

PROGRAM LOGIC

1. WHAT IS PROGRAM LOGIC?

Program logic is a thinking, planning and implementation tool that describes and diagrammatically represents how a project, programme or strategy *intends* to impact social, economic and political development in a given country, region or context.

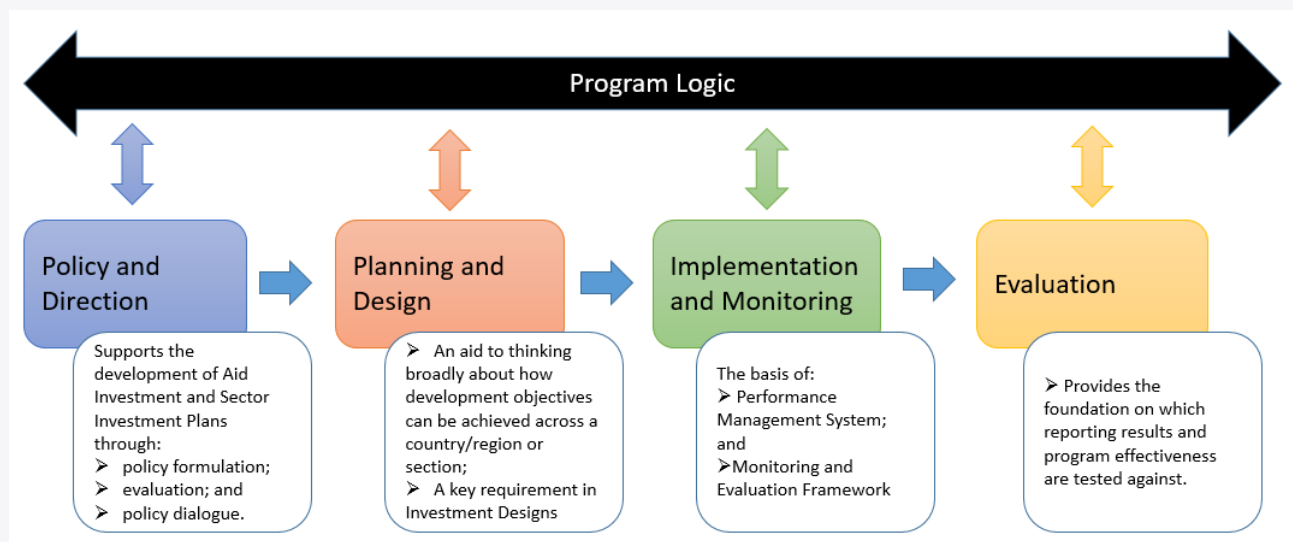
Program logic describes the stepping stones between an activity and a desired change. It helps us to be clear about where we want to get, set out how we think we will get there and *actively* manage for that along the way. Later it helps us monitor, evaluate and report on progress.

2. WHY DEVELOP PROGRAM LOGIC

To ensure there is a clear line of sight from our investments to Australia's aid objectives and the broader development goals we share with the countries we work in. Program logics are good practice across government, and a sound program logic is required for all DFAT aid investments under the investment design quality standards.

3. WHERE IS PROGRAM LOGIC USED?

Program logic is most commonly used at investment level to help clearly articulate the investment design and to monitor and evaluate the investment. It can also be used to support the design of Aid and Sector Investment Plans, and to identify what should be monitored and reported in performance assessment frameworks.



4. WHAT DOES PROGRAM LOGIC LOOK LIKE

Program logic is usually presented as a diagram with a supporting narrative. The diagram illustrates the links between what we do (inputs and activities) and the results we wish to achieve (outputs, outcomes and objectives). The narrative is used to describe the evidence behind the model, to articulate the underlying assumptions and present the casual pathways (i.e. how change will happen) in the model.

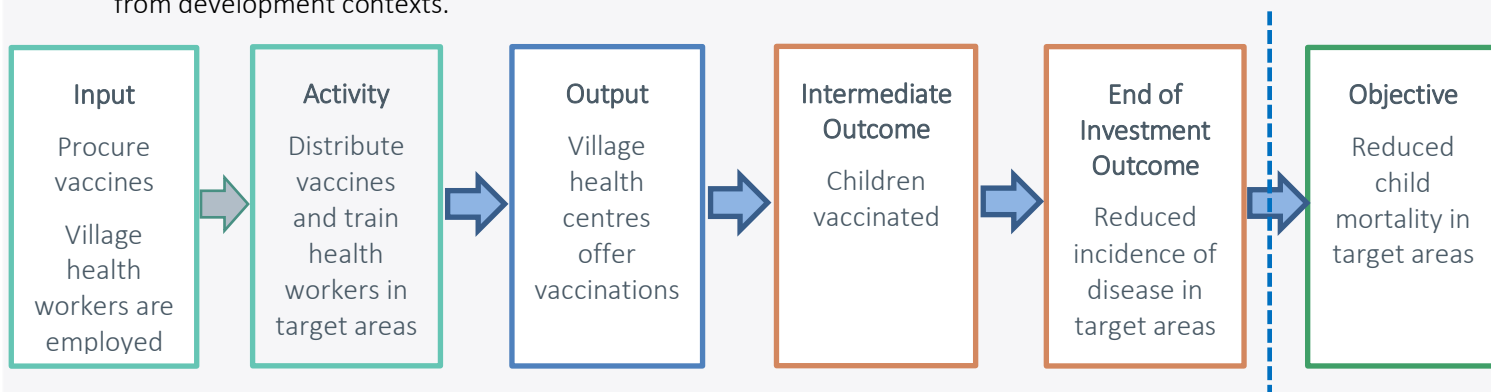
We use the following terminology explain the levels in a program logic:

Goal	The higher-order purpose to which an aid objective is intended to contribute. Development goals are normally specified in national development plans and shared goals may also be identified in agreements between the Australian Government and a development partner. Australia contributes to the achievement of these goals as does the partner government and various other development agencies.
Objective	DFAT’s country and regional programs have development objectives which are the physical, financial, institutional, social, environmental, or other benefits to a society, community, or group of people produced through one or more aid investments. Australia’s aid objectives contribute to the achievement of higher-level national development goals. The achievement of our aid objectives is the sole responsibility of Australia.
Outcome	<p>End-of-Investment Outcome The desired development change that can be achieved within the timeframe of the investment.</p> <p>DFAT’s standards require outcomes to define: an ‘end state’ when the outcome has been achieved; who or what is expected to change; the type of change expected to occur: knowledge (awareness of new ideas, techniques or strategies); action (behaviour change based upon new information/ideas); or condition (organisational or societal conditions changes due to the stakeholder’s actions); and the time by which the change is expected to occur.</p> <p>Intermediate Outcome The short and medium-term effects of an investment’s outputs. Short term outcomes include changes in knowledge, attitudes, skills, while medium term outcomes often reflect changes in behaviour, practice and decisions.</p>
Outputs	The physical products, goods and services that result from a development investment. Outputs are delivered to parties external to the department.
Activity	Actions taken or work performed through which inputs are mobilised to produce specific outputs or outcomes. A single investment may include multiple aid activities.
Inputs	The financial, human, material and intellectual resources used in the aid investment’s implementation.
Investment	A commitment of resources to achieve defined outputs and outcomes. Multiple Australian investments collectively result in the achievement of an aid program objective.

Most DFAT program logics have a **line of accountability** between the End of Investment Outcome and Objective. Generally, the outcomes from multiple DFAT investments support the achievement of DFAT’s country/regional program objective. DFAT is accountable to deliver on the program logic all the way to the End of Investment Outcome. DFAT’s objective, along with many other factors (such as efforts by the private

sector, partner government, not-for profit agencies, other donors and international agencies), contribute to the Goal statement.

There are many ways to represent and describe program logic, but for illustrative purposes this note presents an example of a simple linear pipeline model for a vaccination investment. Pipeline models are usually not adequate for capturing the complexity of the relationships and feedback loops that exist in many development contexts. The reading list at the end of this note provides references to program logic models from development contexts.



5. HOW IS PROGRAM LOGIC USED?

Program logic allows us to test the validity of our logic and our underlying assumptions about how change occurs in a given context. Information from testing the logic and assumptions can be used to shape strategies and designs. For example, some assumptions may need to be factored into design activities or can be incorporated in the program risk register.

In the example above we can test each step of the causal chain:

Input to Activity:

- Testing the logic: How many vaccines were procured, distributed and stored properly to ensure efficacy and safety in each location? How many village health workers were trained (gender disaggregated)? After training, what proportion of health workers increased their ability to provide vaccinations in line with WHO guidance?
- Testing assumptions: Appropriate (refrigerated) transport is available to get vaccines to village health centres? Training is available that is appropriate to culture and context? Health workers are available for training and receptive? Gender and other inequalities have been considered and do not obstruct the process (e.g. limited mobility of women, restricted access to female-headed households, and high illiteracy among women)?

Activity to Output

- Testing the logic: What proportion of village health centres opened on vaccination days? What proportion of village health centres that conducted community information sessions or distributed posters promoting vaccination days?
- Testing assumptions: Village health centres have refrigeration facilities? Health workers are confident and appropriately skilled to conduct vaccinations? Village health workers are remunerated and motivated to provide vaccinations? Village health centres are able to effectively promote the benefits and availability of vaccinations.

Output to Intermediate Outcome:

- Testing the logic: How many boys and girls were vaccinated? What percentage of boys and girls in the village were vaccinated? Were children of the most at risk groups vaccinated? Were there any unintended consequences (positive or negative)?

- Testing assumptions: The vaccination program reached all target locations including the most geographically isolated areas in all seasons. Parents, schools, community and religious leaders support the program and permit their children to be vaccinated. There are no major movements of people to or from other areas/countries that impacted the program. Gender and other inequalities did not obstruct the achievement of outputs and were not exacerbated as a result of the program.

Intermediate Outcome to End of Investment Outcome:

- Testing the logic: Was there a reduction in the incidence of the diseases vaccinated against?
- Testing assumptions: Health Information and Reporting Systems are established and effectively capture data at village level.

End of Investment Outcome to Objective:

- Testing the logic: Was child mortality reduced?
- Testing assumptions: Vaccinated diseases were the major cause of child morbidity and mortality. Health Information and Reporting System will be maintained for a longer timeframe (i.e. at least 5 to 10 years).

6. DEVELOPING A PROGRAM LOGIC

There are four phases for developing a program logic. These are shown below.



Plan

Establish a work plan specifying the scope of the task including the quality assurance processes. The time and resources allocated to prepare your program logic should be proportionate to the significance of the program or the sector within that program. Identify the team members who are critical to the logic development and to quality assure the logic.

Having a sound evidence base is critical for a good program logic. Identify relevant experts, agency policy documents, available evidence and analysis and identify any gaps requiring new research and analysis to be commissioned.

Establish the Terms of Reference for a program logic workshop/s and arrange facilitator(s) (see example terms of reference for commissioning a program logic workshop). In many design teams there is a Monitoring and Evaluation Specialist who can support the team to develop the program logic. Alternately, DFAT staff can lead the development of the program logic. It is recommended that staff without prior experience, complete the DFAT program logic training course. One source of consultants to facilitate the work is the Aid Advisory Services Standing Offer Panel.

Develop

The process for developing your program logic is as important as the product. The development of the program logic is often most effective through a workshop, or series of workshops, that brings together key participants from the program team (especially senior decision makers) with project stakeholders and deep country/regional/sectoral knowledge and experience and sectoral/thematic specialists/advisors. Through a staged facilitation, the group carefully develops a clear 'battle plan' describing what they are doing and how they think this will lead to positive and negative changes.

Note that the logic is unlikely to be complete after the initial workshop, and there may need to be a follow-up workshop to confirm the logic, or circulation of the program logic after the workshop.

If it is not possible to run a workshop you can try the following:

- Interview key people and develop a draft from this
- Develop a draft model yourself then circulate
- Hold teleconferences to discuss the key points
- Circulate examples by email etc.
- Create it with one group of people and get a second group to critique it

Regardless of which approach you take, it is critically important that the team involved in developing a program logic share a common understanding and have ownership of the process as well as the product. Care needs to be taken if an external consultant is engaged and works without sufficient consultation with the program team.

Quality Assure

The following review questions are a guide to quality assuring your program logic to ensure that it is fit for purpose and informs effective investment design, implementation, monitoring, evaluation and reporting.

Review questions. Use **SPECTOR** to check that the program logic is sound. The program logic should be:

- **Simple:** Presented in plain English and easy for non-specialists to understand.
- **Plausible:** There is a clear line of sight from the inputs and activities all the way to the end of investment outcomes.
- **Evidence-Based:** The program logic is supported by evidence and analysis.
- **Cause and Effect is clear:** There are no miracle logic leaps. The narrative is coherent.
- **Testable:** You can you build a monitoring framework from it. The change pathways are clear.
- **Owned:** Stakeholders and partners were actively involved. The program team owns the logic. It is clear how this contributes to Australia's and Partner priorities.
- **Risks identified:** Assumptions and risks are clearly documented. Gender equality and other cross-cutting issues are adequately reflected in the logic.

Apply

The major benefits from applying a program logic occur when:

- An investment manager can clearly articulate how their investment contributes to development
- The logic is regularly re-visited to test the logic and assumptions (using evidence collected in monitoring)
- This evidence is used for program reporting, and to manage and adapt the program.

If used appropriately, program logic helps us produce better strategy, communicate more clearly and manage our investments more effectively:

Using program logic for better strategy

- The basis for investment plans and design development
- Understanding how positive change can be supported
- Exploring a range of options – not just 'business as usual'
- Informed by evidence

- Providing a rationale for a cohesive and consolidated program of investments
- It allows us to set realistic and achievable aid outcomes at appropriate levels and to plan how we will contribute to them.

Using program logic to facilitate communication

- Showing how our investments will make a difference
- Building programs based on shared understanding
- Program logic inspires and supports innovation and improvement in programs
- Documented program logic can be used as a communications reference when staff turn over
- Developing a program logic can also help other stakeholders reach a shared understanding of what aid can add to other efforts, and the reasoning that drives the application of Australia's aid.

Using program logic for results-based management

- The basis for the development of an M&E Framework or Performance Assessment Framework
- Allows for robust on-going adaptive management
- Strong basis for monitoring, evaluation, evidence-based performance reporting, and learning.

7. SUPPORT AND REFERENCES

Topic	Section	Contact
Introduction to Program Logic training module	Aid Management Systems and Training Section, MPB	AMT@dfat.gov.au
Draft consultant TOR: Facilitated Workshop for Development of a Program Logic	Program Planning and Reporting Section, MPB	programplanning@dfat.gov.au
Aid and Sector Investment Plans	Program Planning and Reporting Section, MPB	programplanning@dfat.gov.au
Investment concepts and designs	Investment Design Section, MPB	designmail@dfat.gov.au
M&E, Performance Assessment Frameworks, results, performance benchmarks, mutual obligations	Performance Benchmarks & Implementation Support Section, MPB	development.results@dfat.gov.au

Further reading

Funnell, S.C. & P.J. Rogers (2011) *Purposeful theory of change: effective use of theories of change and logic models*. John Wiley and Sons, San Francisco (DFAT Library has copies)

Theory of Change Resource List

<http://www.capacity.org/capacity/opencms/en/topics/change-facilitation/theories-of-change-resource-list.html>

Taylor-Powell, E., & Henert, E. (2008) *Developing a logic model: Teaching and training guide*. Madison, WI: University of Wisconsin-Extension, Cooperative Extension, Program Development and Evaluation
<http://www.uwex.edu/ces/pdande/evaluation/pdf/lmguidcomplete.pdf>

Tips and Challenges on Team Building with Theory of Change (*a useful note on participatory processes*)
<http://www.theoryofchange.org/pdf/teambuilding.pdf>