New JICA Guidelines for Project Evaluation
First Edition

Japan International Cooperation Agency (JICA)
Evaluation Department

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1 Overview of Aid Evaluation and JICA's Project Evaluation

1.1 Purposes and Meanings of JICA's Project Evaluation

1-1-1 Purposes of Evaluation

The OECD Development Assistance Committee (OECD-DAC) laid out that the main purposes of evaluation of development assistance are to improve aid and to provide basis for accountability in its "Principles for Evaluation of Development Assistance" (1991). The purposes of JICA's project evaluation are summarized into two points, namely (i) improvement of projects and (ii) enhancement of accountability.

Box 1: Purposes of JICA's Project Evaluation

(i) To improve projects through feedback from findings into decision-making processes:
   ♦ in formulation of the aid strategy and JICA's implementing policy,
   ♦ in decision-making about implementing, modifying, and continuing corporation of the project to be evaluated, and
   ♦ in facilitating learning effects of participants and organizations involved.
   (utilized in planning and implementation/supervision of similar projects, as well as enhancement of the project to be evaluated and capacities of relevant organizations).

(ii) To disclose information extensively for the sake of improvement of transparency and accountability of JICA's cooperation projects:
   ♦ ensuring transparency and accountability of the project, and
   ♦ disclosing information regarding effects and process of JICA's cooperation, both domestically and internationally.

1-1-2 Evaluation and Implementation or Supervision of Projects

Evaluation is a tool for better implementation or supervision of the project, presenting participants with information regarding the needs of the recipient society, smooth implementation of the project, impacts made on the recipient society, and factors affecting implementation of the project, etc., through the entire process of implementation or supervision of the project.

JICA utilizes lessons learned from the findings through the process from ex-ante evaluation and ex-post evaluation as management tools in planning and implementation of projects, for the sake of effective implementation or supervision of projects.
1.2 International Trends of Aid and Evaluation

1-2-1 International Trends toward "Aid Effectiveness" and Their Implications on Evaluation

1. International Trends toward "Aid Effectiveness"

In the past decade, the international development community has been accelerating its efforts towards Managing for Development Results (MfDR) in order to enhance aid effectiveness of ODA projects through reducing procedural costs that are charged to developing countries due to different assistance procedures among donors. Key milestones include the UN Millennium Declaration and Millennium Development Goals (MDGs) (2000), the Memorandum of the Marrakech Roundtable on Managing for Results (2004), and the Paris Declaration on Aid Effectiveness (2005).

With the definition agreed in Marrakech (see Box 2), MfDR calls for developing countries to increase their commitment to policies and actions that promote economic growth and reduce poverty, and developed countries to support them through more effective aid and trade policies.

Box 2: Definitions and Principles of Managing for Development Results (MfDR)

<table>
<thead>
<tr>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing for development results (MfDR) is a management strategy focused on development performance and on sustainable improvements in country outcomes. It provides a coherent framework for development effectiveness in which performance information is used for improved decision-making, and it includes practical tools for strategic planning, risk management, progress monitoring, and outcome evaluation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MfDR Core Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Focus the dialogue on results at all phases.</td>
</tr>
<tr>
<td>2) Align actual programming, monitoring, and evaluation activities with the agreed expected results.</td>
</tr>
<tr>
<td>3) Keep the results reporting system as simple, cost-effective, and user-friendly as possible.</td>
</tr>
<tr>
<td>4) Manage for, not by, results.</td>
</tr>
<tr>
<td>5) Use results information for management learning and decision making, as well as for reporting and accountability.</td>
</tr>
</tbody>
</table>

The Paris Declaration on Aid Effectiveness, adopted at the "High-Level Forum on Aid Effectiveness" held in Paris in March 2005, is based on these principles and summarizes partnership commitments by both donors and recipient countries for necessary measures to improve quality of assistance and maximizing development results (see Box 3).
Box 3: Five Key Principles for Improving Aid Effectiveness in the Paris Declaration

1) Ownership
Recipient countries exercise leadership in establishing and implementing their national strategies, and aid providing countries and organizations shall support said leadership.

2) Alignment
Donors provide their overall support for the development strategies of recipient countries, and utilize the systems and procedures, such as financial management and procurement, of the recipient country to the highest degree possible.

3) Harmonization
Donors use common systems and procedures whenever possible for assistance planning, implementation, evaluations, and reporting.

4) Managing for Results
Systems in recipient countries for development plans, budgetary measures, and evaluations shall be strengthened, and development results increased by fortifying a mutual relationship of those systems.

5) Mutual Accountability
Donors and recipient countries shall enhance transparency and take mutual responsibility for aid resources, procedures, and development results.


2. International Trends toward “Aid Effectiveness” and their implications on Evaluation

The emphasis on MfDR seen in the 2000s can be explained as a process for both donors and recipient countries to adapt themselves to Result-based Management (RBM). Indicator-based monitoring and evaluation are incorporated as management tools in the Millennium Development Goals (MDGs) at the UN Millennium Summit and the Poverty
Reduction Strategy (PRS).\(^1\)

RBM is defined as "a management strategy focusing on performance and achievement of outputs, outcomes, and impacts" and means a set of processes for performing strategic planning, performance measurement, and evaluation as well as utilizing these results for management (refer to Table 1).\(^2\).

**Table 1: Seven Steps of RBM**

<table>
<thead>
<tr>
<th>Step</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Formulating objectives</td>
<td>Identifying in clear, measurable terms the results being sought and developing a conceptual framework for how the results will be achieved.</td>
</tr>
<tr>
<td>2 Identifying indicators</td>
<td>For each objective, specifying exactly what is to be measured along a scale or dimension.</td>
</tr>
<tr>
<td>3 Setting targets</td>
<td>For each indicator, specifying the expected or planned levels of result to be achieved by specific dates, which will be used to judge performance.</td>
</tr>
<tr>
<td>4 Developing monitoring systems and measuring actual results</td>
<td>Developing performance monitoring systems to regularly collect data on actual results achieved.</td>
</tr>
<tr>
<td>5 Reviewing results</td>
<td>Comparing actual results with the targets to determine performance.</td>
</tr>
<tr>
<td>6 Integrating evaluations</td>
<td>Conducting evaluations to provide complementary information on performance not readily available from performance monitoring systems and to analyze performance factors.</td>
</tr>
<tr>
<td>7 Using performance information and evaluation results</td>
<td>Using information from performance monitoring and evaluation sources for internal management learning, decision-making, and for external reporting to stakeholders on results achieved. Effective use generally depends upon putting in place various organizational reforms, new policies and procedures, and other mechanisms or incentives.</td>
</tr>
</tbody>
</table>


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\(^1\) Evaluation based on performance measurement is being implemented not only in the ODA sector but also in public administration. While New Public Management, which actively incorporates corporate management styles into public administration, is becoming mainstream worldwide, it is increasingly important also in the ODA sector to aware basic principles of strategic planning, performance measurement, and evaluation.

\(^2\) With the spread of RBM, multilateral and bilateral development institutions have been strengthen the efforts for utilizing *Impact Evaluation*, a set of methods for precise measurement and review of the outcomes of aid effects. Refer to Appendix 4 for details about Impact Evaluation.
In the first phase of RBM, what will be achieved is identified, indicators that can objectively show the achievement are specified, and then target values are set. These processes are referred to as Strategic Planning. In the second phase, a system is developed to regularly monitor the progress of indicators, where performance data of indicators are collected, and then compared to the target values. These processes, from strategic planning to measurement of performance based on that, are referred to as Performance Measurement. In the last phase, it is determined whether the objectives are achieved based on information from the monitoring, and Evaluation is conducted to do detailed analysis of factors in the achievement. Here, evaluation is positioned as a complement to monitoring information. The performance information obtained from monitoring and evaluation is utilized for improvement of aid activities and reporting to the Congress and to the public (to ensure accountability). Thus, RBM is generally understood as a concept including the information obtained from performance measurement being actually utilized in the management process.

Recent introduction of RBM in DAC member countries has made changes in the roles of traditional monitoring and evaluation. In the past, monitoring was performed inside the aid agencies for the purpose of checking the implementation process, while evaluation was often performed by external consultants outside the organization using strict methods on purpose to correctly understand whether expected outcomes were produced by the project. Evaluation was performed at the predetermined times during the project cycle: ex-ante, mid-term, and ex-post; analysis and reporting were performed mainly in the ex-post evaluation after the project had been implemented. However, as results are increasingly considered important, continuous monitoring is being used for getting information not only about the implementation process but also about performance, and evaluation is being performed as needed to complement monitoring. An increasing number of aid agencies are reporting performance annually because of the importance attached to performance measurement.\(^3\) In addition, the above-mentioned three institutions are required to submit evaluation reports at the end of the project. Thus, monitoring and evaluation are being deeply embedded in the management process, thereby producing information focused on performance in a timelier manner.

1-2-2 ODA Evaluation Trends in Japan

In Japan, there is a recent trend to improve evaluation as an important approach to more effective and efficient use of ODA and high quality implementation of ODA, against the

\(^3\) For example, in organizations where RBM has been introduced for long, including the World Bank, CIDA, DFID and AusAID, performance measurement is carried out for ongoing projects on the initiative of officials in charge, with annual performance monitoring reports being submitted to the headquarters.
backdrop of international trends and domestic ODA reform.

1. Response to International Trends

   • Expanding Scope of Evaluation
     
     With the advent of comprehensive approaches and strategies in the late 1990s, such as Sector-Wide Approach (SWAp), Comprehensive Development Framework (CDF), and Poverty Reduction Strategy (PRS), which remove barriers around individual projects, country- and sector-based initiatives are being intensely exercised in Japan. Keeping pace with this, the scope of evaluation expands from individual projects to sector, country, and issue-based assistance plans. In the New ODA Charter (August 2003), it is stated that "evaluation is performed against policies, projects, and programs", according to which JICA, which is the implementing agency, and the Ministry of Foreign Affairs are collaborating with each other in performing evaluations at various levels (refer to 1-3-1).

   • Introduction of Performance-based System
     
     In Japan’s Action Plan on Aid Effectiveness (2002), concrete measures are indicated: (1) Introducing Performance-based System as a trial in the country assistance plan to be formulated (for example, clear indication of development objectives that Japan should pursue among development objectives of the country concerned, and investigation into priority areas and priority items of assistance required for that purpose); (2) Strengthening review regarding Japan's ODA projects at the local level based on the result-based monitoring framework of partner countries.

2. Response to the Domestic ODA Reform

   • Expansion and Functional Enhancement of Objectives
     
     Since 1990, accountability has been placed as one of the major objectives of evaluation (refer to 1-2-2), in addition to improvement in ODA management as well. Improvement of ODA management necessitates a feedback function, which provides policy makers and implementers with good understanding of ODA implementation status and with useful information for future policy making and implementation. The feedback of evaluation findings (refer to 1-4-2) is prescribed in the New ODA Charter (August 2003). As the objectives of evaluation spread to include accountability, the functions of evaluation are also required to incorporate publicly explaining the effects of ODA, in addition to the feedback function as well.

   • Diversification of Timing of Evaluation
As evaluation expands in its objectives and functions and increasingly greater importance is attached to its role, it is recognized that ODA can be more effective by consistently managing its different stages, i.e. planning, implementation, and production of outcomes. And therefore it is proposed to the Ministry of Foreign Affairs that a system should be established which enables consistent project-level evaluation at different stages, i.e. ex-ante, mid-term, and ex-post. The New ODA Charter (August 2003) positions evaluation as "a tool to improve quality of development assistance" and prescribes "consistent evaluation from ex-ante to ex-post". Also the Fiscal Reform Plan 2005 (June 2005), prescribes that "third-party objective evaluation, including cost-effective analysis, should be carried out for outcomes of ODA projects and the result of the evaluation should be published and reflected in the planning of ODA policies through PDCA cycles (refer to 1-4-1), which should also be established."

- **Importance of Third-party Evaluation**
  Since 2000, along with the progress of ODA reform, evaluation by external third parties is considered to be more important to ensure transparency and efficiency of ODA (refer to 1-4-3). The reports of the Second Council on ODA Reform and the Advisory Board for the Reform of the Ministry of Foreign Affairs, both submitted in 2002, made recommendations regarding the expansion of evaluation. They attached particular weight to third-party evaluations, evaluations by the governments and organizations of recipient countries, and joint evaluations with other donors. Also the New ODA Charter (August 2003) prescribes that "evaluation by third parties with expertise should be further pursued in order to measure, analyze, and make objective decisions regarding outcomes of ODA."

- **ODA Evaluation by the Ministry of Foreign Affairs Based on the Government Policy Evaluations Act**
  Since 2002, policy evaluations by Japanese ministries have expanded rapidly with the enforcement of the Government Policy Evaluations Act which intends to facilitate utilization of evaluation findings in policy making and publication of evaluation information. In accordance with the Act, the Ministry of Foreign Affairs is carrying out ex-post evaluation regarding policies in general and ex-ante evaluation for individual grant aid and loan aid with more than a certain amount of money.4

**1-2-3 ODA Reform and the Launch of the New JICA**
On October 1st, 2008, the Japan International Cooperation Agency (JICA) took over

4 http://www.mofa.go.jp/mofaj/gaiko/oda/shiryo/index_hyouka05.html
overseas economic cooperation, which had been in charge of Japan Bank for International Cooperation (JBIC), and part of grand aid operations, which had been in charge of the Ministry of Foreign Affairs. The launch of New JICA has consolidated the Japanese ODA implementation system, which had been separated by the aid modalities, and enabled unified implementation of three aid modalities, i.e. technical cooperation, ODA loans, and grant aid (refer to 1-4-4).

**Figure 1: Functions of the New JICA in Japan's ODA**

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Summary of operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical cooperation</td>
<td>Accepting trainees, dispatching experts, providing equipment, and giving advice and guidance regarding public policy making and public work planning, on purpose to support development of human resources, organizations, and institutions in developing countries.</td>
</tr>
<tr>
<td>ODA loans</td>
<td>Lending funds in Yen for developing countries to establish foundations of economic and social development and stability, with lenient lending conditions of low interest rates and long periods of repayment.</td>
</tr>
<tr>
<td>Grant aid</td>
<td>Granting funds for developing countries to procure materials, equipment, facilities, and services (including technology and transportation) for the purpose of economic and social development, without imposing repayment obligations on developing countries.</td>
</tr>
</tbody>
</table>

With the unified operation of these three aid modalities, the needs of developing countries can be answered more comprehensively and appropriately, achieving international cooperation of high quality.
1.3 Types of JICA's Project Evaluation

1-3-1 Classification by Evaluation Targets

Evaluation of ODA projects are classified into three levels by their targets, i.e. policy-level, program-level, and project-level. JICA is in charge of project-level and program-level evaluation, as shown in Figure 2.

**Figure 2: Targets and Implementation Structure of ODA Evaluation**

- **Policy level**: ODA Charter, Medium-Term Policy on ODA, Country assistance policies, Policies on priority issues, etc.
- **Program level**: Sector cooperation programs, Aid Modalities, etc.
- **Project level**: Individual projects, etc.

Prepared based on *ODA Evaluation Guidelines, 5th Edition* (Ministry of Foreign Affairs)

Targets of **project-level evaluation** are individual projects, of which JICA is in charge of technical cooperation, ODA loans, and grant aid.

**Program-level evaluation** evaluates multiple projects in a comprehensive and cross-sectional manner. JICA’s program-level evaluation is divided broadly into two categories, i.e. *Cooperation Program evaluation* and *thematic evaluation* (refer to 1-4-5).

Compared with project-level evaluation, lessons learned and recommendations from program-level evaluation are more general and provide more overall viewpoints. Therefore it is applied to the improvement of extensive projects and/or overall plan and guidelines.

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5 DAC defines project evaluation as "evaluation of an individual development intervention designed to achieve specific objectives within specified resources and implementation schedules, often within the framework of a broader program."

6 DAC defines program evaluation as "evaluation of a set of interventions, marshaled to attain specific global, regional, country, or sector development objectives."
1-3-2 Classification by Implementation Stages of Evaluation

Project-level evaluation is classified according to the project stage on which evaluation is carried out, as shown in Table 2.

**Table 2: Overview of Evaluation in Each Stage of the Project Cycle**

<table>
<thead>
<tr>
<th>Type of evaluation</th>
<th>General description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-implementation stage</td>
<td><strong>Ex-ante evaluation</strong> Evaluation applied to all three schemes. Before implementation of assistance, applicability of the assistance is comprehensively judged, with the priority and necessity being reviewed, contents and expected effects being clarified. The evaluation indicators developed in the ex-ante evaluation stage are utilized in other stages as criteria for measurement of progress and effectiveness of the assistance.</td>
</tr>
<tr>
<td>Mid-term review</td>
<td>Evaluation applied to technical cooperation projects and ODA loan projects. It is carried out at the halfway point for the former and five years after the loan agreement for the latter. In addition to reexamination of relevance, expected achievement of objectives, contributing and hindering factors, and their tendencies are analyzed. The findings are utilized in fine-tuning plans and improving operational structures (in technical cooperation projects).</td>
</tr>
<tr>
<td>Implementation stage</td>
<td><strong>Terminal evaluation</strong> Evaluation applied to technical cooperation projects. It is carried out around six months before the completion (or on completion in the case of small projects). Implementation of the project is comprehensively evaluated from various perspectives, including expected achievement of objectives at the time of completion, operational efficiency, and future prospects of sustainability. Plans are made for the rest of the implementation period in collaboration with the recipient government, judging propriety of project termination, necessity of follow-ups including extended period of cooperation, and matters that require attention in the case of independent continuation by the recipient government.</td>
</tr>
<tr>
<td>Post-implementation stage</td>
<td>Ex-post evaluation</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Post-implementation stage</td>
<td>Ex-post monitoring</td>
</tr>
</tbody>
</table>
1.4 Mechanism of JICA’s Project Evaluation

1-4-1 Consistent Evaluation According to the PDCA Cycle

The PDCA cycle consists of four steps (Plan, Do, Check, and Act) and is a management cycle for the purpose of continuous improvement of project activities. JICA’s project evaluation is an integral part of the PDCA cycle of the project, regardless of aid schemes. It is performed according to a consistent framework covering pre-implementation, implementation, and post-implementation stages, as well as feedback, reflecting characteristics of the aid scheme such as aid period and timeframe for expected results.

Because various indicators and data for terminal and/or ex-post evaluation are ready before the project starts, it is possible to evaluate and analyze the effect produced from the project and to recommend appropriate measures for improvement of projects. Ex-ante evaluation from the same perspective as terminal and/or ex-post evaluation enables measurement of actual performance of the project based on the changes of indicators that were evaluated previously. In this way, development outcomes from the project can be improved with the evaluation at each stage of the PDCA cycle.

* In FY2009, JICA started carrying out the evaluation of grant aid projects it took over, including ex-post evaluation.
1-4-2 Utilizing Evaluation Findings

JICA has an enhanced feedback system in project evaluation so that findings from evaluation performed at each stage of the project will be linked to the Action step of the PDCA cycle. Feedback is utilized as recommendations to improve the project concerned and lessons learned for ongoing and future projects of similarity, and further enhancement is planned for feedback to JICA’s Cooperation Programs, assistance implementation plans, and thematic guidelines. In addition, by feeding back findings to the recipient government or jointly performing the evaluation, the findings will be reflected in projects, programs, and higher-level policies such as development policies of the recipient government.

Figure 4: Utilizing Evaluation Findings

1. How Findings are Utilized

Broadly speaking, findings from project evaluation are utilized in two ways as shown in Table 3: (1) Feedback to the stakeholders of the project (JICA and the recipient government) and (2) General accountability.
Table 3: How Findings are Utilized

<table>
<thead>
<tr>
<th>Feedback</th>
<th>Utilized for improvement of projects in two ways:</th>
<th>(1) Feedback to the decision-making process:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>● Findings are directly reflected to the decisions regarding the project/operation concerned, which are mainly derived from evaluation performed by the JICA department in charge as part of management of the project/operation. For example, findings from ex-ante evaluation are utilized in making go/no-go decisions of the project/operation in JICA, findings from mid-term review are in decisions of fine-tuning the original plan, and terminal evaluation of technical cooperation projects are in decisions of termination or extension/follow-up of the project.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● By providing feedback of findings to the recipient government, the findings will be reflected in projects, programs, and higher-level policies such as development policies of the recipient government.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) Feedback to the learning process:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluation information and lessons learned are accumulated in organizations involved in development assistance, utilizing them in forming, adopting, and planning similar projects/operations and in fine-tuning organizational strategies.</td>
</tr>
<tr>
<td>Accountability</td>
<td>As a means of securing accountability. Requirements for accountability include clear project objectives, a transparent organizational decision-making process, efficient use of inputs, and accurate understanding of outcomes as results of the projects. In order to secure accountability, disclosure of high-quality evaluation information is required, which meets the above-mentioned requirements.</td>
<td></td>
</tr>
</tbody>
</table>
2. **Mechanism for Utilizing Findings**

JICA has been building and improving the mechanism shown below to feed back evaluation findings and to secure accountability (also refer to Table 4).

<Mechanism for feedback to the participants of the project>

(1) Feedback to the inside of JICA

In technical cooperation projects, *lessons learned* are compiled into sectoral databases and utilized so as to be reflected in the planning of new projects or operations. Past findings are comprehensively analyzed to extract common or characteristic tendencies that facilitate feedback to projects. In ODA loans, implementing agencies are requested to perform ex-post monitoring until seven years after completion of the project, in order to monitor how *recommendations* are utilized, which are derived from ex-post evaluation.

(2) Feedback to the outside of JICA

Through feedback of findings, JICA and recipient governments share knowledge about what measures are required to maintain or improve the outcomes of the project. In the next phase, recipient countries are expected to formulate and implement plans to carry out these required measures in the operational management system of the project/program.

Specifically, such measures include performing joint evaluation (mainly for technical cooperation projects), hosting feedback seminars (for ODA loan projects), and inviting comments on findings from ex-post evaluation (for all three schemes).

<Mechanism for accountability in general>

This includes distribution of reports, publicizing JICA’s annual evaluation report and summary of findings on the website, publishing reports via the JICA library, and holding public seminars on evaluation findings.
Table 4: JICA's Activities for Utilizing Evaluation Findings

<table>
<thead>
<tr>
<th>Utilization of findings</th>
<th>Target</th>
<th>Major activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback</td>
<td>JICA</td>
<td>Lessons learned and recommendations compiled into databases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comprehensive analysis of findings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Listing utilized lessons learned in the ex-ante evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reflecting lessons learned from evaluation findings in implementation policies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluation training</td>
</tr>
<tr>
<td>Recipient governments</td>
<td>Joint evaluation</td>
<td>Feedback seminars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inviting comments on findings from ex-post evaluation</td>
</tr>
<tr>
<td>Accountability</td>
<td>People in Japan and in the recipient country</td>
<td>Distribution of reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Publicizing evaluation findings on the website</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public seminars on evaluation findings</td>
</tr>
</tbody>
</table>

1-4-3 Ensuring Objectivity and Transparency in Evaluation

In JICA's project evaluation, efforts are taking place to ensure objectivity and transparency in evaluation. Ex-post evaluation, which requires that effectiveness of project implementation be examined from an objective viewpoint (refer to 1-3-2), has been carried out as external evaluation for all three schemes in common since fiscal year 2009.

Also constructed is a mechanism where external perspective is reflected in the project evaluation system, by inviting advice from the Advisory Committee on Evaluation regarding evaluation systems, institutions in general, and thematic evaluation policies, to improve evaluation quality and objectivity of findings.

1-4-4 Evaluation System Consistent in Three Schemes

JICA has constructed an evaluation system consistent in three schemes, namely technical cooperation projects, ODA loans, and grant aid, and has been fully operational since fiscal year 2009 (see Table 5).
### Table 5: Evaluation System of Three Schemes (as of March 2010)

<table>
<thead>
<tr>
<th>Time of evaluation</th>
<th>Technical cooperation projects</th>
<th>ODA loans</th>
<th>Grant aid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ex-ante evaluation</strong></td>
<td>Before implementation of the project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-term review</td>
<td>Halfway point of the project</td>
<td>Five years after the loan agreement</td>
<td></td>
</tr>
<tr>
<td>Terminal evaluation</td>
<td>Six months before completion of the project (Note 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ex-post evaluation</strong></td>
<td>Until three years after completion of the project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex-post monitoring</td>
<td>—</td>
<td>Seven years after completion of the project</td>
<td>—</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluation targets</th>
<th>Ex-ante evaluation</th>
<th>Mid-term review</th>
<th>Terminal evaluation</th>
<th>Ex-post evaluation</th>
<th>Ex-post monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evaluation targets</strong></td>
<td>All projects (Note 1)</td>
<td>In principle, projects with cooperation period of three years or more (Note 1)</td>
<td>All projects (Note 1)</td>
<td>In principle, all projects with contributions of 200 million yen or more (Note 2)</td>
<td>—</td>
</tr>
<tr>
<td>Ex-post monitoring</td>
<td>—</td>
<td>Projects with concerns for effectiveness (including impact) and sustainability</td>
<td>—</td>
<td>Projects with concerns for effectiveness (including impact) and sustainability</td>
<td>—</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Principals of evaluation</th>
<th>Ex-ante evaluation</th>
<th>Mid-term review</th>
<th>Terminal evaluation</th>
<th>Ex-post evaluation</th>
<th>Ex-post monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principals of evaluation</strong></td>
<td>Internal evaluation</td>
<td>Internal evaluation (joint evaluation)</td>
<td>External evaluation</td>
<td>External evaluation (with some joint evaluation)</td>
<td>—</td>
</tr>
<tr>
<td>Ex-post monitoring</td>
<td>—</td>
<td>External evaluation</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Note 1: Projects with planned total input of 200 million yen or less can be operated with a simplified evaluation method.

Note 2: With regard to grant aid, general and fishery projects are due to be evaluated.

As shown in Table 5, evaluation is carried out internally or externally, depending generally on its time and the scheme to be evaluated.7 The principal of internal evaluation is JICA. In external evaluation, the principal is an external evaluator chosen by publicly announced competition, from among experts of development assistance or evaluation. In this way, it is

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7 In the case of joint evaluation, relevant agencies in recipient countries or other aid agencies participate.
ensured that the external evaluator can make independent judgments in external evaluation.

1-4-5 Cross-sectional and Comprehensive Evaluation with Program-level Evaluation

JICA is carrying out program-level evaluation that comprehensively evaluates and analyzes JICA's cooperation from the perspective of a particular theme and development objective. This allows recommendations and lessons learned, which are common to the theme or objective concerned, to be extracted and utilized in implementation of projects and future project planning.

Figure 5: Program-level evaluation

Program-level evaluation is divided broadly into two categories, i.e. Cooperation Program evaluation and thematic evaluation. Cooperation Program evaluation is targeted at a strategic framework, namely Cooperation Program, to help developing countries to achieve specific development objectives in a medium or long term (refer to Chapter 2 (2-2) for evaluation methods for Cooperation Programs).

In the case of thematic evaluation, a specific theme, such as a region, a sector concerned, or an assistance scheme, is specified. Projects related to the theme are selected, whose evaluation findings are comprehensively analyzed and examined using evaluation criteria set for the specific theme, to extract lessons learned and recommendations related to the theme.
1.5 JICA’s Project Evaluation Implementation System

JICA’s project evaluation implementation system consists of the Advisory Committee on Evaluation, the Evaluation Department, and project implementation departments (headquarters, overseas offices, etc.). They are positioned and expected to play the roles shown below:

- **Advisory Committee on Evaluation**
  
  The Advisory Committee on Evaluation was founded to contribute to ensuring the quality of JICA’s project evaluation and objectivity of evaluation findings. It consists of external third parties, including academics with expertise and knowledge in international cooperation and evaluation, international organizations, NGOs, the mass media, and private organizations. This committee advises on JICA’s project evaluation policies, evaluation systems, and institutions in general.

- **Evaluation Department**
  
  The Evaluation Department is in charge of project-level evaluation that requires a high level of objectivity, such as ex-post evaluation. It also performs development and improvement of evaluation methods, provides information regarding project evaluation, assists and supervises evaluation carried out by other departments, enhances evaluation capacity of JICA staff, facilitates feedback from evaluation findings into projects, and promotes publication of evaluation findings, as well as carrying out program-level evaluation.8

- **Project Implementation Departments (Headquarters, Overseas Offices)**
  
  They are in charge of project-level evaluation, from the pre-implementation stage to the implementation stage. The principal department implementing each evaluation is determined on the basis of the scheme, size, and content of the project concerned.

  Evaluation Chiefs, who are in charge of controlling evaluation quality and facilitating project improvement through evaluation, are appointed in business units and overseas offices involved in evaluation.

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8 Sometimes part of program-level evaluation is carried out by project implementation departments, with the assistance of the Evaluation Department.
Figure 6: JICA’s Project Evaluation Implementation System

- Advise JICA on evaluation policy and implementation
- Advise JICA on evaluation system and implementation structure
- Supervise evaluation quality
- Develop evaluation guidelines
- Facilitate of feedback
- Conduct program-level evaluation
- Conduct evaluation, utilize findings
- Conduct of evaluation, utilize findings
2 Overview of JICA's Project Evaluation Methods

2.1 Evaluation Framework (Project-level)

JICA's project-level evaluation has a framework composed of three steps: (1) understanding and reviewing the current status of the project, (2) judgment according to the DAC evaluation criteria (relevance, effectiveness, efficiency, impact, and sustainability), and (3) giving feedback to the next stage with lessons learned and recommendations derived.

2-1-1 Assessing the Current Status of the Project: Performance, Implementation Process, and Causality

In evaluation studies, good understanding or analysis of current status around the project concerned relies on review of performance, implementation process, and causality. This is because correct understanding of factors in project failure is very important to the improvement of projects, which necessitates review of performance, as well as implementation process and causality. If implementation process had a problem, it can be attributed to the management system of the project. Or if there was a problem in logical construction of the project, it could be attributed to the project design itself.

These three review items are summarized in Table 6, with depiction of their perspectives and points to be reviewed.
Table 6: Perspectives and Points to Be Reviewed

<table>
<thead>
<tr>
<th>Review item</th>
<th>Perspective</th>
<th>Point to be reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>• What has been achieved as the result of the implemented project, and has it been achieved as expected?</td>
<td>Measure the achievement of outcome targets and actual outputs at the time of evaluation, and then compare them with the target values that were set at the planning stage.</td>
</tr>
<tr>
<td>Implementation process</td>
<td>• What happened in the process of the project implementation, and what impact was made on the achievement of outcome targets?</td>
<td>Review whether the activities were carried out and caused the outputs as expected and what factors in the implementation process impacted the achievement of outputs and outcome targets. Generally, information obtained from the implementation process review serves as a basis for verifying efficiency and effectiveness, and is utilized for making modifications in the middle of the project and for planning similar projects.</td>
</tr>
<tr>
<td>Causality</td>
<td>• Did (or will) the project truly cause the achievement of outcome targets?</td>
<td>Even if outcome targets were achieved as planned, it might be affected by factors other than implementation of the project. Therefore, in order to verify causality between a project and results, it is necessary to take different methods from performance review or comparison with target values, such as before-and-after comparison of the same area involved or deducing the net effects by comparing the project covered area with others.</td>
</tr>
</tbody>
</table>

Note that monitoring during implementation of a project is very important for accurate reviews of these three items. While monitoring is mainly used for checking progress of a project and making modifications if necessary, it can be utilized to collect performance data and information required for the review of the implementation process. If a project is not properly monitored during its implementation, it would be difficult to carry out accurate and
reliable evaluation, due to a probable lack of necessary information.

**Figure 7: Assessment of Performance: Three Aspects**

**2-1-2 Data Interpretation based on the DAC Evaluation Criteria**

JICA applies the *DAC criteria for evaluating development assistance* for value judgment of its project evaluation. The criteria were proposed in the Development Assistance Committee (DAC) at the Organization for Economic Cooperation and Development (OECD) in 1991.

**Table 7: General Description of the DAC Criteria for Evaluating Development Assistance**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>Degree of compatibility between the development assistance and priority of policy of the target group, the recipient, and the donor.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>A measure of the extent to which an aid activity attains its objectives.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Efficiency measures the outputs -- qualitative and quantitative -- in relation to the inputs. It is an economic term which is used to assess the extent to which aid uses the least costly resources possible in order to achieve the desired results. This generally requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been adopted.</td>
</tr>
<tr>
<td>Impact</td>
<td>The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local community.</td>
</tr>
</tbody>
</table>
social, economic, environmental and other development indicators.

| Sustainability | Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environmentally as well as financially sustainable. |


The DAC evaluation criteria for evaluating development assistance are standards to comprehensively evaluate the value of the implemented project, while each criterion has a different perspective in the focused stage (before, during, or after implementation), purpose, and whether evaluation is carried out based on current status and performance, or on expectation and prediction (refer to Table 8). Also different emphases are laid on them, depending on characteristics and challenges of the project.

**Table 8: Differences in Purposes and Perspectives of Each Evaluation Stage**

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Purpose of evaluation</th>
<th>Major perspective of evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex-ante evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical cooperation</td>
<td>Review necessity, effects, and implementation plans of the project. Also, outcome targets are set using indicators that are as quantitative as possible, to clarify the evaluation plan for the future.</td>
<td>Utilizing the DAC evaluation criteria, check <strong>necessity, relevance, purpose, content, effects (effectiveness), external factors, and risk</strong> in order to examine appropriateness of the project comprehensively.</td>
</tr>
<tr>
<td>ODA loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grant aid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-term review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical cooperation</td>
<td>Review the performance of the project to produce expected effects, contributing to modification of the project plan being evaluated and to improvement of the implementation structure.</td>
<td><strong>Relevance, effectiveness</strong> (whether the project produces effects as expected), and <strong>efficiency</strong> are reviewed, along with contributing and hindering factors, based on the current status and performance.</td>
</tr>
<tr>
<td>ODA loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grant aid</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Technical cooperation projects | It is comprehensively reviewed whether objectives can be achieved by the time of termination of the assistance period. Results will help to determine the termination of the project and the necessity of extension of cooperation period. | Based on current status and performance, **effectiveness** (achievement of project effects) is comprehensively reviewed. The attainability of **Impact and sustainability** is examined.

| ODA loans | — | — |
| Grant aid | — | — |

### Ex-post evaluation

| Technical cooperation projects | Performed for the purpose of more effective and efficient implementation and more secure accountability. | A comprehensive judgment is made based on **all of the DAC Evaluation Criteria**; with special emphasis on review to what extent the expected project effect is produced.

| ODA loans | — | — |
| Grant aid | — | — |

| Technical cooperation projects | — | — |

### Ex-post monitoring

| ODA loans | Confirm implementation status of lessons learned and recommendations provided at the time of ex-post evaluation. | Review is made on **effectiveness**, **impact**, and **sustainability**.

| Grant aid | — | — |

#### 2-1-3 Extracting Recommendations and Lessons Learned and Feedback

In the last stage of evaluation, concrete recommendations and lessons learned are drawn from evaluation findings. **Recommendations** are proposals that can be used for improvement of the project concerned for the future, while **lessons learned** are recommendations for future or ongoing projects of similar nature.

Extraction of recommendations and lessons learned relies on identification of factors that contributed or hindered the project. Useful recommendations and lessons learned can be drawn from clarifying contributing or hindering factors with concrete evidence. For example, when the project turns out to be not as effective as expected in the effectiveness evaluation,
contributing and hindering factors are required to be analyzed from the implementation process of the project and from the results of the causality review. To give another example, if problems are found in placement of counterparts through review of the implementation process in a technical cooperation project, some sort of recommendations are required to modify placement of counterparts. Or if it is judged that additional output targets are necessary to produce expected results, recommendations are required to modify outputs.

Feedback of evaluation findings are provided to participants, organizations and the department in charge, to be utilized in modification of the project concerned and for planning of similar projects (refer to 1-4-2 of Chapter 1, "Utilizing Evaluation Findings").
2.2 Evaluation Framework (Program-level)

Here we will present basic concepts and methods for Cooperation Programs in particular, among those outlined in Chapter 1 (1-4-5).

2-2-1 Ideas behind Evaluation of Cooperation Program

<Definitions of Cooperation Programs>

JICA defines an as a “strategic framework to support achievement of particular mid- and long-term development objectives in a development country”, in other words, assistance objectives and an assistance scenario appropriate for their achievement. The term "strategic" used here means something fulfils the following requirements:

Box 4: Requirements for Cooperation Program

| (1) Having clear cooperative objectives in line with a specific development strategy of the developing country and with Japan's assistance strategy, |
| (2) Having an assistance scenario appropriate for the assistance objectives, and |
| (3) Operating optimum combination of three aid modalities, namely technical cooperation, ODA loans, and grant aid.* |

* This does not mean that all three schemes must be used in the program; depending on the circumstances of each country, sometimes a Cooperation Program includes a technical assistance project alone, or a public participation project such as a volunteer project.

<Evaluation of Cooperation Programs>

Because of the long-term nature of Cooperation Programs, it is very important to review achievement of assistance objectives and outcome indicators of the program concerned, as well as periodically monitoring for the purpose of enhancement of the strategy through clarifying and fine-tuning of the assistance scenario. Therefore JICA advocates establishment of the PDCA cycle in Cooperation Programs, which revolves around monitoring. Lessons learned from trial evaluation of selected Cooperation Programs will be reflected in the formation of other Cooperation Programs.

In order to embody development strategies of the recipient country, JICA’s cooperative program alone is often not very effective without participation by various development principals, such as the recipient country and other aid agencies. Thus JICA’s contribution is evaluated from the perspective of the role that JICA played in achieving outcomes among all the activities of the participating countries and agencies.

Contribution means an idea where the plausibility of causality between the progress of a development issue and the outcome of an agency can be verified by clearly recognizing
them separately.\(^9\)

Plausibility of causality can be verified from one aspect of **positioning in the development strategies**, if JICA’s cooperation project has selected an important issue which is of high priority, and where JICA’s cooperation project is positioned in the development strategy of the country concerned. It can also be verified from another aspect of **strategy of Cooperation Program (planning, outcomes, and processes)**, if the effective plan is made to achieve the objectives (consistency of approach), production of outcomes, and appropriate modifications to the plans and implementation process according to the situation. In JICA’s program evaluation, the above-mentioned **positioning** and **strategy (planning, outcomes, and processes)** are reviewed and analyzed to evaluate **contribution to the development strategies of recipient country**, based on the progress of development strategies of the country concerned (as the whole outcomes including projects implemented by other aid agencies and the government of the country concerned). Therefore, high plausibility of causality can be concluded if we are addressing priority issues in development strategies of the country concerned and producing prominent outcomes, as well as making improvement in development challenges.

**Figure 8: Evaluation Framework of Cooperation Program**

\(^9\) As opposed to this, “attribution” is “the ascription of a casual link between observed (or expected to be observed) changes and a specific intervention” (definition of DAC), which means how much of the observed development effects can be attributed to a certain assistance or an act of assistance by plural aid agencies involved, based on consideration of other assistance, impeding factors (whether they are expected or not), or external effects.
Table 9 shows sample evaluation items and questions in evaluation based on the idea of contribution.

Table 9: Sample Evaluation Items and Questions

<table>
<thead>
<tr>
<th>Evaluation items</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Positioning</strong></td>
<td>1-1-1 How is the Cooperation Program positioned in Japan's country assistance policy?</td>
</tr>
<tr>
<td>Positioning in Japan's policy</td>
<td>1-1-2 How is the Cooperation Program positioned in Japan's sectoral or thematic assistance policy?</td>
</tr>
<tr>
<td>Positioning in the development strategy of the recipient country</td>
<td>1-2-1 How is the Cooperation Program positioned in the development strategy of the country concerned?</td>
</tr>
<tr>
<td><strong>2 Strategy of the program</strong></td>
<td>2-1-1 Is the scenario for achieving Cooperation Program objectives (including the grouping of projects) appropriate? (consistency of the program)</td>
</tr>
<tr>
<td>Planning</td>
<td>2-2-1 How much was achieved of the objectives of individual projects that compose the Cooperation Program? What outcomes were made from the implementation of individual projects?</td>
</tr>
<tr>
<td>Results</td>
<td>2-2-2 What outcomes were achieved by the collaboration among JICA’s projects that compose the Cooperation Program, from the perspective of achievement of the Cooperation Program objectives?</td>
</tr>
<tr>
<td></td>
<td>2-2-3 What outcomes were achieved by the cooperation with other aid agencies in individual projects, from the perspective of achievement of the Cooperation Program objectives?</td>
</tr>
<tr>
<td></td>
<td>2-2-5 The selection of constituent projects was appropriate, as opposed to achievement of the Cooperation Program objectives?</td>
</tr>
<tr>
<td>Processes</td>
<td>(In evaluation of plans or results, analyses are made as needed to extract contributing and hindering factors)</td>
</tr>
<tr>
<td></td>
<td>2-3-1 Were appropriate collaboration and coordination made in planning and implementation stages among projects that compose the Cooperation Program?</td>
</tr>
</tbody>
</table>

10 These are standard evaluation items and questions. It is not necessary to answer all questions, depending on when the program is evaluated or the situation of the program.
2-2-2 Relationship between Cooperation Programs and Projects

As mentioned previously in 2-2-1, JICA defines a Cooperation Program as a "strategic framework to support achievement of particular mid- and long-term development objectives in a development country", in other words, assistance objectives and an assistance scenario appropriate for their achievement. A Cooperation Program has higher-level goals that are not achievable by individual projects of a certain assistance scheme, and therefore, JICA's resources (budget and people) are allocated with priority. In order to operate Cooperation Programs more strategically, it is required to optimally operate all schemes (projects) to support achievement of particular development objectives, not just a combination of aid modalities (projects).

There is a means-end relationship between a Cooperation Program and its constituent projects, with the logic that achievement of all projects (i.e. means) leads to achievement of program objectives (refer to Figure 8).
In this figure, two projects comprise the cooperation program, as a solution to the development challenges in the sector of the recipient country, which is compatible with Japan's aid policy. This means that both projects share the same program objectives.

A project evaluation performed as part of a Cooperation Program evaluation has a different perspective from the usual project evaluation (refer to 2-1). For example, review of appropriateness of projects chosen as a means for achievement of the program objectives focuses on a strategic scenario from each project for achievement of the program objectives, taking account of cooperative status with other development partners, as well as compatibility with policies of the recipient country and Japan. Also review of results evaluates production of effects caused by implementation of each project in the same manner as simple project evaluation, with additional focus on collaboration among constituent projects and cooperation with other development partners in each project.

---

Figure 9: Relationship between a Program and Projects, Shown in an "Assistance Program" Structure Diagram

In this figure, two projects comprise the cooperation program, as a solution to the development challenges in the sector of the recipient country, which is compatible with Japan's aid policy. This means that both projects share the same program objectives.

A project evaluation performed as part of a Cooperation Program evaluation has a different perspective from the usual project evaluation (refer to 2-1). For example, review of appropriateness of projects chosen as a means for achievement of the program objectives focuses on a strategic scenario from each project for achievement of the program objectives, taking account of cooperative status with other development partners, as well as compatibility with policies of the recipient country and Japan. Also review of results evaluates production of effects caused by implementation of each project in the same manner as simple project evaluation, with additional focus on collaboration among constituent projects and cooperation with other development partners in each project.

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11 Taken from “Kenyan AIDS prevention program” evaluation report, with some revision. Note that cooperation program objectives are placed on the same level as the achievement of development challenges of the recipient country in Figure 9. In fact such cases are rare. Usually a cooperation program is positioned as means of solution to the development challenges concerned, along with other programs of the recipient country itself and contributions from other development partners.
2.3 Evaluation Tools

2-3-1 Logical Framework

The logical framework, or logframe in short (refer to Appendix 2) is a summary table of the project and one of widely used tools in JICA’s project-level evaluation. Methods that use the logframe in planning, implementation, and evaluation of projects are generally called logical framework approach. Typical configuration of the logframe is shown in Table 10.

Table 10: Typical Configuration of a Logical Framework

<table>
<thead>
<tr>
<th>Narrative summary</th>
<th>Objectively verifiable indicators</th>
<th>Means of verification</th>
<th>Important assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall goal (Impact)</td>
<td>Criteria to measure achievement toward the overall goal</td>
<td>Information sources for the indicators at left</td>
<td>Conditions required for the project effects to be sustainable</td>
</tr>
<tr>
<td>Long-term development effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project purpose (Outcome)</td>
<td>Criteria to measure achievement toward the project purpose</td>
<td>Information sources for the indicators at left</td>
<td>External factor which must be met so that the project can contribute to the overall goal</td>
</tr>
<tr>
<td>Direct effects of the project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outputs</td>
<td>Criteria to measure achievement toward the outputs</td>
<td>Information sources for the indicators at left</td>
<td>External factor which must be met so that the project can contribute to the project purpose</td>
</tr>
<tr>
<td>Goods and services produced by the project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities</td>
<td>Inputs</td>
<td>Resources to be used for production of outputs</td>
<td>External factor which must be met so that the project can produce outputs</td>
</tr>
<tr>
<td>Project activities to produce the outputs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 10: Vertical Logic of the Logframe

The logframe implies the logic model theory. The logic model describes the causal relationships between four levels in the project summary (overall goal, project purpose, outputs, and activities), also referred to as vertical logic. The combination of these four levels and important assumptions systematically shows both the purpose of this project and the necessities for the achievement of project purpose and overall goal (refer to Figure 10: Vertical Logic of the Logframe).

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12 Logical framework (Logframe) is a “management tool used to improve the design of interventions” (DAC Glossary of Key Terms in Evaluation).
In ODA loans and grant aid projects, the logframe is not created in the ex-ante evaluation stage and not directly used in subsequent evaluation. However, the purpose of the project, indicators of outcomes, and external factors and risks, all of which are review items of ex-ante evaluation and published in ex-ante evaluation sheet, are based on the idea of the logframe.

In the management of technical cooperation projects, project design matrix (PDM), which is a variation of the logframe, is typically used. The PDM is required to be created for technical cooperation projects with planned contributions of 100 million yen or more.\(^{13}\)

As described above, the logframe/PDM provides orderly presentation of logical structure for goal management, enabling quick understanding of the whole plan with its logical structure. Therefore a large number of participants can share an understanding of the project framework using the logframe/PDM. The logframe/PDM has these characteristics and can be used in project management to improve accountability and transparency.

However, it should be noted that the logframe/PDM does not necessarily have all the information regarding the project. It is advisable to be used with other complementary research methods as necessary.

In the ex-ante evaluation stage where projects are planned, it is necessary to review feasibility of project objectives levels as opposed to the period and expected inputs of the project, as well as logical consistency of the PDM. It is also necessary to keep records in an ex-ante evaluation sheet about content, participants, and related project implementers regarding major discussions until such project is chosen, as well as preparing chronological action plans required for project management.

In evaluation of mid-term review and thereafter, the distinction should be remembered between matters that can be evaluated by the logframe/PDM and those that cannot (refer to Box 5). In particular, relevance, impacts, and sustainability should be comprehensively evaluated by analyzing them from the cross-sectional perspective (refer to Table 11) with correct understanding of environmental changes surrounding the project.

Note that the original PDM sometimes needs to be fine-tuned or modified according to the progress of the project or changes in circumstances.\(^{14}\)

Box 5: Logframe/PDM and Evaluation

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\(^{13}\) Because of the nature of international joint research, creation of PDM may be omitted for projects of the Science and Technology Research Partnership for Sustainable Development. However, it is essential to set evaluation indicators for outcomes and achievement of objectives, even if PDM is not created.

Matters that can be evaluated based on the Logframe/PDM:
- Results of the project (comparing planned and actual performance of goals, project objectives, outputs, activities, and inputs)
- Reasons for difference between planned and actual performance (if any)
- Appropriateness of the project design (correctness of the vertical logic from prerequisites to goals)

Matters that cannot be evaluated based on the Logframe/PDM:
- Appropriateness of the planning process (whether alternatives were considered; the project was appropriately scoped)
- Appropriateness of the project implementation structure and process (organizational structure, creativeness in activities, and monitoring methods)
- Impacts other than goals (impacts other than goals/objectives listed in the Logframe/PDM)
- Sustainability (probability that effects continue after termination of the project, judged from the organizational structure, budget, and external environment of the recipient country)

Table 11: Cross-sectional Perspective for Evaluation

<table>
<thead>
<tr>
<th>Policy</th>
<th>Priority of the project area, consideration for relevant policies, and institutional development situations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Choice of appropriate technology, existence of engineers, continuous development and maintenance of human resources, availability of related materials and equipment</td>
</tr>
<tr>
<td>Environment</td>
<td>Management, development, and exploitation of natural resources, environmental protection, and environmental impacts</td>
</tr>
<tr>
<td>Social and cultural factors</td>
<td>Impacts on and penetration into local communities, impacts on various groups (by gender, ethnicity, religion, financial class, etc.), benefits and access for each group</td>
</tr>
<tr>
<td>Institutional management</td>
<td>Maintenance of necessary institutional structure and human resources, location of competence and responsibility</td>
</tr>
<tr>
<td>Economy and finance</td>
<td>Funding for operation, maintenance, and management, cost-benefit analysis of the project</td>
</tr>
</tbody>
</table>

2-3-2 Indicators (Performance Indicators)

1. Definition of Indicators

An indicator is a concept or matter that specifies a certain phenomenon. OECD-DAC's "Evaluation and Aid Effectiveness No. 6 - Glossary of Key Terms in Evaluation and Results Based Management" defines an indicator as a "Quantitative or qualitative factor or variable
that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development factor."\textsuperscript{15} Thus, by setting indicators, achievement of objectives can be objectively demonstrated as outcomes of the project or program. The purpose of JICA’s project evaluation can be summarized into two points: (1) improvement of projects and (2) enhancement of accountability. Setting indicators closely relates to these purposes of project evaluation.

A performance indicator (sometimes called a performance monitoring indicator) is a criterion for evaluating achievement of a public policy or a public service. Continuous measurement of performance indicators from the planning (ex-ante) stage to the follow-up (ex-post) stage enables the consistent collection of information regarding performance of policies and projects. Such method of collecting information, together with utilizing collected information in improvement of operations, is called performance measurement,\textsuperscript{16} which is widely used as an administrative management tool in the United States and other countries (refer to Appendix 7 for details).

In the Performance Monitoring Indicators: A Handbook for Task Managers, issued by the World Bank in 1996, performance indicators are defined as “measures of project impacts, outcomes, outputs, and inputs that are monitored during project implementation to assess progress toward project objectives.” For example, measures for outputs are called output indicators and ones for outcomes outcome indicators, and so on.

2. Setting Indicators

Several characteristics, which are commonly found in many aid agencies, regarding the usage of performance indicators in development assistance projects include what is described as follows:

1) Hierarchical causal relationship is defined between inputs, activities, outcomes,\textsuperscript{17} and impacts (the logic model of the logframe or vertical logic; refer to the previous section).

2) Coverage of measurement is not just what was performed in the project to produce outputs from inputs, but also what outcomes were obtained from the project, or even expanded to what changes were made in beneficiaries, society, and economies concerned.

3) Baseline data are defined and measured before implementation of the project, and collection of data has been consistently continued through project implementation and until after the project is completed.

\textsuperscript{15} Glossary of Key Terms in Evaluation and Results Based Management (OECD-DAC, 2002).

\textsuperscript{16} As an Independent Administrative Institution, JICA has introduced a performance appraisal system including project evaluation to improve quality and efficiency of operations as well as ensuring transparency.

\textsuperscript{17} In many cases, outcomes of policies and projects (changes in conditions of society and economics concerned as results of output) are primary measures of performance appraisal.
In JICA, performance indicators are utilized to perform project evaluation consistently from ex-ante to ex-post. With regard to technical cooperation projects, outcome indicators are typified in a comprehensive and cross-sectional manner from the viewpoint of capacity development, as well as a collection of indices being created for each area or challenge. Performance indicators for ODA loans (operation and effect indicators) will be detailed in the next section. In evaluating grant aid projects, all output indicators are set for those expected from implementation of the project to which assistance is made, and as many as possible for those expected from implementation of the whole project planned.

3.  Examples of Indicator Setting (Operation and Effect Indicators in ODA Loans)

Since fiscal year 2000, operation and effect indicators have been introduced in ODA loan projects as performance indicators for each major sector. Operation and effect indicators are defined as shown below, both of which correspond to outcome indicators in the definition of the World Bank. These indicators in ODA loan projects are also considered to be indicators basically at the outcome level (refer to Figure 11).

Box 6: Definitions of Operation and Effect Indicators

- **Operation indicators**: indicators to quantitatively measure operational status of the project
- **Effect indicators**: indicators to quantitatively measure production of effects of the project

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18 There are five types in total: (type 1) capacity development of C/P (person), (type 2) capacity development of C/P agency (organization), (type 3) capacity development of service users (beneficiaries), (type 4) capacity development in the region (social system), and (type 5) improvement of situations and problem solving in the region.

19 This is not to say that no indicators for other than outcomes are used in ODA loan projects. Input indicators (input amount), output indicators (typically the size and content of facilities and equipment developed or procured), and impact indicators (which is set according to the project) are always measured in evaluation.
The purpose of the ODA loan project is often described as two stages. They are (1) appropriate operation and usage of outputs, and (2) effects produced by stage (1) to benefit beneficiaries and the target area, as the results of the development of facilities and equipment (outputs) in the project. Operation indicators measure (1), and effect indicators (2), respectively.

Ex-ante evaluation has been carried out and publicized for all ODA loan projects that went through appraisal. As a process of such evaluation, actual (baseline) values at the time of appraisal, target values, and their achievement deadlines are supposed to be recorded in the ex-ante evaluation sheet, on which JICA and implementing agencies agree about setting of these indicators as part of the appraisal.
### Table 12: Examples of Operation and Effect Indicators

<table>
<thead>
<tr>
<th>Sector name</th>
<th>Typical operation indicators (unit)</th>
<th>Typical effect indicators (unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation</td>
<td>Beneficiary area (hectares)</td>
<td>Production volumes of individual major food crops (tons)</td>
</tr>
<tr>
<td>Power plants</td>
<td>Facility utilization rate (percent)</td>
<td>Produced electricity at the transmission end (MWh)</td>
</tr>
<tr>
<td>Flood control</td>
<td>High watermark at the reference point (m)</td>
<td>Area of maximum inundation caused by breach or overflow of embankment (square kilometers)</td>
</tr>
<tr>
<td>Water supply</td>
<td>Water supply (cubic meters per day)</td>
<td>Coverage (percent)</td>
</tr>
<tr>
<td>Harbors</td>
<td>Cargo volume (tons or TEU[^Note] per year)</td>
<td>Average wait time (minutes)</td>
</tr>
<tr>
<td>Roads</td>
<td>Annual average of daily traffic (vehicles per day)</td>
<td>Shortened time (hours per year)</td>
</tr>
</tbody>
</table>

Note: This is also a valuable effect indicator, because it means increase in port cargo handled for users of the harbor.

### Table 13: Sample Setting of Operation and Effect Indicators in the Ex-ante Evaluation Sheet

(Philippines, "Highway System Improvement Project (VII")

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Roads</th>
<th>Present (2001)</th>
<th>Two years after completion (2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increase in traffic</strong> (vehicles per day)</td>
<td>[1] Allen—Calbayog</td>
<td>1,088</td>
<td>1,570</td>
</tr>
<tr>
<td></td>
<td>[2] Calbayog—Gatangit</td>
<td>932</td>
<td>1,342</td>
</tr>
<tr>
<td><strong>Reduced cost of travel</strong> (million pesos per year)</td>
<td>[1] Allen—Calbayog</td>
<td>--</td>
<td>164.90</td>
</tr>
<tr>
<td><strong>Reduced travel time</strong> (hours)</td>
<td>[1] Allen—Calbayog</td>
<td>1.6</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td>[2] Calbayog—Gatangit</td>
<td>1.17</td>
<td>0.75</td>
</tr>
</tbody>
</table>

### Box 7: Criteria to Be Referenced in Setting Indicators

- **Validity**: whether the indicator data being set can really measure the achievement of project objectives.
- **Reliability**: whether the indicator being set can produce the same results for an arbitrary number of measurements by anyone.
- **Accessibility**: whether the indicator being set is easily accessible from the project. The number of indicators should not be too large, in the light of costs and time of data collection.

After the start of the project, the implementing agency is supposed to measure and record
2-3-3 Cost Benefit Analysis

1. Definition of Cost-Benefit Analysis

Cost-benefit analysis is a method for measuring the cost effectiveness of the project concerned by comparing monetary values of measured (or estimated) costs and benefits of the project implementation. Its main indicators include Net Present Value (NPV) and Internal Rate of Return (IRR) (refer to Box 8).

Box 8: Definitions of NPV and IRR

- **Net Present Value (NPV):**
  The total present value of cash inflow (benefits) generated from the project and cash outflow (cost) involved in the project. The present value is the amount of obtained value by investment in the project, discounted by a certain discount rate (expected rate of return) into the value at the point of investment. If NPV is greater than zero, the project is considered to be worth investment.

- **Internal Rate of Return (IRR):** A discount rate such that NPV becomes zero, which is generally considered to be a measure of benefits obtained from the project. There are two kinds of IRR:
  - **Financial Internal Rate of Return (FIRR):** The cash inflow is calculated as financial benefits (income) from the project.
  - **Economic Internal Rate of Return (EIRR):** The cash inflow is calculated as beneficial contributions to the national economy (such as increase in value added) from the project.

NPV can be expressed as follows:

\[ PV_n = \frac{CF_n}{(1 + r)^n} \]

Where
- \( r \) = discount rate; \( n \) = number of unit periods (usually years)
- \( CF_n \) = cash flow in the \( n \)th period
- \( PV_n \) = the present value of cash flow in the \( n \)th period

\[ NPV = PV_0 + PV_1 + ... + PV_n \]

IRR is a value of \( r \) such that NPV = 0.

2. Methods of Cost-Benefit Analysis
Considering characteristics of each aid scheme, JICA applies cost-benefit analysis mainly to evaluation of ODA loan projects. In evaluating ODA loan projects, both or either of Financial Internal Rate of Return (FIRR) and Economic Internal Rate of Return (EIRR) are calculated at the time of appraisal (ex-ante evaluation) of the project. FIRR is calculated mainly for projects involving fee incomes, such as toll roads and power plants. EIRR is calculated where possible, although not calculated for projects with difficulties in monetization or quantification of benefits, including educational or medical projects.

Note that cost-benefit analysis is basically not applied to technical cooperation projects, where project effects are evaluated from multifaceted perspectives, not just in monetary values. With regard to grant aid projects, importance is attached to financial evaluation that ensures sustainability, rather than economical evaluation such as internal rate of return.

3. Application Examples of Cost Benefit Analysis (ODA Loan)

Box 9: Example Calculations of NPV and IRR

Assume a project with implementation period being one year and project life (service life of facilities constructed by the project) being five years after its completion.* If project cash flow (differences between benefits and costs) is minus 100 dollars for the year of project implementation, 20 for the next year of the completion, 20 for two years after, 30 for three years after, 40 for four years after, and 50 for five years after, NPV and IRR can be calculated as follows:

<table>
<thead>
<tr>
<th>Year of project implementation (Year 0)</th>
<th>CF&lt;sub&gt;0&lt;/sub&gt; = -100</th>
<th>PV&lt;sub&gt;0&lt;/sub&gt; = -100</th>
</tr>
</thead>
<tbody>
<tr>
<td>One year after completion (Year 1)</td>
<td>CF&lt;sub&gt;1&lt;/sub&gt; = 20</td>
<td>PV&lt;sub&gt;1&lt;/sub&gt; = 20 / (1 + r)&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Two years after (Year 2)</td>
<td>CF&lt;sub&gt;2&lt;/sub&gt; = 20</td>
<td>PV&lt;sub&gt;2&lt;/sub&gt; = 20 / (1 + r)&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Three years after (Year 3)</td>
<td>CF&lt;sub&gt;3&lt;/sub&gt; = 30</td>
<td>PV&lt;sub&gt;3&lt;/sub&gt; = 30 / (1 + r)&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Four years after (Year 4)</td>
<td>CF&lt;sub&gt;4&lt;/sub&gt; = 40</td>
<td>PV&lt;sub&gt;4&lt;/sub&gt; = 40 / (1 + r)&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>Five years after (Year 5)</td>
<td>CF&lt;sub&gt;5&lt;/sub&gt; = 50</td>
<td>PV&lt;sub&gt;5&lt;/sub&gt; = 50 / (1 + r)&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

NPV = -100 + 20 / (1 + r)<sup>1</sup> + 20 / (1 + r)<sup>2</sup> + 30 / (1 + r)<sup>3</sup> + 40 / (1 + r)<sup>4</sup> + 50 / (1 + r)<sup>5</sup>

When r ≈ 0.15, NPV ≈ -100 + 17.4 + 15.1 + 19.7 + 22.9 + 24.9 = 0, therefore IRR ≈ 15 %

* This example is highly simplified for ease of understanding concepts. In fact, implementation period of ODA loan projects for infrastructure development extends for several years, and project life for 20 or 40 years after project completion.

In ex-post evaluation of ODA loans, FIRR and EIRR are recalculated on the same conditions as of appraisal and utilized as indicators to evaluate achievement of project objectives. If the recalculated values differ significantly from the values at the time of appraisal, reasons behind such difference should be analyzed. They are often due to variation in project costs compared with estimation at the time of appraisal or variation in achievement of project objectives. Although IRR is a very clear quantitative indicator, its value changes according to settings of items and amounts of costs and benefits. Therefore it is important to specify conditions used in the calculation if IRR is used in project evaluation.
Procedures to recalculate FIRR and EIRR are shown below.

**Box 10: Procedures to Recalculate FIRR and EIRR**

1) Review framework of the project and formulate hypothesis using benefits and costs assumed at the time of appraisal.
2) Determine lifetime of the project. The evaluation period for which IRR is calculated is from the first year of the project investment to the last year of the project life.
3) Calculate the costs and benefits during the evaluation period.
4) Convert the amounts of costs and benefits into fixed prices at the base year, eliminating inflation factors during the evaluation period. The base year is usually the year of project completion in the case of recalculation for ex-post evaluation.
5) In recalculating EIRR, market prices of costs and benefits are converted to their economic prices, eliminating effects of domestic price distortion.
6) Calculate cash flow (net benefits, i.e. the difference between benefits and costs) for every year.
7) Calculate EIRR and FIRR. It is convenient to use computer software such as spreadsheet.
Box 11: Recalculation Examples of FIRR and EIRR in Ex-Post Evaluation

Indonesia, "Bali International Airport Development Project (second phase)"

In the ex-post evaluation performed in 2003, FIRR and EIRR of this project (second phase) were recalculated based on information obtained from our research. The recalculated value of FIRR was 14.3 percent, comparable to the value at the time of appraisal, 14.2 percent. EIRR, which had not been calculated at the time of appraisal, was estimated at 19.3 percent, based on benefits calculated from available data of foreign currencies consumed by alien tourists and time savings of Indonesian passengers. The numbers of passengers used in calculating benefits are actual values up to August 2003 and estimated after that using growth rate in the forecast of the year 2000. Therefore, these numbers reflect the effects of terrorist bombing in October 2002 and SARS in the first half of 2003.

Conditions for Calculating EIRR and FIRR

- Project Life: 20 years after facilities are in operation
- Calculation method for fixed prices: The year of project completion being set as the base year, discounted fixed prices are calculated for the local currency and foreign currencies using respective CPI. Fixed prices in foreign currencies are converted with the exchange rates of the base year.
- Costs: Project costs, operation and maintenance costs (operation and maintenance costs for phase two alone are estimated from the area of major facilities). Because invested amounts for individual facilities were not available, the ratio of facility area was used.
- EIRR Benefits: Calculated from spending of alien tourist and time savings of Indonesian passengers (approximated by passengers of domestic routes).
- FIRR Benefit: Revenue from the airport (contribution of the second phase was estimated from the area of the major facilities, which is 39 percent and equals to the ratio of investment of the first phase and the second phase)
2-3-4 Social Analysis

1. Definition of Social Analysis

Social analysis is a blanket name for various researches and analyses of social aspects of development policies, programs, and projects. The World Bank defines social analysis as research that "enables the Bank to assess whether a proposed program or operation is likely to meet its social objectives and to recommend measures that will ensure that these objectives are met." In general, any social aspects in any stage of the project cycle or the program cycle can be subjected to social analysis, while appraisal and design stages are in the most need of it. In the case of social analysis used in evaluation of development assistance, usually attention is attracted to the analysis of social or economic effect of external development interventions. The World Bank calls such analysis by the name of Poverty and Social Impact Analysis (PSIA).

2. Application Examples of Social Analysis (ODA Loan)

< In the Case of Project-level Evaluation (Evaluation for Individual Project) >

With regard to JICA's project-level evaluation, social analysis is mainly used for evaluation for effectiveness and impacts, as in a beneficiary survey for ODA loan projects. With regard to JICA's project-level evaluation, social analysis is mainly used for evaluation for effectiveness and impacts, as in a "beneficiary survey" for ODA loan projects. In project-level evaluation, which covers various items in line with the DAC evaluation criteria, simple quantitative and qualitative methods are usually used; because social analysis only covers part of evaluation activities (refer to Box 13). However, for the sake of development outcome management, it is required to perform as detailed analysis as possible, taking advantage of local consultants.

Box 12: "Beneficiary Survey" Methods in ODA Loan Projects

- **Simple quantitative analysis**: Structured (formal) survey using questionnaires and interviews for sampled beneficiaries. The results are expressed in simple descriptive statistics such as average values and variances. If possible, it is useful to analyze differences in benefits among different types of beneficiaries or between beneficiaries and non-beneficiaries by regression analysis and cross tabulation.

- **Simple qualitative analysis**: semi-structured or unstructured (informal) survey using questionnaires and interviews, as well as focus group discussions, for a small number of beneficiaries (and non-beneficiaries) compared to the quantitative analysis, to understand the reasons behind the quantitative information.

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Box 13: Examples of Beneficiary Survey in Ex-Post Project Evaluation


The purpose of this project is to improve waste collection and treatment capacities by developing waste disposal plants and equipment in the Subic Bay Freeport Zone, and thereby contributing to encourage investment and to improve sanitary conditions in the area. Beneficiary survey was conducted as part of the field survey for the ex-post evaluation. The purpose of the beneficiary survey is to observe improvement in garbage collection and disposal services made by the implementation of the project and how it contributed to promote investment in the Subic Bay Freeport Zone and to improve sanitary conditions of local residents. Questionnaire-based interviews were held for 110 residents and 110 companies in the Subic Bay Freeport Zone.

Existing data had already shown improvement in garbage collection capacity and increase in frequency. However, this beneficiary survey reveals that increase in frequency of garbage collection was reported by only 10.3 percent of resident respondents and 13.9 percent of corporate respondents, while 67 percent of residents and 69.5 percent of companies responded "very satisfied" or "satisfied" to the question regarding overall satisfaction with the garbage collection services.

The effectiveness of this project was evaluated as satisfactory (grade B) from above and other information collected.

< In the Case of Thematic Evaluation: >

In some cases of thematic evaluation, social impacts are evaluated. There are more choices of tools to be used in social analysis than those available in the evaluation of individual projects, including macroeconomic models with various statistical analyses and more qualitative or beneficiary-participatory tools such as organizational analysis or stakeholder analysis. 22

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22 For more detailed information for these tools, refer to the above-mentioned PSIA website: http://web.worldbank.org/WEBSITE/EXTERNAL/TOPICS/EXTPROVIDING/EXTPSIA/0,,menuPK:490139~pagePK:149018~piPK:149093~theSitePK:490130,00.html
Box 14: Examples of Social Impact Evaluation Using Poverty Analysis and Macroeconomic Simulator (PAMS)

India, Role of Infrastructure in Poverty Reduction

This evaluation was performed for the purpose of developing methods for quantitative analysis of contribution from infrastructure development to poverty reduction, utilizing Poverty Analysis and Macroeconomic Simulator (PAMS), which is an economic tool for poverty analysis. PAMS is a sort of Poverty and Social Impact Analysis (PSIA) with characteristics in terms of consistent measurement of impacts from the macro-model through meso-level to micro-level.

Eight ODA loan projects, all of which are of infrastructure development, are selected for evaluation.

At the macro-level, it is analyzed how the project affected the gross regional domestic product, or GRDP. Regression analysis was made between investment to the project (inputs) and sectoral GRDP, and the resulting equation was used to deduce the impacts of the project, which is calculated as the difference between the actual GRDP and hypothetical GRDP on the assumption that the project had not been implemented. For example, the contribution of this project to the increase of GRDP in the industrial sector was estimated to be 30 percent.

At the meso-level, it is analyzed how GRDP changes in the different sectors affected, through growth of employment, the distribution of labor population between such sectors. For example, the difference of labor population in the rural industrial sector was 0.1 percent, between the cases where the project was implemented and not.

At the micro-level, it is analyzed how changes in GRDP and labor population affected household incomes. For example, the poverty rate (percentage of households below the poverty line) was dropped from 16.5 to 5.3 percent in the rural industrial sector, due to the effects from macro- and meso-level.
Appendix

Appendix 1: Recommendations from Advisory Committee on Evaluation
Appendix 2: Logical Framework
Appendix 3: Rating
Appendix 4: Impact Evaluation
Appendix 5: OECD Development Assistance Committee (OECD/DAC)
  Quality Standards of Evaluation
Appendix 6: Participatory Evaluation
Appendix 7: Performance Measurement
Appendix 8: References
Appendix 1: Recommendations from Advisory Committee on Evaluation

Since the launch of the New JICA in October 2008, the Committee had three meetings until December 2009. Recommendations on evaluation policies of the New JICA, given by committee members, are summarized below:

1. Project Evaluation of the New JICA
   1) **Evaluation of grant aid projects:** Although the Ministry of Foreign Affairs had conducted evaluation for all grant aid projects in the past, it was mainly performed by diplomatic establishment abroad, utilizing questionnaires. It is necessary for JICA to devise evaluation methods in order to cover all projects within the limited evaluation budget while maintaining evaluation quality. Such methods might include (1) elaborate questionnaire design (to ensure appropriate evaluation results), (2) prioritization in performing evaluation (detailed evaluation for projects of more than a certain size, simplified for others), (3) request for cooperation to the Embassies and JICA overseas offices (rather than outsourcing to external experts for all cases), and (4) meta-evaluation of evaluation cases that had been conducted by the Ministry of Foreign Affairs, which will help to improve quality of evaluation for the future.
   
   2) **Ex-post Evaluation:** Prioritization is also important for projects other than grant aid, in order to ensure both coverage and quality of evaluation performed by JICA with the limited resources available for implementing projects. For example, it is desirable to focus on projects that are publicly important and that also attract professional interest, such as impact evaluation.

   3) **Evaluation Findings Database:** The evaluation findings database is currently utilized inside JICA, but sharing it with consultants involved in project implementation would be useful, although careful consideration would be required about limitations including information security.

   4) **Evaluation of Financial Aid:** It is important to evaluate from a differed perspective, depending on the particular environment of development aid in each country or region. For example, in Indonesia, Vietnam, or other countries with advanced aid coordination and Japan's large presence, evaluation could be performed coordinating with other donors and setting common indicators, or focusing on contributions made with Japan's initiative. On the other hand, in countries with Japan's small quantitative presence such as Tanzania and Zambia, production of
effects is more important, for example whether the financial aid led to scale up existing projects with Japan's contribution.

2. Project Evaluation for the Future

1) **Combination of aid modalities:** Even in evaluating a project with a single scheme that is not cooperating with other schemes, if external evaluators could extract recommendations and lessons learned from the supposition that there had been cooperation with other schemes, it would be possible to produce feedback that results in formation of future projects.

2) **Shifting Focuses from Processes to Outcomes:** Although outcomes are important, it should be noted that there are some projects with difficulties in measuring outcomes, for example, mass training and dispatch of individual experts in technical cooperation projects. Also the downscaling trend of projects often limits production of outcomes. Even in these cases, outcomes can be evaluated by bundling them with training, for example. Also review of the process is still important especially in technical cooperation projects, with importance attached to outcomes.

3) **Concept of Cooperation Programs:** It should be noted in evaluation that there are different meanings in different countries due to varying dependence on aid and existence of other donors. In some cases, it would not be possible to set outcome targets by Japan alone. In light of lowering barriers between aid modalities, thanks to the launch of the New JICA, it is important to express opinions from the perspective of evaluation that little effect can be expected from a program composed of a mere collection of projects and that programs are most meaningful when implemented with flexible combinations of three schemes.

   International organizations including the World Bank position technical cooperation and financial cooperation as components in a certain project and perform ex-post evaluation as a whole. We believe that future JICA projects should also be implemented as a program in combination of three schemes to produce impacts. Although choice of projects should also be made by grouping them into Cooperation Programs, budgeting and commercialization is very difficult for Cooperation Programs. Preliminary surveys are necessary to determine a framework for formation of a Cooperation Program, identifying necessary components.

4) **Building Evaluation Capacity of Recipient Countries:** It would be suggested that evaluation should first be conducted by recipient countries, sharing the results with us. Because of different perspectives from Japan and from recipient countries, it is
possible that recipient countries had had alternative cooperation requests rather than actual offers. It would also be an issue of sustainability.
Appendix 2: Logical Framework

The "logical framework" (also known as the "logframe"), is literally a logical framework utilized to manage projects (refer to Table 1-1). Used in the development assistance field by the United States since the latter half of the 1960s as a project plan table, it is currently utilized in the context of the result-based management (RBM) as the primary tool for clarifying goals and arranging the indicators needed to measure outcomes.

JICA uses the logframe to formulate and manage technical cooperation projects, which are a means toward solving development issues. Accordingly, it is important to give full consideration to 1) the fact that the logframe is always positioned as a part of a major development issues (refer to Figure 1-1), and that 2) the fact that the logframe should be modified as required in monitoring during project implementation and at the mid-term review. Also, while the logframe shows the content of the project’s composition and the logicality of its plan, it is simply a summary table. Thus, it is important to bear in mind that it does not explain all items (e.g., project background, detailed activities, the project operation structure, detailed content of technical cooperation, etc.)

The logframe is an "outline table of the project plan", that compiles the project strategy into a matrix of four rows and four columns (see Figure 1-1). Specifically, it displays the composite elements of the project (the overall goal, project purpose, outputs, activities, and inputs), constructs the linked relationship between “causes” and “results”, and puts the expected values of the goals and outcomes in the form of indicators prior to the project’s implementation. At the same time, it identifies the “important assumptions” that may affect the success of the project.

References:
Figure 1-1: The Logframe and Development Issues

- Improved urban sanitation (reduced infection rate of waterborne diseases)
- Improved water supply coverage
- Enhanced administrative organization for urban environment
- Construction of water purification plant
- Improved residents' understanding of sanitation
- Proper disposal of waste

Logframe for the water supply services improvement project
Logframe for the urban environmental administration improvement project
Logframe for the water purification plant construction project
Logframe for the sanitation education project
Logframe for the waste disposal project
<table>
<thead>
<tr>
<th>Narrative summary</th>
<th>Objectively verifiable indicators</th>
<th>Means of verification</th>
<th>Important assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall goal</strong></td>
<td>Indicators and target values to measure achievement toward the overall goal</td>
<td>Information sources for the indicators at left</td>
<td>Conditions required for the project effects to be sustainable</td>
</tr>
<tr>
<td><strong>Project purpose</strong></td>
<td>Indicators and target values to measure achievement toward the project purpose</td>
<td>Information sources for the indicators at left</td>
<td>External factors which must be met so that the project can contribute to the overall goal, but with uncertainty</td>
</tr>
<tr>
<td><strong>Outputs</strong></td>
<td>Indicators and target values to measure achievement toward the outputs</td>
<td>Information sources for the indicators at left</td>
<td>External factors which must be met so that the project can contribute to the project purpose, but with uncertainty</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td>Inputs (by both Japan and the partner country) Resources required for activities (people, money, materials, and equipment)</td>
<td>External factors which must be met so that the project can produce the outputs, but with uncertainty</td>
<td></td>
</tr>
<tr>
<td><strong>Preconditions</strong></td>
<td>Conditions that must be met before activities begin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Logical Construction of the Logframe (refer to Figure 1-2)

At the center of the Logical construction of the logframe is the linked relationship “activities -> outputs -> project purpose -> overall goal”. This is the logic of the “if-then” hypotheses; e.g., “if” activities take place, “then” an output will be achieved; “if” the output is achieved, “then” the project purpose will be fulfilled; and “if” the project purpose is fulfilled, “then” it will contribute to the overall goal. To plan a project is to build such a hypothesis. The process of building these hypotheses is based on comprehension of the current situation that is gained by of looking at cause-and-effect relationships involved in problems facing the target group and its society, as well as the causes of these problems (i.e., problem analysis). The more realistic these hypotheses are, the better the project plan will be. Thus, the following things are important: a) direct connection between the “if” and “then” elements (the more direct, the better), b) controlling various problems by through the efforts of the project, and c) effective, low-risk activities. This logic can be utilized to find causal relationships for the project and performance when conducting monitoring and evaluation.

If we were living in a perfect world, projects could produce expected effects based on these “if-then” relationships only. In reality, however, there are various external factors that may affect the project, because the project is one of means to solve problems. The logframe identifies these factors in the “important assumptions” column and clarifies the linkage between the “activities -> outputs -> project purpose -> overall goal” logic and the “important assumptions”. The whole picture of the project can be described by using "if-and-then" logic: "if" activities take place "and", on top of this, external factors that are important but cannot be controlled by the project are met (and), "then" the outputs can be achieved (the same applies to the logic for outputs and higher levels). The idea of important assumptions is useful as a tool for planning projects from the perspective of ensuring sufficient project planning and preventing external factors from hindering production of effects.

The important assumptions have significant roles as a target of surveys when conducting monitoring and evaluation. The environment surrounding the project is always changing. The important assumptions, identified during project formulation, often have an impact that far exceeds what was predicted during project implementation. In such cases, the plan should be reviewed or new important assumptions should be identified by carrying out monitoring and mid-term review. In terminal evaluation and ex-post evaluation, if some important assumptions impeded achievement of the objective, the evaluators should study
whether such important assumptions were identified and monitored during project implementation. It should be avoided at all costs that the important assumptions be exploited for obscuring responsibilities in the project implementation process.

Figure 1-2: Logical Construction of Logframe
"Narrative summary" and "Inputs"

The narrative summary is comprised of "activities", "outputs", "project purpose", and "overall goal", and includes elements that become the framework of the project plan. A project means achievement of "objectives" by producing "outputs" through various "activities" from "inputs" of certain resources (people, materials, money, etc.). These "objectives" are represented by two levels in the logframe, namely "project purpose" and "overall goal".

The "overall goal" is the long-term effect expected to be attained through implementation of a project. When planning a project, sufficient study must be devoted to the question of how the overall goal will contribute to a development issue (it is possible that, depending on the project, the development issue itself becomes the overall goal). JICA perceives the overall goal as "the effect that will be occurring in the target society three to five years after the project is completed".

The "project purpose" is the direct effect on the target group (including people and organizations) and society that is expected to be achieved through project of implementation. In the case of technical cooperation, the "project purpose" is achieved basically at the completion of the project.24 Thus, the level of achievement toward the "project purpose" is a signpost toward "whether or not the project is producing outputs" and "whether project implementation was meaningful". A project with outputs, but without any benefits for the target group, would be meaningless and not worth a lot of resource inputs.

24 In some projects, depending on their content and natures, direct effects will not be produced until a certain period of time after completion of the project. For example, in irrigation projects, changes in rice production would not be observed until a certain period of time after construction of the irrigation facilities.
The "outputs" are goods and services the project produces for achievement of the "project purpose". While the project purpose indicates a positive change for beneficiaries including the target group, the outputs refers to items that are produced by the project implementers. For example, in the case of a project focused on training, the "implementation of training" is an output, while the project purpose is seen as "improvement in knowledge of trainees", "application of acquired techniques in the workplace", etc.

The "inputs" refer to resources necessary to produce the "outputs" (people, materials, equipment, operational costs, and facilities, etc.), and they are listed as the resources of both Japan and the partner country. The "activities" refer to a series of actions necessary to produce the "outputs" utilizing the "inputs", which are performed by the project team at the project site. Because the logframe is an overview of the project plan, detailed action plans are prepared separately. However, major activities that indicate the project strategy are listed in the logframe.
"Objectively verifiable indicators" and "Means of verification"

The "objectively verifiable indicators" that apply to the Outputs, Project Purpose, and Overall Goal columns show the indicators and their target values used for specific measurement of the level of achievement of each. The information sources for these indicators are clearly noted in the Means of Verification column. Data that is obtained from the information sources must be highly reliable, available, and without too much costs incurred. Based on these requirements, it is important to establish multiple indicators and information sources as necessary in order to obtain the most objective data possible.

The indicators and target values are set based on baseline surveys and other activities at the planning stage. In the ex-ante evaluation, study of the relevance of these indicators, target values, and means for obtaining them is an important part of verification work. The indicators must accurately fit the content of goals and outputs, and it is important that the means of measuring them be objective and reproducible (i.e., the same types of data can be obtained by anyone, the same method being used). If no reasonable baseline data are available in the pre-implementation stage, a baseline survey should be undertaken as soon as possible after the project starts, objectively verifiable indicators and target values being set according to the results.

Appropriate setting of indicators based on baseline data raises project transparency and is an essential part of project management. Indicators can be utilized to check whether the project is implemented as expected during the implementation stage (monitoring). In some projects, it would be necessary to fine-tune original target values due to various external environmental changes or implementation status of the project. The content of inputs, activities, and other items might be reformulated accordingly.
"Important Assumptions" and "Preconditions"

The "important assumptions" are external factors that have impacts on achievement of the projects but not controllable from the project. Because a project is one of means to contribute to solve a development issue, which is selected by a certain criteria, it does not take account of all factors involved in the resolution of the problem. When planning projects, it is important to set goals that have the highest possibility of actually being realized; however, in reality, a variety of external factors that are not controllable from the project also affect the project. Therefore it is necessary to identify these external factors as "important assumptions" on the logframe in the planning stage to examine relevance of goal settings and activities, as well as watching their impacts by monitoring them during implementation of the project.

As shown in Figure 1-3, the "important assumptions" are identified in terms of the degree of importance to the project, controllability from the project, and probabilities of them to be fulfilled, etc., and demonstrated on the logframe as they have been fulfilled. Also quantitative description is advisable where possible (for example, "80 percent of trained teachers will stay on their jobs"), facilitating observation of changes in important assumptions and their impact on the project.

Although "important assumptions" are beyond the responsibility of the project, it should be avoided at all costs that the important assumptions be exploited for the purpose of obscuring responsibilities in case of project failure. It is important to examine "important assumptions" from the perspective of what kind of activities and objectives can be planned to render the project more risk-free and more effective. Even if a factor is considered to be one of "important assumptions", it should be carefully examined whether it can be handled as one of project activities, and it should be included in project activities if possible.
(Example: in the case of a project to promote empowerment of female villagers where incomes are generated for women, absence of objection from patriarchs or husbands is considered to be one of important assumptions, but such objection can be suppressed by implementing educational activities for male villagers in the project.)

The "preconditions" refer to conditions that must be fulfilled before implementation of the project, with which fulfillment activities can take place.
Figure 1-3: How to Identify Important Assumptions

Is the condition important for the project? no → Not important assumption

yes → Is the condition controllable from the project? yes → Not important assumption

no → How about probability of the condition to be fulfilled? almost certain → Not important assumption

not likely → Important assumption (to be described in the Logframe and monitored)

Is it possible to change project content? no → Killer assumption

yes → Change part of project content not to be affected by the condition
Appendix 3: Rating

Rating is grading or marking of evaluation findings based on a certain standard. They are a means that can be utilized in policy-making and review to improve the project, as well as intelligibly present evaluation findings. However, it is not desirable that rating results alone be excessively emphasized, because rating does not comprehensively reflect the whole project.

JICA performs rating and publicizes its results regarding ex-post evaluation of each project, for the purpose of more intelligible indication of findings. Until integration in October 2008, different rating methods were used for different schemes, namely technical cooperation projects, ODA loans, and grant aid, because the principal was different for each scheme. However, a new rating system was created that can be applied commonly to all three schemes, as shown in the table below.

Specifically, sub-rating (in three grades of a/b/c) is performed for (1) relevance, (2) effectiveness (impacts), (3) efficiency, and (4) sustainability, based on criteria provided in accordance with characteristics of each scheme, from which results an overall rating (in four grades of A/B/C/D) is calculated based on a flowchart.
Appendix 4: Impact Evaluation

It is generally called *impact evaluation* to measure amounts of changes caused by a development project or program alone. It is often difficult to understand outcomes of a certain project or program because social and economic changes are caused by various factors. In recent years, however, research and development of what is called a *strict impact evaluation method* becomes popular mainly in a circle of development economists, being little by little adopted in practical operations of development aid evaluation. A strict impact evaluation method is based on a statistical analysis of the difference in changes between cases where an intervention such as a project or a program was implemented and not.

There are two major methods for scientific evaluation of impacts: experimental design and quasi-experimental design. Both analyze before-and-after changes found in beneficiaries (experimental group) and in non-beneficiaries (comparison group). The difference between experimental and quasi-experimental designs lies in the way research targets are chosen. While an experimental group and a comparison group are randomly chosen before the project (intervention) starts in the experimental design, they are not randomly sampled in the quasi-experimental design, a comparison group being chosen at the time of ex-post evaluation to form a similarly conditioned group as the beneficiary group except that they are not beneficiaries. However, purely experimental research is very difficult in the field of development aid evaluation. There is a large volume of literature and websites on the methods mentioned above. To give an example, Baker (2000). *Evaluating the Impact of Development Projects on Poverty: a handbook for practitioners*, The World Bank (http://siteresources.worldbank.org/INTISPMA/Resources/handbook.pdf).

Merits of strict impact evaluation include (1) that it helps production of development outcomes by determining the effectiveness of the project or program concerned and by giving priority to the project or program found to be effective in terms of inputs of limited resources, and (2) that it demonstrates how effectively money is used (securing accountability). However, introducing strict impact evaluation systematically requires investigation of its purposes and scopes because it involves collection of data from the pre-implementation stage and therefore entails human and financial costs.
Appendix 5: OECD Development Assistance Committee (OECD / DAC) Quality Standards of Evaluation

Introduction

The DAC Quality Standards for Development Evaluation identify the key pillars needed for a quality development evaluation process and product. They are intended for use by evaluation managers and practitioners. The Standards are not mandatory, but provide a guide to good practice. They were developed primarily for use by DAC members, but broader use by all other development partners is welcome.

The Standards aim to improve quality and ultimately to strengthen the contribution of evaluation to improving development outcomes. Specifically, the Standards are intended to:

- improve the quality of development evaluation processes and products,
- facilitate the comparison of evaluations across countries,
- support partnerships and collaboration on joint evaluations, and
- increase development partners’ use of each others’ evaluation findings.

The Standards support evaluations that adhere to the DAC Principles for the Evaluation of Development Assistance (1991), including impartiality, independence, credibility and usefulness, and should be read in conjunction with those principles. The Principles focus on the management and institutional set up of evaluation systems and remain the benchmark against which OECD DAC members are assessed in DAC Peer Reviews. By contrast, the Standards inform evaluation processes and products. The Standards can be used during the different stages of the evaluation process and in a variety of ways, including to assess the quality of evaluations, inform practice, strengthen and harmonise evaluation training, or as an input to create evaluation guidelines or policy documents.

The Standards should be applied sensibly and adapted to local and national contexts and the objectives of each evaluation. They are not intended to be used as an evaluation manual and do not supplant specific guidance on particular types of evaluation, methodologies or approaches. Further, these Standards do not exclude the use of other evaluation quality standards and related texts, such as those developed by individual agencies, professional evaluation societies and networks.
This document is structured in line with a typical evaluation process: defining purpose, planning, designing, implementing, reporting, and learning from and using evaluation results. The Standards begin with some overall considerations to keep in mind throughout the evaluation process. An annex provides references to related OECD DAC development evaluation publications.

**Terms used in this document**

The term ‘development intervention’ is used in the Standards as a general term for any activity, project, programme, strategy, policy, theme, sector, instrument, modality, institutional performance, etc, aimed to promote development.

The term ‘evaluation report’ is used to cover all evaluation products, which may take different forms, including written or oral reports, visual presentations, community workshops, etc.

1. **Overarching considerations**

1.1 **Development evaluation**

Development evaluation is the systematic and objective assessment of an on-going or completed development intervention, its design, implementation and results. In the development context, evaluation refers to the process of determining the worth or significance of a development intervention.

When carrying out a development evaluation the following overarching considerations are taken into account throughout the process.

1.2 **Free and open evaluation process**

The evaluation process is transparent and independent from programme management and policy-making, to enhance credibility.

1.3 **Evaluation ethics**

Evaluation abides by relevant professional and ethical guidelines and codes of conduct for individual evaluators. Evaluation is undertaken with integrity and honesty. Commissioners, evaluation managers and evaluators respect human rights and differences in culture, customs, religious beliefs and practices of all stakeholders.

Evaluators are mindful of gender roles, ethnicity, ability, age, sexual orientation, language and other differences when designing and carrying out the evaluation.
1.4 Partnership approach

In order to increase ownership of development and build mutual accountability for results, a partnership approach to development evaluation is systematically considered early in the process. The concept of partnership connotes an inclusive process, involving different stakeholders such as government, parliament, civil society, intended beneficiaries and international partners.

1.5 Co-ordination and alignment

To help improve co-ordination of development evaluation and strengthen country systems, the evaluation process takes into account national and local evaluation plans, activities and policies.

1.6 Capacity development

Positive effects of the evaluation process on the evaluation capacity of development partners are maximised. An evaluation may, for instance, support capacity development by improving evaluation knowledge and skills, strengthening evaluation management, stimulating demand for and use of evaluation findings, and supporting an environment of accountability and learning.

1.7 Quality control

Quality control is exercised throughout the evaluation process. Depending on the evaluation's scope and complexity, quality control is carried out through an internal and/or external mechanism, for example peer review, advisory panel, or reference group.
2 Purpose, planning and design

2.1 Rationale and purpose of the evaluation

The rationale, purpose and intended use of the evaluation are stated clearly, addressing: why the evaluation is being undertaken at this particular point in time, why and for whom it is undertaken, and how the evaluation is to be used for learning and/or accountability functions.

For example the evaluation’s overall purpose may be to:

- contribute to improving a development policy, procedure or technique,
- consider the continuation or discontinuation of a project or programme,
- account for public expenditures and development results to stakeholders and tax-payers.

2.2 Specific objectives of the evaluation

The specific objectives of the evaluation clarify what the evaluation aims to find out. For example to:

- ascertain results (output, outcome, impact) and assess the effectiveness, efficiency, relevance and sustainability of a specific development intervention,
- provide findings, conclusions and recommendations with respect to a specific development intervention in order to draw lessons for future design and implementation.

2.3 Evaluation object and scope

The development intervention being evaluated (the evaluation object) is clearly defined, including a description of the intervention logic or theory. The evaluation scope defines the time period, funds spent, geographical area, target groups, organisational set-up, implementation arrangements, policy and institutional context and other dimensions to be covered by the evaluation. Discrepancies between the planned and actual implementation of the development intervention are identified.
2.4 Evaluability

The feasibility of an evaluation is assessed. Specifically, it should be determined whether or not the development intervention is adequately defined and its results verifiable, and if evaluation is the best way to answer questions posed by policy makers or stakeholders.

2.5 Stakeholder involvement

Relevant stakeholders are involved early on in the evaluation process and given the opportunity to contribute to evaluation design, including by identifying issues to be addressed and evaluation questions to be answered.

2.6 Systematic consideration of joint evaluation

To contribute to harmonisation, alignment and an efficient division of labour, donor agencies and partner countries systematically consider the option of a joint evaluation, conducted collaboratively by more than one agency and/or partner country.

Joint evaluations address both questions of common interest to all partners and specific questions of interest to individual partners.

2.7 Evaluation questions

The evaluation objectives are translated into relevant and specific evaluation questions. Evaluation questions are decided early on in the process and inform the development of the methodology. The evaluation questions also address cross-cutting issues, such as gender, environment and human rights.

2.8 Selection and application of evaluation criteria

The evaluation applies the agreed DAC criteria for evaluating development assistance: relevance, efficiency, effectiveness, impact and sustainability. The application of these and any additional criteria depends on the evaluation questions and the objectives of the evaluation. If a particular criterion is not applied and/or any additional criteria added, this is explained in the evaluation report. All criteria applied are defined in unambiguous terms.

2.9 Selection of approach and methodology

The purpose, scope and evaluation questions determine the most appropriate approach
and methodology for each evaluation. An inception report can be used to inform the selection of an evaluation approach.

The methodology is developed in line with the evaluation approach chosen. The methodology includes specification and justification of the design of the evaluation and the techniques for data collection and analysis. The selected methodology answers the evaluation questions using credible evidence. A clear distinction is made between the different result levels (intervention logic containing an objective-means hierarchy stating input, output, outcome, impact).

Indicators for measuring achievement of the objectives are validated according to generally accepted criteria, such as SMART (Specific, Measurable, Attainable, Realistic and Timely). Disaggregated data should be presented to clarify any differences between sexes and between different groups of poor people, including excluded groups.

2.10 Resources

The resources provided for the evaluation are adequate, in terms of funds, staff and skills, to ensure that the objectives of the evaluation can be fulfilled effectively.

2.11 Governance and management structures

The governance and management structures are designed to fit the evaluation’s context, purpose, scope and objectives.

The evaluation governance structure safeguards credibility, inclusiveness, and transparency. Management organises the evaluation process and is responsible for day-to-day administration. Depending on the size and complexity of the evaluation, these functions may be combined or separate.

2.12 Document defining purpose and expectations

The planning and design phase culminates in the drafting of a clear and complete written document, usually called “Terms of Reference” (TOR), presenting the purpose, scope, and objectives of the evaluation; the methodology to be used; the resources and time allocated; reporting requirements; and any other expectations regarding the evaluation process and products. The document is agreed to by the evaluation manager(s) and those carrying out the evaluation. This document can alternatively be called “scope of work” or “evaluation mandate”.

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3 Implementation and reporting

3.1 Evaluation team

A transparent and open procurement procedure is used for selecting the evaluation team.

The members of the evaluation team possess a mix of evaluative skills and thematic knowledge. Gender balance is considered and the team includes professionals from partner countries or regions concerned.

3.2 Independence of evaluators vis-à-vis stakeholders

Evaluators are independent from the development intervention, including its policy, operations and management functions, as well as intended beneficiaries. Possible conflicts of interest are addressed openly and honestly. The evaluation team is able to work freely and without interference. It is assured of co-operation and access to all relevant information.

3.3 Consultation and protection of stakeholders

The full range of stakeholders, including both partners and donors, are consulted during the evaluation process and given the opportunity to contribute. The criteria for identifying and selecting stakeholders are specified.

The rights and welfare of participants in the evaluation are protected. Anonymity and confidentiality of individual informants is protected when requested or as needed.

3.4 Implementation of evaluation within allotted time and budget

The evaluation is conducted and results are made available to commissioners in a timely manner to achieve the objectives of the evaluation. The evaluation is carried out efficiently and within budget. Changes in conditions and circumstances are reported and un-envisaged changes to timeframe and budget are explained, discussed and agreed between the relevant parties.

3.5 Evaluation report

The evaluation report can readily be understood by the intended audience(s) and the form of the report is appropriate given the purpose(s) of the evaluation.
The report covers the following elements and issues:

3.6 Clarity and representativeness of summary

A written evaluation report contains an executive summary. The summary provides an overview of the report, highlighting the main findings, conclusions, recommendations and any overall lessons.

3.7 Context of the development intervention

The evaluation report describes the context of the development intervention, including:
- policy context, development agency and partner policies, objectives and strategies;
- development context, including socio-economic, political and cultural factors; and
- institutional context and stakeholder involvement.

The evaluation identifies and assesses the influence of the context on the performance of the development intervention.

3.8 Intervention logic

The evaluation report describes and assesses the intervention logic or theory, including underlying assumptions and factors affecting the success of the intervention.

3.9 Validity and reliability of information sources

The evaluation report describes the sources of information used (documents, respondents, administrative data, literature, etc.) in sufficient detail so that the adequacy of the information can be assessed. The evaluation report explains the selection of case studies or any samples. Limitations regarding the representativeness of the samples are identified.

The evaluation cross-validates the information sources and critically assesses the validity and reliability of the data.

Complete lists of interviewees and other information sources consulted are included in the report, to the extent that this does not conflict with the privacy and confidentiality of participants.
3.10 Explanation of the methodology used

The evaluation report describes and explains the evaluation methodology and its application. In assessing outcomes and impacts, attribution and/or contribution to results are explained. The report acknowledges any constraints encountered and how these have affected the evaluation, including the independence and impartiality of the evaluation. It details the techniques used for data collection and analysis. The choices are justified and limitations and shortcomings are explained.

3.11 Clarity of analysis

The evaluation report presents findings, conclusions, recommendations and lessons separately and with a clear logical distinction between them.

Findings flow logically from the analysis of the data, showing a clear line of evidence to support the conclusions. Conclusions are substantiated by findings and analysis. Recommendations and any lessons follow logically from the conclusions. Any assumptions underlying the analysis are made explicit.

3.12 Evaluation questions answered

The evaluation report answers all the questions detailed in the TOR for the evaluation. Where this is not possible, explanations are provided. The original questions, as well as any revisions to these questions, are documented in the report for readers to be able to assess whether the evaluation team has sufficiently addressed the questions, including those related to cross-cutting issues, and met the evaluation objectives.

3.13 Acknowledgement of changes and limitations of the evaluation

The evaluation report explains any limitations in process, methodology or data, and discusses validity and reliability. It indicates any obstruction of a free and open evaluation process which may have influenced the findings. Any discrepancies between the planned and actual implementation and products of the evaluation are explained.

3.14 Acknowledgement of disagreements within the evaluation team

Evaluation team members have the opportunity to dissociate themselves from particular judgments and recommendations on which they disagree. Any unresolved differences of opinion within the team are acknowledged in the report.
3.15 Incorporation of stakeholders’ comments

Relevant stakeholders are given the opportunity to comment on the draft report. The final evaluation report reflects these comments and acknowledges any substantive disagreements. In disputes about facts that can be verified, the evaluators investigate and change the draft where necessary. In the case of opinion or interpretation, stakeholders’ comments are reproduced verbatim, in an annex or footnote, to the extent that this does not conflict with the rights and welfare of participants.

4 Follow-up, use and learning

4.1 Timeliness, relevance and use of the evaluation

The evaluation is designed, conducted and reported to meet the needs of the intended users. Conclusions, recommendations and lessons are clear, relevant, targeted and actionable so that the evaluation can be used to achieve its intended learning and accountability objectives. The evaluation is delivered in time to ensure optimal use of the results.

Systematic dissemination, storage and management of the evaluation report is ensured to provide easy access to all development partners, to reach target audiences, and to maximise the learning benefits of the evaluation.

4.2 Systematic response to and follow-up on recommendations

Recommendations are systematically responded to and action taken by the person(s)/body targeted in each recommendation. This includes a formal management response and follow-up. All agreed follow-up actions are tracked to ensure accountability for their implementation.

4.3 Dissemination

The evaluation results are presented in an accessible format and are systematically distributed internally and externally for learning and follow-up actions and to ensure transparency. In light of lessons emerging from the evaluation, additional interested parties in the wider development community are identified and targeted to maximise the use of relevant findings.
Appendix 6: Participatory Evaluation 25

Participatory evaluation is an evaluation method, to which attentions are recently being drawn because stakeholders’ participation in evaluation can improve the quality of its findings. There are a multitude of theories and methods for participatory evaluation, tailored to evaluation purposes or processes to be focused on.26 In the field of development assistance, different aid agencies have different definitions of participatory evaluation, but they seem to share common ideas including (1) that it is performed jointly by the project participants including the beneficiary population, and (2) that a wide spectrum of parties concerned will actively participate in the whole process of the evaluation, from evaluation design through information gathering and analysis to feedback of findings. However, the extent of project participants and degree of participation are different, depending on aid agencies and specific projects.

Having such characteristics, participatory evaluation takes a different approach from traditional evaluation that is performed by evaluation experts or a particular group of experts. In participatory evaluation, the stakeholders themselves perform a value judgment about the evaluation, a decision about the evaluation methods, including evaluation criteria by consensus among participants, and investigate and extract findings. Arguably, capacity development of participants (abilities in task analysis, self-evaluation, etc.) can be expected from these processes, exerting positive influence on subsequent implementation of the project. Therefore, in participatory evaluation, evaluation experts should abandon their traditional role of assessors, concentrating on such roles as meeting convener, opportunity provider, facilitator, catalyst, or supporter. Evaluators should commit themselves to be facilitators, indirectly supporting stakeholders to perform evaluation.

Participatory evaluation does not work well if participation is introduced only in the evaluation stage. This is because sharing the merit of participatory evaluation becomes difficult without constant participation of stakeholders throughout planning and implementation processes.

26 To give a few examples, Stakeholder-based Evaluation, Democratic Evaluation, Utilization-focused Evaluation, Empowerment Evaluation, etc.
In the *Fundamental Research on Participatory Evaluation* conducted by the Institute for International Cooperation in fiscal year 2000, participatory evaluation in JICA is defined and explained as follows:

**Participatory Evaluation in JICA:**

Participatory evaluation is evaluation where a wide spectrum of stakeholders, including final beneficiaries, are participating as much as possible in preparing evaluation plans, provision, collection, and analysis of information, modification of the original project plans, etc. The term "evaluation" mentioned here means not only evaluation at the completion of the project, but also ex-ante evaluation, monitoring during implementation, terminal evaluation, and ex-post evaluation.

JICA expects the following effects from the implementation of such participatory evaluation:

- Enhanced management capacity
- Reinforced ownership
- Facilitated effective feedback
- Improved accountability
Appendix 7: Performance Measurement

Background of Performance Measurement

A short definition of performance measurement will be periodical measurement of outcomes and efficiency of public policies and public programs (hereinafter referred to as "programs").

The theory of performance measurement has been developed mainly by Harry P. Hatry and Joseph S. Wholey in the Urban Institute, a policy think tank in the United States. They observed that large-scale program evaluation with experimental design methods, which had been used in the field of U.S. policy evaluation, could not provide evaluation findings at the time when policy makers and field implementers were in need of them. Based on reflection of that, they researched and developed the system of performance measurement, combining simpler evaluation methods and improvement of administrative activities from the perspective of administrative management based on the new public management. Arguably, performance measurement enables evaluation in a more timely and cost-effective manner, producing evaluation findings more meaningful for both taxpayers and implementing agencies, which result in improvement of administrative activities.

Characteristics and Benefits

In the first step of performance measurement, expected outcomes of the program are identified. Then indicators of these outcomes and their numerical targets are determined and regularly measured to evaluate achievement of the original numerical targets, which are utilized for decision making and improvement of project implementation. The idea of performance measurement is also incorporated in management method adopted in JICA and other aid agencies, which are based on the logical framework.

Performance measurement is different from other traditional methods where evaluation measurement is focused. While outputs and inputs including costs were mainly measured traditionally, performance measurement attaches importance to outcomes and benefits for customers or beneficiaries, which are produced as the result of implementation of the

References:

The term program evaluation used here means evaluation of policies including public policies and public programs.
program. Efficiency is also measured primarily in conjunction with outcomes, rather than deduced from the relationship between inputs and outputs. To take as an example, lectures against smoking, efficiency is evaluated by the input cost per participant who actually quits smoking, rather than calculating the average cost involved in one lecture. In other words, efficiency of an implemented program should be considered in relation to the benefits produced by the implementation of the program.

Another distinction of performance measurement is periodic measurement. While once per year would suffice for budget management, achievement of outcomes would need to be checked more frequently to determine where important problems lie or whether a certain administrative activity is making satisfactory progress, or to inspire participants to improve the project. Thus, it can be evaluated easily only by the changes in the target area, rather than having a "comparison group" as in the experimental design. Another merit is quick feedback, resulting from periodic measurement of indicators throughout the implementation.

With these characteristics, performance measurement is suitable for projects that provide public services. This is because public services are required to be continuously checked for efficiency and the quality of the benefits customers and beneficiaries receive. However, performance measurement is not well suited for basic research or long-term planning.

**Constraints and Cautions**

Three constraints and cautions can be pointed out for performance measurement. First, it is difficult to verify causality from the program, because data are only collected from the target area, without having a comparison group. In other words, influences of external factors cannot be eliminated. This leads to difficulties in measures for improvement of the program, because simple observation of achievement of outcomes does not indicate what brought about such a problematic situation. This weakness can be compensated to a certain extent, however, by fully explaining details of implementation status of the program and outcome data.

Second, outcomes cannot be measured directly in some cases. One, for example, is measurement of reductions in undesirable items, such as reduced crime or drug use. In such cases, it is required to set up alternative indicators to measure transition of incidence, which is utilized to observe reduction of crimes.

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29 Definitions of inputs, activities, and outcomes, which constitute a program, are the same as ones in the explanation of the logic model.
The third caution is that performance measurement can provide only part of the information required for decision-making, rather than that which directly influences the decision-making process such as allocation of budget or human resources. The main purpose of the performance measurement is to raise questions, not to offer solutions or workarounds.

Among various applications of performance measurement, an example of one used in combination with traditional evaluation methods is one that the United States Agency for International Development uses. In 1994, the USAID decided to conduct performance measurement for all programs. On the other hand, traditional evaluation methods are also applied to very successful programs and failed ones, exploring the cause with in-depth analysis to obtain lessons learned. This method deserves attention, as it effectively combines low-cost and simple performance measurement with more costly but precise evaluation, enabling efficient use of the evaluation budget.
Appendix 8: References

Evaluation Theory in General

- **Evaluation: A Systematic Approach, 6th ed.**
  Rossi, Peter H., Reeman, Howard E., and Lipsey, Mark W., Sage Publications, 1999

- **Evaluation, 2nd ed.**
  Weiss, Carol H., Prentice-Hall, 1998

- **Handbook of Practical Program Evaluation**


- **Evaluation Thesaurus 4th ed.**
  Scriven, M., Sage Publications, 1991

- **Evaluability Assessment: Developing Program Theory**
  Whooley, J.S., Jossey-Bass, 1987

- **Theory-Driven Evaluation**
  Chen, Huey-Tsth, Sage Publication 1990


- **Evaluating Development Assistance: A Japanese Perspective**
  FASID, 2009 (http://www.fasid.or.jp/english/publication/research/evaluating.html)
### Evaluation Related Websites in Japan

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<td>Japan Evaluation Society</td>
<td><a href="http://www.idcj.or.jp/JES">http://www.idcj.or.jp/JES</a></td>
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### Evaluation Related Websites of Other Aid Agencies

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### OECD-DAC Related Websites

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<td>EVALUNET Top Page</td>
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<td>Links to DAC Members</td>
<td><a href="http://www.oecd.org/document/47/0,3343,en_21571361_34047972_34629871_1_1_1_1,00.html">http://www.oecd.org/document/47/0,3343,en_21571361_34047972_34629871_1_1_1_1,00.html</a></td>
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Evaluation Methods

<Logic Model>
- Program Logic: An Adaptable Tool for Designing and Evaluating Programs  
  Funnell, S. Evaluation News and Comment, Vol. 6(1). pp. 5-7
- Program Theory in Evaluation: Challenges and Opportunities  
  New Directions for Evaluation, No. 87, Jossey Bass

<Performance Measurement>
- Performance Measurement: Getting Results  
  Hatry, H.P., Urban Institute, 2000
- Clarifying Goals, Reporting Results  

<Experimental Design Method>
- Social Experimentation, Sage Classics 1  
- Quasi-experimentation: Design and analysis issues for field settings  

<Qualitative Evaluation>
- Qualitative Research & Evaluation Methods  
  Patton, M.Q., Sage Publications, 2002
- Qualitative Data Analysis: An Expanded Sourcebook (2nd ed.)  

<Case Studies>
- The Art of Case Study Research  
  Stake, R. E., Sage Publications, 1995
• Case Study Research
  Yin, R.K., Sage Publications, 1984

<Development Program Evaluation>
• Monitoring and Evaluating Social Programs in Developing Countries: A handbook for policy makers, managers, and researchers
  Valadez, J. & Bamberger, M., World Bank, 1994

• Evaluating Country Development Policies and Programs: New Approaches for a New Agenda
  *New Directions for Evaluation*, No. 67, Jossey-Bass

<Participatory Evaluation>
• Foundation of Empowerment Evaluation
  Fetterman, D.M., Sage, 2001

• Participatory Evaluation in Education; Studies in Evaluation Use and Organizational Learning
  Cousins, J.B. & Earl, L.M., Falmer, 1995

• Partners in Evaluation-Evaluating Development and Community Programs with Participants
  Feuerstein, M.T., MacMillan, 1986

• Evaluating the Arts in Education: A Responsive Approach
  Stake, R. E., Merrill, 1975

• Participatory Evaluation and International Cooperation
  Institute for International Cooperation, JICA (June 2001)

<Organizational Evaluation>
<Evaluation of "JICA Cooperation Programs">
- Annual Evaluation Report 2009, JICA
- Thematic Evaluation of Honduras Basic Education Expansion Program, 2005, JICA
- Thematic Evaluation of Educational Program in Malawi and Vietnam, 2006, JICA

<Evaluation Kits>
  1) Evaluator’s Handbook
  2) How to Focus an Evaluation (Stecher B.M. & Davis W.A.)
  3) How to Design A Program Evaluation (Fitz-Giboon C.T. & Morris L.L.)
  4) How to Use Qualitative Methods in Evaluation (Patton M.Q.)
  5) How to Assess Program Implementation (King J.A., Morris L.L. & Fitz-Gibbon C.T.)
  6) How to Measure Attitudes (Henerson M.E., Morris L.L. & Fitz-Gibbon C.T.)
  7) How to Measure Performance and Use Tests (Morris L.L, Fitz-Gibbon C.T. & Lindheim E.)
  8) How to Analyze Data
  9) How to Communicate Evaluation Findings (Morris L.L, Fitz-Gibbon C.T. & Freeman M.E.)

Research Methodology and Techniques

<Interviews>
- Focus Group Interviews in Education and Psychology
  Sharon Vaughn, Jeanne Shay Schumm, Jane Sinagub, Sage Publications, 1996

<Focus Group Discussions>
- The Power of Focus Groups for Social and Policy Research
  Billson, J., Skywood Press, 2002

- Focus Groups 3rd ed.

<Statistical Analysis>
- Practical Sampling
- **Statistical Methods in Education and Psychology, 3rd ed.**
  Glass, G. & Hopkins, K., Allyn and Bacon, 1996

- **Design Sensitivity: Statistical Power for Experimental Research**

**<Qualitative Research - Interviews, Focus Groups, Observation and Other Methodology>**

- Flick U., *Qualitative Forschung*, Rowohlt Taschenbuch Verlag GmbH, 1995


- **Silverman, David, Doing Qualitative Research: Practical Handbook**
  Sage Publication 2000

**Journal of Evaluation Research**


**Miscellaneous**

**<Capacity Development>**

- A Study of the Effectiveness and Problems of JICA's Technical Cooperation from a Capacity Development Perspective
  Institute for International Cooperation, JICA (September 2006)

- Summary: Towards Capacity Development (CD) of Developing Countries Based on their Ownership
  - Concept of CD, its Definition and its Application in JICA Projects
    Institute for International Cooperation, JICA (September 2006)

- **Capacity Assessment Handbook – Project Management for Realizing Capacity Development**
  Institute for International Cooperation, JICA (September 2008)