

Part II
JICA's Evaluation
Methods

Chapter 1 Confirming Evaluation Purposes and Organizing Information on Target Project

This chapter explains the first step of evaluation planning; namely, confirmation of the evaluation purpose and how to grasp the whole picture of target project.

Tips!

- Evaluation purposes differ among ex-ante, mid-term, terminal and ex-post evaluations. As the first step of evaluation planning, it is important to confirm evaluation purposes and share information among stakeholders on how the evaluation results will be used and by whom.
- Information that has to be obtained in advance includes the contents of a project plan and the level of project's achievement.
- Try to understand the project contents and its structure (linkage of causal relationships) using logframe/PDM. The concept of the logic model that composes the theoretical basis of logframe/PDM can be helpful.
- In the case that the actual situation of the project is not reflected on its logframe/PDM, some adjustments are needed. However, this does not mean to change logframe/PDM to make evaluation study easier.
- Examine the appropriateness of indicators and means of verification in logframe/PDM, and consider a use of new indicators and means if necessary.
- Several Logframe/PDM of projects are located under the same program or sectoral goal, and thus development plans or development issues of partner countries should be taken into consideration when conducting evaluation study.
- When examining performance and implementation process, monitoring information should be fully utilized. Conduct additional surveys in case there is a lack of information in the existing monitoring documents.

1. Confirmation of Evaluation Purpose

When evaluation is planned, first of all, the evaluator and related stakeholders need to confirm the purpose of the evaluation. There are various evaluation methods depending on the purpose. The evaluation results may end up useless and not to the point, unless those concerned share its purpose and use. Therefore, it is very important to confirm for what and by whom results of evaluation will be used, and plan evaluation to meet its purpose.

The purpose of evaluation differs depending on where an evaluation is situated on the project cycle as shown below.

Four types of project-level evaluation:

Ex-ante Evaluation: Examines the validity of the contents of project plans. Results of ex-ante evaluation are utilized to obtain the final approval for project implementation.

Mid-term Evaluation: Examines whether a project is properly producing effects at the mid-term. Results of mid-term evaluation are utilized to improve the project strategy as well as learn lessons for similar type of projects.

Terminal Evaluation: Examines whether a project is properly producing effects at the end of the project period. Results of terminal evaluation are utilized to decide whether the project be terminated or followed up. The lessons drawn from the results are also fed back as “lessons learned” to similar types of projects.

Ex-post Evaluation: Examines whether expected effects and impact are produced from a project in a certain period of time after the termination of the project. Results of ex-post evaluation are utilized to make recommendations to the implementing agency in the partner country, propose lessons learned in an attempt to effectively and efficiently implement similar projects in the future, and make plans at the macro level (e.g., JICA’s country programs).

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Another important issue in the process of confirming the purpose of evaluation is that those concerned with evaluation share the same purpose. “Those concerned” means stakeholders including JICA departments in charge of the project, the relevant

ministries and implementing agencies in the partner country, and the beneficiary. People generally tend to alienate “evaluation” because they feel they are being audited from the outside. Therefore, it is indispensable to gain the people’s understanding of its purpose and their cooperation towards evaluation activities in order to carry out evaluation effectively.

It is also necessary to specify who will be the users of evaluation results. Since JICA’s project evaluation is conducted internally, project operation departments and implementing agencies in a partner country are usually the first users of evaluation results. In some projects, local people – either as the beneficiary or as the counterparts of implementing agencies – are the direct target for feedback. It may be a good idea to arrange an occasion to discuss among those concerned the kind of evaluation study needed to improve project management.

2. Grasping the Whole Picture of a Target Project

The next step after confirmation of evaluation purposes is to grasp the whole picture of a project as an evaluation target. By knowing what is already happening in the project, the evaluator can more easily decide on what evaluation questions are important in conducting the study and what type of data needs to be collected. There are differences in the types and the quantity of information the evaluator can obtain at the time of evaluation, depending on the timing of the study and availability of related documents, including monitoring results. Generally, the following information should be obtained to clarify the whole picture of the project.

Types of Information Regarding a Target Project

On the contents of plans:

- What is the background of implementing the project?
- What are the development issues that the project contributes to?
- How effective are the project strategies for solving the development issues?
- What is the main component of the project?
- Who is the main target group?
- What effects does the project aim to produce?
- How are causal relationships structured between project implementation and effects?
- What is achievement criteria or basis for judgment?
- What are the external factors and risks?
- What are the inputs and how much are the costs, etc.?

On the project performance:

- What is happening in the project implementation process?
- What results are produced in the project, etc.?

i) Contents of Plans

Evaluation compares the current situation of a project with its original plans. Thus, it is necessary first to collect information on the contents of plans. There mainly are two parts: 1) the project elements: project purpose, activities and inputs and 2) the way the project is structured (the logic of causal relationships). Project plans are made based on the hypothesis that expected effects will be produced by implementing a project. We can confirm how the plans were made considering their background, the relation to

development issues, and the relevance of project strategies.

When grasping the contents of plans, the logframe/PDM can be utilized. In the next section, “**the logic model**,” the theoretical basis of the logframe/PDM, will be explained focusing on how to organize information on a target project from evaluation perspectives.

ii) On the Project Performance

Another type of information that should be obtained is the performance of a project at the time of evaluation. In terms of mid-term evaluation, it becomes important to know the actual inputs and outputs as well as the current situation of implementation process. Regarding terminal evaluation, in addition to that kind of information, the achievement level of project purpose should be obtained. We can generally obtain information on these items from the monitoring results. However, if needed, additional surveys can be conducted during evaluation.

iii) Main sources of information

Main sources of information for grasping the whole picture of a project are shown below.

Main Sources of Information to Grasp the Whole Picture of a Project:

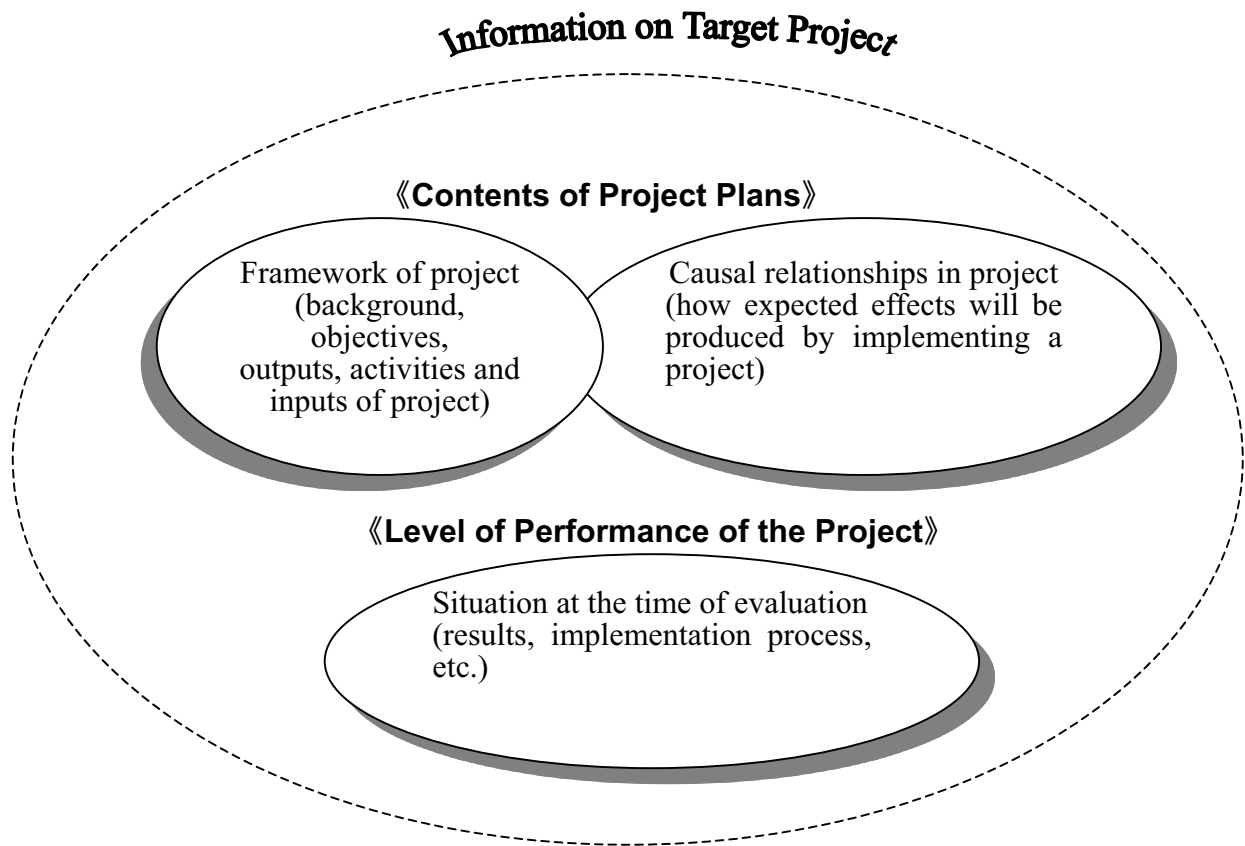
In the case of ex-ante evaluation:

- Development plans of a partner country in a sector/sub-sector
- Japan’s country programs
- Related literature on the sector/sub-sector
- Information about on-going projects in the sector/sub-sector
(regarding other donors as well)
- Baseline data
- Evaluation reports of similar projects (logframe/PDM, lessons learned, etc.)
- Draft logframe/PDM, etc.

In the case of mid-term, terminal, and ex-post evaluation:

- Summary tables of ex-ante evaluations, project documents
- Different versions of the logframe/PDM
- Monitoring reports
- Various reports and memorandum of project
- JICA officers in charge, ex-experts and members of the supporting committee in Japan
- Relevant ministries of a partner country, implementing agencies (if the field office carries out evaluation), etc.

Figure 2-1-1 Conceptual Overview of Information on Target Project



3. Utilization of the Logical Framework

(1) Actual situation of project and logframe

Logframe is a useful tool for understanding what project objectives, activities, and inputs are, how target values and measurement are selected, and what project risks are.¹ Logframe has been used for the planning and management of projects. Logframe may provide the evaluator with information about the actual situation and the logics or theories of projects. The following information can be obtained through logframe.

Information to be obtained through logframe:

- Expected effects and outputs in the project
- Target values in objectives as a basis for judgment
- Means of verification (which is useful for considering survey methods)
- Some external factors and risks that influence the project performance
- Inputs/resources
- Availability of monitoring information, etc.

In reality, however, the contents of logframe may not be very clear and logical, or target values may not be clarified in some cases. In that case, the evaluator needs to grasp the actual situation of a project from relevant documents or through interviewing people concerned. In addition to that, an opportunity to have a discussion with stakeholders can help the evaluator consider what should be investigated to measure the effects of the project and with what criteria the achievement level of objectives should be judged.

(2) The Theory of the Logic Model

i) What is the 'Logic Model'?

"The logic model" is one of the project evaluation theories and composes the theoretical basis of the logframe.

Logic Model is...

Logic model represents the evaluation theory of 'program theory.' It sometimes is described in such terminologies as 'program outcome logic' and 'action theory' depending on researchers. Program theory evaluation is conducted through confirming or assuming a cause and effect ladder of programs and projects.

By using a logic model, the causal relationships of the target project are clarified, and that will help evaluators investigate whether project inputs are really producing effects as assumed or impacts are observed as expected, and/or any theory failure exists in the project.

The logic model is a theory for specifying causal relationships in a project. All projects assume a hypothesis that “*if* the activities of A are implemented, *then* the effects of B will be produced.” For instance, an irrigation project assumes the hypothesis that “*if* an irrigation facility is constructed, *then* the productivity of rice will be increased.” Another logic that “*if* the productivity of rice is increased, *then* the income level of farmers will be improved” is assumed in the project as a cause and effect relationship. If these “cause-effect” relationships do not properly function, the project may fail. In the evaluations, we need to identify what hypothesis underlies the project and what causal relationships the project is structured with, and examine whether they function, whether the hypothesis is correct, and whether expected effects are being produced. The model that applies the theory of specifying causal linkage in a project is called “**the logic model.**” Figure 2-1-2 shows its conceptual figure.

ii) Outcome and Project Management

As shown in figure 2-1-2, another important aspect in evaluation based on the logic model is that the project is described in two levels, namely, outcome level and project management level. This concept is useful when examining where project issues lie and who are responsible for those issues. For instance, if expected effects are not being produced, we can examine whether there are problems in the range of management or in the specifying of causal relationships “*if ...then.*” This kind of analysis is very important in order to make recommendations and draw lessons learned, since we can specify whose responsibility should be counted. Such an evaluation approach using logframe is consistent with the framework of JICA evaluation to assess the performance by focusing on three aspects: results, implementation process, and causal relationship.

Definition of Outcome and Outputs

Outcome:

The likely or achieved short-term, intermediate, and long-term effects of the outputs of a development intervention. The long-term outcomes are often called ‘impact.’

Outputs:

The products, capital goods, and services which result from a development intervention. Outputs may also include changes resulting from the intervention that are relevant to the achievement of outcomes.

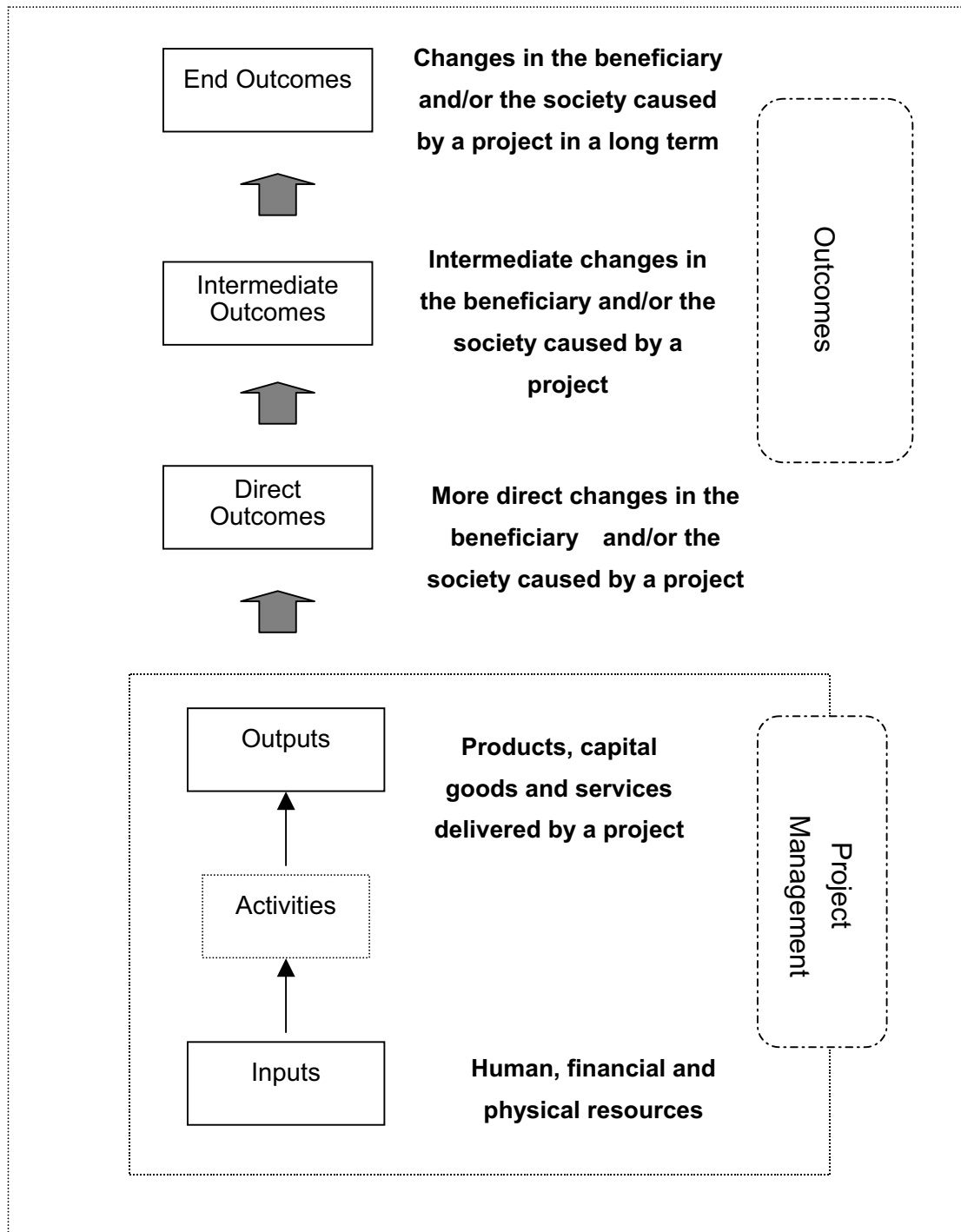
Main Source: OECD ‘Glossary of Key Terms in Evaluation and Results Based Management’ 2002

iii) Logic Model and Logframe

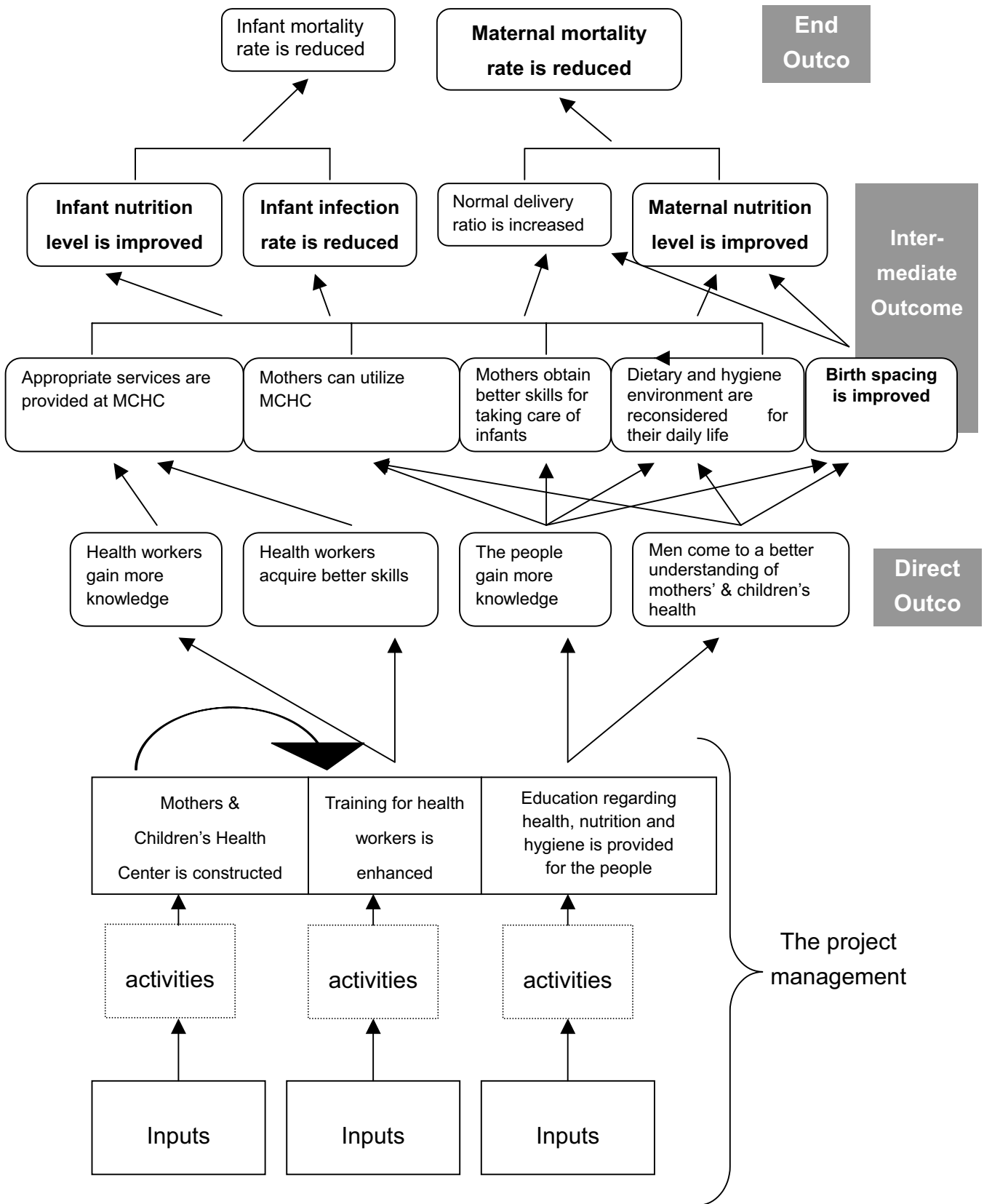
JICA introduces, at the planning phase, a logframe that comprises the theory of the logic model. Therefore, there is no need to build up a new logic model at the time of evaluation. The important thing, however, is to appropriately utilize logframe in the evaluation while fully understanding the theory of the logic model.

There usually are several different levels of outcomes expected by project intervention (refer to figure 2-1-3). But the logframe has only two levels: 1) the overall goal, and 2) the project purpose (refer to figure 2-1-4). The project purpose is described in the form of direct or short-term benefits for the target group or the society, while the overall goal is the effects or changes over a longer term. Based on the already existing logframe, we are able to understand project theory by identifying causal relationships as well as expected outcomes and the impact of the project. If some questions regarding the contents of the project or the causal relationships are found in that process, they should be reflected on evaluation work plans for further examination.

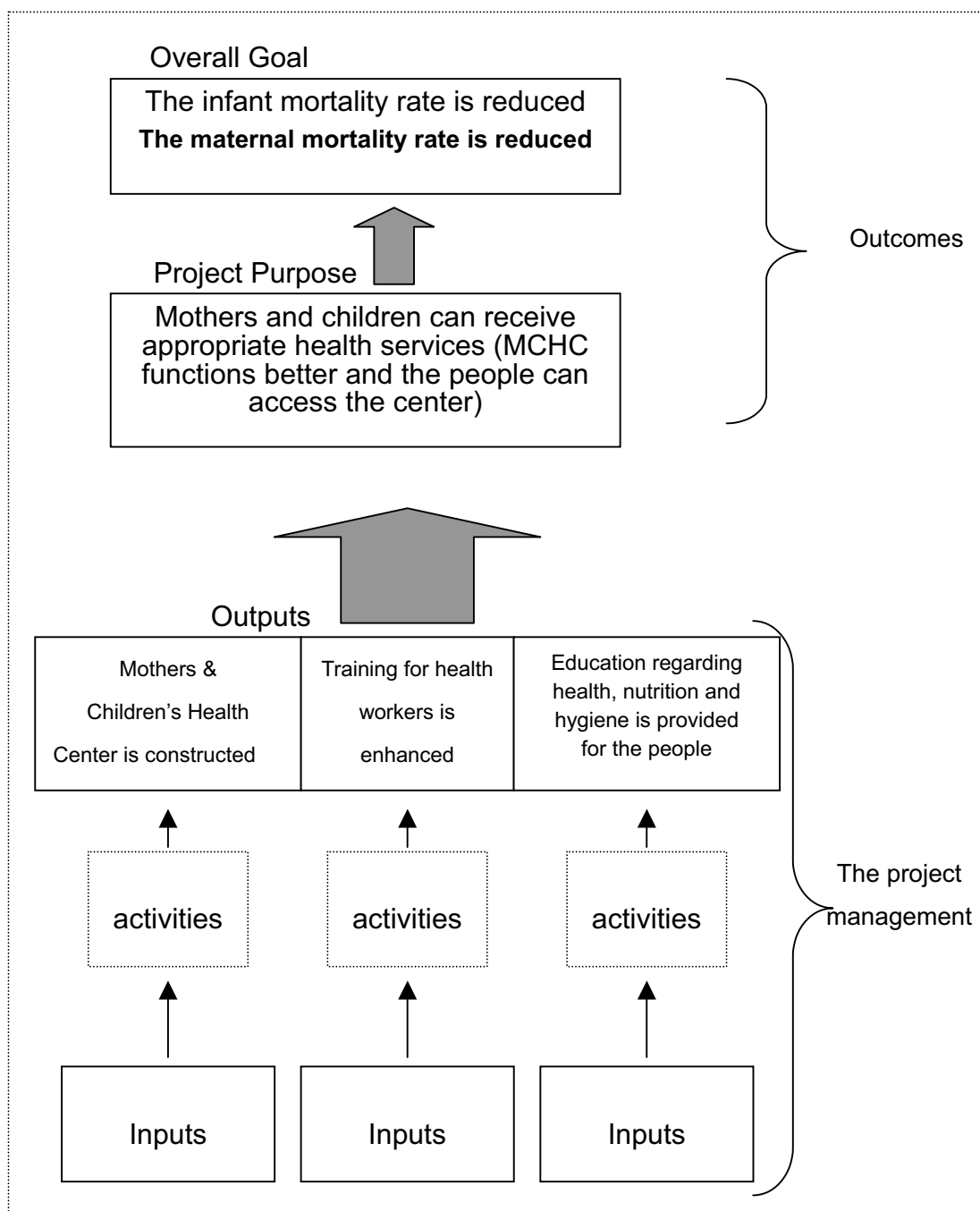
Figure 2-1-2 The Logic Model



**Figure 2-1-3 An Example of the Logic Model:
“The Project of Health Improvement for Mothers and Children”**



**Figure 2-1-4 An Example of the Logical Framework at JICA
(Narrative Summary)
“The Project of Health Improvement for Mothers and Children”**



(3) Reviewing Logframe: Whether It Reflects the Actual Situation of a Project

At JICA, a logframe is formulated at the time of project planning, applying causal relationship of the logic model. In and after mid-term evaluation, it is possible to correlate the contents of logframe to the evaluation work plans in so far as the actual

situation of a project is accurately described by the logframe (in the case that there exist plural versions of the logframe, the most recent one is applied). In reality, however, there are cases in which the logframe is not clearly or theoretically formulated, and thus does not reflect the actual situation of a project. Sometimes not only causal relationships but also indicators, targets, means of verification, and important assumptions are not well identified. In that case, the evaluator should adjust the logframe so as to reflect what is happening at the project site as accurately as possible using other project information. For instance, in the case that what is written as the project purpose can merely be considered as an output, the evaluator – working in consensus with the stakeholders – can reset the project purpose by examining related materials or interviewing those concerned to find out what effects were originally expected. Based on monitoring results, the evaluator may also adjust the indicators in a more appropriate way.

The task of adjusting the logframe does not mean that the evaluator can formulate an “*assumed logframe*” nor set the “*target values to be easily evaluated.*” The evaluation target is the planned contents and project performance. Therefore, the aim of reviewing the logframe at the time of evaluation planning is to adjust its contents according to what is really happening at the site.

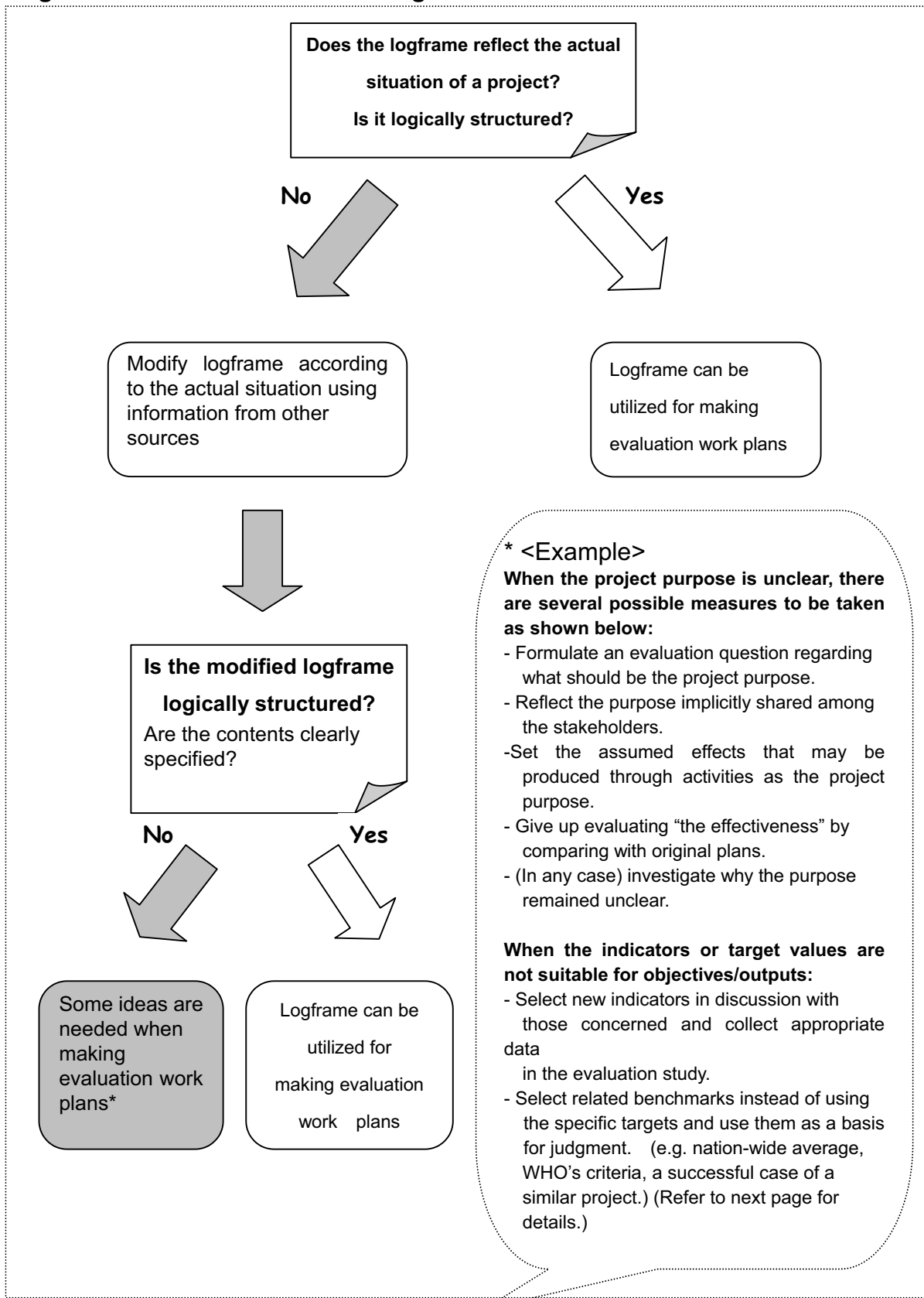
When the planned content or objectives are not clear even after reviewing other information, it is often difficult to construct causal relationships in the logframe. As a result, we may not be able to evaluate the project in a real sense.² In such a case, we can formulate the evaluation question of what was the assumed project purpose, and then measure the degree of achievement after identifying the purpose.

In the case of ex-ante evaluation, the evaluation results are reflected by the formation and/or revision of the logframe and the establishment of a basis for smooth monitoring and evaluation afterwards.

Figure 2-1-5 shows the steps of reviewing the logframe at the time of evaluation planning.

² At JICA, however, such a case would not occur since ex-ante evaluation is now conducted. In the case that it happened in mid-term or terminal evaluation at all, it would be a matter of the quality of ex-ante evaluation itself or the monitoring.

Figure 2-1-5 Utilization of the Logframe in Evaluation



(4) Adequacy of Indicators and Means of Verification in Logframe

There is a column of “indicators” in the logframe for the measurement of objectives. In the column, the measurement of outputs, project purpose, and overall goal are specifically set with targets. Also, next in the right, the column “means of verification” shows the data collection methods for the indicators. That information is indispensable for monitoring a project. It also can be utilized to confirm project performance as well as to determine the data needed and the data collection methods in an evaluation study.

The evaluator needs to examine whether the project purpose is described with appropriate indicators and measurement methods. If the indicators are not appropriately stated, the information on project performance submitted by the implementing agency might not be trustworthy. In that case, the evaluators may conduct additional surveys to obtain performance data.

i) Indicators and Measurement Methods

An indicator is a concept for understanding a phenomenon. For instance, the phenomenon that “people become rich” can be understood by the indicator of “income.” Or, it can be better measured by counting “the number of livestock” in rural areas. As another example, the phenomenon that “children’s academic skills are improved” can be proved by using the indicator of “the increase in knowledge.”

Usually, there are several ways to measure a particular phenomenon. For instance, income can be measured by seeing the change in people’s average annual income or in their total income. The increase in children’s knowledge may be measured either by the average score of the nation-wide test, the average rate of the composition test, or the average score of the quiz in every class.

Needless to say, we have to fully consider, at the planning phase, which measurement methods are most adequate. In evaluation, it is necessary to examine whether indicators and measurement methods described in the logframe are suitably in line with the project contents or the situation of the target society as well as the applicability of monitoring and evaluation. For instance, in measuring the effects of training, there are many ways to measure it, such as the number of those who received training, the degree of their satisfaction, the increase in their knowledge, the level of skills acquired, and the degree of their utilization (contribution at work, the employment rate, etc.), and so on. Also, in order to measure those effects, it might be necessary to introduce a test before and after the training, so that the change in their knowledge can be observed.

Major criteria to review the adequacy of indicators and measurement methods are described below.

Criteria for Good Indicators and Measurement Methods

“Indicators”

- **Direct/Valid:** Whether indicators directly explain a phenomenon. More direct indicators explain the objective more clearly, and thus make it easier to measure the achievement level.
- **Operational:** Whether indicators are defined to be operational enough. For instance, the indicator of “the number of mid-level technicians who have succeeded” cannot be measured unless the meaning of “succeeded” is clear enough (e.g., it can be defined as “those who became employed within one year after the professional training” or “those whose salary was raised”).
- **Adequate:** Whether the indicators adequately represent objectives. We should avoid too many indicators for only one purpose. It might mean that the objectives could be too complicated or their contents are not fully understood among those concerned. In that case, it would be necessary to review objectives and reset more concrete and specific ones.

“Measurement Methods”

- **Practical:** Whether measurement methods are practical. The cost of measurement depends on measurement strategies and the credibility of secondary data. If highly reliable secondary data are available, then a simple practical indicator can be set at a minimal cost. The indicators that are measurable only after large scale surveys may not be practical from the viewpoint of the cost and time. Measurement methods are part of the management tools used for monitoring and evaluation. The accessibility and timing of obtaining data is another important criterion in selecting measurement methods.
- **Reliable:** Whether data collected are reliable. If the same results can be obtained at each measurement, the data may be more reliable. The data source also should be reliable and the bias of a surveyor should be eliminated as much as possible.

ii) Target Values

Target values provide the basis for judging performance, and thus they are a very important part of logframe. It is indispensable that stakeholders reach an agreement

on target values at the planning phase of the project. If it turned out that no clear target was set in the project planning, the evaluator and other stakeholders should have meetings to decide upon a basis for judgment using related criteria or statistical data. (Refer to box 2.)

(5) Positioning of the Logframe in a Program

In understanding the project through a logframe, questions about the positioning of end outcome (or the overall goal) of an individual project in the underlying program or the development issue should also be raised. An individual project is one way to solve a development issue within the framework of a large program. JICA defines a project and a program as described below. Figure 2-1-6 shows a diagram of their positioning.

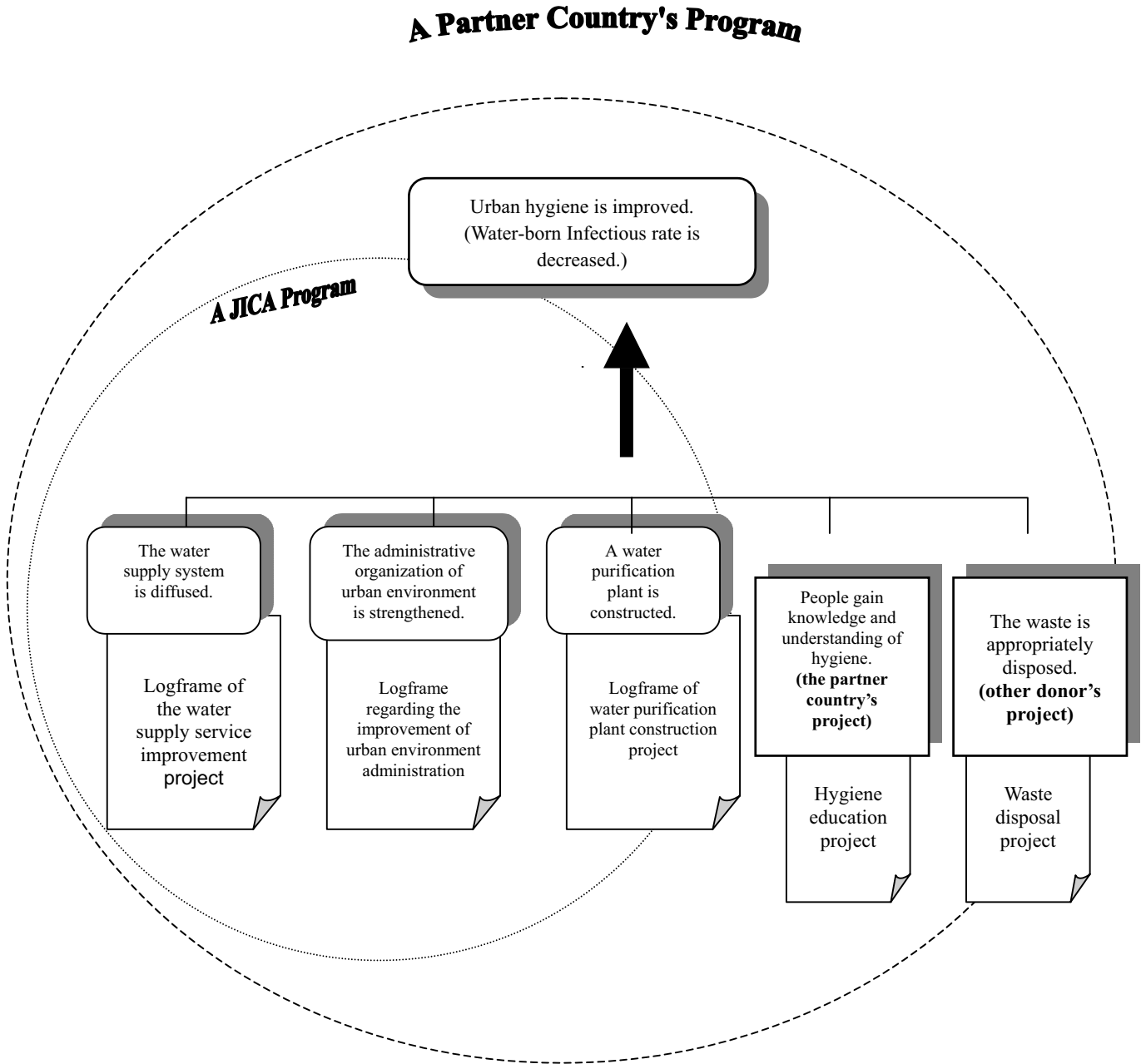
As shown in figure 2-1-6, a program is a collection of individual projects that share the same overall goal under the same development issue. In evaluation, it becomes necessary to examine how an individual project is positioned in a program or under a development issue and also what the linkages are among the projects of other donors and partner countries. This is especially the issue of “relevance” in ex-ante evaluation and “impact” in ex-post evaluation.

JICA’s Definitions of a Program and a Project:

- **A *program*** is a collection of individual projects that are loosely tied under development issues.
 - **A *project (individual)*** has a purpose of producing certain outcome within a certain period of time. Outcome can quantitatively be measured, and causal relationships with input can be directly assumed.
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Figure 2-1-6 Positioning of a Program and Projects

“The Case: Urban Hygiene Improvement Program”

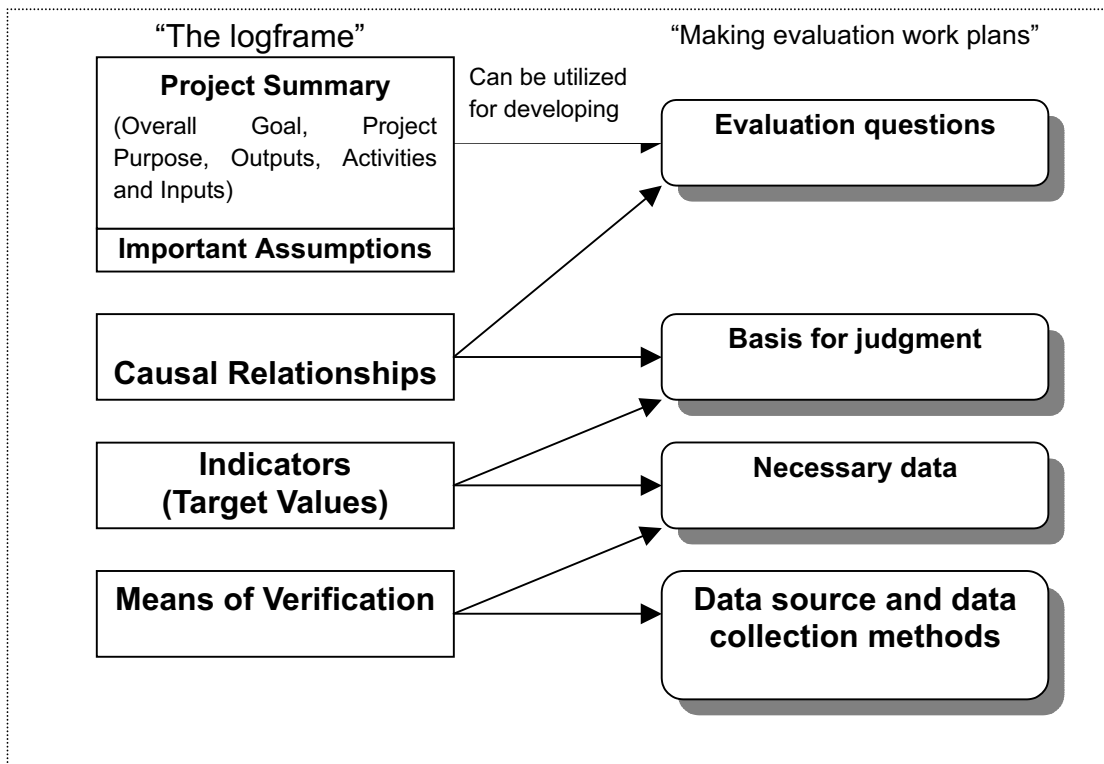


(6) A Connection between Logframe and Evaluation Work Plans

The logframe contains some useful information for making evaluation work plans. For instance, the evaluation questions about effectiveness and impact can reflect the logframe's model of causal relationships. Also, target values for indicators and means of verification can be the basis for identifying the necessary data and data collection methods. Utilization of information in logframe in making evaluation work plans are shown in figure 2-1-7.

Evaluation work plans will be explained in detail in Chapter 2 of Part II.

Figure 2-1-7 Utilization of Logframe in Making Evaluation Work plans



4. Grasping the Implementation Situation: Information on Performance and Implementation Process

The evaluator needs to understand how the project has been implemented at the time of evaluation (especially in and after mid-term evaluation). That includes issues of performance as well as what is happening in the implementation process. Such information can possibly be obtained from monitoring records. JICA's project evaluation is an internal task, and thus information on project performance and implementation process are usually provided through monitoring efforts. If the evaluator thinks that monitoring is not carried out well enough or that more detailed information is needed, further surveys will be conducted within evaluation activities.

i) Information on Performance

Information on performance includes the results of inputs, outputs, and the degree of achievement of a project's purpose and overall goal, although the focus will be different depending on the timing of evaluation. The evaluator is mainly conscious of whether objectives are achieved as planned and how target values or indicators are modified during implementation. Monitoring records may help the evaluator clarify objectives and indicators in case they are not specified in the logframe.

ii) Information on Implementation Process

Information on implementation process includes how far activities proceeded and what is happening at the project site. Also, the relationships between a project team and project operation departments as well as JICA overseas offices should be investigated. It is expected to make the most of the strength of a project and avoid incidents in advance through examining the implementation process. The implementation process may provide us with the following factors or situations.

The information about the implementation process may provide factors that influenced the achievement of objectives. In the case that these factors are not well examined in project monitoring, further surveys should be included in evaluation.

Information to be gained through examination of implementation process

Examination of activities

- Are activities carried out as planned? If so, what are the contributing factors?
- Are there any activities that are not fully carried out? If so, what are the reasons?
- Are project inputs sufficient enough to continue activities?

Relationship with target group

- Are project objectives consistent with needs of target group?
- Is there any positive change of attitude and behavior of a target group to support project activities?
- What is the level of participation and perception towards project activities by a target group, related organization, and community concerned?
- What is the level of satisfaction of target group towards services delivered by the project and the level of their utilization?

Project management

- Are the working attitudes of project staff positive enough to implement project operation effectively?
- What is the level of commitment of project staff to project activities?
- Is good communication between Japanese experts and project staff established?
- Is monitoring conducted in an appropriate way? Is project strategy modified accordingly?
- Do project operation departments and the overseas offices properly provide support or advice in project monitoring?

Overall

What are the important factors or key issues that contribute to the project's effects? (e.g., methods of technical transfer, the equipment and facilities provided, the plan of operation, the services provided by the project, the selection of a target region, the size of a target group, etc.)