

Logic Model

The logic model (LM) is a tool for project planning that is used widely in relief and development programs. The development of the LM takes planners through a series of steps to define in general terms what the project or program will accomplish and how.

The LM also provides a quick overview of the program logic that can be used to present a project to potential supporters and help identify gaps in project planning. Bear in mind that, while the LM is a useful tool, the process of developing it is as, or more important, than the end product.

The LM is divided into 6 distinct sections – inputs, activities, outputs, immediate outcomes, intermediate outcomes and ultimate outcome. Each of these components represents a step in the causal logic of a program. See the next page for LM examples.

1. Causal Relationship

The LM illustrates the steps that must take place in order to achieve the project's ultimate outcome. The inputs and activities are expected to result in specific **outputs** that lead to other changes in the community (**immediate and intermediate outcomes**) that in turn contribute to the overall purpose of the project (**ultimate outcome**). This chain of events – sometimes referred to as the "project logic" or "results chain" – shows the causal relationship between the activities and the project's results, based on the project cycle (see tips 101).

Distinguishing between outputs and outcomes is relatively easy to do when developing a LM. An output summarizes a group of completed activities done by the implementing partner. In these situations, the implementing partner has a significant amount of control in making sure the activities are done to achieve specific outputs. This control diminishes in the transition from the output to the outcome level. The outcomes are about changes in accessibility, skills, behaviors and practices of the project beneficiaries. For a food aid project, the output of a completed food distribution is the responsibility of the implementing partner. Increased food consumption, an intermediate outcome, is a change of practice that happens at the household level. Although the implementing partner can influence whether an outcome is achieved, their direct responsibility and activities are primarily at the output level.

Distinguishing between immediate outcomes and intermediate outcomes is more challenging and should begin by simply observing if there is a causal relationship between the two – **does the immediate outcome lead to the intermediate outcome?** In addition to the causal relationship, there is always a chronological separation

between immediate and intermediate outcomes. Immediate outcomes are short-term results and occur before intermediate outcomes which are longer-term in nature. In a food security project, an example of an output could be the delivery of workshops on growing drought tolerant crops. The immediate outcome would then be farmers planting these crops in the field (short-term result) and the intermediate outcome would be increased food production and food reserves (longer-term result).

The ultimate outcome generally represents a higher level of change that the project is working towards, but generally does not accomplish during the project's timeframe. The ultimate outcome of all projects supported by the Canadian Foodgrains Bank is improved food security.

In the end, the most important point to remember is that there must be a logical link between each of the LM components. On the next page, there are two LM examples. Although some components of the LM examples might be similar to your project, others will need to be adjusted to reflect the focus of your project.

2. Developing a LM

The first step in developing a LM begins with a situation assessment and analysis to clearly define the problem. As an example, assume that our analysis shows that 500 households are food insecure in a specific district. We may use a tool like the **problem tree** (tips 103) to define the roots of this problem. Having described the problem and potential solutions, we can begin to plan our project.

The next step is clarifying what are the outcomes that we are trying to achieve with this project, and then work our way back to the activities and inputs that are required in order to achieve those results. It is best to begin with defining the ultimate outcome, and it may be improved food security for 500 households in a specific area. One of the causes of food insecurity identified in our analysis could be that households are not getting enough food to eat because of poor harvests following a drought when everyone lost their seed and sold their tools. Therefore, one of our **intermediate outcomes** may be to increase agriculture production. One of the **immediate outcomes** required to achieve this **intermediate outcome** could be the adoption of improved farming practices by farmers. The **activities** would include running workshops to introduce improved farming methods, an activity and responsibility of the implementing partner. Farmers may require certain **inputs** such as seeds or tools to practice the improved farming method, especially if the farming method involves the introduction of new seed varieties.

Once we have defined the three outcome levels, outputs, activities, and inputs, check the logic by moving back and forth, or up and down within the LM. You can follow the logic as a series of IF-THEN statements: IF we have these inputs (trained personnel) and do these activities (run workshops on improved farming methods), THEN we will achieve specific outputs (completed workshops). IF we have these outputs, THEN we should see specific immediate outcomes (farmers implementing the improved

farming methods in their fields). IF we achieve these immediate outcomes, THEN we should see intermediate outcomes (increased food production). IF we achieve this outcome, we should see this ultimate outcome (improved food security).

Developing a strong LM comes with experience, and usually requires a significant amount of adjustment until it reflects a clear logical structure of the project.

LOGIC MODEL DESCRIPTION AND EXAMPLES

HOW?			WHAT?		WHY?
INPUTS	ACTIVITIES	OUTPUTS	IMMEDIATE OUTCOMES	INTERMEDIATE OUTCOMES	ULTIMATE OUTCOME
Human and physical resources	The things you "do" with your inputs – the actions	Product or service stemming from a completed group of activities	Short-term results emerging from the outputs that often represent a change in knowledge or skill	Medium-term results emerging from immediate outcomes that usually represent a change in behavior or practice	Longer-term results emerging from the intermediate outcomes that the project is working towards
FOOD AID EXAMPLE					
Food Funds Vehicles Personnel Warehouses Office supplies	Registration and verification of beneficiary households Procurement and delivery of food to warehouse Warehousing control and dispatch Food distribution	Registration and verification of beneficiary households completed Commodities procured Monthly food distributions completed	Increased food availability for beneficiary households	Increased food consumption by beneficiary households	Improved food security for displaced people living in X region
AGRICULTURE FOOD SECURITY EXAMPLE					
Funds Vehicles Office space Office supplies Base camp Tools, seeds and cassava cuttings Personnel	Community meetings Registration of beneficiaries Purchase and distribution of tools, seeds and cassava cuttings Farmer trainings on crop management and drought tolerant crops Follow-up farmer visits Field days	Tools, cassava cuttings and maize seeds distributed Farmer trainings on crop management and drought tolerant crops completed Follow-up farmer visits conducted Field days organized	Increased adoption of improved agriculture production methods Increased planting of drought tolerant crops	Increased agriculture production Increased proportion of annual household food needs produced	Improve the food security of 500 drought affected households in X region

Resources

Managing for Change: Introducing the Art of Results Based Management

<http://www.foodgrainsbank.ca/uploads/RBM%20primer%20Splash%20and%20Ripple%20Jan09.pdf>

RBM Tools at CIDA: How-to Guide

[http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLImages/Public_Engagement/\\$file/RBM-How-to-Guide-e.pdf](http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLImages/Public_Engagement/$file/RBM-How-to-Guide-e.pdf)

For more information on the project cycle, or other issues related to planning, monitoring, and evaluation, the Canadian Foodgrains Bank (cfgb@foodgrainsbank.ca).