

Frontiers project M&E planning guide



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Purpose

The Frontiers project monitoring and evaluation (M&E) planning guide has been developed to support the implementation of Hort Innovation's Organisational Evaluation Framework at the 'project' investment level and to support implementation of the *Frontiers project M&E framework* (Framework).

This document operationalises the Framework and is designed to guide delivery partners to apply the Framework to develop an M&E plan, including a program logic model, that aligns with the appropriate Frontiers investment pathway for their project.

The relevant process owner at Hort Innovation and the Industry Insights Team will support project M&E planning and implementation by delivery partners.

Definitions

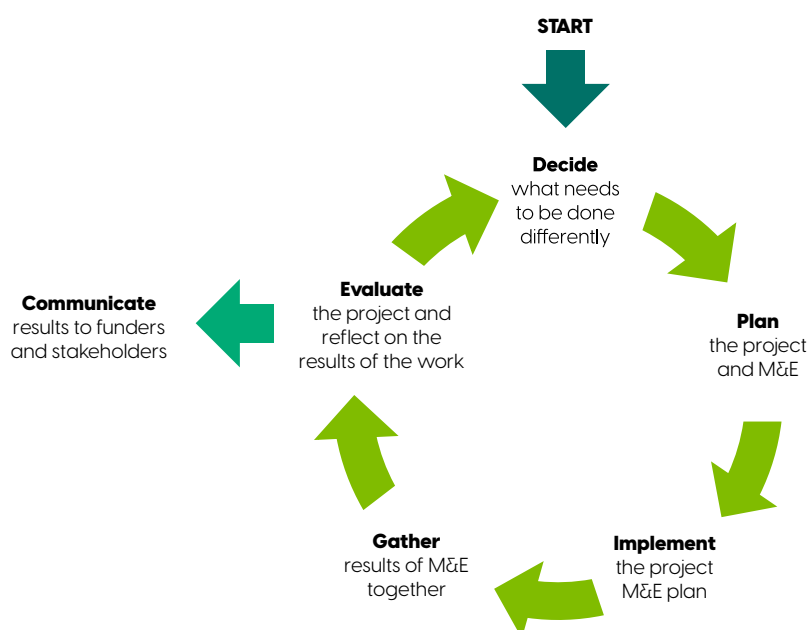
Monitoring involves the regular and systematic collection of data to support both management and evaluation functions. **Evaluation** is the structured process of assessing the value, merit, or effectiveness of an intervention, policy, or program. Within the context of Hort Innovation's work, evaluation provides insight into the significance of an investment—answering the critical question of "so what?" by examining whether intended outcomes have been achieved for the target beneficiaries.

Monitoring and evaluation (M&E) refers to the combined use of monitoring data and activities to inform evaluative judgments. A project-specific M&E plan defines the scope of these activities, detailing what data will be collected, how and when it will be gathered, who will be responsible, and how the information will be analysed and applied to meet the project's M&E objectives.

Monitoring and evaluation in the project cycle

Monitoring and evaluation are critical components of project management throughout the project cycle as shown in **Figure 1**. M&E enables accountability, demonstrates performance, facilitates continuous improvement and supports advocacy of R&D and marketing project outcomes (i.e., helps tell the project story).

Figure 1. Monitoring and evaluation in the process cycle



Principles for project monitoring and evaluation

Monitoring and evaluation are essential throughout the entire project lifecycle, see **Figure 1**. Consistent with Hort Innovation's Organisational Evaluation Framework and the Framework, project M&E should:

- Define and communicate the **impact** achieved throughout project delivery
- Be focused on the **achievement of outcomes**, i.e. on benefits to growers
- Articulate the **logic of the project**, clearly outlining how benefits will be delivered
- Align with the appropriate investment pathway
- Identify **performance measures** (indicators) based on the logic of the project and where possible, link performance measures to those listed in the appropriate investment pathway listed in the Framework
- Be selective in **what is measured** to ensure that resources are used efficiently
- Be **strategic**, clearly linking to the relevant investment pathway outcome and the Framework
- Be **consistent** where possible but sufficiently flexible to ensure that the specifics of each individual project are considered
- Be **commensurate** with the size and scale of the project
- Be as **practical**, implementable and simple as possible
- Be used for **continuous improvement**.

Project monitoring and evaluation planning

Every Frontiers project must have a project-specific M&E plan. Beyond meeting accountability requirements, effective M&E planning helps delivery partners manage adaptively, optimise resources, and clearly demonstrate impact.

Plans will differ in length, complexity, and methodology based on the project scope and investment value. What matters most is that each plan is fit-for-purpose—designed to ensure the collection of appropriate evidence to demonstrate impact and align with the overarching Framework and appropriate Frontiers investment pathway.

For projects that exceed a defined investment or risk threshold*, Hort Innovation requires an independent mid-term evaluation. The relevant process owner will advise whether this requirement applies. The purpose of the mid-term evaluation is to assess whether the project is on track to deliver its intended outcomes and to support course correction if needed. Projects may also include an end-of project independent review to assess whether the project has delivered intended outcomes and delivered anticipated impact*.

* To be advised by Hort Innovation at procurement or during project delivery.

What to include in your project M&E plan

Well-structured Frontiers project M&E plans align to the Framework and include the following:

- Program logic, with clear articulation of the project’s impact pathway, showing how activities are expected to contribute to Hort Innovation’s strategic goals, alignment to appropriate Frontiers investment pathway and the relevant fund outcomes (where appropriate)
- Scope, purpose and intended audience for the M&E activities, including who will use the results
- Key Evaluation Questions (KEQs) are often used to guide data collection to support this (guiding KEQs included in Framework)
- Performance expectations for assessing project performance against agreed indicators or measures
- M&E data collection, collation, synthesis, and analysis details on how M&E data will be collected, collated, synthesised, and analysed—including methods, data sources, and responsibilities
- Reporting how and when M&E findings will be communicated to stakeholders.

Each of these requirements is outlined in more detail in the following sub-sections. The *Frontiers project M&E template* reflects each of these sections, and is available [here](#).

1. Program logic

What is program logic?

Program logic is a thinking tool used by Hort Innovation to:

- Define the impact pathway and outline how project activities are expected to lead to outputs, outcomes, and ultimately contribute to Investment Pathway outcomes.
- Clarify assumptions and linkages through identifying underlying assumptions and connections between different elements of the project, helping to ensure coherence and alignment.
- Support M&E and facilitate reporting on progress and achievements of projects.

The Framework illustrates the Frontiers Program logic model, which forms the foundation of how the program is expected to deliver impact. **Table 1** outlines the Hort Innovation levels and definitions for program logic at the ‘project’ investment level and how this corresponds to the Framework.

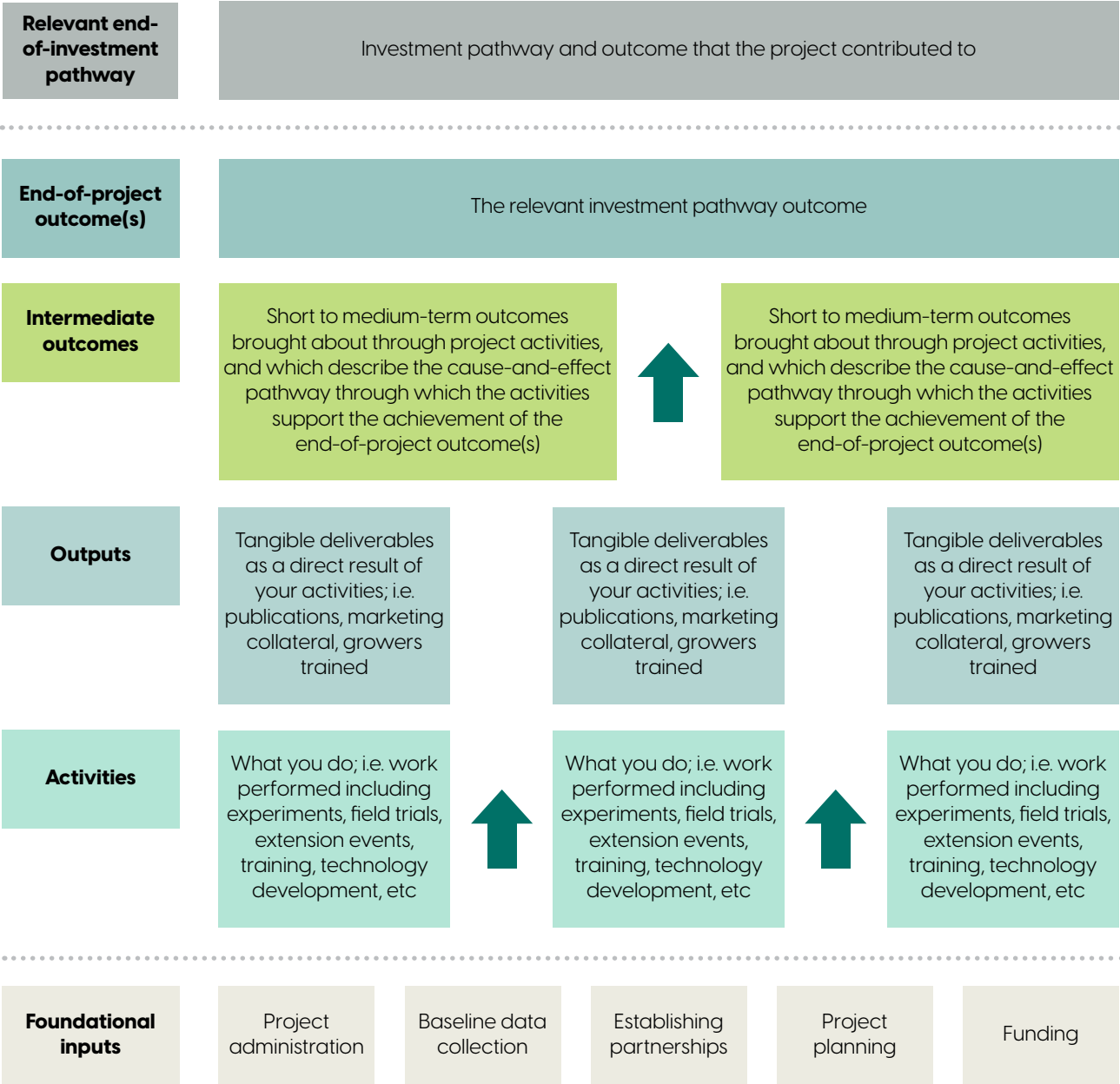


Table 1. Project level logic hierarchy

End-of-investment pathway outcomes	Frontiers investment pathway outcomes that the project is ultimately expected to contribute towards. The project must demonstrate contribution to the relevant end-of-investment pathway outcomes. Example: Innovation Partnerships: Strategic partnerships formed with stakeholders to accelerate innovation in horticulture.
The 'line of accountability'	
End-of-project outcome(s)	These outcomes are the bespoke and desired result of the project, and represent the project's unique contribution to the end of investment pathway outcome. They represent what the project could be reasonably expected to achieve given the level of investment and the timeframe for delivery (though some outcomes may be realised after the project period). Includes: practice or behavioural changes; adoption; incremental improvements stimulated through R&D; use of new information/protocol/technology; increased recognition of Australian horticulture products; increased consumer demand; improved product quality; commercialised intellectual property (IP). Example: Develop a deeper understanding of how observable traits (phenotypes) in tree crops are influenced by the underlying genetic mechanisms linked to productivity.
Intermediate outcomes	Short- to medium-term outcomes brought about through project activities, and which describe the cause-and-effect pathway through which the activities support the achievement of the end-of-project outcome(s). Includes: changes in grower Knowledge, Attitudes, Skills and Aspirations (KASA); marketing campaign brand health; access to new information; training accessed by growers. Example: Efficient molecular analysis methods (e.g. hormone profiling) established and operational for tree crops.
Outputs	Project outputs are the tangible products or services (deliverables) that are produced from the project activities. These include: publications; data; field trial and experiment results; minor use permits; new farm management protocols or standards; new technology; marketing campaigns and collateral; training/extension events delivered; industry development services; trade shows; study tours; reports; patents; prototypes; new varieties or technology. Example: Target genes and regulatory networks identified, with gene expression and metabolite data collected from field and/or glasshouse experiments focused on key physiological traits
Activities	The activities delivered by the project to bring about the desired changes, and the immediate effects – or tangible deliverables/outputs (products or services) – of those activities. The activities are what projects are funded to do. Activities include collecting field trial data, conducting consumer surveys, conducting an information event, product quality sampling. Example: Collection of samples from field trials and/or glasshouse trials for analysis.
Foundational activities	Preliminary or 'preparatory' activities that are important for the success of the project but are not directly associated with changing or influencing the external environment as project activities are. Foundational activities include: establishing a project team; outputs from previous or linked projects; data sets; a new variety, protocol or technology that is to be extended in your project; scoping study results. Example: Partnerships and baseline data established.

Figure 2 provides a template example of how program logic for a Frontiers project investment could be represented in a visual hierarchy. When developing a program logic model, it's important to begin with the end in mind, considering what contribution the project is seeking to deliver for the beneficiaries and how this is aligned to the relevant industry end-of-investment pathway outcome, Framework and KPIs.

Figure 2. Program logic template example for a Frontiers project investment



2. Project monitoring and evaluation scope

The scope of a Frontiers project M&E plan will be underpinned by the KEQs that will guide data collection and inquiry for the project.

Key evaluation questions

KEQs are overarching questions that guide evaluative inquiry of Frontiers investments. They form the basis of data collection but are not the same as survey questions.

Table 2 outlines examples of KEQs which will support reporting against the *Frontiers project M&E framework* (Framework). These are included to provide a guide to the types of questions which should be asked and what category they are associated with. For further examples, please access the Framework [here](#).

KEQs should be tailored to each specific project and using the Framework is a great place to start when forming questions which are:

- Relevant to the project
- Supportive of reporting against the Framework.

Table 2. Key evaluation questions relevant at the project level

Domain	Key evaluation questions
Effectiveness	1 To what extent has the project achieved its expected outcomes?
Relevance	2 How well does the project activities align with the current needs and priorities of the horticulture industry, or individual business needs?
Process appropriateness	3 How effective are the projects' governance and management structures in supporting the project implementation?
Efficiency	4 What efforts did the project make to improve efficiency?
Value for money	5 How does the project contribute to the long-term financial sustainability and value creation of the horticulture sector?
Impact	6 Have growers/industry/supply chain stakeholders seen a measurable benefit resulting from the project?

Definitions of domains

Effectiveness: the extent to which an intervention (a project) has attained (or is expected to attain) its intended outcomes.

Relevance: the extent to which the expected outcomes of an intervention are consistent with beneficiaries' requirements, government priorities, etc.

Appropriateness (process): the extent to which a project/program is operating as intended.

Efficiency: the extent to which an intervention produces outputs and outcomes without wasting time, money, effort or other resources.

Value for money: the extent to which resources were used in a way to achieve the desired outcomes.

Impact: the extent to which significant change has resulted from the project/program.

3. Key performance indicators

Performance expectations such as key performance indicators (KPIs), standards, or measures can be set for assessing the performance of the project in achieving its intended outcomes. Performance expectations can be expressed quantitatively as a measure or an indicator, qualitatively as a set of standards or criteria, or as a combination of both. The Framework provides program aggregated key performance indicators at an investment pathway level and can be used to inform project KPIs. Examples of performance indicators for the Frontiers program are as follows:

Quantitative

- Number of partnerships formed with innovators and/or growers
- Amount of co-investment secured from partners
- Number of expressions of interest received
- Increase in cost income or cost savings for growers
- Measured improvements in productivity, sustainability and/or productivity
- Return on investment.

Qualitative

- Changes in growers' Knowledge, Skills, Attitudes and Aspirations {KASA}
- Feedback from partners on collaborative effectiveness
- Increased engagement.

The Framework also includes a collection of core KPIs which each Frontiers investment is expected to incorporate into reporting should it be relevant to the investment and are as follows:

- Number/per cent of growers engaged – KASA
- Number/per cent of partners engaged – KASA
- Number of R&D trials
- Number/per cent of hectares covered/engaged
- Number of new products or services available to growers
- Number of new products or services with anticipated environmental benefits
- Number/per cent of improvements in environmental sustainability
- Number of products or services with anticipated social benefits
- For all investments with Technology Readiness Level of 6 or above, what is the expected ROI?

For these core KPIs, delivery partners are to work with Hort Innovation process owners to determine relevance of inclusion in the investment.

4. Data collection, collation, synthesis and analysis

Data collection can include a range of quantitative (numeric) or qualitative (descriptive, text-based or visual) information. Importantly, data collection methods must be fit-for-purpose, addressing the information needs defined by KEQs and performance expectations. To overcome data gaps or quality issues, use multiple collection methods where possible.

Table 3 provides a suggested format for identifying data collection methods and linking project outcomes, performance measures and data collection methods. This table forms the foundation of an effective M&E plan, ensuring a balanced system that identifies what to monitor at all levels – outputs, intermediate outcomes, and end-of-project outcomes.



Table 3. Project monitoring plan

Program logic level	What to monitor Insert aspects of the project to be monitored, for example, grower groups, trials, improved awareness or knowledge, application of a new technology	Performance expectations KPIs	How to monitor Suggested methods	Data source Target audience	When	Responsibility Who is responsible for the monitoring and how will results be reported
Activities	What you do, such as field trials, farm days	Number of trials Number of extension activities	Record keeping	Growers Advisors	Ongoing	Organisation/ specific project team member Milestone Reports Final Report
Outputs	Tangible deliverables as a direct result of your activities	Number of articles Number of publications Extension participation (number of growers) Number of minor use permits New technology or variety or protocol Number of partnerships established Number of business plans developed	Record keeping	Growers Advisors Exporters Packers	Ongoing	Organisation/ specific project team member Milestone Reports Final Report Industry reports/publications
Intermediate outcomes	Changes in Knowledge, Attitudes, Skills and Aspirations (KASA)	Increased knowledge/use of information by number of growers Number/per cent of audience reached Increased economic benefit for growers Number of commercial outcomes met Increased ROI from investments	Event questionnaire Observation Interviews Surveys Case studies Website/marketing analytics Record keeping	Growers Advisors Processors	Intermittent i.e. annually As required for evaluation	Organisation/ specific team member Independent reviewer Milestone Reports Final Report Industry reports/publications

Table 3. Project monitoring plan (continued)

End-of-project outcomes	Frontiers project outcomes	Uptake and adoption targets because of the project	Interviews Surveys Case studies	Growers Exporters	As required for evaluation	Organisation/ specific project team member
		Number of practice changes by percentage of production base	Industry data/ benchmarks			Independent reviewer
		Increased yield by number/per cent	Record keeping			Final Report
		Increased consumer recognition				Evaluation Report
		Number/per cent increased sales/exports				
		Number/per cent increase in water use efficiency				
		Number/per cent increase in product meeting minimum quality standards				
		Increased investment in in high-growth early stage start-ups				

5. Evaluation

Evaluation has two forms:

- Internal evaluation:** This involves making evaluative judgements using monitoring data collected throughout the project, along with any additional data gathered at the point of evaluation. Delivery partners must answer KEQs through self-assessment or expert judgement
- External evaluation:** This involves commissioning an independent evaluation study to review existing data, collect new data if needed, and make evaluative judgements. This may also include an end-of-project evaluation commissioned through the project to independently understand outcomes and impact.

In both cases, evaluation is defined by the act of making judgements about the worth or merit of a project – particularly in relation to its performance expectations and delivery against KEQs. Evaluation helps answer the critical question: “so what?” following project delivery.

6. Reporting

Project investments must demonstrate their performance, relevance and ‘so what’ by using M&E findings to communicate results to Hort Innovation, growers, and other industry stakeholders. The final report will present evidence of how the project has addressed its KEQs, achieved impact and met its performance expectations, while also showing how these achievements contribute to broader fund-level outcomes. Progress against M&E activities is to be reported throughout the project via milestone reporting.

Hort Innovation uses these reports to inform Frontiers performance analyses, contribute to the annual reporting process and requirements, and support ex-post impact assessments.

Share your thoughts

We strive to provide the best experience possible for our delivery partners. Please share your feedback on how we can improve this document for you and other delivery partners in the future by emailing us at communications@horticulture.com.au



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