allow the projects to adapt flexibly to the emerging situation, the sheets could be periodically or continually updated.

Sheet
C

Indicators

This sheet records the snapshot statuses of some of the key indicators that were derived from the Theory of Change diagram. However, it should be noted that these indicators should not be collected in order to judge the sound progress of the project, but rather in order to understand the expected or emergent conditions that influence the actual outcomes and impacts.

Sheet
D

Knowledge Harvesting

This sheet illustrates what the stakeholders have learned through carrying out project activities. This includes knowledge related to changes in the context and in the purpose or goal of the project. While this knowledge is informed by such changes, it is not limited to them. This enables the users to reflect on the implications of this for the Working Theory of Change (Sheet B) and for the activities, such as the need for new actions, new partners, or adjustments in resource allocation.

Sheet
B

Working Theory of Change

This sheet allows for updates or revisions based on what is observed in implementation. In particular, the assumptions behind the original project design will be reconsidered. Furthermore, discussions with and feedback from diverse stakeholders may lead one to revisit the project's outcomes and impacts.

Reflection and way forward

Towards the completion of the project period, the exercises will mainly focus on what was learnt through implementation, and how this knowledge will inform future activities. However, these exercises can also be tried during the implementation phase in order for the project team to adapt to the emergent situation in a timely manner.⁷ The emphasis is placed on the learning for deeper and more sustainable implementation beyond the project period, rather than on judging the success or failure of the project.

Sheet
C

Indicators

This sheet records the snapshot statuses of some of the key indicators. However, it should be noted that these indicators should not be collected in order to judge the success or failure of the project, but rather to provide clues that enable one to consider the expected and unexpected conditions that influenced the specific results.

Sheet
D

Knowledge Harvesting

This sheet can be used during a later phase to summarize what the stakeholders have learnt through carrying out project activities. This knowledge will help the implementers in considering future improvements of activities through revisiting the Working Theory of Change (Sheet B) or Desired Future Status (Sheet A) and working on Scaling (Sheet E).

Sheet
E

Scaling

This sheet raises why, what, how, and who questions in relation to scaling, which is not limited to "Scaling Up." The directions and pathways desired for scaling should be derived from the self-identification and dialogues of the stakeholders regarding further needs for improvement, continuation, and adaptation, rather than from the donors' needs to "scale up the best practice."

⁷ This is why sheets D and B in the previous stage are important.

2.3 Exercises

Exercise A Current and desired future status

This sheet supports the users in identifying the project's purpose, together with its key challenges and opportunities. It also helps them to identify specific aspects of the partners (the beneficiaries, participants, and primary and secondary partners⁸), as well as the enabling and constraining conditions that the project seeks to address. The design of Sheet A assumes that the behaviours, practices, and forms of individuals and organizations are enabled and constrained by the specific conditions of the environment, economy, society, and so on. In order to support the changes of a specific group of individuals or organisations, the project activities may engage directly with these people or indirectly help them adapt alternatives through improving the surrounding conditions to make it easier for them to change.

Therefore, the users answer the following key questions when filling in Sheet A.



Key questions

- What are the main challenges and opportunities you are seeking to address?
- What is the purpose of the project? (This does not need to be detailed, and you can come back here and revise it later.)
- Who are the main stakeholders? Who are the most strategic persons or organizations to work with? (primary, secondary, and other partners)
- What are the enabling and constraining conditions for addressing the challenges and opportunities? (e.g., resources, stakeholders)
- What are the long-term changes that the project would like to achieve?
What is the current situation, and what is the desired future situation?
- What capacities are required in order to address these challenges and opportunities?

In order to clearly indicate the changes that the project intends to bring about, the project implementers and reviewers are requested to specify the **Present Status and Desired Future** of both the behaviours and practices of the people involved, the forms of organisations, and the surrounding systems. It is important to note that many of the conditions in the surrounding systems that enable and constrain the behaviours of the stakeholders are difficult to control or influence by means of project interventions. Therefore, it is also important to specify uncontrollable conditions when describing the logical assumptions that the project will cause changes in lifestyles and contexts.

⁸ In this exercise, *beneficiaries or participants* refer to those who are directly engaged with the changes that the project aims. *Primary and secondary partners* refer to the strategic partners of the project implementers influencing the beneficiaries or participants, such as consumer product companies, local governments, and educators. *Beneficiaries, participants, primary and secondary partners* are also called *main actors*. However, project stakeholders are not limited to them.



✓ Notes for updating the sheet during later phases

Modify the desired status in future (Cells A10-13) as necessary, based on the Knowledge Harvesting (Sheet D). Updating desired future and gaps can inform better continuation or scaling of this project.

Exercise B Working Theory of Change

This sheet develops the Theory of Change diagram and illustrates the causal chains of the project's interventions, outputs, outcomes, and impacts.⁹ All projects make interventions in order to deliver outputs that then generate outcomes and impacts. However, the successful delivery of outputs may not automatically result in the successful generation of outcomes and impacts.¹⁰ To ensure the attainment of the intended outcomes and impacts through the interventions, projects should clarify the causal relationship between these elements in their preparatory phase.

When filling in Sheet B, the users are required to answer the following key questions.



Key questions

- What are the concrete activities (and outputs) that will respond to the needs regarding project purpose identified in the previous sheet?
- What are the key outcomes (changes in behaviour and practices, and changes in enabling and constraining conditions) required to achieve the purpose of the project?
- What kind of knowledge or capacities related to the project's purpose will individuals, organizations, and society obtain from the implementation?
- What kind of impacts, including environmental, socio-economic, and other types of impacts, will be derived from the outcomes?
- How and under what conditions will these outputs contribute to outcomes (outcome assumptions)?
- How and under what conditions will these outcomes contribute to impacts (impact assumptions)?

The Theory of Change diagram is intended to guide the project during its preparatory phase by examining the causal relations between specific interventions and the expected outcomes and impacts. Some projects may have fewer outcomes than outputs and fewer impacts than outcomes. During the later phases, this diagram enables a review of the project's plans and activities by checking its progress by means of indicators. In this sense, the sheet is a **Working Theory of Change**,¹¹ which can be reworked at any time.

⁹ In this exercise, *impacts* refer to short-term and long-term net gains toward a more sustainable environment, society and economy deriving from the changes induced by the project's activities and *outcomes* refer to changes in the beneficiaries/participants and enabling and constraining conditions being induced by the project's activities and leading to gains for a more sustainable environment, society and economy. For example, reduction of pollution and nutritious conditions are impacts, while changes in awareness, behaviour, policy, strategy, and capacity are outcomes.

¹⁰ *Outcomes* should be distinguished from *outputs*, which refer to direct results of project activities, such as the number of workshops or of publications.

¹¹ Theory of Change is "a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context" (Center for Theory of Change 2016). This framework learns from the impact-oriented theory of changes by UNICEF (Rogers 2014), ORS (Stachowiak 2013), and ACUMEN (Innovations for Poverty Action 2017) while emphasising the necessities to capture sustainability gains as impacts and to consider Theory of Change as a working document.

STEP 1

Specify the key activities that will lead to the “desired future” stated in the previous sheet in the diagram (Sheet B, Cell B1). Specify the outputs for each intervention in the same column. The outputs will be direct deliverables by project interventions. For example, the training materials and equipment provided, the pilot sites developed, and the groups organised are direct outputs.

STEP 2

Specify the impacts that the projects intend to generate (Sheet B, Cell B2-4). **Impacts** are the sustainability gains in environmental, socio-economic, and other aspects that the projects aims to generate through supporting changes of behaviours or practices in the main actors or those in the enabling and constraining conditions.

STEP 3

Specify the outcomes (Cells B5-6). **Outcomes** are considered here as the midway towards the impacts discussed above. More specifically, the changes in the behaviours and practices of the main actors (individuals or organisations) (Cell B5), or the changes in the surrounding conditions (Cell B6) that are induced by the project’s activities and then lead to the impacts, are considered outcomes.

STEP 4

Summarise the **assumptions**¹² behind the logical connection between outputs and outcomes (Cell B7) and outcomes and impacts (Cell B8). For example, when a project develops a technical tool or report (output), it is expected that the key stakeholders will change their behaviours by adopting the tool or implementing the suggestions in the report (outcome). The assumption here is that the content of such a tool or report should be applicable and attractive to them, and should ensure that they have sufficient resources and capacity (the assumptions between outputs and outcomes). In addition, there is the assumption that changes in the practices of the key stakeholders will actually generate a reduction in the environmental impacts (the assumptions between outcomes and impacts).

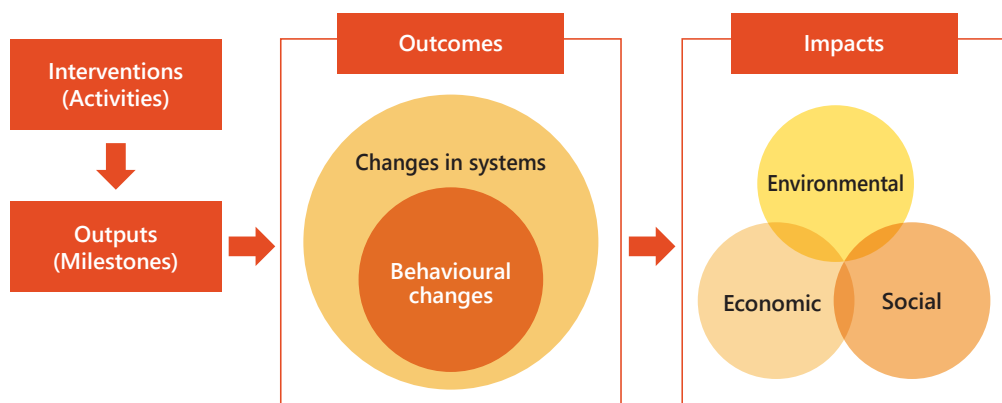


Figure 2. Assumptions in the Theory of Changes

Source: authors

¹² Assumptions in this exercise stand for the logical reasoning of the causal linkages between the steps toward the delivery of the impacts. They will include the considerations on how the implementation of certain activities deliver the outputs; how the outputs lead to the outcomes; and then how the outcomes lead to the impacts.



Mark a few key elements in outcomes and impacts that can be monitored at some point in the project's implementation in order to gain knowledge concerning the actual changes or non-changes of the status of the participants or their enabling and constraining conditions. The marked elements will become the qualitative and/or quantitative indicators that are put in the **Sheet C Indicators**.

The Theory of Change Diagram can be drawn in many different ways. Instead of Sheet B in the toolkit, users can draw a flow chart with boxes and arrows, while retaining elements of this exercise sheet (i.e., activities and outputs, outcomes, impacts, assumptions).

✓ Notes for updating the sheet during later phases

On the basis of this discussion on learning through dialogue and observation, the theory of change can be elaborated to refine the assumptions, impacts, and outcomes, as well as the activities that lead to them. The Assumptions (Cells **B7** and **B8**), Impacts (Cells **B2-B4**), Outcomes (**B5** and **B6**), and activities and outputs (Cells **B1**) should be modified as necessary, based on the Knowledge Harvesting (Sheet D).

Exercise C Indicators

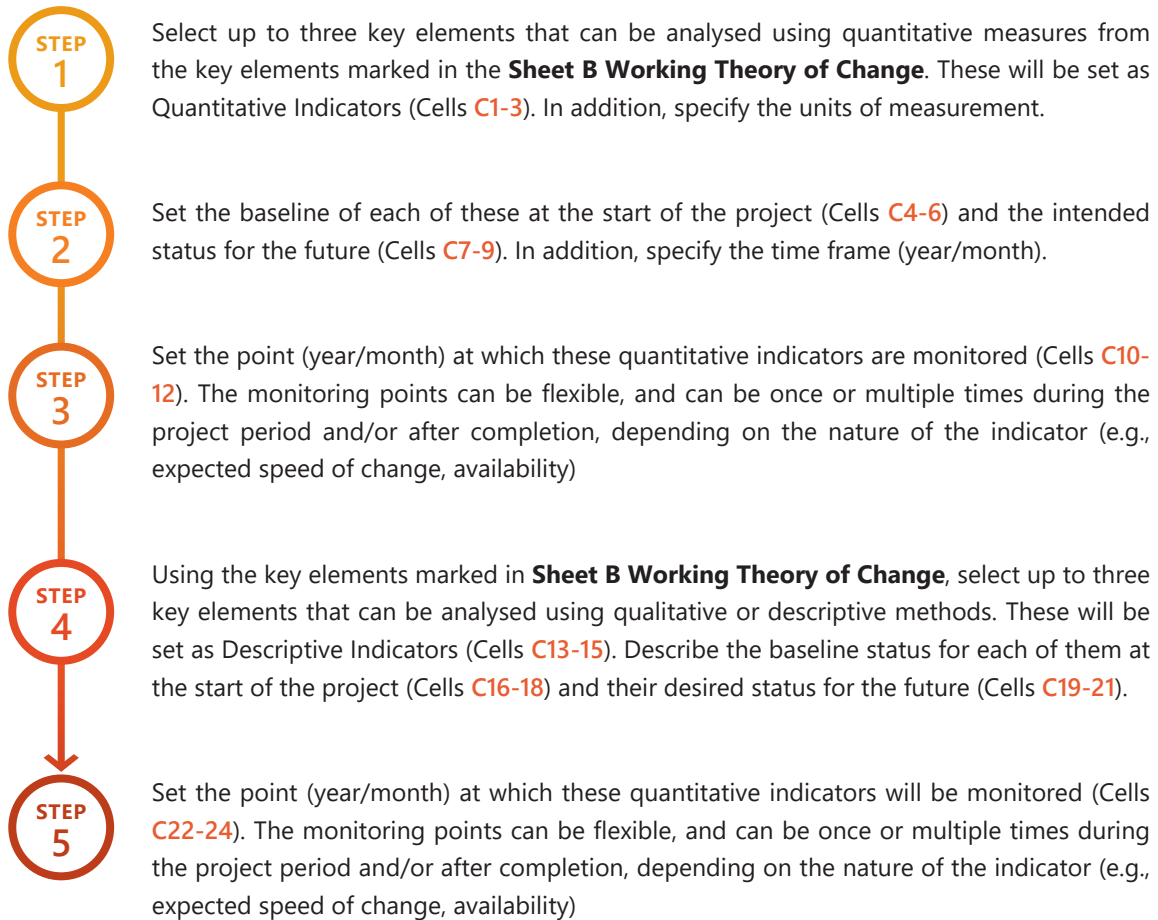
This sheet supports the users in setting specific indicators to learn what is happening on the ground, which it does by checking the key elements of the outcomes and impacts marked in the **Sheet B Working Theory of Change**. Indicators are sometimes used to evaluate the success or failure of a project, typically at the end-point of the implementation period. However, while this toolkit for assessment is designed to facilitate dialogues for learning and adaptive implementation, it suggests that the users to set indicators with the objective of guiding them in revisiting the Working Theory of Change. This will enable them to modify their project activity plans at any point during implementation by comparing the expected and the realized outcomes and impacts (in combination with **Sheet D Knowledge Harvesting**).

When filling in Sheet C, the users answer the following key questions.



Key questions

- What are the most important impacts that the project is intended to generate in the end?
- What are the most critical outcomes that the project needs to realize, and which will inform one whether the assumptions in the Working Theory of Change were correct?
- How is the status of these key elements captured at some point in the project implementation, both quantitatively and descriptively?



✓ **Notes for updating the sheet during later phases**

Write down the updated status of the pre-set quantitative and descriptive indicators (Cells **C10-12, C22-24**) according to the planned time-line of data collection. Data collection can be either continuous or periodical. Based on the results of the final data collection (e.g., end-line survey, interview of stakeholders), write down the updated status at the end of the project period (Cells **C10-12, C22-24**). The updated status will be utilized for in-depth reflection, adaptive implementation, scaling through knowledge harvesting (Sheet D), updating the working theory of change (Sheet B) and the desired future (Sheet A), and developing strategy for scaling (Sheet E).

Exercise D Knowledge Harvesting

This sheet highlights what has been learnt by the project implementers, the evaluators, and the main actors and other stakeholders, including the participants and the primary and secondary partners. It is concerned with what is learnt through implementation and with the potential implications of this knowledge for the project's implementation. The users can fill in observations about the contexts (such as enabling and constraining conditions, roles, capacities, the motivations of the key stakeholders, and the purpose of the project) and the indicators (both quantitative and qualitative). They are then

encouraged to reflect on their assumptions (including the intended outcomes and impacts and the assumptions behind them) and to consider whether these observations will prompt them to adjust the activity plan at all.

When filling in Sheet D, the users answer the following key questions.



Key questions

- What have the stakeholders learnt through the implementation?
- How do the key elements of the Theory of Change, which are set as quantitative and descriptive indicators, change?
- What implications do these observations have for the assumptions underlying the project design? Is it necessary to modify the Working Theory of Change?
- How can the current activities be improved? Will this lead the participants towards the desired future in a better way, or will it change the constraining and enabling conditions?
- Is there any suggestion of changes in the actions, partners, or resources?

STEP
1

Write down what was observed regarding the contexts, including the enabling and constraining conditions, the stakeholders' roles, capacities, and motivations, and the project purpose (Cell **D1**).

STEP
2

Write down observations regarding the trends related to changes in the quantitative and descriptive indicators, including unexpected trends. Try to write down the possible reasons for them (Cell **D2**). In addition, write down any other observations during project implementation (Cell **D3**).

STEP
3

On the basis of the above observations, reflect on whether the assumptions underlying the project design were correct, and whether the outcomes and impacts were properly set (Cell **D4**).

STEP
4

Where applicable, suggest modifications in the activities, resource allocation, or strategic partners (Cell **D5**). In addition, write down any other suggestions that occur during this process of reflection (Cell **D6**).

STEP
5

Revisit the **Working Theory of Change (Sheet B)** and update it as necessary on the basis of the knowledge stated in the Sheet D.

The answers to each question do not need to be entirely consistent. It is more important to include the various observations of the different stakeholders than to reach a common understanding.

✓ **Notes for updating the sheet during later phases**

Revisit this entire exercise (Sheet D). Reflecting the opinions and observations of a wide range of stakeholders is particularly recommended, and this should include not only the main implementation team and the evaluator, but also the beneficiaries and the partners. Revisit and update the Working Theory of Change (Sheet B) and the desired future (Sheet A) as necessary. Then proceed to the scaling exercise (Sheet E).

Exercise E Scaling

This sheet is intended to guide the users in identifying the possibilities and directions of scaling. Scaling is sometimes understood in terms of quantity (*Scaling Out*) or of policy influence (*Scaling Up*). However, it is also important to consider other dimensions of scaling, such as *Scaling Deep* or “changing relationships, cultural values and beliefs.”¹³ The different dimensions of scaling may occur separately or simultaneously. For example, a project that was originally launched with a small number of housewives may learn from the challenges it faces and try to collaborate with local government and university researchers, while also seeking to expand the range of its activities in order to better engage with and support the youth and males. In this case, scaling out, scaling up, and scaling deep are all occurring at the same time.

The possible dimensions of scaling depend on the needs identified using the knowledge obtained through implementation. In order to identify the desired directions and possibilities of scaling, the sheet encourages the users to consider the **Why, What, How, and Who of Scaling**¹⁴, rather than presupposing that a “larger” scale of implementation engaged with a “higher level” of actors is always desirable.

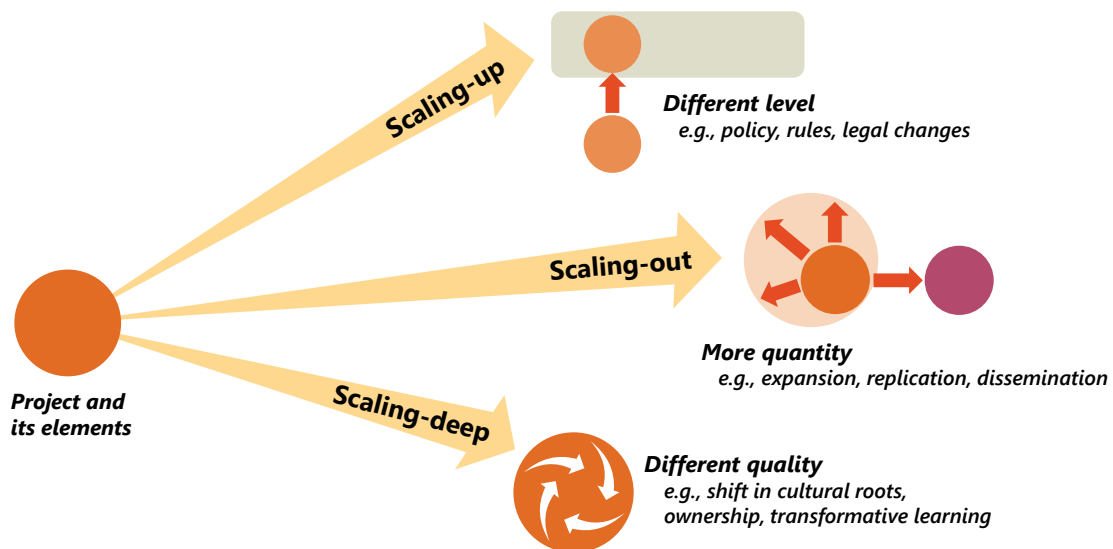


Figure 3. Directions of Scaling

Source: authors based on Riddell and Moore (2015)

13 See footnote 3 above.

14 Addressing Why, What, How, and Who questions can facilitate the in-depth thinking process for scaling (Cooley 2016, Mickelsson 2018).

The key questions are as follows.



Key questions

- **In what** particular aspect of a project or initiative do you find room for scaling?
- **How** would you design and support a contextually sensitive scaling process?
- **Why** would you do the scaling in a particular way?
- **Who** is going to be involved to enable a broadening or deepening of participation? Why would you involve certain people in scaling?
- **So what** actions do you propose to take now?

STEP
1

Answer the questions **Why, What, How,** and **Who** (Cells **E1**). There is no specific order for answering these questions.

STEP
2

Answer the final question: **So What Now** – what actions do you propose to take (Cell **E2**)? Does the Working Theory of Change need to be updated?

STEP
3

Proceed with more **detailed strategy development and planning for scaling** as applicable. This can be either a new project or a continuation of the current project. The exercises in this framework starting with Sheet A can help to plan for the scaling process selected.

3

Exercise Sheets

Current and Desired Future Status

Challenges and opportunities	Please write in a sentence.
Purpose of the project	Please write in a sentence.

	Who	(A4) Current situation (Year/Month: _____)	(A9) Desired future (Year/Month: _____)
Behaviour and practices of the main actors	(A1) Beneficiaries (participants):	(A5) Describe the current behaviours and practices.	(A10) Describe the behaviours and practices desired in the future.
	(A2) Primary partner:	(A6)	(A11)
	(A3) Secondary partner:	(A7)	(A12)
Enabling and constraining conditions		(A8) Describe the current conditions that enable or constrain the behaviours and practices.	(A13) Describe the desired future conditions that will enable or constrain the behaviours and practices.

Working Theory of Change


Activities and outputs	Outcomes	Impacts
<p>(B1) Activities and outputs</p> <ul style="list-style-type: none"> • • • • • 	<p>(B5) Changes in behaviour and practices of the main actors</p> <ul style="list-style-type: none"> • • • <p>(B6) Changes in enabling and constraining conditions</p> <ul style="list-style-type: none"> • • • 	<p>(B2) Environmental impacts</p> <ul style="list-style-type: none"> • • • <p>(B3) Socio-economic impacts</p> <ul style="list-style-type: none"> • • • <p>(B4) Other impacts</p> <ul style="list-style-type: none"> • • •
<p>(B7) Assumptions between outputs and outcomes</p> <ul style="list-style-type: none"> • • • 	<p>(B8) Assumptions between outcomes and impacts</p> <ul style="list-style-type: none"> • • • 	



Indicators

Description of indicator	Baseline	Intended status	Updated status
<p>(C1) Quantitative indicator 1</p> <p>(unit of measurement: _____)</p>	<p>(C4)</p> <p>(Year/Month: _____)</p>	<p>(C7)</p> <p>(Year/Month: _____)</p>	<p>(C10)</p> <p>(Year/Month: _____)</p>
<p>(C2) Quantitative indicator 2</p> <p>(unit of measurement: _____)</p>	<p>(C5)</p> <p>(Year/Month: _____)</p>	<p>(C8)</p> <p>(Year/Month: _____)</p>	<p>(C11)</p> <p>(Year/Month: _____)</p>
<p>(C3) Quantitative indicator 3</p> <p>(unit of measurement: _____)</p>	<p>(C6)</p> <p>(Year/Month: _____)</p>	<p>(C9)</p> <p>(Year/Month: _____)</p>	<p>(C12)</p> <p>(Year/Month: _____)</p>
<p>(C13) Descriptive indicator 1</p>	<p>(C16)</p> <p>(Year/Month: _____)</p>	<p>(C19)</p> <p>(Year/Month: _____)</p>	<p>(C22)</p> <p>(Year/Month: _____)</p>
<p>(C14) Descriptive indicator 2</p>	<p>(C17)</p> <p>(Year/Month: _____)</p>	<p>(C20)</p> <p>(Year/Month: _____)</p>	<p>(C23)</p> <p>(Year/Month: _____)</p>
<p>(C15) Descriptive indicator 3</p>	<p>(C18)</p> <p>(Year/Month: _____)</p>	<p>(C21)</p> <p>(Year/Month: _____)</p>	<p>(C24)</p> <p>(Year/Month: _____)</p>

Knowledge Harvesting

Observations		
<p>(D1) Context – Have you found any changes in the context of the project? (e.g., enabling or constraining conditions, roles, capacities, motivations of the key stakeholders, or the purpose of the project)</p>	<p>(D2) Indicators – Have you found any unexpected status in the quantitative or descriptive indicators? If so, what do you think is the reason for it?</p>	<p>(D3) Other observations – Describe any other observations.</p>
		
Reflections		
<p>(D4) Assumptions – Have any changes occurred to what you wrote in the working theory of change? (e.g., assumptions, intended outcomes and impacts)</p>	<p>(D5) Plans – Are there some aspects that could be improved in relation to the purpose of the project? (e.g., activity plan, resources, any other suggestions)</p>	<p>(D6) Other suggestions – Describe any other thoughts you may have.</p>

Scaling

Why would you use scaling as an approach? Why would you scale a particular aspect?

What particular aspect of a project or initiative provides you with room for scaling?

(E1) **Scaling**

How would you design and support a contextually sensitive scaling process?
Why would you do the scaling in a particular way?

Who is going to be involved to enable the broadening or deepening of participation?
Why would you involve certain people in the scaling?

(E2) **So what now** – what kind of actions do you propose to take? (e.g., update the working theory of change, scale-out project, mainstream elements of project)

4

Indicator Examples

Examples of impact and outcome indicators

The following lists are examples of the impacts and outcomes level indicators to be included in this framework. It should be noted that the guidance here is a basic principle and recommended examples but each project may need to adjust this principle considering the context and objectives of the project. For more details, also refer to the examples of indicator selection and measurement (Box 1-3) and list of example indicators (Table 1).

Impact-level Indicators

- **Reduction or prevention of environmental pollution** such as greenhouse gas emission, water and soil pollution, and reduction of waste generation, disturbance on biodiversity and land degradation because they contribute to mitigating the degradation of the ecosystem services.
- **Reduction or prevention of consumption of resources** such as energy, material, and water and increase in recycling rate, because saving natural resources ensure sustainable use of the limited resources in the ecosystem.
- **Improvement in social and economic conditions** such as increase or stabilisation of household income, increased opportunities for or wider options of decent jobs, improvement of nutritious condition.

Outcome-level Indicators

- **Improvement in awareness and capacity of participants** such as enhancement of individuals and organisations in terms of knowledge level on environmental issues and the necessity of sustainable practices or awareness level of employees and managers of companies including their ability of learning.
- **Change in behaviour and practices of participants** such as adoption of energy saving practices, waste segregation, and purchasing sustainable products or adoption of sustainable ways of production and sustainable procurement.
- **Change in technology and infrastructure in the surrounding systems** such as the development of platform and infrastructure which enables sustainable practices in the society and introduction of resource efficient technologies which support the changes in behaviour and practices of participants.
- **Change in policy, strategy, and model in the surrounding systems** such as the introduction of new policy and regulation by the government, adoption of sustainable principle, strategies, and business models by the private companies (if they are not participants).
- **Enhanced engagement and capacity of stakeholders outside of participants** such as participation of stakeholders and establishment of a network of stakeholders in promoting sustainable consumption, improvement in the capacity of educators, professionals, and institutions which support changes (if they are not participants).

Table 1. Example of impacts and outcomes indicators

Category	Sub-category	Impacts/Outcomes	Example of Indicators
Impact-level Indicators	Environmental pollution (including greenhouse gas)	Reduction of greenhouse gas emission Reduction of water, soil, and air pollution Reduction of waste generation and landfilling Reduction of biodiversity disturbance and land degradation	Reduction in ton CO ₂ -equivalent greenhouse gas emissions, Reduction in kg NO _x and SO _x emissions, Reduction in reduction in ton waste generation, Reduction in land footprint
	Resource consumption	Reduction of resource consumption Increase in recycled products and recycling rates	Reduction in kg material consumption, Reduction in kWh energy consumption, Reduction in L water consumption, Increase in % recycling rate
	Socio-economic sustainability	Increase in income-level and generation of decent jobs Increase of nutritious condition, well-being and other socio-economic conditions Decrease in gender and economic inequality	Increase in USD household income, Increase in number of decent jobs Increase in number of people with nutritious meals, Increase in ratio of females in public participation
Outcome-level Indicators	Behavioral and practice changes of participants	Increase in awareness and capacity of participants Changes in behaviour and practices or participants Learning processes among the participants Feedback cycles between the participants and implementers	Increase in number of people understand importance of climate change, Increase in number of people adopt sustainable practices
	Change in the surrounding systems and stakeholders	Changes in technology and infrastructure Changes in policy, strategy and model Increase of engagement and capacity of stakeholders	Increase in number of sustainable products distributed, Increase in number of local governments with sustainable procurement policies Increase in number of stakeholders participating in network

Source: authors

The following three boxes illustrate the logic of selecting the impacts and outcomes indicators for different types of projects and designing the means of measurement of the specified indicators.

Box 1. Example of indicators – Sustainable practices in workplace

A project may be designed to conserve energy and therefore contribute to GHG emissions reduction through the implementation of an eco-action plan in a participating organisation. Certain amount of energy saving is expected through changing the daily behaviours of energy use by the staff members, such as turning off the lights while leaving the office for lunch, switching to the stand-by mode for PCs while leaving the seats for meetings and completely shutting down PCs when closing of the business of the day. In such a project, the **outcomes** could be the increased awareness on the importance of eco-action, behavioural changes such as the number of employees adopted eco-action. Changes in the systems such as substitution of equipment to more efficient ones or introduction of company eco-action plans could be also considered as outcomes.

As **impacts** indicators, reduction of resource consumption such as the amount of energy saving, such as XX kWh of electricity saved, can be set as a straightforward one. However, this indicator cannot easily show a reduction of pollution: i.e. how much GHG emissions reduced, usually presented in terms of tons of CO₂ equivalent. Energy saving and reduced GHG emissions, a conversion factor, i.e. GHG emissions per unit electricity consumption (in grams of CO₂ equivalent/kWh), can be used to link these two impacts. The conversion factor at a national average level can be estimated by dividing the total amount of GHG emissions from electricity generation by total energy consumption. As illustrated above, there may be more than one step among the category of impacts or outcomes where two or more indicators have a causal connection.

Box 2. Example of indicators – Sustainable practices by households

Let's assume a project consisting of a training programme for municipality staff in charge of municipal waste management and an awareness raising campaign to promote appropriate waste separation. Through activities of the project, training and awareness raising campaign will be delivered as outputs. The numbers of trainees and participants of training and campaign will be the indicators for these outputs.

The expected outcome from this project can include both the changes in the participants and the systems. The former includes the improvement of awareness (measured by the number of households understand the importance of waste segregation), changes in behaviour (measured by the number of households practicing appropriate waste separation). The changes in systems will include the improvement of the waste management practice of the municipality incorporating waste segregation. The expected impacts include reduction of resource consumption and pollution (measured by the increase in the number of recycled products consumed, the reduction in landfill volume and a corresponding reduction in GHG emissions). There might be other potential outcomes outside the project, such as visitors to learn from this project and reputation of the project site which may result in similar activities outside, but these indirect impacts are difficult to plan and to monitor and are not necessary.

Necessary data to validate these indicators will be available through surveys to households and the administrators in charge of waste management. It is desirable to survey the status of households' waste separation and municipality's waste management both before and after the project. For example, the difference of landfill volume and amount of recycled resources over a certain period (say, monthly) before, during and after the project may be an impact of the project.

Reduction in GHG emissions can be estimated as follows:

Reduction in GHG emissions = GHG emissions from production of virgin products/resources that were substituted by recycled projects/resource - GHG emissions from recycling process

GHG emissions data from production and recycling processes may be collected from life cycle assessment literature, e.g. United States Environmental Protection Agency (2016).

Box 3. Example of indicators – Sustainable agricultural practices

In the area of agriculture and food, projects aiming at lifestyle changes often target GHG emission reduction through increased resource efficiency by reducing input use per unit output of the food or on a hectare basis. They also typically target the lifecycle concept of 'from farm to plate' including the realm of the supply chain and consumers.

Outcomes of such a project may include the change in knowledge and capacity of farmers (i.e. number of farmers whose knowledge has increased in sustainable farming techniques), behavioural change (e.g. the number of farmers who shifted from conventional farming to conservation farming, farmers who shifted from chemical farming to organic farming) and changes of the surrounding systems (e.g. supply chain for providing machinery for needed for zero tillage and organic agriculture and change in policies such as subsidies on zero tillage machines). More specifically, indicators such as reduced hours of pumping of water, reduced fertilizer use, reduced diesel use for tillage, better yields, reduced miles of food transported, reduced food waste, and number of farmers who shifted from grid-based electricity/diesel pump sets to photovoltaic could be used to monitor behavioural changes of farmers. There might be some causal and resultant relationships within the outcomes; i.e. some of the above outcomes might be generated first and then contribute to the other outcomes.

Similarly, **impact** indicators could include environmental, social and economic sustainability (e.g. reduced water demand, improved soil health, and GHG emission reduction, better household nutrition, improved socio-economic status of farmers increased farm profits, and environmental sustainability). Some of the impacts may be realised shortly after the project completion and thus categorised as short-term impacts, while others take a longer time to come into reality and thus classified as long-term impacts. It is important for projects to consider both short-term and long-term impacts in the planning stage. However, whether it is possible to monitor and evaluate the long-term impacts depend on the available resources and the types of indicators.

Most of the above indicators can be directly measured by employing data survey techniques that are within the purview of the projects such as a household survey for before-and-after comparison and analysing the record of project activities such as the provision of training and equipment. Keeping the unit for these indicators is important, and hence a decision is to be made whether to express them on per capita basis or area basis since they have implications for the resources to be used to measure these indicators. All the indicators need to be quantified for the baseline (i.e. before the introduction of the project), at regular intervals during the project implementation and after the project (ex-post) to compare and evaluate the progress in the indicators.

To illustrate, GHG emission reductions can be calculated as:

GHG emission reduction at farm + GHG emission reduction from farm operation + GHG emission reduction at supply chain + GHG emission reduction at consumption

Among these categories, GHG emission reduction at the farm can be calculated by the estimated annual emission of methane from a particular rice water regime and for a given organic amendment reduced by the project interventions. The project may conduct a survey on the agricultural practices of the participants and refer to the existing guideline such as by IPCC to estimate annual emission of methane, methane emission factor, and annual harvested area under new cropping practices.

GHG emission reduction from farm operations can be calculated from the amount of diesel use for tractor operation and pumping water reduced by the new agricultural practices. A project may need to collect information on the amount of diesel consumption in the participants. Factors to calculate GHG emission can be directly obtained from related efficiency documentation provided by the equipment manufacturer.

Measurement of Impacts and Outcomes

The assessment of the progress and achievements of the projects toward the intended outcomes and impacts requires indicators to measure progress at certain points, such as baselines, mid-term and end-point. The indicators and plans, as well as the methodologies of measurement, are selected among various options to meet different objectives within the different resources available.

Against the backdrop of increased awareness on the importance of evidence-based project design and evaluation, a growing number of monitoring activities are emphasizing indicators to measure impacts. Measurement of impacts can take: i) experimental; ii) quasi-experimental; or iii) non-experimental designs (Table 2). Experimental designs provide the most accurate and reliable results by comparing two or more groups generated by randomised sampling to control factors not attributed to the project strictly. However, a highly accurate measurement based on experimental design such as Randomized Controlled Trials (RCTs) is very high-cost and thus will be only justified for large-scale, well-resourced projects, with results that make a huge impact on society. Quasi-experimental design is a lighter way of measuring impacts based on comparison groups using non-randomised samples. The non-experimental design is a much more low-cost way of measuring impacts, for example using data collected through surveys but not involving trials for comparison of two or more groups.

Due to the cost issue, some literature even suggests that only selected projects need to measure impacts (Peersman et al. 2016). In fact, quite a considerable number of monitoring activities on development cooperation projects do not measure impacts. However, monitoring ends up simply as a process check if impact measurement is not carried out at all.

The design of the measurement should include clarification of the data set, means of data collection, and the methodologies to utilise the collected data as indicators. It should be noted that the design enabling the highest level of accuracy is not always the best option. The project and reviewers are required to take account of the reasonable level of accuracy and any limitations to available resources.

With regards to the data set and the collection method, experimental and quasi-experimental designs can be too costly to be applied for measuring outcomes and impacts of small-scale projects. Such designs can be considered only when necessary resources are available. Otherwise, nonexperimental design including the surveys of limited scale can be of significant use. For instance, time-series comparisons at the beginning and end of the project, or cross-sectoral comparisons at the end point will provide useful information to understand what the project has achieved.

It is important to note that a comprehensive survey is not the only methodology to track the progress and achievements. A record of activities, such as the number of products and documents distributed, or the number of users of a tool and how frequently it is used, may provide telling clues about the progress and achievements of the projects towards the intended outcomes and impacts. In such cases, available data can be translated into the indicators to be assessed. When considering methodologies to utilise data, it should be noted that it is sometimes difficult to obtain the data that can serve as outcome or impact indicators as they are. Assessment can take advantage of different data that can be calculated to create the required indicators. Calculation methodology can either be developed through administering a set of trial surveys or referring to existing literature. Here again, the key to realistic design is a balance between the accuracy of measurement and resources required.

Table 2. Type of research design for measurement of impacts

Type	Description	Advantage	Disadvantage
Experimental design	Comparison of treatment group receiving interventions and control group with no interventions provided, with randomised assignment of groups into samples	An ideal methodology addressing causality and attribution issue	Requires high cost and expert assistance; practical difficulty in implementation
Quasi-experimental design	Comparison of the participants of project and comparison groups without receiving project interventions, not through randomised sampling, but controlling differences applying multivariate statistical techniques	Second best ideal methodology but requires less demand than the experimental design	Requires medium cost and expert assistance; results can be affected by irrelevant parameters
Non-experimental design	Methodology without having comparison groups	Practical methodology requires relatively low cost, time and expert assistance	Results can be significantly affected by irrelevant parameters; relatively less scientific evidence on results
Before and after comparisons	Comparisons of outcomes before and after interventions to estimate impacts		
Time series designs	Before and after comparisons with collection of additional data during project		
Cross-sectional comparisons	Statistical analysis of surveys of individual participants at termination of project to determine correlations between duration, type, intensity of services and outcome		
Panel designs	Tracking outcomes at individual participant level before, during and after project		

Source: Authors adopted from Sept, Naylor, & Weston (2011)

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