

IPDET

Handbook

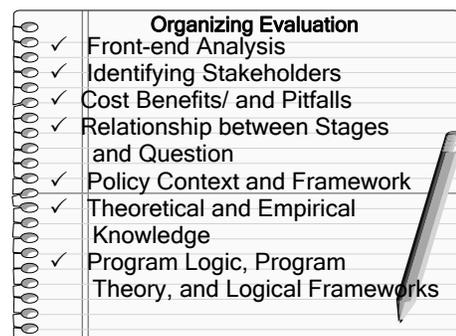
Module 3

Front-end Analysis of the Evaluation Process: Why, When, and What

Introduction

In the previous module, you learned about emerging trends and issues in development evaluation. This module discusses the organization and planning process for evaluation. This module has seven topics. They are:

- Front-end Analysis of the Project, Program, or Policy
- Identifying Stakeholders
- Balancing Costs and Benefits and Pitfalls of the Evaluation
- Relationship between Program Stages and the Broad Evaluation Question
- Policy Context and Its Framework
- Existing Theoretical and Empirical Knowledge about the Project, Program, or Policy
- Program Logic, Program Theory, and Logical Frameworks.





Learning Objectives

By the end of the module, you should be able to:

- describe the importance of doing front-end analysis
- describe the role of stakeholders and how to identify important stakeholders and impactees
- describe pitfalls of the front-end planning process
- define manager, evaluator, client, stakeholder, and consumer
- classify the program stages and the broad evaluation questions
- describe the policy context and its time frame
- describe ways to learn about existing theoretical and empirical knowledge
- describe how to reconstruct, test, and work with the underlying program logic, program theory, and logical frameworks
- describe the value of balancing costs and benefits of evaluation
- describe the development evaluation framework, including: the evaluation and policy cycle, who benefits from evaluation, what and when to evaluate, uses of evaluation, and timing of the evaluation.



Key Words

You will find the following key words or phrases in this module. Watch for these and make sure that you understand what they mean and how they are used in the course.

front-end planning
stakeholder
consumer (impactee)
logic and theory
logical framework analysis
model
outcome model
outputs
outcomes
impacts
black box
systems model
program theory
program theory model
logic model
program logic
logical frameworks (logframes)
well defined scope
validated criteria
accurate data
sound analysis
evaluation design
doing phase
reporting phase
feedback process
policy scientific approach
strategic assessment approach
elicitation approach
evaluation design matrix



Front-end Analysis of the Project, Program, or Policy

As an evaluator begins work on an evaluation, the evaluator needs to get a deeper understanding of the project, program, or policy. To reach this understanding, the evaluator needs to investigate several dimensions of the intervention, called a **front-end analysis**. We believe that the following dimensions should be covered or taken into account when doing front-end analysis.

- Understanding the Relationship between Program Stages and the Broad Evaluation Question
- Understanding the Policy Context and Its Time Frame
- Getting to Know Existing Theoretical and Empirical Knowledge about the Program/Policy
- Reconstructing, Testing, and Working with the Underlying Program Logic, Program Theory, and Logical Frameworks
- Balancing Costs and Benefits of the Evaluation.

More discussion will follow in a later module.

Balancing Costs and Benefits and Pitfalls of the Evaluation

Finally, expected costs and effects/benefits of the evaluation and how to balance them should be on the agenda during the front end planning. Examples of benefits are manifold:

- ‘strong knowledge’
- clear understanding
- context specification of what will work
- answers to questions.

Costs of evaluations however are important too. Think of:

- cost of evaluation in relation to the cost of the program
- costs in terms of the social burden to program officials, evaluands (‘respondents’) as a consequence of participating in the study
- reputation costs to the evaluator and the evaluation community when results are disputed because of theoretical and or methodological criteria
- transaction costs.



Pitfalls Involved in the Front-End Planning Process

The following are dangers or pitfalls of the planning process.

- The *belief* that everything should be covered *up front* including the belief that if front-end planning has been taken place, everything will be okay.
- *The to-do-ism fixation*: this is the danger that the principal investigator or somebody gets fixed on the original document of planning and can only do what has been planned before.
- Ritzer¹ has coined the concept of *McDonaldization* of society. A danger of front-end planning that is particularly applicable is when checklists, to do-lists, frameworks and log-frames ‘take over’ and replace *reflective thinking*.
- Another danger is that *truisms* pop up while doing the front –end planning. “Randomized experiments...no way: ‘too complicated, too expensive, too conservative...’. Or: ‘a logical framework analysis is the least we can do and therefore we should do it.’”
- Front-end planning does not prevent people to join in ‘*group think*’ – agreeing with the group to remain a part of the group, criticism is not encouraged.
- *Power matters*. Never forget to look into the power position of the participants.
- With regard to *logic models and in particular log frames*, Gasper² has nicely summarized pitfalls:

First, the LF is very often used only because external funders demand it, and so is then invented after a project has been designed, rather than used to guide the design by promoting logical thinking about the links from one level to the next higher one and about the role of external factors in affecting these connections. We can name this case the ‘*logic-less frame*’, where a pre-existing logframe format is used to accommodate a pre-existing design, rather than to help create a logical design in an appropriate format.

¹ G. Ritzer (1996). *The McDonaldization of Society*, revised edition. Thousand Oaks: Pine Forge Press. p. 1.

² D. Gasper (1997). *Logical Frameworks: A Critical Assessment Managerial Theory*, Pluralistic Practice Working Paper Series No. 264. Institute of Social Studies. The Hague: ISS.



Identifying Stakeholders

An important part of the front-end analysis is identifying the stakeholders of the project, program, or policy.

Stakeholders

Stakeholders are all those people or representatives of organizations that have a “stake” in the intervention. Typically, they are those who are affected by an intervention either during its lifetime or in subsequent years. It is important to include those who would typically not be asked to participate in evaluation.

Stakeholders can include:

- Participants: those people who participate or have participated in the intervention
- Direct Beneficiaries: those people who directly and currently benefit
- Indirect Beneficiaries: those people who are not recipients of the intervention but who benefit from others who are beneficiaries. For example, employers benefit from educational programs since they are able to hire better-trained people
- Others Impacted: those people who did not participate in the program but who were impacted by it in some way, either directly or indirectly
- Donors
- Government officials, elected officials, government employees with a relevant interest, such as planners, public health nurses, etc.
- Program directors, staff, board members, managers, and volunteers
- Policy-makers
- Community and interest groups or associations, including those that might have a different agenda from the program officials.

Table 3.1, adapted from Fitzpatrick, Sanders, and Worthen,³ gives a checklist to assist determining roles for the evaluation audience.

³ Fitzpatrick, Sanders, and Worthen, *Program evaluation” Alternative approaches and practical guidelines*. (New York: Person Education, 2004). p 202.



Table 3.1: Checklist of Stakeholder Roles

Individuals, groups, or agencies	To make policy	To make operational decisions	To provide input to evaluation	To react	For interest only
Developer of the program					
Funder of the program					
Person/agency who identified the local need					
Boards/agencies who approved deliver of the program at local level					
Local funder					
Other providers of resources (facilities, supplies, in-kind contributions)					
Top managers of agencies delivering the program					
Program managers					
Program directors					
Sponsor of the evaluation					
Direct clients of the program					
Indirect beneficiaries of the program (parents, children, spouses, employers)					
Potential adopters of the program					
Groups excluded from the program					
Groups perceiving negative side effects of the program or the evaluation					
Groups losing power as a result of use of the program					
Groups suffering from lost opportunities as a result of the program					
Public/community members					
Others					



Involving Stakeholders

The first challenge will be to identify the stakeholders. This can be done by looking at documents about the intervention and talking with program staff, local officials, and program participants. Stakeholders can be interviewed initially, or brought together in small groups.

Stakeholder meetings can be held periodically, or a more formal structure can be established. The evaluation manager may set up an advisory or steering committee structure. Tasks can be assigned to individuals or to smaller sub-committees if necessary.

Often there is one key client sponsoring or requesting the evaluation. The needs of this client will largely shape the evaluation. The evaluator, who listens and facilitates discussions about the evaluation's focus, can summarize, prepare written notes, and provide key stakeholders with options about ways the evaluation can be approached.

By engaging the stakeholders early on, everyone will have a better understanding of the intervention and the challenges it faces in implementation. In addition, the evaluation team will be better informed as to key issues for the evaluation and about what information is needed, when, and by whom. Meeting with key stakeholders helps ensure that the evaluation will not miss major critical issues. It also helps get a “buy in” on the evaluation as stakeholders perceive the evaluation as potentially helpful in attempting to answer their questions.

The extent to which stakeholders are actively involved in the design and implementation of the evaluation depends on several factors. For example, stakeholders may not be able to afford to take time away from their regular duties, or there may be political reasons why the evaluation needs to be seen as independent.

While it may be somewhat unwieldy, involvement of stakeholders in this first step is likely to:

- generate better questions
- generate support for the evaluation
- increase access to whatever information is available
- enhance the acceptance of the final report and recommendations.



Stakeholder Analysis

In their website “*A Guide to Managing for Quality*,” the Management Sciences for Health (MSH) and the United Nations Children’s Fund (UNICEF)⁴ give clear information about stakeholder analysis.

They define stakeholder analysis as a technique to identify and assess the importance of key people, groups of people, or institutions that may significantly influence the success of your activity or project. They also suggest the following reasons for doing a stakeholder analysis:

- identify people, groups, and institutions that will influence your initiative (either positively or negatively)
- anticipate the kind of influence, positive or negative, these groups will have on your initiative
- develop strategies to get the most effective support possible for your initiative and reduce any obstacles to successful implementation of your program.

⁴ A joint effort of Management Sciences for Health (MSH) and the United Nations Children’s Fund (UNICEF), “Quality guide: Stakeholder analysis” in the *Guide to managing for quality*.
<http://bsstudents.uce.ac.uk/sdrive/Martin%20Beaver/Week%202/Quality%20Guide%20-%20Stakeholder%20Analysis.htm>



How to Do a Stakeholder Analysis

Use the following procedure to do a stakeholder analysis:

Step	Procedure
1	<p>Make a matrix with four columns with the following headings for each column:</p> <ul style="list-style-type: none"> • Stakeholder • Stakeholder Interest(s) in the Project • Assessment of Impact • Potential Strategies for Obtaining Support or Reducing Obstacles
2.	Brainstorm to identify all the people, groups, and institutions that will affect or be affected by the intervention.
3.	List the people, groups, and institutions in the “Stakeholder” column.
4.	<p>Once you have a list of all potential stakeholders, review the list, and identify the specific interests these stakeholders have in the intervention. Consider issues like:</p> <ul style="list-style-type: none"> • the intervention’s benefit(s) to the stakeholder • the changes that the intervention might require the stakeholder to make • the project activities that might cause damage or conflict for the stakeholder. <p>Record these under the column "Stakeholder Interest(s) in the Project."</p>
5.	<p>Again, review each stakeholder listed. This time, ask the question:</p> <p>How important are the stakeholder's interests to the success of the intervention?</p> <p>As you ask the question, consider:</p> <ul style="list-style-type: none"> • the role the key stakeholder must play for the intervention to be successful, and the likelihood that the stakeholder will play this role • the likelihood and impact of a stakeholder's negative response to the intervention <p>Record your assessment under the column "Assessment of Impact" for each stakeholder. Assign a(n):</p> <ul style="list-style-type: none"> - “A” for extremely important - “B” for fairly important - “C” for not very important
6.	<p>Finally, consider the kinds of things that you could do to get stakeholder support and reduce opposition. Consider how you might approach each of the stakeholders.</p> <ul style="list-style-type: none"> • What kind of information will they need? • How important is it to involve the stakeholder in the planning process? • Are there other groups or individuals that might influence the stakeholder to support your initiative? • Record your strategies for obtaining support or reducing obstacles to your project in the last column in the matrix.



Table 3.2 shows an example of a stakeholder analysis matrix before entering analysis information.

Table 3.2: Example of Stakeholder Analysis.

Stakeholder	Stakeholder Interest(s) in the Project	Assessment of Impact	Potential Strategies for Obtaining Support or Reducing Obstacles

You may be asked to work on an evaluation that did not use a participatory approach but you want to involve the stakeholders in the evaluation. Mikkelsen⁵ discusses the difficulty of this situation. For these situations, the evaluator needs to ensure that stakeholders are involved in:

- formulating terms of reference
- selecting the evaluation team
- analyzing data
- formulating conclusions and recommendations.

Normally, a stakeholder analysis will show that the stakeholders are diverse. Stakeholders may have different interests and in some cases, their interests may be contradictory. The evaluator will need to bring the different opinions into the open. As an evaluator, you may need to find a balance between naïve consensus thinking and an ability to handle conflict resolution.

⁵ B. Mikkelsen (2005). *Methods for development work and research: A new guide for practitioners*. Thousand Oaks, CA: Sage, 2005. pp. 283-285.



Stakeholders: Diverse Perspectives

Stakeholders approach the intervention from different perspectives. This is a good thing. It helps to understand that the initial discussions may reflect those perspectives. A donor may be concerned that the money is spent appropriately and that the intervention is effective. A program manager may be concerned that the intervention is well managed and is generating lessons learned. Program participants may want to get more and/or better services. Policy-makers may be most concerned with whether the intervention is having its intended impact. Others in the community may want to replicate or expand the intervention, while others may want to limit what they perceive to be some of the negative consequences of the intervention.

Disagreement is a normal part of the process of people working together. People who feel passionately often have somewhat different visions of how the world is and should be. As a facilitator, it is important for the evaluation manager or evaluator to help the group set ground rules about disagreement that make sense within the cultural context. But it is essential that disagreement about issues and ideas be brought into the open, discussed, and resolved in a way that everyone feels is fair.

The World Bank on Involving Stakeholders⁶

Once stakeholders have been identified, the next step is to enlist their participation. Evaluators have sought to work with affected stakeholders through a variety of approaches. But "special" measures are needed to ensure that groups that are normally excluded from the decision making process have a voice. To achieve this, evaluators have first organized the "voiceless," mandated their representation, held exclusive participatory sessions with them, employed "leveling" techniques that allow stakeholders at all levels to be heard, and used surrogates-intermediaries with close links to the affected stakeholders. But what happens when opposition exists?

⁶ The World Bank Group. *The World Bank participation sourcebook*.
<http://www.worldbank.org/wbi/sourcebook/sb0303t.htm>



The following are examples of techniques to use to ensure important stakeholders are involved:

building trust

- involving directly affected stakeholders
- seeking feedback
- involving the voiceless
- involving the opposition.

Building Trust

To many of the identified stakeholders, an outsider bringing offers of "participatory development" may seem suspect. Prior experience with public agencies, public servants, and donor projects has, in many places, created negative impressions that need to be rectified. The following are ways of building trust:

- sharing information
- interacting repeatedly
- working through intermediaries.

Sharing Information.

One way to build trust is to share information about what is intended by the evaluation. You can do this with individual meetings or large groups like a "town meeting." During these meetings, a representative of the project can share information about the *hows* and *whys* of the evaluation. The participants in the meeting have the opportunity to express their expectations and concerns. Once trust is established, participants can be invited to form their own committees and participate in the evaluation.

Interacting Repeatedly

Another way to build trust is through intensive and repeated interaction between the evaluators and the stakeholders. As both sides develop a feel for and understanding of one another through iterative planning sessions, suspicion of each other begins to dissipate and the basis for trust, respect, and cooperation can be established.

Working through Intermediaries

In some instances distrust is so great that intermediaries may be required to bridge the gap. In these cases, a person or organization that is respected by the stakeholders is able to use its unique position to bring the different parties together.



Involving Directly Affected Stakeholders

A great deal can still be learned about how to work with directly affected stakeholders. The following are approaches for enabling intended beneficiaries – as well as those likely to be adversely affected – to participate in planning and decision-making. These approaches include:

- working with the community
- working with representatives
- working with surrogates.

Working with the Community

The most commonly used approaches are two different types of community negotiations.

In one approach, the organization in charge of the intervention designs the intervention first and then negotiates it with the stakeholders along with issues of billing, operational responsibilities, and user contributions.

The other common approach for working with communities is to use community involvement from the very beginning from which the design or the intervention emerges.

Working with the Representatives

After meeting with the entire group, you may want to have the stakeholders form committees of representatives from each area. The members of committees can give input into the evaluation.

Working with Surrogates

Another approach to involving directly affected stakeholders is through intermediaries or surrogates. Surrogates may be any group or individual who has close links to the affected population and is capable of representing their views and interests during participatory planning. Be sure to exercise caution in selecting surrogates to speak for the directly affected. In some cases the surrogates represent their own interests instead of the stakeholders they are representing.



Seeking Feedback

In cases in which stakeholders participate through their representatives or surrogates, evaluators should follow the rule of thumb that one should trust those who speak for the ultimate clients but from time to time *verify directly with those whose opinion really counts*. The following are ways to crosscheck and see if the approach also facilitates broader ownership and commitment among those affected by the evaluation. These approaches include:

- making on-site visits
- stakeholder review of documents.

Making On-site Visits

When looking for feedback from stakeholders, consider the value of direct interaction with communities to ensure that their interests are being accurately represented in the evaluation. The direct interaction can occur in both a formal and informal way. Formal sessions can be arranged and facilitated by representatives of the stakeholders. Evaluators can report to the stakeholder's progress of evaluation. Open discussion can follow where individual stakeholders can express their opinions and ask questions. Their feedback can then be incorporated in the final evaluation. In addition to these formal meetings, the evaluators can go unannounced to visit stakeholders. They can introduce themselves and ask if stakeholders have heard about the evaluation and what they thought of it. This informal feedback can be compared with what the evaluator hears at the more formal level. It serves as a way of verifying consistency and checking for biases.

Stakeholder Review of Documents

Another way evaluators can obtain feedback is by providing the opportunity for stakeholders to review and revise draft documents prepared by the design team. Evaluators find this follow-up to be crucial in fostering broader ownership and commitment beyond just those who were present at the participatory planning events.



Involving the Voiceless

Some groups – especially the very poor, women, indigenous people, or others who may not be fully mobilized – may not have the organizational or financial wherewithal to participate effectively. These are often the exact stakeholders whose interests are critical to the implementation success and sustainability of interventions. Special efforts need to be made to level the disequilibrium of power, prestige, wealth, and knowledge when stronger and more established stakeholders are meant to collaborate with weaker, less organized groups. The following are ways of involving the voiceless:

- building capacity
- organizing separate events
- leveling techniques
- using surrogates.

Building Capacity

Evaluators can build capacity to involve the “voiceless” by helping local people form and strengthen their own organizations. By organizing communities, local people learn how to work together to take care of their individual and communal needs. Once organized and having clarified their own interests, their willingness and ability to use the new power and skill of speaking with one, unified voice increases significantly. For example, in many rural situations, women are left out of decision-making. Evaluators can make the rule that at least one mother is included on each committee

Organizing Separate Events

Another way to include the “voiceless” is to organize separate events. If you have a large group that is left out, you may want to organize a separate event just for that group. For example, if you have a religious, ethnic, or gender group that is not invited to the planning event but have a large stake in the evaluation, you may set up a meeting with the group or groups alone, in a separate event where they can articulate their priorities and concerns.



Leveling Techniques

Power differences among stakeholders can be diminished with participatory techniques. Skilled design and facilitation of participatory processes can promote "level" interactions. Small working groups, governed by facilitator-monitored "behavioral rules" that ensure that all participants speak and receive respect for their contributions, is one way of doing it. "Leveling" is facilitated when people listen to or observe quietly what others say without criticism or opposition. Quiet observation encourages the "voiceless" to express themselves through nonverbal representations. Similarly, role reversal can help level the playing field. Role-playing exercises are another means of levelling.

Using Surrogates

In some cases it may be logistically infeasible to bring the "voiceless" to meetings. They may live long distances away and may not be able to leave their homes due to family responsibilities. In other cases, it may not be feasible because of the power differences between the "voiceless" and the people in power. It may be that when making presentations to the minister and other senior government officials, the "voiceless" might feel intimidated and overwhelmed and might not be able to articulate their needs effectively. Bringing in other people who are very familiar with the problems and have experience working with bureaucrats and local government officials such as surrogates might be a solution. It can be easier for them to speak to more powerful stakeholders and participate more equally in preparing action plans on behalf the "voiceless."

Involving the Opposition

Sometimes collaboration among different stakeholders may not be possible, however. In these cases, either resources should not be committed to the proposed activity or a group of stakeholders may have to be left out, generally by modifying the concern being addressed.

Stakeholder conflict is often produced by the external expert stance. When external experts formulate a complete, fully developed proposal and present it to the people it affects, immense room for misunderstanding exists on the part of those who were not involved in preparing the proposal. Ways of involving the opposition include:

- starting early and broadly
- finding common ground
- dealing with deadlock.



Starting Early and Broadly

In most instances, fully developed proposals are really "take-it-or-leave-it" propositions, no matter how much lip service is paid afterward to collaborative decision making. After sponsors and designers spend millions of dollars and many years preparing a complete plan, they are not likely to be open to significant changes. For those who perceive a loss for themselves in the proposal, outright opposition may appear to be the only possible stance; the greater the loss, the stronger the opposition is likely to be. Once opposition mobilizes, it is difficult – if not impossible – to resolve the matter.

When all stakeholders collaborate in designing their collective future, it increases the chances of former differences being resolved and a new consensus emerging around issues everyone can agree on. This is probably so because people who have to live and work together can often find ways to agree if given the chance. Unfortunately, people do not often get the chance to work together to determine their collective future. Development projects prepared in the external expert stance do not provide that chance. The participatory process, however, facilitates working together. So participation can be a "conflict avoidance" process to the degree that it helps stakeholders with different interests explore and potentially find common interests.

Finding Common Ground

By focusing on common interests most evaluations result in sustainable collaborative action. Despite the success stories, consensus will sometimes be unattainable and no basis will exist for future action, especially in situations with a long history of entrenched conflict and divisiveness among the parties. In such cases, the result is no action, which is probably better than action that will fall apart during implementation for want of consensus.

Dealing with Deadlock

Alternatively, when strong opposition exists to a project from one set of stakeholders, an evaluator may, in certain circumstances, proceed by leaving out that set of opposition stakeholders and working with the others. Employing this approach has many potential dangers, but it does happen from time to time and has worked.



Consumers (Impactees)

Scriven⁷ discusses another important role in the evaluation: the role of the consumers or the persons who are impacted by the project, program, or policy. They may also be called impactees.

Consumers comprise:

- the recipients/users of the services/products
 - They are the downstream *direct* impactees, sometimes called “clients.” Keep in mind that they are clients of the program NOT of the evaluation: for this reason, it is usually better to restrict the use of this term in the context of talking about evaluation to the sponsor of the evaluation.
- the downstream *indirect* impactees
 - For example, a recipient’s family or co-workers who are impacted by a ripple effect are downstream indirect impactees.
- the program staff
 - They are the midstream impactees because the obligations to them are very different and much weaker in most kinds of program evaluation (their welfare is not the major goal of the program).
- the funding agency, taxpayers, and political supporters, called upstream impactees
 - They are sometimes these are called stakeholders although that term is often used more loosely to include all impactees, except when they are also direct recipients.
- anticipators, also called upstream impactees
 - They are not funders or recipients of the services, but react to the announcement or planning of the program before it actually comes online.

In identifying consumers remember that they often will not know the name of the program or its goals and may not know that they were impacted or even targeted by it.

⁷ Scriven. *Key evaluation checklist* Oct, 2005. p. 3.
http://www.wmich.edu/evalctr/checklists/kec_october05.pdf



While looking for the impacted population, you may also consider how others could have been impacted, or protected from impact, by variations in the program. These alternative possible impacted populations may suggest some ways to expand or contract the program at later stages of the evaluation.

Relationship between Program Stages and the Broad Evaluation Question

The first dimension to cover in front-end planning is the relationship between program stages and the broad evaluation question that will be asked. The life of a policy or program can be thought of as something of a developmental progression in which different evaluation questions are at issue at different stages. Pancer & Westhues have presented a typology as shown in Table 3.3.

Table 3.3: Typology of the Life of a Policy or Program.

Stage of program development	Evaluation question to be asked
Assessment of social problem and needs	To what extent are community needs and standards met?
Determination of goals	What must be done to meet those needs and standards?
Design of program alternatives	What services could be used to produce the desired changes?
Selection of alternative	Which of the possible program approaches is most robust?
Program implementation	How should the program be put into operation
Program operation	Is the program operating as planned?
Program outcomes/effects/impact	Is the program having the desired effects?
Program efficiency	Are program effects attained at a reasonable cost?

Source: S. Mark Pancer and Anne Westhues (1989). "A developmental stage approach to program planning and evaluation," in *Evaluation Review* 13(1): 56-77. (Adapted by Rossi, Freeman & Lipsey [1999].)



Policy Context and Its Time Frame

The second dimension is to understand the policy context and its time frame. If an evaluation has to be planned and there are “ready programs” on the shelf that already have been evaluated in somewhat similar contexts, the policy context is rather different than when completely new, innovative programs have to be designed, crafted and implemented (in short notice).

The same is true about the level of complexity of the programs and policies involved. According to Pawson,⁸ “it looks like an important change in public policy in recent years has been the rise of *complex, multi-objective, multi-site, multi-agency, multi-subject programs*. The reasons are clear. The roots of social problems intertwine. A health deficit may have origins in educational disadvantage, labor market inequality, environmental disparities, housing exclusion, differential patterns of crime victimization, and so on. Decision makers have, accordingly, begun to ponder whether single-measure, single-issue interventions might be treating just the symptoms.”

Pawson outlines which approaches to follow if one is dealing with what he calls ‘a new breed of ‘super interventions’. This approach highlights a focus on:

- the underlying *program theory*
- using existing evidence through *research synthesis*
- interpreting a complex program as *intervention chains*, with one set of stakeholders providing resources (material, social, cognitive, or emotional) to other sets of stakeholders, in the expectation (or ‘theory’) that behavioral change will follow. The success of the intervention is thus matter of the integrity of the sequence of program theories and, in particular, how different stakeholders choose to respond to them.⁹

⁸ Ray Pawson. (2006). *Evidence-based policy: A realistic perspective*. New Brunswick, New Jersey: Sage Publication.

⁹ Ibid.



Existing Theoretical and Empirical Knowledge about the Project, Program, or Policy

The third dimension we suggest is getting to know the existing theoretical and empirical knowledge about the project, program, or policy. The knowledge coming from evaluations and other social science research, including psychological and economic studies increases every day.

Journals synthesizing the accumulation of explanatory knowledge are available.

Problem-oriented research into how organizations function combines theories and research from such diverse disciplines as organizational sociology, cognitive psychology, public choice (economics) and law and economics (Scott, 2003; Swedberg, 2003). Repositories of randomized experiments in the field of criminal justice and crime prevention, social welfare programs, and health and educational programs indicate that more than 10,000 “experiments” have been done.¹⁰ See the following example from the field of criminal justice programs.



Example of a knowledge fund:

See Sherman, L.W. et al (editors), Evidence-based crime prevention, London, Routledge, 2002, with a concluding chapter on:

- what works
- what does not work
- what is promising

It appeared that 29 programs worked; 25 did not, 28 were promising and of 68 programs it was unknown what they ‘did’. More than 600 evaluations synthesized, including such diverse fields as:

- school and family based crime prevention
- reducing burglary programs
- drug arrests
- policing /hot spots
- CCTV initiatives (closed circuit TV)
- neighborhood wardens
- mentoring
- types of (prison) sanctions /corrections (anger management, training programs, cognitive programs focused on reducing recidivism, boot camps etc)

¹⁰ Campbell Collaboration, 2003.



Therefore, it is crucial that when organizing and planning for an evaluation, attention should be paid to the *Knowledge Fund*.

Articulating the Theory of Change: Program Logic, Program Theory, and Logical Framework

The fourth dimension is to be able to reconstruct, test, and work with the underlying program logic, program theory, and logical frameworks. The underlying **logic and theory** of a program are important topics for evaluations, whether it is during the ex ante or the ex post stage of a study.

Therefore, when the study is planned, attention must be paid to the question *when and how underlying logic and theory will be reconstructed and tested*.

You can use visual techniques to help you visualize and organize the key components and interactions of a project, program, or policy. The techniques attempt to show the cause and effects of projects, programs, or policies.

Some of the ways to visualize use models. **Models** are diagrams or some other type of visual that attempt to show the links in a chain of reasoning about "what causes what," in relationship to the desired outcome or goal. The desired outcome or goal is usually shown as the last link in the model.

The value of a model is that it visually conveys beliefs about why the evaluation is likely to succeed. Because it is visual, it can usually be more easily remembered. A model can also specify the various components of a program and their relationships to each other. Donors provide resources to enable an organization to engage in activities in order to achieve specific goals and objectives. The resources, activities, results, and impacts are inter-related.

In some cases, there may be an existing theory of change. If so the evaluator needs to review it carefully. In many cases, it will be necessary to refine or rework the existing theory of change.

If no theory of change exists, the evaluator will need to create one.



Models help evaluators think about how to measure each component in order to determine how well each is working. By understanding the inter-relationships of the components, evaluators can also develop a strategy to measure the whether the program is achieving its desired outcomes.

Many models are based on a “black box” evaluation model. The **black box** can be anything – an organization or an intervention – that takes the inputs and converts them into outputs as is shown in a systems model. (See Figure 3.1.)

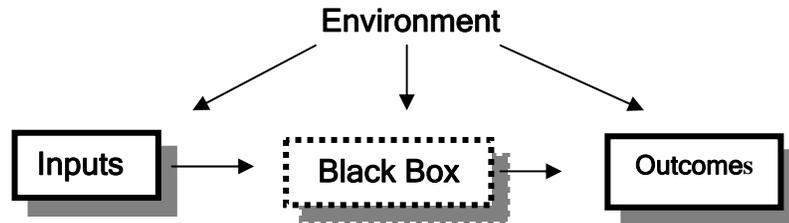


Fig. 3.1: Systems Model

As evaluation practice expanded, program evaluators began to be interested in the black box thinking. These evaluators believed that evaluation should be more than just inputs and outputs. Researchers became interested what happens outside of the boxes. They began to look at the system and all that happens within a context. They looked at ways the environment can influence the inputs, outputs, and the black box. This interest became known as program theory.

There are several techniques you can use to help you understand the logic and theory of an intervention. Here, we will address the following:

- program theory
- logic models
- program outcome model
- logical framework (logframe).



Program Theory

Program theory, or theory-based evaluation, emerged in the 1980s. Its focus is to understand the nature of the problem and the relationships between the problem, intervention, and expected outcome.

A program theory is a type of program description that includes normative theory [programs as they should be], the theories of people involved with the program, and causative models [links problem to program] or research-based theories. These theories, and the knowledge gaps within them, can provide clues as to the appropriate evaluation questions.¹¹

In other words, program theory describes what the intended intervention is expected to do and an explanation of the underlying rationale (whether explicit or implicit) for achieving the expected results.

The program “theory” begins by noting what the research shows to explain or predict an event. For example, the research may show that students do better academically when their parents are involved in their homework or that teachers who visit students homes become more empathetic. Once research is identified, the program theory is developed to predict what will take place due to an intervention.

There are a variety of frameworks that can be used for assessing program theory including:

- assessment in relation to social needs
- assessment of logic and plausibility
- assessment through comparison with research and practice
- assessment by confronting a program theory with one or more relevant scientific theories
- assessment via preliminary observation.¹²

¹¹ Fitzpatrick, Sanders, and Worthen, (2004). *Program evaluation: Alternative approaches and practical guidelines*. New York: Pearson Education. p. 299.

¹² Rossi, Freeman, and Lipsey, editors. *Evaluation: A systematic approach*, 1999, 6th edition, pp174-183.



Reconstructing program theories are to some extent similar to logic models, covered further in this module. They both examine and reconstruct the underlying basis or rationale for a given project, program, or policy. However, the theory-based approach allows a much more in-depth understanding of the workings of a program or activity – the ‘program theory.’ *In particular, it need not assume simple linear cause-and-effect relationships.*

For example, let us consider a government program to improve literacy levels by increasing the number of teachers. The success of this program might depend on a larger number of factors including: availability of classrooms and textbooks, the likely reactions of parents, school principals and school children, the skills and morale of teachers, the districts in which the extra teachers are to be located, and so on.

By mapping out the determining or causal factors that have been judged important for success, and how they might interact, it can then be decided which steps should be monitored as the program develops, to see how well they are in fact borne out. This allows the crucial success factors to be identified.”¹³

What is the theory? Why do we believe that training people will result in better evaluations? Why do we believe that funding micro-businesses will reduce poverty? If an assessment about the relevance is to be made, the theory has to be examined.

The process of articulating the theory usually includes the stakeholders. The research of others may also help articulate the theory.

Examining program theory should form a part (indeed the basis) of every evaluation. It is important to highlight that program theory is not always made explicit, nor is it always or necessarily consistent from start to finish vis-à-vis a given intervention. Evaluation practitioners must uncover and reconstruct program theory, and discover any inconsistencies in the theory, and between the theory and outcome. In Annex IV.6, three methods are discussed that can guide this process.

¹³ *Monitoring and evaluation: Some tools, methods and approaches*, World Bank, OED, 2004, p. 10.



Figure 3.2 shows a simplified example of use of a program theory model. The example is looking at effects of teacher visits to students' home.¹⁴

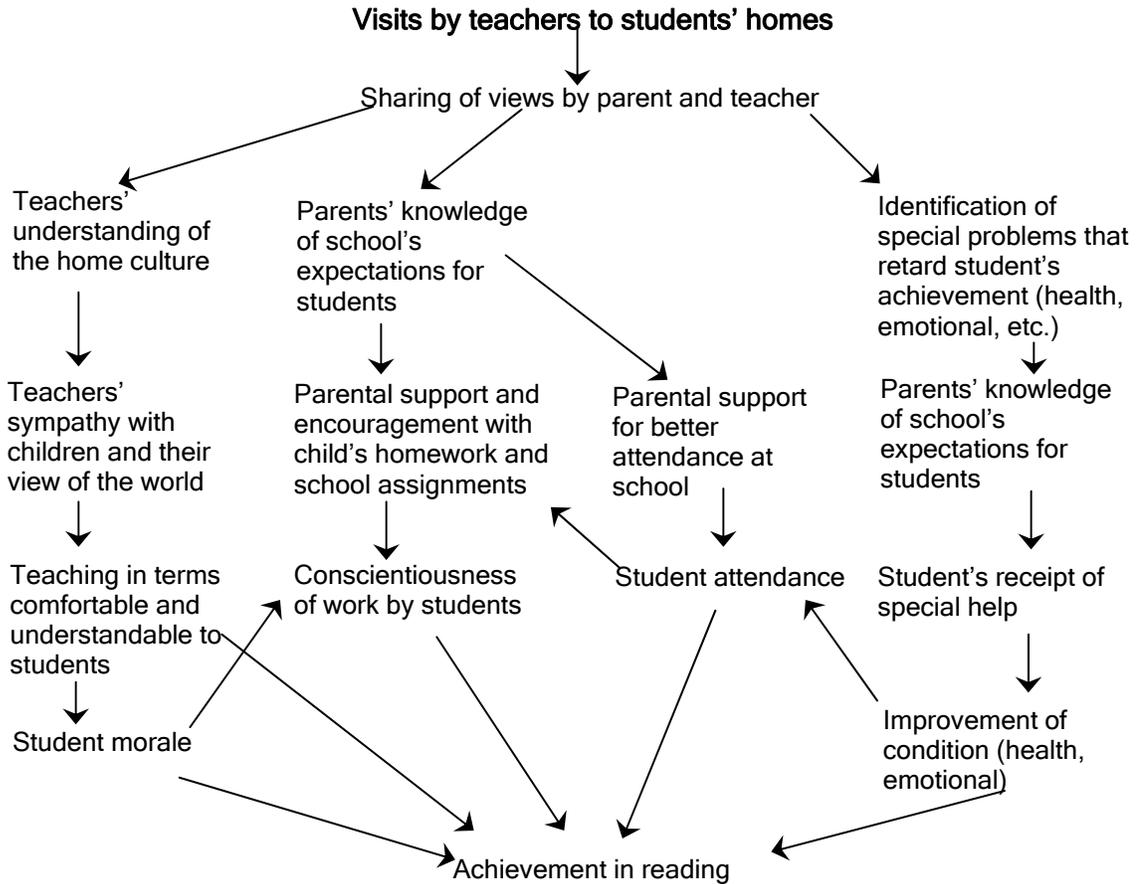


Fig. 3.2: Example of Program Theory Model: Teacher Visits to Students' Homes

Fig. 3.3 presents the articulated program theory underlying a World Bank Institute (WBI) anticorruption program.¹⁵

¹⁴ Carol H. Weiss (1997). *Evaluation*. Prentiss Hall, NJ: Prentice Hall. p 63

¹⁵ Carolien Klein Haarhuis (2005). Promoting anti-corruption reforms: Evaluating the implementation of a World Bank anti-corruption program in seven African countries. Available online at: <http://igitur-archive.library.uu.nl/dissertations/2005-0714-200002/full.pdf> . p. 43

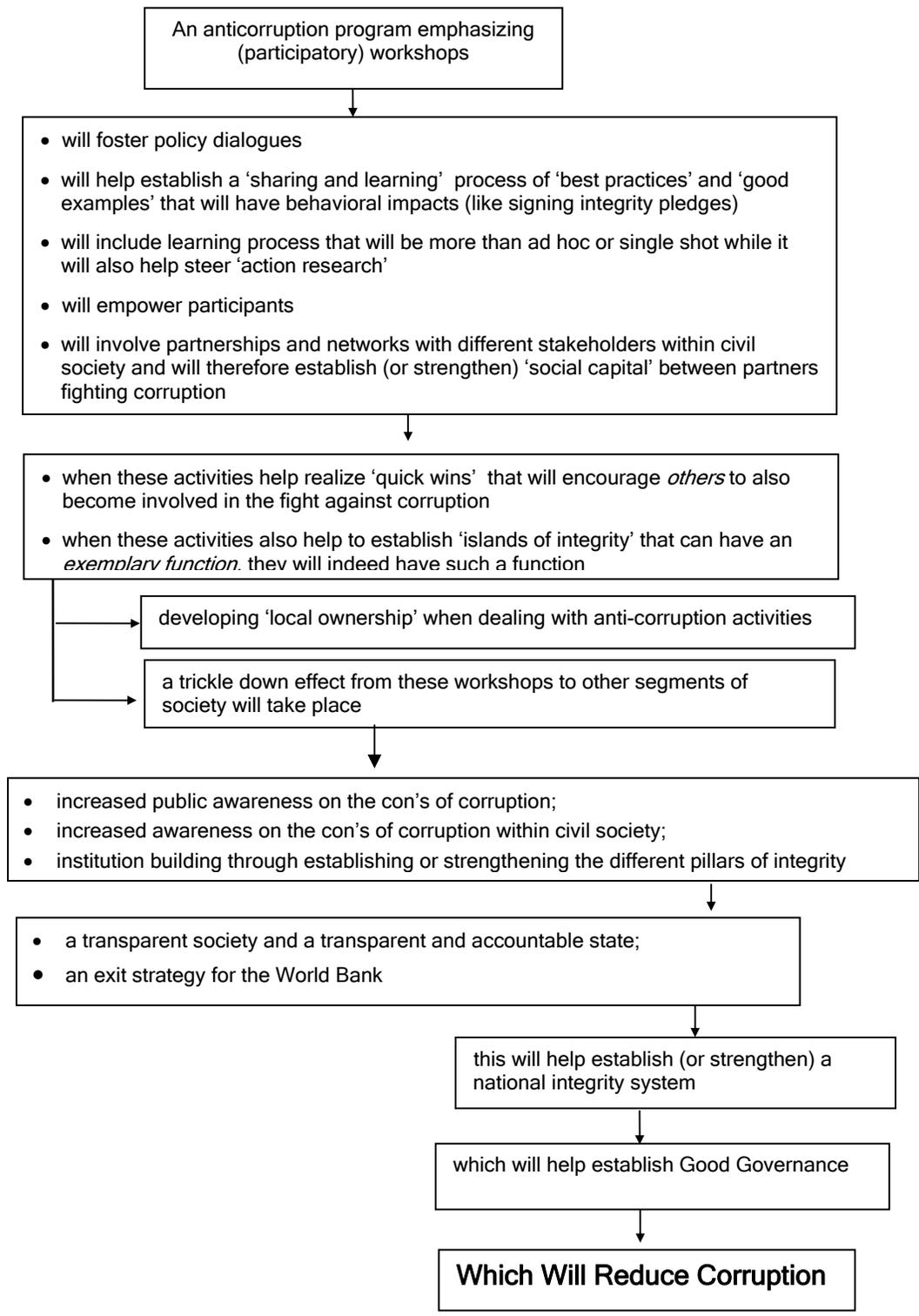


Fig. 3.3: Schematic Representation of Core Elements of WBI's Underlying Program Logic



Methods for Reconstructing Program Theory

There are three possible methods for reconstructing the underlying assumptions of project, program, and policy theories:

- a policy-scientific approach, which focuses on interviews, documents and argumentation analysis:
- a strategic assessment approach, which focuses on group dynamics and dialogue
- an elicitation approach, which focuses on cognitive and organizational psychology.¹⁶

Policy-Scientific Approach

Each of these methods brings to bear different strengths and weaknesses. The policy-scientific approach, for example, has several advantages. It focuses on documents and interview data, such as multiple methods. The diagrammatic presentation of the underlying theory helps dialogues with stakeholders and others.

There are also important weaknesses to this approach. For example, often, the social and behavioral dynamics involved in the processes of articulation and evaluation of theories may receive no attention. People have political, economic, and social stakes in their personal theories. Another potential weakness is the lack of attention to differences in power positions of the stakeholders.

Strategic Assessment Approach

The strategic assessment approach relies on group formation, assumption surfacing, dialectical debate, and synthesis. Group formation involves collecting a wide cross-section of individuals/stakeholders with an interest in the relevant question at hand and dividing them into separate groups. Assumption surfacing involves using separate stakeholder groups to discover the most significant assumptions underpinning their preferred projects, programs, and policies. Groups then rate their assumptions according to importance and certainty. The groups are brought back together and then an open, dialectical debate occurs; each group makes the best possible case to the others for its preferred strategy, while identifying key assumptions. Assumptions are negotiated and modifications made in a final synthesis.

¹⁶ See also Frans L. Leeuw (2003). "Reconstructing Program Theories: Models Available and Problems to be Solved," in *The American Journal of Evaluation*, Volume 24, Number 1, Spring, 2003, pp. 5-20.



Again, there are important strengths and weaknesses associated with the strategic assessment approach. One of the strengths "...is the focus on group formation and dynamics. Sharing knowledge and sharing perspectives when doing a reconstruction is central....

A weakness is that the criteria used for assessing the validity of the assumptions remain largely unspecified, while the same goes for the role of existing research in the dialogues. Group think, yeah-saying, and similar social-psychological artifacts of group dynamics are not adequately considered. In addition, too little attention is paid to differences in the power positions of the participants and consequences for their group behavior."¹⁷

Elicitation Approach

The elicitation approach focuses on formulating a mental model or cognitive map of stakeholders in order to understand the anticipated impact of projects/programs/policies. There are a variety of methods that may be used to create these mental models/maps, including, among others:

- looking at the concrete record of strategic intentions through a study of the documentation which is designed to direct behavior
- looking at decision-making in action, get involved in the organization (an anthropological observer approach). Watch decision-makers, listen to stories
- using well-designed trigger questions in interview situations so that "theories in use" can be detected
- applying data/content/text analysis programs
- working with managers on strategic breakdown decisions, i.e. when things are not going well.

Among the strengths associated with the elicitation approach is the "...highlight[ing of] the importance of observing managerial behavior in breakdown-situations, or crucial circumstances, and not only in times of prosperity... A second strength is the almost anthropological orientation to unraveling ways in which managers 'work with' mental modes.

¹⁷ Frans L. Leeuw (2003) "Reconstructing Program Theories: Models Available and Problems to be Solved," p. 13.



With regard to weaknesses, a first one...is that the elicitation approach is unclear about the knowledge bases used and about the criteria. When asking trigger questions and when creating a 'dialectic atmosphere,' it is important to know what the knowledge is from which one starts. To establish a dialectic atmosphere on the basis of empirically *incorrect* assumptions is inefficient and ineffective... Also, the level of specificity how to create the 'open atmosphere' is rather low."¹⁸

When is it most appropriate to use theory-based evaluation? "The larger the assumed impact of a project/program/policy, the wiser it is to reconstruct a program theory with rigorous methods. The larger the risks involved in the intervention, the more worthwhile it is to use it. And, finally, the more money (private or public) involved in the intervention, the wiser it is to get involved in a reconstruction and evaluation of the underlying theory and assumptions."¹⁹

To help reduce some of the weaknesses of the approaches and in particular the ones that deal with the social context of reconstructing program logic, a challenging new development comes from a relatively new field of interdisciplinary studies. This is Computer-Supported Collaborative Argumentation (CSCA). It brings together research from the areas of Computer-Supported Collaborative Learning (CSCL) and Design Argumentation, and in particular Design Rationale (DR). For 'argumentation' one can read: assumptions underlying programs or policies. The new field is an information and communication-technology (ICT)-driven approach to reconstruct argumentations underlying decisions of people and organizations. Virtual-graphic representations are crucial; they function as (external) representations of the structure of the underlying assumptions. By using ICT, the transparency of the reconstruction process is greatly enhanced, which makes it possible to reduce some of the dangers involved in the social and group processes when reconstructing assumptions.

ICT-driven group decision rooms, for example, show, on the screen and in hard copy, all participants exactly which assumptions are believed by the group members; moreover, this makes it possible to comment on them. Another advantage is that no comments or assumptions can get lost during the debates.

¹⁸ Frans L. Leeuw (2003) "Reconstructing Program Theories: Models Available and Problems to be Solved pp. 15-16.

¹⁹ Ibid.p. 17.



Examples can be found in systems such as SenseMaker (Bell, 1997) and Belvédère (Suthers and Weiner, 1995; Suthers, Toth and Weiner, 1997). In Sensemaker hypotheses and supporting evidence are brought together in so-called 'claim frames'. Sensemaker only uses 'theory'; it does not use objects like hypothesis or data. Moreover, Sensemaker does not make contradictions between evidence visible²⁰

Belvédère is a synchronous system that supports collaborative inquiries²¹. Learners are confronted with challenge problems (e.g., What caused the extinction of the Dinosaurs; why does an anticorruption policy focused on the judiciary in Bolivia does not work?) that need a (scientific) explanation. The Belvédère environment offers access to web-based material (that will also guide learners through the steps of the inquiry), a chat window, and a shared visual workspace where learners construct scientific explanations in so-called 'evidence maps'. The environment has a coach that comments on the structure of the evidence maps and that makes suggestions for improvements. The ontology of the evidence maps in Belvédère is defined in the objects and relations that students may use when they create evidence maps. In the current version of Belvédère, the objects are 'principle', 'hypothesis', 'data', and 'unspecified'. The relations are reduced to a basic set of 'for', 'against' and 'and'. Participants can express how strong their beliefs in the objects and relations are. This set of objects and relations obviously limits the scope of what Belvédère can express.

²⁰ Bell (1997). Online at:
http://www.kie.berkeley.edu/KIE/software/sensemaker_large.gif

²¹ Belvédère (Suthers and Weiner, 1995; Suthers, Toth and Weiner, 1997)
Online at: <http://iilt.ics.hawaii.edu/belvedere/index.html>

Logic Models

Flowing from program theory are **logic models**. Logic models are useful ways to understand the linkage between a program and its expected outcomes.

A logic model is a diagram or picture that shows the causal links from the activities to the results. Logic models illustrate the cause-effect relationship between activities and outputs through to the final results. It is a visual way of expressing the rationale, thought process, or theory behind an organization, program, or initiative. It is a representation of how the organization or initiative is **expected** to lead to the results.

A logic model can be applied to an organization, policy, program or initiative. It can be used for the purposes of planning, project management, evaluation, and communication. Logic models can help to clarify objectives and focus the evaluation on results.

Logic models list or show graphically the critical assumptions being made about how the program will work. In a sense, development interventions are theories. By doing A, we should get X to happen. For example, if we trained people in the techniques of development evaluation, then we would expect to see more high quality evaluations conducted. Sometimes there is a chain of relationships: if better evaluations are conducted, they should result in useful information to policymakers. The useful information should result in better decisions by decision makers. This set of relationships is called a **logic model**. (See Figure 3.4.)

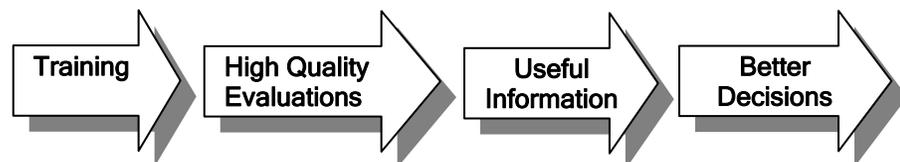


Fig. 3.4: Simple Logic Model

A logic model is an attempt to provide a visual way to depict program theory. It highlights the relationships between key elements and helps identify the operating assumptions.



Using a logic model assists both the evaluator and the other people working on the project, program, or policy. Ellen Taylor-Powell²² lists the following as some of the advantages for using logic models:

- provides a common language
- helps differentiate between “what we do” and “results” – *outcomes*
- increases understanding about the program
- leads to improved planning and management
- increases intentionality and purpose
- provides coherence across complex tasks, diverse environments
- enhances team work
- guides prioritization and allocation of resources
- motivates staff
- helps to identify important variables to measure; use resources, opportunities, recognition.

A logic model can help uncover stakeholders’ assumptions about how and why a program, policy, or project is expected to work. If an evaluation finds that a program is not achieving its expected outcomes, program theory can help disentangle where the breakdown is occurring. For example, is the financial management advice and support not working to increase people’s business skills, or are these skills being acquired but are not helping people achieve success in their small businesses?

“A logic model starts with the long-term vision of how program participants will be better off (changed) because of the program [policy/project]... this requires specification of: [target population], [problem statement], inputs...activities...outputs...and immediate, intermediate, long-term, and ultimate outcomes...”²³

²² Ellen Taylor-Powell. *Logic models: A framework for program planning and evaluation*. University of Wisconsin – Extension, Program Development and Evaluation, 2005. slides 15-16. Available online at: <http://www.uwex.edu/ces/pdande/evaluation/pdf/nutritionconf05.pdf>

²³ Fitzpatrick, Sanders, Worthen (2004). *Program evaluation: Alternative approaches and practical guidelines*. New York: Pearson Education. p. 79.



In the context under discussion here, logic models can be used to explain *how* projects, programs, and policies are expected to lead to the attainment of socio-economic goals for a given target population. They provide a clear and logical argument demonstrating how project, program, and/or policy activities will produce the intended outcomes, noting important causal mechanisms.

Logic models should be able to answer the following questions: Is the model an accurate depiction of the program?

- Are all elements well defined?
- Are there any gaps in the logical chain of events?
- Are elements necessary *and* sufficient?
- Are relationships plausible and consistent?
- Is it realistic to assume that the program will result in the attainment of stated goals in a meaningful manner?

Measurable indicators will be needed for each element of the logic model for which managers are to be held accountable.

Articulating the logic model for a policy or program offers several benefits:

- It helps identify elements of programs that are critical to success.
- It helps build a common understanding of the program and expectations among stakeholders based on a common language.
- It provides a foundation for evaluations.
- Poorly specified models limit the ability to identify and subsequently measure intervening variables on which outcomes depend.

Most logic models are not linear; they usually have boxes and/or arrows that link back to earlier or ahead to later parts of the logic model. Logic models can be done in many different ways. They can be boxes and arrows moving vertically or horizontally. They might instead be circular, or a storyboard of what is expected to happen.



Components of a Logic Model

While logic models can vary considerably in terms of how they look, they typically have three main components – activities, outputs, and results. Table 3.2 summarizes the components of a logic model.

Table 3.2: Components of a Logic Model

Components	Key Attribute	Description
Activities	What we do	The main actions of the project. The description may begin with an action verb (e.g., market, provide, facilitate, deliver).
Outputs	What we produce	Outputs are the tangible products or services produced as a result of the activities. They are usually expressed as nouns. They typically do not have modifiers. They are tangible and can be counted.
Results	Why we do it	Results are the changes or the differences that result from the project outputs. Note that there can be up to three levels of results (immediate, intermediate, and ultimate or final). Results are usually modified (e.g., increased, decreased, enhanced, improved, maintained).
Immediate Results		Those changes that result from the outputs. These results are most closely associated with or attributed to the project.
Intermediate Results		Those changes that result from immediate results and will lead to the ultimate outcomes.
Ultimate Results		Those changes that result from the intermediate results. Generally considered a change in overall “state”. Can be similar to strategic objectives. Link final results to the agency’s strategic results as specified in the MRRS.

Some logic models also include other features, such as:

- **Reach** – To which target groups/clients are the activities directed?
- **Inputs** – What resources are used?
- **Internal/External Factors** – The identification of factors within and outside control or influence.

Figure 3.5 gives another example of a logic model. This example is of a logic model for a research grants proposal. Notice that the components are identified on the left of the model. The figure is followed by an example of short- and long term results.



Activities	Selection Criteria
Outputs	Selecting Applicants
Immediate Results	Enhanced Selection Process
Intermediate Results	Improved Research Quality
Final Results	Increased Use of Research Findings



The following example is of short- and long-term results for a logic model are given in an example from the National Parole Board's logic model for the Aboriginal Corrections Component of the Effective Corrections Initiative in Canada.

Examples of short-term results

- Communities are better informed about the NPB and conditional release.
- Hearing processes for offenders in the Nunavut Territory are culturally appropriate.

Examples of long-term results

- The conditional release decision-making process is responsive to the diversity within the Aboriginal offender population.
- The NPB has better information for decision making, including information on the effects of their history, when conducting hearings.



Different Types of Logic Models

Logic models vary considerably in terms of how they look. They can flow horizontally or vertically. The logic model type you choose should be appropriate to your agency and to your stakeholders. Whatever type you choose, the model should provide sufficient direction and clarity for your planning and evaluation purposes. Keep in mind that the logic model should help to focus the evaluation on the results of your program. Choose the model you feel helps you most.

Although there are many types of logic models, there are two common types: flow chart or classic logic models and results chain models.

Flow Chart or Classic Logic Model

Flow charts or tables are the most common formats used to illustrate logic models.

The flow chart or classic logic model illustrates the sequence of results that flow (or result) from activities and outputs. It is a very flexible logic model as long as the three core components of the logic model are presented: activities, outputs, and results. You can have any number of result levels to ensure that your logic model accurately depicts the sequence of outcome results.

The cause-effect linkages can be explained by using “if-then” statements. For example, **if** the activity is implemented, **then** these outputs will be produced. **If** the outputs are achieved, **then** they lead to the first level of immediate results, and so on.



Figure 3.6 shows the structure of a flow chart or classic logic model.

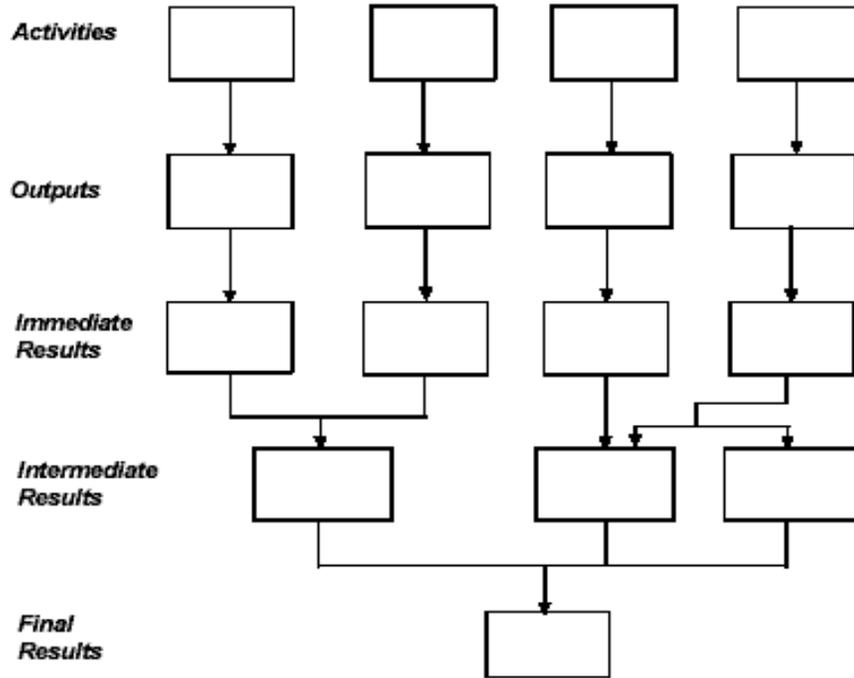


Fig. 3.6: Structure of a Flow Chart or Classic Logic Model

The flow chart logic model makes you think carefully about the linkages between specific activities, outputs, and outcomes. It helps answer questions such as: What outputs result from each activity? What outcome resulted from the output?

Results Chain Model

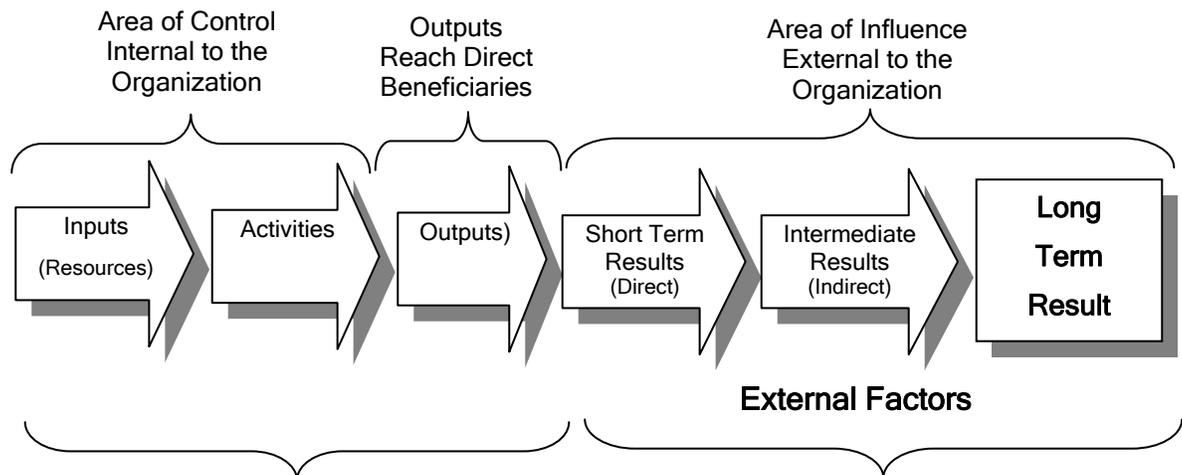
The results chain model is also referred to as a performance chain. While it is similar to the flow chart model, it does not isolate the specific activities, outputs or results. The results chain, therefore, does not show the same detail with respect to the causal sequence of outputs and results.

Both types of logic models, however, are used as a structure for describing the expectations of a program and as a basis for reporting on performance. Like the flow chart model, it is based on the rationale or theory of the program.



The logic model can be used as a basis for measuring efficiency and effectiveness. The inputs, activities, and outputs can be used as measures of efficiency whereas the results (outcomes) can be used as measures to evaluate program effectiveness.

Figure 3.7 shows the structure of a results chain model.



Source : *Six Easy Steps to Managing For Results: A Guide for Managers*, April 2003, Evaluation Division, Department of Foreign Affairs and International Trade in Canada.

Fig. 3.7: Structure of a Results Chain Model.

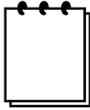
Consider the following when comparing flow chart and results chain models:

- The results chain is less time-consuming to develop.
- The flow chart logic model enhances understanding of how specific activities might lead to results.
- You may develop one, two, or three result levels, depending on the relevance to your program or organization.

You can find many examples of completed logic models from the University of Wisconsin Extension at the following site.

<http://www.uwex.edu/ces/pdande/evaluation/evallogicmodelexamples.html>

The following is a case example of a logic model for a micro-lending program.



Case Example: Micro-Lending Program

Introduction

Mala and her family had always been bound to the growing seasons of the land. In her village, Manpur, in the state of Andhra Pradesh in southern India, she and her husband had work when there was planting to be done, or crops to be harvested. Otherwise, there was little she could do to earn the money necessary to improve their mud-walled house or buy the food they needed or get books for their four children. Like most other women in the village, Mala was illiterate. Her house had no running water or electricity, which meant she and her children spent many hours every day finding fuel, tending the fire, or hauling water from the village well.

Mala's chances for a better life improved recently after workers from an unusual lending organization came to her village and introduced a program that helped the women there set up their own businesses. The concept behind the program was simple: Mala and four other women in her village would agree to take joint responsibility for repayment of their loan from the organization. Mala was not required to pledge any of her meager possessions to receive the loan; rather, she puts in a small sum of money she had saved and was trusted to pay back the loans with interest.

Borrowing the equivalent of about U.S. \$100, Mala used the loan to buy a cow and a goat, and to pay for their feed. She was excited and happy with what the loan could do for her family. Sales of milk, cheese, and butter from the animals meant that for the first time, she had a regular income during the months when there was little farm work available. In the past, with daily salaries equal to less than half a U.S. dollar, Mala and her husband rarely were able to save any money. Because they had no possessions to give to a bank if they were unable to make payments, they were not eligible for a regular commercial bank loan. The only other sources of cash were moneylenders who charged very high interest rates, or landowners who demanded free work in their fields as payment. But now, thanks to the small loan and her new business, Mala had money to repair the thatched roof of her family's home to protect it against the monsoon rain, and to buy shoes for her children.

Mala is benefiting from a relatively new development strategy called microfinance that is aimed at raising the gross national product (GNP) per capita, or individual income, of people in low- and middle-income countries. India saw its GNP per capita increase annually by about three percent between 1980 and 1992. Although that pace of improvement compares quite favorably with the situation in many other low-income economies around the world, where GNP per capita actually dropped in the same time period, India still lags far behind other Asian economies such as Singapore and South Korea. Expressed in U.S. dollars, India's GNP per capita was about \$300 in 1992, compared to \$6,790 in Korea. In industrial countries in Europe and North America, GNP per capita normally exceeds \$20,000 a year.

Continued on next page



Microfinance is important for large numbers of poor women who have very limited opportunities to improve their lives or to contribute to the betterment of their families. More generally, it assists people who wish to become entrepreneurs or expand their small businesses but, with few possessions to guarantee a loan, lack access to banks or other traditional lending institutions. Governments have tried to subsidize loans to the poor, but problems including inflation and over-regulation have prevented these programs from becoming self-sufficient. Subsidized programs have also undermined other financial institutions that did not receive government aid, and frequently the people who have been most successful at getting the low-interest government loans have been the richer members of the economy, rather than the poor people they were intended to help.

During the past two decades, microfinance efforts have become an increasingly popular alternative to total reliance on state credit subsidies. Today, the approach is being used, with varying degrees of success, across Asia, Africa, and Latin America. Programs are working in very poor nations, such as Bangladesh and Niger, and in developing countries with higher levels of economic well being, such as Colombia and Costa Rica.

The size of a typical microfinance loan is small, often under U.S. \$400. Operating on this scale, the Grameen Bank of Bangladesh, for example, covers almost half the villages in the country, reaching almost 2 million poor clients. Bolivia's Banco Sol has served nearly 50,000 borrowers, almost 10 percent of the potential market. In other countries, programs are growing at rates ranging from 25 percent to 100 percent annually.

Besides earning money for home improvements, food and clothing, entrepreneurs such as Mala participate in their national economy by providing employment for themselves and others and boosting the supply of goods and services available to the population. Although microfinance works on a small, individual level, collectively it plants the seeds of higher economic growth, or GNP, for poor, developing nations. Involvement in these new lending programs also makes more people aware of some of the basic rules of a free market system, which has become the most common form of economic organization in the world.

Mala's husband, who was at first sceptical of her business efforts, has decided to help her expand by caring for two new cows and goats. With more income, they hope to have a concrete floor poured in their house, and to pay for a greater variety of foods for their family.

While this type of story is compelling, it is not by itself sufficient to convince program sponsors to increase or continue their program support

The Program

The mission of the Women's Micro enterprise Program is to promote new livelihoods and improve household well-being by helping women like Mala enter the labor force and build entrepreneurial skills thereby increasing household income. The long-term goal is to promote private sector development and further economic growth. The Program focuses on the rural poor. The Program targets are that 70 percent of the women clients are starting a micro enterprise for the first time and that 85 percent are in households earning less than US \$1 per day per household member. The Program not only provides financing but also technical assistance. Loans will average US \$225 and are all at or below US \$500. They are to be lump sums for investing in a micro enterprise or providing working capital. The loan maturities range from 1 to 10 years, with an average of 2-3 years. A grace period of one year is offered. (continued on next page)



The Program is funded by a 10-year World Bank line of credit to the Yellamanchili Microfinance Institution and a UNDP capacity building grant. The Program began in 1999 with an objective of fostering 1500 micro enterprises within 5 years with 90 percent being financially sustainable after three years of operation. The objective thereafter is to foster the development of 500 micro enterprises each year with the same target for financial sustainability. The Yellamanchili Microfinance Institution is privately owned and managed and makes microfinance investment and working capital loans and also offers a savings and deposit service to borrowers. The long term goal is for the sustainability of the microfinance program. That is, the Microfinance Institution would be able to cover their operational and financial costs. Operational costs include asset depreciation, loan losses, and the administrative costs of making very small loans. Financial costs are the commercial costs of funds such as savings and bank loans.

Capacity building services to the Microfinance Institution initially included loan officer training in accounting skills, portfolio management, market analysis and outreach, and development of a rudimentary management information system.

Capacity building programs for clients included literacy, basic bookkeeping, business plan development, and financial management.

It is now early in 2006 and an external evaluation of the program has been requested and is being funded by the program donors. Basic descriptive information on the program exists, thanks to the rudimentary management information system. The donors are requesting an evaluation design along with cost and time requirements, but note that an evaluation report must be delivered before the year's end. (See Figures 3.5 and 3.6 for Logic Model examples. Figure 3.8 shows a simplified model. Figure 3.9 shows a more detailed model.)

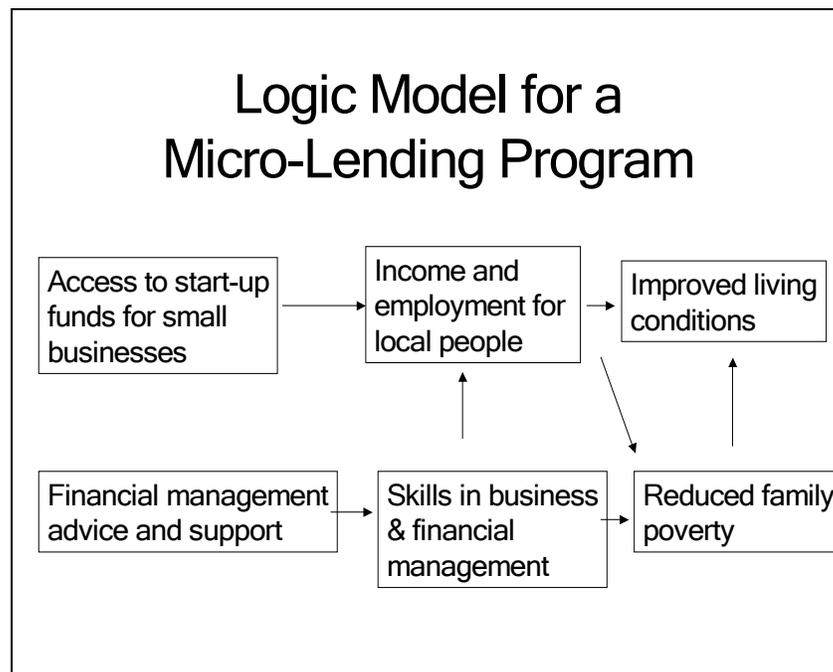
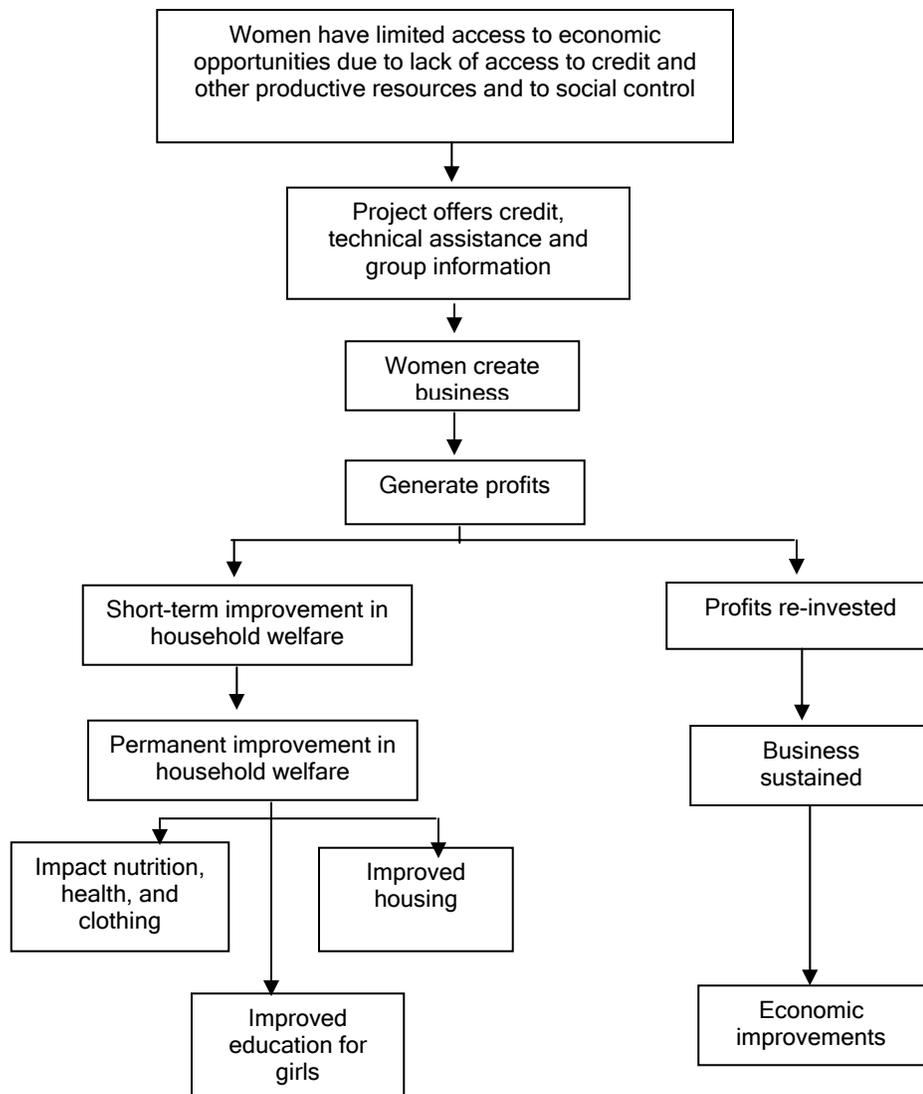


Fig. 3.8: Simple Logic Model for a Micro-Lending Program.



Assumptions:

- Women will create business. They will have time and family support to do so.
- The profits generated will not be diverted (e.g. used to pay for dowry).
- The business will succeed because of strong demand for the product at the price to be charged and there is short supply.
- The business will succeed despite possible constraints on women's time or social pressures.
- The business will succeed as women are provided financial management skills and peer support.

Fig. 3.9: More Complex Logic Model for a Micro-Lending Program.



Program Outcome Model

One of the most common models used by evaluators is the program outcome model. The **program outcome model** is portrayed in terms of inputs, activities, outputs, outcomes, and impacts. We will use the working definitions in Figure 3.10.

Inputs:	The resources put into a program: money, staff, facilities, equipment, and technical expertise.
Activities:	What the program does. For example, the program builds drainage ditches.
Outputs:	The services or products produced. Numbers of people served. Hours or units of service. This is a quantifiable statement of the activities. For example, the program built 50 drainage ditches.
Outcomes:	The effect, or result of the activities and outputs. It is the thing that gets changed because of the program. For example, as a result of the 50 drainage ditches, 100,000 ha of land are now available for farming. As a result of more land available for farming, farmers are able to produce more crops.
Impacts:	The longer term consequence of the program. Typically, impacts refer to goal attainment. For example, the outcome of producing more crops is to increase income. As a result of increased income, poverty is decreased. There often is a chain of outcomes, more immediate ones ultimately leading to more distant impacts. While it is harder to demonstrate a linkage between the programs to build 50 drainage ditches and the reduction of poverty, it is likely that the long-term goal of the program is to reduce poverty.

Fig. 3.10: Elements of a Program Outcome Model.

The logic works this way: resources are invested in a program or project in order for it to carry out its activities. At least some of the activities should result in the production and delivery of services or products, called **outputs**. These outputs should cause something to change. Changes, in the short term, are referred to as **outcomes**. The longer-term changes caused by the program are referred to as **impacts**.



Figure 3.11 shows an example of a program outcome model for a training program. We will return to this in Module 5 when we discuss how to design and build a performance-based monitoring and evaluation system.

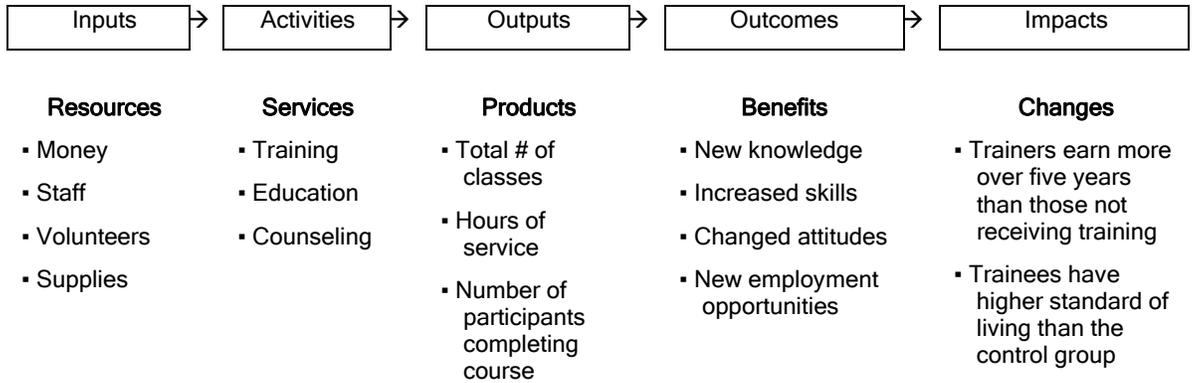


Fig. 3.11: Program Outcome Model for a Training Program

Logical Framework (Logframe)

A related model that can be used as a management tool is the **logical framework**, or **logframe**. A logical framework links up the activities, results, purpose, and objectives of a program, policy, or project in a hierarchy. For each of the components, the evaluator identifies the indicators that are needed, the sources, and the assumptions.

The logframe is a specific type of logic model or approach. It helps to clarify the objectives of a given project, program, or policy, and to identify the causal links between inputs, processes, outputs, outcomes, and impact. Performance indicators are drawn up for each stage of the intervention. Key assumptions are articulated, and the manner in which evaluation and supervision will be undertaken is explained.

The logframe is essentially a 4x4 matrix containing a summary of the critical elements of a project/program/policy. The approach addresses key questions for a project/program/ policy in a methodical manner according to causal logic. Figure 3.12 contains one example of the way in which a logical framework can be used for a program goal.



Narrative Summary	Performance Indicators	M&E/Supervision/ Verification	Key Assumptions
Program Goal:			
Project development objective:			
Outputs:			
Activities:			

Fig. 3.12: Example of Logframe for a Program Goal.

The history of the logframe model dates back over forty years. Originally developed by the American Defense Department, it was later used by the US Agency for International Development. Other donors, such as Canada, the EU, and Germany have since followed suit, utilizing and modifying the logframe.

The logframe can be used for a variety of purposes:²⁴

- Improving quality of project..., program [and/or policy] design – by requiring the specification of clear objectives, the use of performance indicators, and assessment of risks.
- Summarizing design of complex activities.
- Assisting the preparation of detailed operational plans.
- Providing objective basis for activity review, monitoring and evaluation (which is also true of other logic models).

²⁴ Material drawn from *Monitoring and evaluation: Some tools, methods and approaches*, World Bank OED, 2004, p.8.



The logframe has a variety of advantages and disadvantages that should be considered in advance of any planned project, program, or policy intervention. With respect to advantages, the logframe:

- ensures that decision-makers ask fundamental questions and analyze assumptions and risks
- engages stakeholders in the planning and monitoring process
- when used dynamically, is an effective management tool to guide implementation, monitoring and evaluation.

Limitations of the logframe model include the following:

- the focus on achievement of intended effects by intended routes makes logframes a very limiting tool [rigidity problem] in evaluation
- an assumption of consensual project objectives often becomes problematic in public and inter-organizational projects [programs/policies]
- the automatic choice of an audit form of accountability as the priority in evaluations can [come]... at the expense of evaluation as learning.”²⁵

A related difficulty always encountered with LFA has been how to distinguish, and hence apply, the terms it uses for different levels in the hierarchy of objectives. This raises the danger of attempting to ‘jam’ too much into a four-level diagram. Two inter-level links in a project are supposed to take us already to sustainable benefits. Yet the logframe contains no clear time dimension. ‘Jamming’ can cause illogic and is part of a problem of oversimplification.

Additionally, the LF is frequently too simple, even for simple project designs. Not everything important can be captured in a one to three pages, four or five level diagram. Eggers and I used the term ‘*lack-frame*’ for when omissions are major (Gasper, 1997). Many LFA users have underestimated that a ‘frame’ includes some things and leaves others out, and that a ‘frame-work’ is to help the required work not substitute for it.

²⁵ D. Gasper (2000). “Evaluating the ‘logical framework approach’ – towards learning-oriented development evaluation,” in *Public Administration Development*, 20:1. pp. 17-28.



Finally, after an LF has been prepared, it tends to be fixed and not updated, and thus becomes a 'lock-frame'.²⁶

Figure 3.13 illustrates the logframe approach, using as an example the childcare component of a women's development project.

<p>GOAL (general objective) Improve the economic and social welfare of women and their families</p>	<p>INDICATORS Improvements in family income in x% of participating families Improvements in measures of health status, nutritional status, and educational participation</p>	<p>VERIFICATION Household surveys of the economic, social, and health condition of all family members</p>	
<p>PURPOSE (specific objective) Provide women with opportunities to earn and learn while their children are cared for in home day care centers</p>	<p>INDICATORS • day care homes functioning, providing accessible, affordable care of adequate quality during working hours and thus allowing shifts in women's employment and education activities</p>	<p>VERIFICATION From surveys: changes in women's employment and education and their evaluations of the care provided Evaluations of quality of care provided based on observation</p>	<p>ASSUMPTIONS Other family members maintain or improve their employment and earnings Economic conditions remain stable or improve</p>
<p>OUTPUTS Trained caregivers, supervisors, and directors Day care homes upgraded and operating Materials developed Administrative system in place MIS in place</p>	<p>INDICATORS • caregivers trained • homes upgraded and operating • materials created and distributed • a functioning MIS</p>	<p>VERIFICATION Data from MIS on trainees, homes, and materials Evaluations of trainees after initial training and during course of continuous training</p>	<p>ASSUMPTIONS Family conditions allow home day care mothers to carry through on their agreements to provide care</p>
<p>ACTIVITIES Select caregivers and supervisors and provide initial training Upgrade homes Develop materials Develop administrative system Deliver home day care Provide continuous training and supervision Develop monitoring and evaluation system</p>	<p>RESOURCES Budget Technology Human resources</p>	<p>VERIFICATION Plan of action, budgets, and accounting records Studies showing that the chosen model and curriculum work Evaluations to see that the activities were not only carried out but done well Survey o</p>	

Source: Inter-American Development Bank, <http://www.iadb.org/sds/soc/eccd/6example.html#ex1>

Fig. 3.13: Logical framework for a childcare program embedded in a women in development project

²⁶ D. Gasper (1997). *Logical Frameworks: A Critical Assessment Managerial Theory*, Pluralistic Practice Working Paper Series No. 264. Institute of Social Studies. The Hague: ISS.



If a logical framework is developed for a well-baby clinic, it might include immunizations as one of its activities, with a target result of immunizing 50% of all children under age 6 in a particular district. If this target is achieved, then the incidence of preventable childhood diseases should decrease. This ultimately should achieve the overall objective of reducing the number of deaths of children under age six (see Figure 3.14).

The second column identifies the indicators that verify the extent to which each objective has been achieved. Indicators are used to measure change or to assess whether objectives are achieved. Ideally, the indicators are selected during the program formation and design stage. As the project is being developed, the objectives and target group should be specified. In addition, the anticipated changes as a result of the project should be specified: these can be immediate changes (program purpose) and longer term changes (overall objectives or impact). It might also include some performance measures: how many people served and for what cost? Lastly, there might be some criteria established for judging the success of the program.

The third and fourth columns specify where the data will be obtained in order to assess performance against the indicators, and any assumptions made about the nature and accessibility of those data.

It is important to stress that logic models are extremely useful in showing how a program is supposed to work and achieve its intended outcomes and impacts. They are also useful in identifying through assumptions the treats to the program working as it supposed to and achieving the desired outcomes and impacts. But when conducting an evaluation based on logic models, the evaluator must also look for unintended outcomes and impacts, both positive and negative.



Ev

Hints for Evaluators

- Spend time learning about and trying to thoroughly understand the project, program, or policy. Including:
 - relation between the program stages and the broad evaluation
 - policy and context and its time frame
 - existing theoretical and empirical knowledge
 - reconstruct, test, and work with the underlying program logic, program theory, and logical frameworks
- Identify the standards and guidelines to use for the evaluation
- Involve the stakeholders.

Mgr

Hints for Managers of Evaluation

- Work with the evaluator(s) to make sure they thoroughly understand the project, program, or policy. Including:
 - relation between the program stages and the broad evaluation
 - policy and context and its time frame
 - existing theoretical and empirical knowledge
 - reconstruct, test, and work with the underlying program logic, program theory, and logical frameworks
- Identify the standards and guidelines to use for the evaluation
- Involve the stakeholders.



Summary



In this module, we have considered the overall evaluation design flow chart. We have looked at critical issues involved in the timing of evaluations, and we have covered logic models, program theory, and theory-based evaluation.

Are you comfortable now:

- describing the importance of doing a front-end analysis for an evaluation
- describing the role of stakeholders and how to identify important stakeholders and impactees
- describing the value of balancing costs and benefits of evaluation
- describing pitfalls of the front-end planning process
- classifying the program stages and the broad evaluation questions
- describing the policy context and its time frame
- describing ways to learn about existing theoretical and empirical knowledge
- describing how to reconstruct, test, and work with the underlying:
 - program logic
 - program theory
 - logical frameworks



Quiz Yourself

Answer the following multiple-choice questions to help test your knowledge of

You will find the answers to the questions on the last page of this module.

1. Which of the following is the definition of a **stakeholder**?
 - a. the person who will manage the preparation, implementation, and follow-up of an evaluation
 - b. the person or representative of an organization that has a “stake” in the intervention
 - c. the person who will do the actual work for an evaluation
2. List five **sources for stakeholders**.

3. For each of the following stages of social program development **write in the corresponding evaluation question** to be asked.

Stage of program development	Evaluation question to be asked
Assessment of social problem and needs	
Determination of goals	
Design of program alternatives	
Selection of alternative	
Program implementation	
Program operation	
Program outcomes/effects/impact	
Program efficiency	



4. **Which evaluation model** is portrayed in terms of **inputs, activities, outputs, outcomes, and impacts**?
 - a. program outcome model
 - b. systems model
 - c. program output model
 - d. logical framework
5. Which of the following are examples of **activities**?
 - a. training, education, counseling
 - b. new knowledge, increased skills, changed attitudes
 - c. improved economic conditions for subjects
 - d. money, staff, volunteers, supplies
6. Which of the following are examples of **outcomes**?
 - a. training, education, counseling
 - b. new knowledge, increased skills, changed attitudes
 - c. improved economic conditions for subjects
 - d. money, staff, volunteers, supplies
7. Which of the following is the description of a **logic model**?
 - a. the black box effect between the inputs and the outcome
 - b. a visual representation to show a process
 - c. an attempt to provide a visual way to depict program theory
 - d. a visual portrayal of the inputs, activities, outputs, outcomes, and impacts



Application Exercise 3.1

Applying the Program Outcome Model



Instructions:

Below are a list of inputs, activities, outputs and outcomes in random order. Please check the column that best describes each statement.

Statement	Input	Activity	Output	Outcome	Impact
A. Poverty rates decline in areas which have the project schools					
B. Built new educational facilities					
C. 5,000 students attended classes last year.					
D. 80% of graduates are hired at above poverty wages					
E. Hired 20 new teachers					
F. Provided \$6 million in loans and grants for construction					
G. Implemented new curriculum to teach more practical skills for marketplace					
H. Test scores improved by 20%					
I. 1,000 students graduated last year.					
J. Employers are satisfied with skills of graduates					
L. Provided 500 students with classes in job search strategies.					



Application Exercise 3.2

Applying the Program Outcome Model



Now that you are able to identify the inputs, activities, outputs, outcomes and impacts from an existing list (see previous exercise), the next step is to be able to generate a list of inputs, activities, outputs, outcomes, and impacts for a program you are evaluating.

Instructions:

Suppose you have been asked to evaluate an agricultural assistance program in your region. The purpose of the program is to provide technical assistance and equipment to farmers to help them improve sustainable farming practices.

Identify the inputs, activities, outputs, outcomes, and impacts of the program.

Then compare and discuss your lists with a colleague.

Inputs:

Activities:

Outputs:

Outcomes:

Impacts:



Application Exercise 3.3

Your Program



Instructions:

Think about the program you are currently working with or one that you are familiar with.

1. What are its goals?

2. What are its objectives?

3. What are its major activities?

4. Why is it important to know whether this program is making a difference?

5. What is the program theory?

6. Identify it's:
Inputs:

Activities:

Outputs:

Outcomes:

Impacts:
7. Draw a program logic model to show how or why you expect your intervention to work.



Further Reading and Resources:

- Bell, P. (1997). "Using argument representations to make thinking visible for individuals and groups." In: R. Hall, N. Miyake, & N. Enyedy (Eds.), *Proceedings of CSCL '97: The Second International Conference on Computer Support for Collaborative Learning*. Pp. 10-19. Toronto: University of Toronto Press.
- Evaluation Models. (2001). *New directions for evaluation, No. 89*. San Francisco, CA: Jossey Bass.
- Funnell, S. (1997). Program logic: An adaptable tool for designing and evaluating programs. *Evaluation news and comment, Vol. 6(1)*, pp. 5-7.
- Leeuw, Frans L. (1991). Policy theories, knowledge utilization, and evaluation. *Knowledge and policy, 4*: 73-92.
- Owen, J.M., & Rogers, P.J. (1999). *Program evaluation: Forms and approaches*. London: Sage.
- Porteous, Nancy L., Sheldrick, B.J., and Stewart, P.J. (1997). Program evaluation tool kit: A blueprint for public health management. Ottawa, Canada: Ottawa-Carleton Health Department.
- Porteous, Nancy L., Sheldrick, B.J., and Stewart, P.J. (2002). "Introducing program teams to the logic modules: Facilitating the learning process." *The Canadian journal of program evaluation*. Vol 17 No. 3. Pp. 113-141.
- Program theory in evaluation: Challenges and opportunities. (2000). *New directions for evaluation, No. 87*. San Francisco, CA: Jossey Bass.
- Rogers, Patricia J. and Hacsí, T.A., Petrosino, A. & Huebner, T.A. (eds.) (2000). *Program theory in evaluation: challenges and opportunities*, New directions in evaluation, Number 87, San Francisco: Jossey-Bass Publishers.
- Rossi, P., Freeman, H. & Lipsey, M. (1999). *Evaluation: A systematic approach*. Thousand Oaks: Sage Publications.
- Shadish, Jr., W.R., Cook, T.D., and Leviton, L.C. (1991). *Foundations of program evaluation*. Thousand Oaks, CA: Sage Publications.
- Stufflebeam, D.L., Madaus, G.F., and Kellaghan, T. (Eds.) (2000). *Evaluation models (2nd Ed.)*. Boston: Kluwer Academic Publishers.



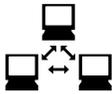
Suthers, D. D., Toth, E. E., & Weiner, A. (1997). An integrated approach to implementing collaborative inquiry in the classroom. In R. Hall, N. Miyake, & N. Enyedy (Eds.), *Proceedings of CSCL '97: The Second International Conference on Computer Support for Collaborative Learning* (pp. 272-279). Toronto: University of Toronto Press.

US GAO, *Designing evaluations*, Washington, 1991

Weiss C. H. (1998). *Evaluation: Methods for studying programs and policies*. New Jersey: Prentice Hall.

Worthen, B.R., Sanders, J.R., and Fitzpatrick, J.L. (1997). *Program evaluation*. New York: Longman.

Websites



CDC Evaluation Working Group: Logic Model Resources

<http://www.cdc.gov/eval/resources.htm#logic%20model>

Community Toolbox. A Framework for Program Evaluation: A Gateway to Tools.

http://ctb.lsi.ukans.edu/tools/EN/sub_section_main_1338.htm

International Development Research Centre (2004). *Evaluation Planning in Program Initiatives* Ottawa, Ontario, Canada.

Online:

<http://web.idrc.ca/uploads/user-S/108549984812guideline-web.pdf>

Carolien Klein Haarhuis (2005). Promoting anti-corruption reforms: Evaluating the implementation of a World Bank anti-corruption program in seven African countries. Available online at:

<http://igitur-archive.library.uu.nl/dissertations/2005-0714-200002/full.pdf>

Management Sciences for Health (MSH) and the United Nations Children's Fund (UNICEF), "Quality guide: Stakeholder analysis" in *Guide to managing for quality*.

<http://bsstudents.uce.ac.uk/sdrive/Martin%20Beaver/Week%202/Quality%20Guide%20-%20Stakeholder%20Analysis.htm>

Porteous, Nancy L., Sheldrick, B.J., and Stewart, P.J. (1997). Program evaluation tool kit: A blueprint for public health management. Ottawa, Canada: Ottawa-Carleton Health Department. Available online at

<http://www.phac-aspc.gc.ca/php-ppsp/toolkit.html> (English)

or

http://www.phac-aspc.gc.ca/php-ppsp/toolkit_fr.html
(French)



Suthers, D., & Weiner, A. (1995) Groupware for developing critical discussion skills.

<http://www-cscl95.indiana.edu/cscl95/suthers.html>

Taylor-Powell, Ellen (2005). "Logic models: A framework for program planning and evaluation". Madison WI: University of Wisconsin-Extension, Program Development and Evaluation.

<http://www.uwex.edu/ces/pdande/evaluation/pdf/nutritionconf05.pdf>

University of Ottawa Program Evaluation Toolkit. Program Logic Model:

<http://www.uottawa.ca/academic/med/epid/excerpt.htm>

University of Wisconsin-Extension (UWEX). Logic Model:

<http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html>

University of Wisconsin-Extension examples of logic models.

<http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel/examples.html>

W.K. Kellogg Evaluation Logic Model Development Guide:

<http://www.wkkf.org/pubs/tools/evaluation/pub3669.pdf>

The Evaluation Center, Western Michigan University. The Checklist Project:

<http://www.wmich.edu/evalctr/checklists/checklistmenu.htm#mgt>

The World Bank Participation Sourcebook. Online (HTML format):

<http://www.worldbank.org/wbi/sourcebook/sbhome.htm>



Answers to Quiz Yourself



1. b

2.

- Participants
- Beneficiaries
- Indirect Beneficiaries
- Other Impactees
- Donors
- Government officials, elected officials, government employees with a relevant interest, such as planners, public health nurses, etc.
- Program directors, staff, board members, managers, volunteers.
- Policy-makers
- Community and interest groups, including those that might have a different agenda from the program officials.

3.

Stage of program development	Evaluation question to be asked
Assessment of social problem and needs	To what extent are community needs and standards met?
Determination of goals	What must be done to meet those needs and standards?
Design of program alternatives	What services could be used to produce the desired changes?
Selection of alternative	Which of the possible program approaches is best?
Program implementation	How should the program be put into operation
Program operation	Is the program operating as planned?
Program outcomes/effects/impact	Is the program having the desired effects?
Program efficiency	Are program effects attained at a reasonable cost?



4. a

5. a

6. c

7. c

 To continue on to this
 **Module's Presentation Slides** click here

 To continue on to the
 **Next Module** click here

 To return to the
 **Table of Contents** click here