

Basic Elements of the Logical Framework Matrix

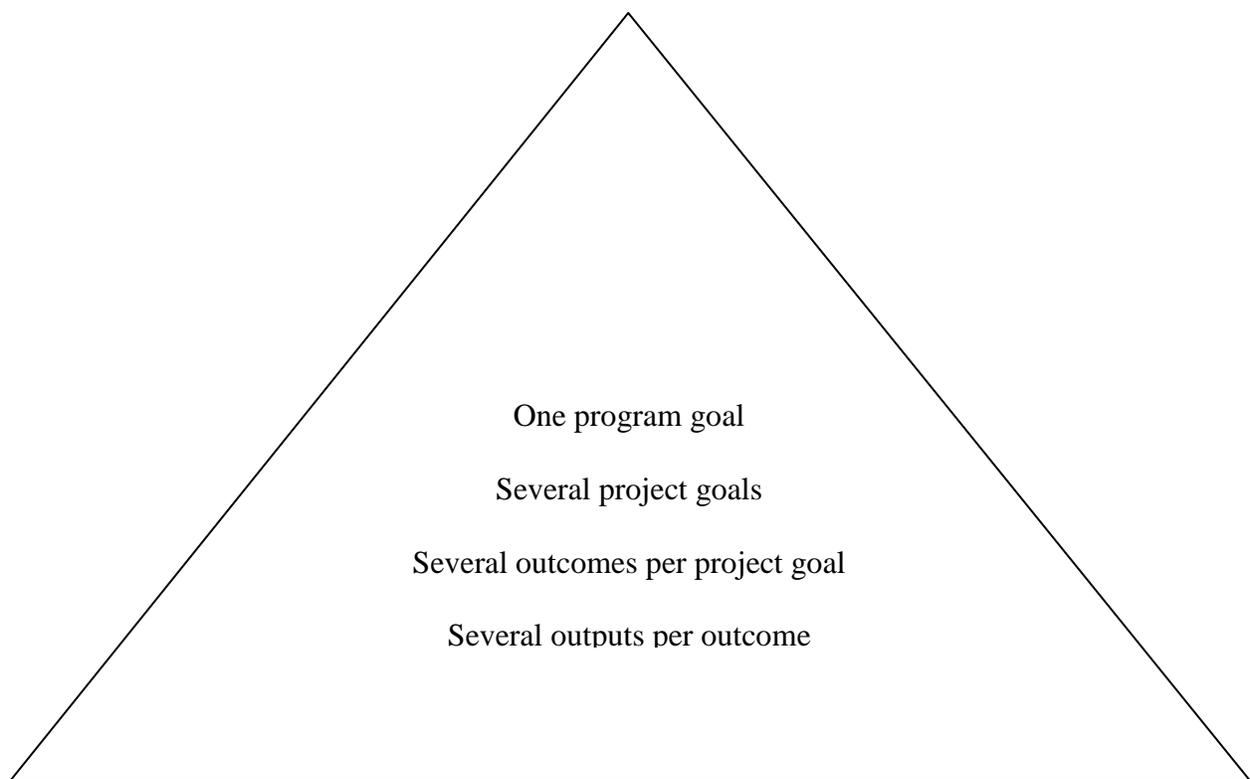
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[Note May 2014. Searching “logical framework matrix” with Google on the internet will generate resources with diverse descriptions of the matrix elements. Explore the images and the other resources for current descriptions. The discussion in this paper is still relevant for those who have little knowledge about the topic.]

There are two fundamental ideas in logical framework analysis that you must understand thoroughly before the framework approach makes sense.

One fundamental idea is that realization of a complex goal requires orchestrating a group of cause-effect relationships in a logical hierarchy, or a logical pyramid.

The other fundamental idea is that results at higher levels of the hierarchy (toward the top of the pyramid) are less predictable than relationships at the lower levels. You can control the results much better at the lower levels than you can at the upper levels.



Introduction

The logical framework is an approach to project planning that encourages teams and organizations to think through the logical connections between the use of resources, immediate project outcomes, and long-term goals and impact. The matrix that characterizes this approach is a summary of agreements about project design. As a team of stakeholders builds a logical framework, consensus is developed on the pillars of the project design and placed in the matrix.

The approach was developed in 1970 for the United States Agency for International Development (A.I.D.) in response to concerns about doing sound program evaluation. A consulting group determined that before evaluation could answer the question, "Did the program work?" the aims of the program had to be specified clearly at several levels. The logical framework is the tool designed to show the causal connections and underlying assumptions in a project design. It is a group of IF-THEN statements, along with ASSUMPTIONS that must be true for the statements to be valid.

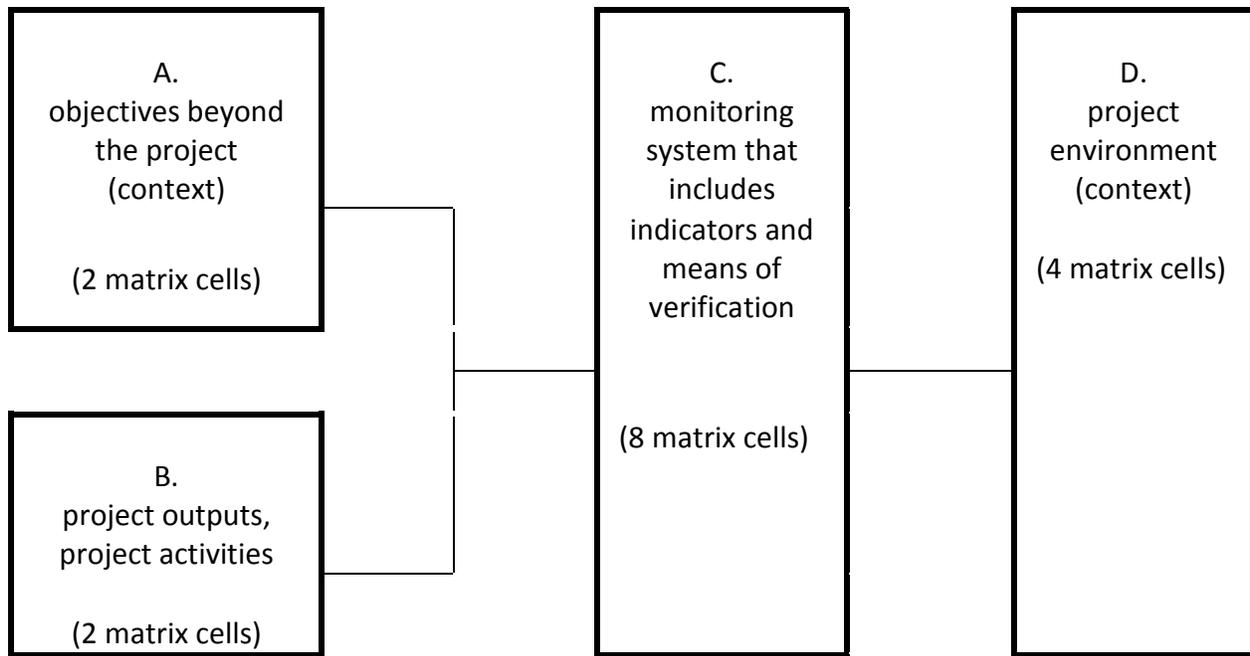
There are two ways to use the logical framework approach in project monitoring and evaluation work. First, and most common, the logical framework for the program describes the intended outcomes and impact, along with what should be observed if the program is successful. These elements in the logical framework provide core information needs for a monitoring system and an evaluation design. If a logical framework was not prepared as the project was planned, the evaluator can assist the appropriate stakeholders to prepare one early in the process of planning an evaluation.

Second, the evaluation itself can be regarded as a project, and the logical framework can be used as a planning tool to design the evaluation.

This discussion is based on the discussion of basic elements in the manual for the computer software package PC LogFRAME R&D, with the addition of the notion of the monitoring system as the primary management tool to track actual project outputs against both the broad objectives and the influence of external factors in the project environment.

Different approaches to logical framework analysis use terms such as goal, super-goal, purpose, aim, objective, impact objective, indicator, and means of verification in different ways. Although this can be confusing, it is a fact of life. If you understand the underlying logic for logical framework analysis, you will be able to sort out quickly any confusion in a particular application. Study the following paragraphs carefully until you understand them well.

Exhibit 1. Three Elements plus Monitoring System



There are 16 cells in the typical logical framework matrix (see Exhibit 2 below). These 16 cells are grouped into three basic elements (A, B, and D in Exhibit 1) plus the monitoring system (C in Exhibit 1). One of the elements is the project itself (B in Exhibit 1), while each of the other two elements (A and D in Exhibit 1) is part of the context within which the project will be implemented. Exhibit 1 is a diagram of the project, two contextual elements, and the monitoring system overlaid on the 16 cells.

The first context element (A in Exhibit 1) includes 2 cells that describe the purpose of the project, and the linkage between that purpose and the broad development goal that is to be achieved in conjunction with other projects. This element can be called the **broad objectives** or aims of the project, *which are beyond the control of the project*. No single project can transform society or a group of communities or individuals. Within the logical framework approach, it is assumed that a group of projects with similar or integrated goals is required. In World Vision, the primary example is a group of ADPs in a country. Each ADP has the aim of facilitating transformational development that empowers people to manage their own development so that the basic needs of every person are met in a way that allows them to be what God created them to be. A single ADP cannot achieve that aim. Thus the goal and purpose statements of a project design describe the broader objectives or aims that are to be achieved if the project is implemented successfully, *and all other related projects are implemented successfully*.

The second context element (D in Exhibit 1) is a group of 4 cells that describe the primary external factors related to goal, purpose, outputs and activities that are beyond the control of the project. These factors are described explicitly in terms of events, conditions or decisions that must be assumed for the logic of the project to be valid. This element is called the **project**

environment. Together, the broad objectives or aims (element A) and the project environment (element D) form the context for a particular project.

The third element (B in Exhibit 1) includes two cells that describe the project activities and the outputs that those activities will produce. This element is called the **project**; it is what can be managed by the implementing agency as its contribution toward the broader purpose and goal. The agency is held accountable for using resources efficiently to produce the intended outputs effectively. *The agency is not held accountable for achieving the project purpose and project goal (A in Exhibit 1),* since both are dependent on the quality of other projects or programs outside the control of the project.

Effective **monitoring systems (C in Exhibit 1)** must track progress toward objectives and the potential risk to success posed by influential external factors that cannot be controlled by project management. The monitoring system includes 8 cells in the logical framework matrix. Four cells describe target indicators for determining if activities were completed as planned, and if the actual activities produced the intended outputs. In addition it describes estimates of results if the actual outputs achieved the project purpose, and estimates of impact if the actual project achievements contributed toward the fulfillment of the larger development goal. The other four cells describe the procedures for collecting the information that will verify whether targets and estimates were reached or not reached.

The matrix in Exhibit 2 uses the terminology in PC LogFRAME R&D for columns and rows. The descriptions in each cell are in Cookingham's words.

Exhibit 2. The Logical Framework Matrix

	S summary	I indicators (targets)	V verification procedures	A assumptions (risks)
	IF this column makes logical sense to those with appropriate knowledge and experience, THEN the theory of action is reasonable.	IF you see this in the situation, THEN you know that the hierarchy of objectives is being accomplished.	IF you use this monitoring system, THEN you can keep the project on track toward the targets.	IF you clarify realistic uncertainties, and extreme threats outside your control, THEN you can design a more useful monitoring system.
G goal (rationale)	IF this goal is fulfilled, <i>and the assumptions are true</i> , THEN the desired development impact will occur in the target groups.	Estimates of sustainable impact.	Impact evaluation design.	Events, conditions, decisions required to sustain development progress.
P purpose (why)	IF this limited change is achieved, <i>and the assumptions are true</i> , THEN the project will make its contribution toward the broader goal.	Estimates of anticipated results.	Project process monitoring system, end-of-project evaluation.	Events, conditions, decisions required to fulfill the goal.
O outputs (what)	IF these 5-7 outputs are produced, <i>and the assumptions are true</i> , THEN the purpose will be achieved.	Realistic performance targets for each output.	Project outcome monitoring system.	Events, conditions, decisions required to achieve the purpose.
A activities (how)	IF these 3-5 activities per output are completed, <i>and the assumptions are true</i> , THEN the outputs will be produced.	Goods and services required to undertake the activities.	Monthly activity and financial reports.	Events, conditions, decisions required to produce the outputs.

Levels of goal and outcome statements

A goal statement describes some desirable change that can be attained by prolonged effort and hardship. Such statements can be arranged in a hierarchy according to the time and complexity

of the effort required for the change to occur. Logical framework analysis shows the hierarchy of goal and results statements for a particular program.

Terms such as "aim," "goal," "purpose," "objective," and "target" are used to designate different levels in the hierarchy. Unfortunately, different authors use the same terms in different orders. For some authors an objective is regarded as a sub-goal. For other authors, a goal is regarded as a sub-objective.

Exhibit 3 is one example of a hierarchy. Different agencies use different terms, but the principle is the same. The example for each level is defined in relation to the levels above or below it. As the length of the project varies, feasible results at each level will vary.

Exhibit 3. Hierarchy of Statements for Project Goals and Results

Description of Goal Statements ordered from long-term change to immediate change

Description of Results for each level of goal statements

Aim. Project aims are goals which describe those long-term desired impacts for the project, but which cannot be achieved by the project alone. Improvement in the quality of life for families in the community is a typical community development aim.

Impact. Impact refers to changes in conditions that have occurred as a consequence of forceful or irresistible outcomes. It refers to vital changes that have occurred in people's lives in part because a project was implemented. Generally impact measures are obtained some time after a project has been closed by the agency.

Goal. A goal is a written statement that describes one final desired outcome in the project. A combination of objectives must be achieved to realize the outcome. A typical goal is implementation of an effective primary health care system. (The term "purpose" may be used at this level.)

Outcome. The outcome statements describe expected results related to achieving goals as project beneficiaries use project outputs or live in a better environment for quality of life. Example: as families follow the advice of community health workers, there is less disease and fewer deaths in the community.

Objective. A project objective is an intermediate goal, or a description of change that is to be achieved as a step toward achieving a goal. A group of targets must be achieved to realize the objective. A typical objective is to ensure children receive adequate food for good health.

Intermediate result. Example: as families follow the advice of community health workers, the number of malnourished children decreases.

Work target. A work target is a short-term objective, or a description of desired change after completing a set of activities. A typical target is to conduct a one-day seminar on monitoring children's weight to identify malnourished children.

Output. Outputs are the specific products or services that are produced by an activity with its inputs. Women who acquire knowledge and skills in a training event sponsored by the project is an output.

Role of assumptions in the logframe

An assumption in the matrix describes a condition that must exist in a program environment as an objective is completed, but that condition is outside the control of the project. Such conditions are potential obstacles to achieving objectives at different levels. Both the completed objective and the condition are necessary to function as a causal factor in completing an objective at the next level in the logframe hierarchy. Note that the function of the assumption in a logframe is to identify a necessary condition that is necessary to achieve the *next level objective*. It points to potential obstacles whose effects need to be mitigated.

The description of an assumption is an answer to the question: “In addition to achieving the objective at this level, what else must be true before the objective will have the desired effect on the next level objective?”

Following the same logic, an assumption can describe a condition that must exist as an activity is completed. Both the completed activity and the assumption are necessary to function as a causal factor in completing an output objective.

As the project is being designed, seek to convert an assumption into an activity that is under control of the project. The more factors that the project can control that will affect achieving the project outputs, the more likely that the project will be implemented successfully.

There may different levels of probability that necessary conditions are present. The probability is a measure of risk to successful project implementation. If the probability is low that a necessary condition exists, then there is high risk that implementation will fail in some aspect. If the probability is high that the necessary condition exists, then there is low risk to implementation.

The relationship between assumptions and risks can be described as the two sides of a coin. On one side the coin says: “If this assumption is true, then the probability is high that completing the associated objectives will have the desired effect.” On the other side the coin says: “If this assumption is not true, then the risk is high that completing the associated objectives will not have the desired effect.”

As management control decreases, the risk to successful project implementation increases. This means that there is more risk to achieving objectives at the higher levels of a logframe. It is important to include risk indicators in the project monitoring system so that management can make adjustments in project activities or plans as higher levels of risk are observed.

To keep the logframe as simple as possible, only include the assumptions that have a major effect on project implementation. Assumptions that are common to all projects, such as “required funds are available” or “qualified staff will be assigned,” should not be included (Foundation, 2000).

A “killer” assumption describes conditions that pose both high risk and major effect on successful project implementation. The portion of the project that is affected should be eliminated from the plan while the risk is high; in some cases this will mean suspending operations or closing a project, or major portions of the project. When killer assumptions are identified during the initial planning for a project, the project should not be initiated in that form.

Uotila (2002) listed several strategies for managing risk. They are presented here with some modifications.

- Live with the risk, but use appropriate risk indicators to keep informed. There is always risk in facilitating transformational development; World Vision’s mission is based on working with the poor in relatively high-risk environments. Include risk indicators in the project monitoring system, and prepare practical contingency plans to be implemented if risk increases.
- When it is not feasible to reduce risk that is limited to some component of the project, eliminate the component. This means that something that had been planned to achieve will not be achieved, which will have some negative consequences.
- Reduce the risk by using alternative means that are less risky to move towards the same overall goal.

References

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This is a computer program to assist teams design both development assistance projects and research efforts. It teaches the user the basic principles of the logical framework approach, and it provides the user with tools for applying the approach to the user's own projects.