

업무자료  
평가심사 2014-47-070

ISBN 978-89-6469-235-6 93320

2014

업무자료 평가심사 2014-47-070

발간등록번호

11-B260003-000352-01

Research on Means of Results-Based Management (RBM) for the Development Consulting Project "DEEP"

한국국제협력단



# Research on Means of Results-Based Management (RBM) for the Development Consulting Project "DEEP"

2013. 12



461-833 경기도 성남시 수정구 대왕판교로 825  
Tel. 031-7400-114 Fax. 031-7400-655  
<http://www.koica.go.kr>



Research on Means of Results-Based  
Management (RBM) for the Development  
Consulting Project “DEEP”

2013. 12

**KOICA**  
한국국제협력단

 **WORLD  
FRIENDS**  
KOREA



The Korea International Cooperation Agency (KOICA) performs various types of evaluation in order to secure accountability and achieve better development results by learning.

KOICA conducts evaluations within different phases of projects and programs, such as ex-ante evaluations, interim evaluations, end-of-project evaluations, and ex-post evaluations. Moreover, sector evaluations, country program evaluations, thematic evaluations, and modality evaluations are also performed.

In order to ensure the independence of evaluation contents and results, a large amount of evaluation work is carried out by external evaluators. Also, the Evaluation Office directly reports evaluation results to the President of KOICA.

KOICA has a feedback system under which planning and project operation departments take evaluation findings into account in programming and implementation. Evaluation reports are widely disseminated to staffs and management within KOICA, as well as to stakeholders both in Korea and partner countries. All evaluation reports published by KOICA are posted on the KOICA website. ([www.koica.go.kr](http://www.koica.go.kr))

This evaluation study was entrusted to Kyung Hee University by KOICA for the purpose of independent evaluation research. The views expressed in this report do not necessarily reflect KOICA's position.



# Contents

## List of Abbreviations

Executive Summary .....	iii
-------------------------	-----

<b>I . Results-Based Management (RBM) and Managing for Development Results (MfDR) .....</b>	<b>1</b>
Section 1. Results-Based Management (RBM) .....	3
Section 2. Managing for Development Results (MfDR) .....	21
<b>II . Case Studies of Results-Based Management of Development Study Program .....</b>	<b>25</b>
Section 1. Reclassification of Development Study Program According to the Purpose of RBM .....	27
Section 2. Master Plan Study and Basic Study .....	31
Section 3. Capacity Development .....	41
Section 4. Feasibility Study .....	54
<b>III . Results-Based Management of Development Study Program .....</b>	<b>61</b>
Section 1. Introduction .....	63
Section 2. Project Identification Stage .....	65
Section 3. Results-Based Management (RBM) Methods .....	69
Section 4. Performance Management Measure for Master Plan and the Basic Survey .....	140
Section 5. Results-Based Management of Feasibility Study .....	163
Section 6. Capacity Development .....	167
<b>Reference .....</b>	<b>173</b>

## 【List of Tables】

<Table 1-1> RBM at Different Organizational Levels .....	8
<Table 1-2> Project Design Logical Framework Matrix .....	9
<Table 1-3> USAID's Results Framework Example .....	15
<Table 1-4> USAID's Results Framework Example .....	16
<Table 1-5> KOICA's Results Framework Example .....	16
<Table 1-6> USAID's Strategic Framework Example .....	19
<Table 2-1> Character of Development Study Program .....	28
<Table 2-2> Types of Development Study Program .....	29
<Table 2-3> Goal and Purposes of Development Study Program ..	30
<Table 2-4> Appraisal Format (Master Plan Study or Basic Study)	32
<Table 2-5> Process of Main Study on Master plan .....	32
<Table 2-6> Status Distinction and Judgement Criteria by the Group I (M/P Research, Basic Survey, etc.) .....	34
<Table 2-7> Status Distinction and Judgement Criteria by the Group II (F/S, M/P + F/S, D/D, etc.) .....	34
<Table 2-8> Objectives of ADB Technical Assistance by Type .....	36
<Table 2-9> TA Related Document and Main Table of Contents ...	39
<Table 2-10> Ownership In Capacity Development .....	45
<Table 2-11> The Four Dimensions Shaping Capacity .....	45
<Table 2-12> Capacity Development Design Process .....	47
<Table 3-1> CPS Results Framework .....	66
<Table 3-2> Check List .....	67
<Table 3-3> Example of ADB's Sector Results Framework .....	68
<Table 3-4> Logframe (PDM) Form .....	69
<Table 3-5> Revised Logframe (PDM) .....	70
<Table 3-6> Recording Form of Stakeholder Analysis by Each Group	75
<Table 3-7> Importance and Impact by the Stakeholders .....	76
<Table 3-8> Cooperative Relationship Matrix .....	77
<Table 3-9> Readiness and Power Analysis Matrix .....	78

<Table 3-10> Supportive/Antagonistic/Constructive/Destructive Relationship Matrix .....	78
<Table 3-11> Readiness Analysis .....	80
<Table 3-12> Demand Analysis .....	80
<Table 3-13> Detailed Analysis Form of Target Group .....	82
<Table 3-14> Alternative Analysis Matrix .....	92
<Table 3-15> Major Factors of PDM .....	94
<Table 3-16> PDM Form .....	95
<Table 3-17> A case of Project Summary .....	103
<Table 3-18> Selection Criteria for the Good Indicators .....	117
<Table 3-19> Major Performance Indicators by the Sector .....	118
<Table 3-20> The Correlation Between the Types of Change, Baselines, and the Targets .....	120
<Table 3-21> Baselines of the Education Sector and Their Target Level Case .....	122
<Table 3-22> Research Methods .....	126
<Table 3-23> Qualitative Sufficing Conditions of the Material .....	128
<Table 3-24> Qualitative Sufficing Conditions of the Material .....	132
<Table 3-25> Qualitative Sufficing Conditions of the Material .....	132
<Table 3-26> Main Contents of Monitoring .....	134
<Table 3-27> PDM for Monitoring Implementation and Performance Achievement .....	135
<Table 3-28> PDM for Risk Monitoring .....	136
<Table 3-29> Risk Management Chart .....	136
<Table 3-30> Requirements of the Use of Evaluation Results and the Qualitative Evaluation .....	137
<Table 3-31> Information Suggested by the Evaluation .....	138
<Table 3-32> Three Elements of Evaluation Results Report .....	138
<Table 3-33> Main Contents Related with the Use of Evaluation Results .....	139
<Table 3-34> List of the Project Pre-assessment Table .....	140



<Table 3-35> Case of “The Philippines: Master Plan for the Agusan River Basin” by ADB .....	143
<Table 3-36> Case of the Standard Model of the JICA’ s Report	147
<Table 3-37> Board of Supervisors .....	150
<Table 3-38> PDM for Risk Monitoring .....	151
<Table 3-39> Risk Management Chart .....	152
<Table 3-40> Sample Table of Contents of Evaluation Report .....	153
<Table 3-41> Criteria of the Development Objective Attainment Grade by the ADB .....	154
<Table 3-42> Status Distinction and Judgement Criteria by the Group I (M/P Research, Basic Study, etc.) .....	155
<Table 3-43> Status Distinction and Judgement Criteria by the Group II (F/S, M/P + F/S, D/D, etc.) .....	155
<Table 3-44> Follow-up Study Questionnaire .....	156
<Table 3-45> Questionnaire for The Status of The Completed Project	159
<Table 3-46> Feasibility Study Activities .....	163
<Table 3-47> Feasibility Study TOR Form .....	164
<Table 3-48> Project Document Form .....	164
<Table 3-49> Project Appraisal Check List .....	165
<Table 3-50> Kirkpatrick’s Foul Level Evaluation Model .....	168
<Table 3-51> Type I: Individual Capacity Development .....	169
<Table 3-52> Type II: Organizational Capacity Development .....	169
<Table 3-53> Type III: End Users (Beneficiary) Capacity Development	170
<Table 3-54> Type IV: Community Capacity Development .....	170
<Table 3-55> Capacity Development PDM for Master Plan for Haiphong New Town Development .....	171

## 【List of Figures】

<Figure 1-1> Seven Phases of Results-Based Management .....	5
<Figure 1-2> Purposes of RBM .....	7
<Figure 1-3> RBM at Different Organizational Levels .....	7
<Figure 1-4> Analysis Stage and Planning Stage .....	10
<Figure 1-5> General Structure of Country Program Results Framework	11
<Figure 1-6> Relationship Between Results Framework and Project Logframe .....	12
<Figure 1-7> Hypothetical Illustration of A Country Program Results Framework .....	13
<Figure 1-8> Agency Strategic Framework Hierarchy Levels .....	19
<Figure 1-9> UNDP's Agency Strategic Framework Example .....	20
<Figure 2-1> Design and Monitoring Framework(DMF) Format .....	38
<Figure 2-2> Preconditions of Change and Tools for Capacity Development .....	46
<Figure 2-3> Capacity Development as a Part of the Development Process .....	49
<Figure 2-4> Logic Model for a Capacity Development Program ...	51
<Figure 2-5> Capacity Development Results Framework (CDRF) Cycle ..	53
<Figure 2-6> ADB Project Cycle .....	55
<Figure 2-7> USAID Program Cycle .....	58
<Figure 3-1> Design and Monitoring Framework (DMF) Form .....	70
<Figure 3-2> Importance and Impact Matrix .....	77
<Figure 3-3> Participant Analysis .....	83
<Figure 3-4> Detailed Analysis of Target Group .....	83
<Figure 3-5> A Case of Problem Tree .....	87
<Figure 3-6> A Case of Objective Tree .....	90
<Figure 3-7> Vertical Logic and Causal Relationship .....	97
<Figure 3-8> Relationship Between Impact and Outcomes .....	99
<Figure 3-9> Killer Assumption Testing .....	105

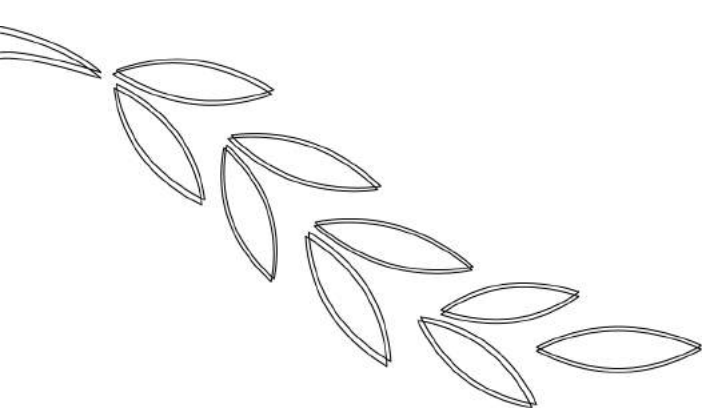
<Figure 3-10> Probability of Fulfilling Assumptions .....	106
<Figure 3-11> Causal Relationships In The Project Summary .....	107
<Figure 3-12> Concept of Target Level .....	121
<Figure 3-13> Implementation Monitoring and Performance Monitoring	133
<Figure 3-14> The Correlation between Implementation Monitoring and Performance Monitoring .....	133



## List of Abbreviations

ADB	Asian Development Bank
CD	Capacity Development
CDCS	Country Development Cooperation Strategy
CDRF	Capacity Development Results Framework
CDTA	Capacity Development Technical Assistance
DAC	Development Assistance Committee
DFID	Department for International Development
DMF	Design and Monitoring Framework
EDCF	Economic Development Cooperation Fund
EU	European Union
JICA	Japan International Cooperation Agency
MDG	Millenium Development Goals
MfDR	Managing for Development Results
MOV	Means of Verification
ODA	Official Development Assistance
OVI	Objectively Verifiable Indicator
PATA	Policy and advisory technical assistance
PDM	Project Design Matrix
PPTA	Project preparatory technical assistance

RBM	Results-Based Management
TA	Technical Assistance
TOR	Term of Reference
USAID	United State Agency for International Development
UNDP	United Nations Development Program
WB	World Bank



## Executive Summary





---

# Executive Summary



## **I . Results-Based Management (RBM)**

During 1990s, most OECD member countries had faced various kinds of pressures such as economic ones caused by budget deficits, structural problems, growing competitiveness and globalization, political and social ones caused by a lack of public confidence in government, growing demands for better and more responsive services, and better accountability for achieving results with taxpayers' money. In this regard, those countries had undertaken extensive public sector reforms called "Reinventing government", "Doing more with less", "Demonstrating value for money", etc. The most central feature of these reforms has been the introduction of results-Based management or performance management.

In particular, there have been increasing number of international initiatives and forces pressing governments towards RBM system creating a global force for public accountability and proven results. These include ① Millennium Development Goals (MDGs), ② Highly Indebted Poor Country (HIPC) Initiative, ③ International Development Association (IDA) Funding, ④ World Trade Organization (WTO) membership, ⑤ European Union (EU) enlargement and accession, ⑥ European Union Structural Funds, ⑦ Transparency International.

RMB is defined as a broad management strategy aimed at achieving important changes in the way government agencies operate, with



improving performance (Achieving better results) as the central orientation. It is first a management system for results (Managing for results) and second, a performance reporting system for results (Accountability for results).

RBM takes place at three different levels within the donor agencies. The first level is at project level. Its major tool for RBM is a Project Logical Framework or Logframe for short. The second level takes place to establish RBM system at sectoral program level of partner countries. Its major tool for RBM is Results Framework. The third level relates to RBM at the corporate or agency-wide level. Its major tool for RBM is the Agency Strategic Framework.

Different agencies apply different phases of RBM, but planning, monitoring (or performance measurement) and evaluation come together as RBM. And most aid agencies' RBM is composed of seven phases (① Formulating objectives, ② Identifying indicators, ③ Setting targets, ④ Monitoring results, ⑤ Reviewing and reporting results, ⑥ Integrating evaluations, ⑦ Using performance information). The first three phases relate to a results-oriented or strategic planning. The first five together belongs to the concept of monitoring or performance measurement. All seven phases combined are essential to an effective RBM.



## **II . Case Studies of Results-Based Management of Development Study Program**

Development study program is a type of consulting service program concerning development planning and projects in a variety of fields of developing countries. This program is equivalent to the first two phases of a project cycle - (1) Identification, (2) Preparation, (3) Appraisal, (4) Implementation, and (5) Evaluation. According to DAC Statistical Reporting Directives, this program belongs to Investment-related Technical Cooperation (IRTC), which is distinct from Free-standing Technical Cooperation (FTC) whose primary purpose is to augment the level of knowledge, skills, technical know-how or productive aptitudes of the population of developing countries. The end-product of this program is report. And implementation methods include consulting services, technical support, the provision of know-how linked to the execution of an investment project, and the contribution of the donor's own personnel to the actual implementation of the project (managers, technicians, skilled labour etc.). The main objectives of this program is first, to provide an important source of basic information in policy decisions to determine the feasibility of development planning and projects and second, capacity development through consulting services, technical support, the provision of know-how.

Here, for the purpose of managing for results, development study program is classified into ① Master Plan Study and Basic Study, ② Feasibility Study, and ③ Capacity Development.

Most development agencies manage a project in a single cycle without separating a development study stage from a project cycle. Except

KOICA, JICA and ADB are probably the only two development agencies which manage a development study program as a type of ODA programs.

JICA's management of master plan study and basic study is almost identical with that of KOICA. The concept of result-based management in JICA's implementation of a development study program including master plan study is not yet fully institutionalized. Implications which JICA's case give us can be summarized as follows:

- To apply DAC's five evaluation criteria from the ex-ante stage;
- To utilize various standardized manuals and work references such as (Standardization of formats, detailed standard operating procedures, manual on scope of work, detailed table of contents of reports, etc.);
- To establish supervision and follow-up study system.

ADB provides the following 7 types of technical assistance programs. Master plan is implemented as a part of Policy and Advisory Technical Assistance (PATA), feasibility study is implemented as a part of Project Preparatory Technical Assistance (PPTA) and capacity development is implemented as a part of Capacity Development Technical Assistance (CDTA).

<Objectives of ADB Technical Assistance by type>

Type	Objective
Project Preparatory Technical Assistance (PPTA)	<ul style="list-style-type: none"> <li>• PPTA may be processed for a standalone project or program, or a sector development program;</li> <li>• A subprogram under the program cluster approach;</li> <li>• Single sector lending for a series of sub-projects;</li> <li>• A multi-tranche financing facility comprising a series of tranches.</li> </ul>
Policy and Advisory Technical Assistance (PATA)	<ul style="list-style-type: none"> <li>• PATA is usually extended in a sector- or economy-wide context.</li> <li>• It may be on a stand-alone basis or a project. In some cases it may be project-specific.</li> <li>• PATA assists in (i) preparing national and sector development plans and programs, particularly in small DMCs; and (ii) carrying out sector-, policy-, and issues-oriented studies.</li> </ul>
Capacity Development Technical Assistance (CDTA)	<ul style="list-style-type: none"> <li>• CDTA assists in (i) establishing or strengthening organizations and institutions in DMCs; (ii) implementing, operating, and managing ADB-financed projects; and/or (iii) enhancing knowledge management.</li> <li>• CDTA plays an important role in ADB's efforts to improve the technical, managerial, and financial capabilities of recipients.</li> </ul>
Research and Development Technical Assistance (RDTA)	<ul style="list-style-type: none"> <li>• RDTA involves TA activities conceived to address global or regional development issues which require further analysis or understanding.</li> <li>• The corporate medium-term research agenda is determined through an annual strategic forum and confirmed in ADB's work program and budget framework.</li> </ul>
Regional Technical Assistance (RETA)	<ul style="list-style-type: none"> <li>• TA for more than one DMC. If a PPTA, PATA, or CDTA covers more than one DMC, it is processed as regional TA (R-PPTA, R-PATA or R-CDTA).</li> </ul>
Small Scale Technical Assistance (SSTA)	<ul style="list-style-type: none"> <li>• PPTA, PATA, CDTA, and RDTA can be in the form of small-scale TA (S-PPTA; S-PATA; S-CDTA or S-RDTA).</li> <li>• TA is considered small-scale if ADB financing does not exceed \$225,000 and the TA does not require substantial logistical support from the recipient.</li> </ul>

Technical Assistance	Cluster	<ul style="list-style-type: none"> <li>• PATA, CDTA, and RDTA can be in the form of TA cluster (C-PATA, C-CDTA and C-RDTA).</li> <li>• TA cluster comprises a series of TA sub-projects over an extended period to address constraints in a DMC through a comprehensive and holistic approach.</li> <li>• TA cluster assumes a long-term perspective and partnership between ADB and the DMC concerned and flexibility in the design of the sub-projects.</li> </ul>
----------------------	---------	--

Implications which ADB's case give us can be summarized as follows:

- ADB has implemented TA projects including a similar type program to development study program, and established standard operating procedures by each phase;
- “Guidelines for Preparing a Design and Monitoring Framework” is used for each phase to produce Design and Monitoring Framework as a tool of result based management.

## 2. Capacity Development

One of the important objectives of JICA development study program is capacity development in the recipient country. However, to this end, the Results-Based management system has not yet been established. JICA published a "Manual on Outcome Indicators of Technical Cooperation Project" in 2005, in which JICA's technical cooperation projects are categorized in five types as follows: Type I: Individual levels of Capacity

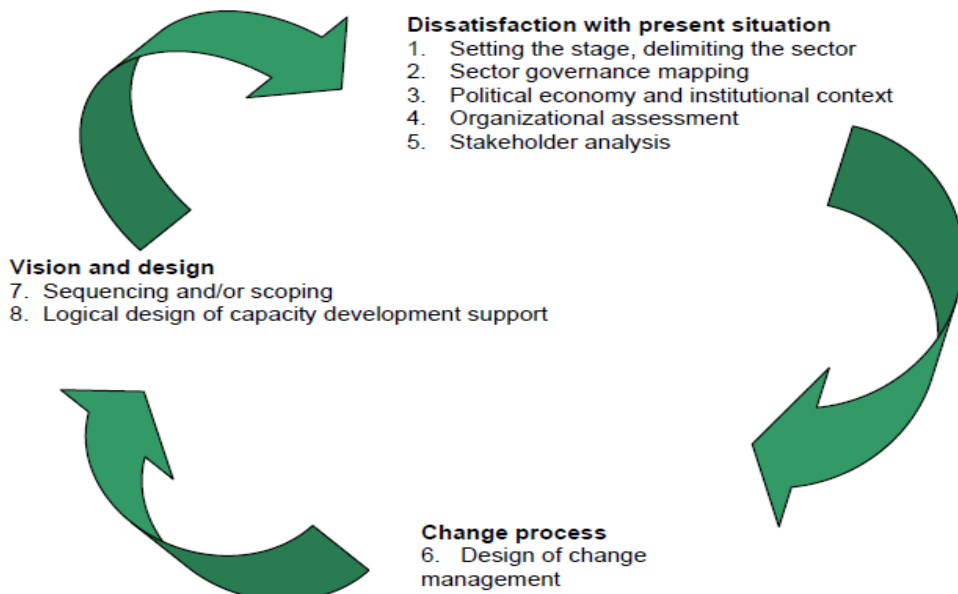
- Type II: Organizational levels of Capacity
- Type III: End-Users (beneficiary) levels of Capacity
- Type IV: Institutional and Societal levels of Capacity
- Type V: Problem solving and improvements of Community Capacity

JICA developed a matrix applying Kirkpatrick model by each type to

measure results or outcomes of technical cooperation projects.

ADB places a key emphasis on capacity development in providing ODA projects to partner countries in recognition of the fact that capacity most crucial factor to improve development results. ADB's Practical Guide to Capacity Development in a Sector Context (2011) defines that "Capacity is the ability of people, organizations and society as a whole to manage their affairs successfully." And three essential ingredients comprising the pressure for capacity development are ① Dissatisfaction with the present situation, ② A credible change process to bring the present situation to a future state, and ③ A shared vision of the future. Preconditions can be utilized by eight tools. Relationship between preconditions and tools is as below.

#### <Preconditions of Change and Tools for Capacity Development>



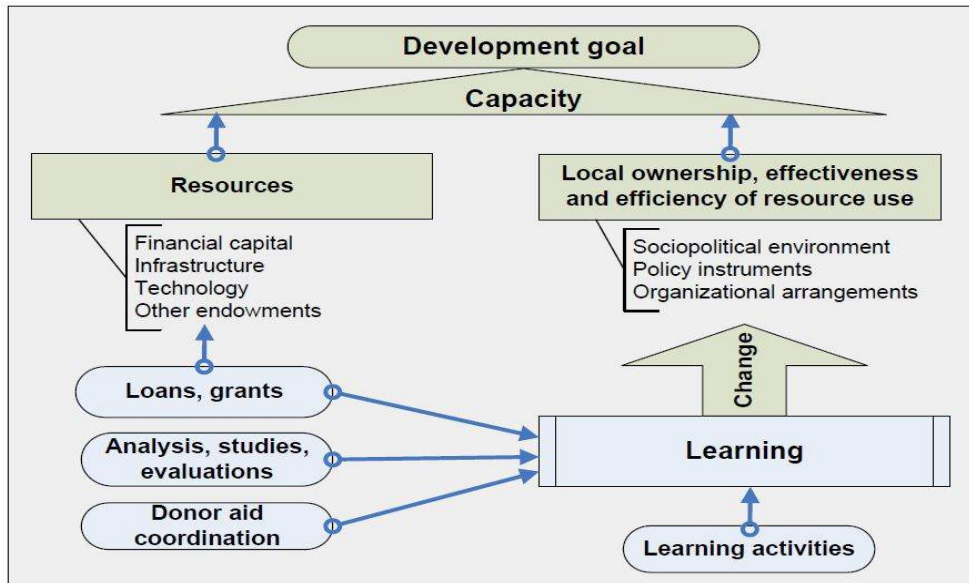
Implications which ADB's case give us can be summarized as follows:

- To establish a clear definition of Capacity Development;
- To develop and utilize a comprehensive manual and practical tool for Capacity Development.

World Bank also places a key emphasis on capacity development in recognition of the fact that capacity development is the most crucial factor to improve development results. According to World Bank's *The Capacity Development Results Framework: A Strategic and Results-Oriented Approach to Learning for Capacity Development* (2009), major concepts are as follows:

- "Capacity for Development is the availability of resources and the efficiency and effectiveness with which societies deploy those resources to identify and pursue their development goals on a sustainable basis."
- "Capacity development is a locally driven process of learning by leaders, coalitions and other agents of change that brings about changes in socio-political, policy-related, and organizational factors to enhance local ownership for and the effectiveness and efficiency of efforts to achieve a development goal."
- Capacity development efforts whether stand-alone programs or embedded in other projects are just a part of the larger process of development, as shown below

<Capacity Development as a Part of the Development Process>



Capacity Development Results Framework (CDRF) Cycle comprises four essential stages. (1) Identification and Needs Assessment, (2) Program Design (3) Implementation and Monitoring, and (4) Completion and Assessment. Detailed information of each stage is presented below.

(1) Identification and Needs Assessment

- ① Specification of development goal
- ② Assessment of capacity factors relevant to project goal
- ③ Identification of measurable indicators for each factor are identified, along with changes in those indicators that can be facilitated by learning.

(2) Program Design

- ④ Determination of capacity factors that will bring about improvements, together with related indicators
- ⑤ Vision making on changes identified during program implementation



- ⑥ Establishing measurable indicators relevant to targeted learning outcomes
- ⑦ Designing Activities of the program

### (3) Implementation and Monitoring

- ⑧ Monitoring the intended learning outcomes
- ⑨ Periodic review of capacity factors based on the capacity indicators defined in previous stages

### (4) Completion and Assessment

- ⑩ Assessment of presented development goals to draw conclusions and specification of post-program management

Implications which World Bank's case give us can be summarized as follows:

- To establish a clear definition of Capacity Development.
- To develop and utilize a comprehensive manual and practical tool for Capacity Development.

## **3. Feasibility Study**

There are no notable difference among development agencies regarding feasibility study process and methods with minor variations. A feasibility study belongs to the project formulation phase for project appraisal in a project cycle and its end-product is in the form of "Project Document." Its main purpose is to consider all aspects of project including technical, financial, economic, institutional, cross-cutting ones and others and assess whether the project is relevant, viable and implementable. PD usually comprises (1) Feasibility Study to assess whether project is implementable, (2) Design of project implementation plans (3) Logframe (PDM) for results management. Common features shared by most agencies are

found in strengthening project selectivity by strategically linking projects to country partnership strategy (CPS) and attaching a key priority to project formulation including planning and feasibility study.



### **III. Results-Based Management of Development Study Program**

#### **1. Basic Policy Directions and Methods**

Basic policy directions are as follows:

- To strengthen strategic linkage between development study project with RBMs at the agency level (KOICA) as well as at the country program;
- To integrate project Identification, formulation, monitoring and evaluation as a cycle;
- To strengthen the role of project formulation;
- To actively utilize operational manuals and quality standards;
- To apply active participatory approach.

At the project identification stage, it is important to make it sure that projects be aligned with CPS and sectoral results framework. And RBM at the project level is composed of (1) Formulating objectives, (1) Identifying indicators, (3) Setting targets, (4) Monitoring results, (5) Reviewing and reporting results, (6) Integrating evaluations, (7) Using performance information. To this end, it is important to prepare a project logframe as a RBM tool.

## **2. RBM for Master Plan Study and Basic Study**

An appraisal document is prepared based on the results of the feasibility study or the preliminary feasibility study in accordance with standard appraisal document and results framework. Given that the final output of the master plan study and basic study is report, the RBM for master plan study and basic study focuses on the improvement of the quality of the final report. To this end, it is necessary to establish and operate "Board of supervisors." Standardized table of contents for the final report is set at the initial stage of the project and is revised and supplemented with the progress of the project. The monitoring is implemented based on the PDM. The interim evaluation and the completion evaluation are conducted following the current practice of KOICA evaluation, and regardless of the evaluation stage, the same table of contents of evaluation reports shall be maintained. After the completion of the project, regular "Follow-up" study conducted once a year on average. Survey results are updated to the database system every year.

## **3. RBM for Feasibility Study**

The final output of a feasibility study project is in the form of "Report," of which main purpose is to decide whether or not to initiate the project. And RBM for feasibility study is virtually not unlike the cases of master plan study and basic study. Therefore, the RBM for master plan study and basic study focuses on the improvement of the quality of the final report. Key Documents are "Feasibility Study TOR", "Project Document", and "Project Appraisal Check List."

#### 4. RBM for Capacity Development

Recently many development agencies have exerted strenuous efforts to establish their own frameworks to strengthen capacity development. Nonetheless, the universally applicable standard framework has not yet been established. And it seems to be difficult to apply their frameworks to KOICA's case in the sense that the cases of ADB and World Bank are targeting the program level capacity development rather than the project level.

In this context, it is more feasible to apply the case of JICA, which developed its own framework for managing technical cooperation project based on Kirkpatrick Model of which basic model is shown below.

##### <Kirkpatrick's Four Level Evaluation Model>

Stage	Items	Contents
1st stage (Reaction)	Satisfaction	<ul style="list-style-type: none"><li>To what degree participants react favorably to the learning event</li></ul>
2 <sup>nd</sup> stage (Learning)	Knowledge	<ul style="list-style-type: none"><li>To what degree participants acquire the intended knowledge, skills and attitudes based on their participation in the learning event</li></ul>
3rd stage (Behavior)	Performance	<ul style="list-style-type: none"><li>To what degree participants apply what they learned during training when they are back on their jobs</li></ul>
4th stage (Results)	Impact	<ul style="list-style-type: none"><li>To what degree targeted outcomes come occur as a result of learning events and subsequent reinforcement</li></ul>

JICA's technical cooperation is classified into the following four types according to its objectives:

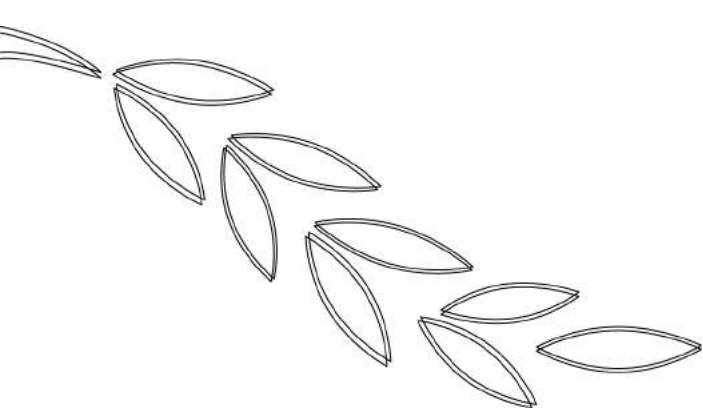
- Type I: Individual levels of Capacity;
- Type II: Organizational levels of Capacity;

- Type III: End-Users (beneficiary) levels of Capacity;
- Type IV: Institutional and Societal levels of Capacity.

JICA applies Kirkpatrick model to each type of technical cooperation. For example, indicators for organizational capacity development is shown below.

<Evaluation Model for Organizational Capacity Development>

Stage	Indicators	Means of Verification
① Reaction	-	-
② Learning	• Knowledge Level of members of organization	• Refer to type I
	• Existence of data-sharing network within an organization	• Project Operational Management Records • Interview with members of organization
③ Behavior	• Organization Behavioral changes	• Project Operational Management Records • Evaluation by observation • Interview with members of organization
	• Implementation status of organizational systems	• Project Operational Management Records
	• Management indicators and financial statement	• Project Operational Management Records
④ Results	• Quantity of provided service by organization	• Project Operational Management Records
	• Quality of provided service by organization	• Project Operational Management Records
	- Customer satisfaction	• End-User (Beneficiary) Survey
		• Evaluation by observation



# I . Results-Based Management (RBM) and Managing for Development Results (MfDR)

Section 1. Results-Based Management (RBM)

Section 2. Managing for Development Results  
(MfDR)





# I

## Results-Based Management (RBM) and Managing for Development Results (MfDR)



### Section 1. Results-Based Management (RBM)

#### 1. Public Sector Reforms and Results-Based Management

During 1990s, most OECD member countries had faced various kinds of pressures such as economic ones caused by budget deficits, structural problems, growing competitiveness and globalization, political and social ones caused by a lack of public confidence in government, growing demands for better and more responsive services, and better accountability for achieving results with taxpayers' money. In this regard, those countries had undertaken extensive public sector reforms called "Reinventing government", "Doing more with less", "Demonstrating value for money", etc.

In the United States, RBM was introduced by the administration of President Bill Clinton in advancing its "reinventing government" administrative reforms whose basic concepts are contained in the "National Performance Review" (1993) authored by Vice President Al Gore and the Government Performance and Results Act of 1993. In Canada the Office of the Auditor General took the initiative in introducing RBM in



the federal government, and the UNDP RBM was introduced as a new management tool when Mark Malloch Brown was appointed administrator in 1998.<sup>1)</sup>

Despite variations in the reform packages implemented in those OECD countries, common features can be summarized as follows:

- Focus on performance issues (e.g. efficiency, effectiveness, quality of services);
- Devolution of management authority and responsibility;
- Orientation to customer needs and preferences;
- Participation by stake-holders;
- Reform of budget processes and financial management systems;
- Application of modern management practices.

The most central feature of these reforms has been the emphasis on improving performance and ensuring that government activities achieve desired results and according to the study, the same is true of ten OECD member countries which introduced results-based management or performance management.

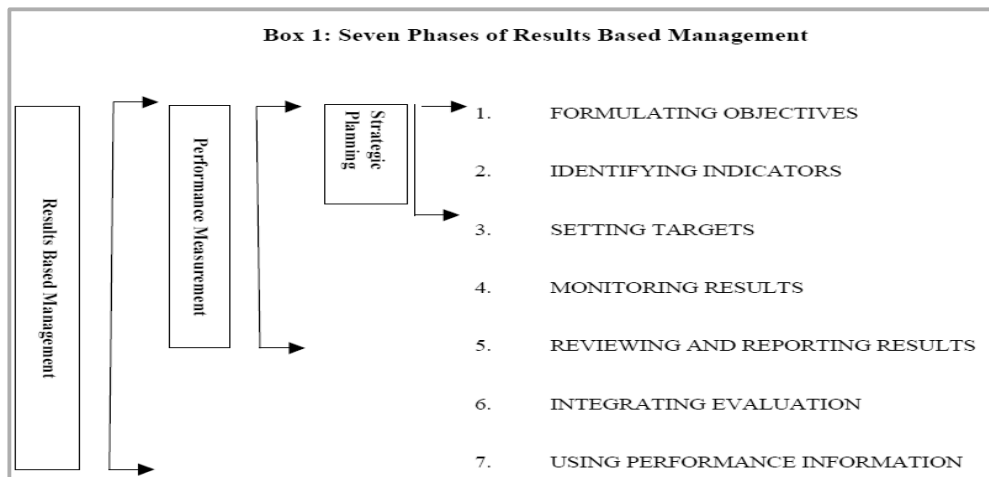
Results-based management (RMB) is defined as a broad management strategy aimed at achieving important changes in the way government agencies operate, with improving performance (achieving better results) as the central orientation. Different agencies apply different phases of RMB, but planning, monitoring (or performance measurement) and evaluation come together as RBM. And most aid agencies RBM is composed of seven phases (① Formulating Objectives, ② Identifying Indicators, ③ Setting Targets, ④ Monitoring Results, ⑤ Reviewing and Reporting Results, ⑥ Integrating Evaluations, ⑦ Using Performance Information).

---

1) Ministry of Foreign Affairs of Japan(2009). ODA Evaluation Guidelines. p.15.

The first three phases relate to a results-oriented or strategic planning. The first five together belongs to the concept of monitoring or performance measurement. All seven phases combined are essential to an effective RBM.

<Figure 1-1> Seven Phases of Results-Based Management



## 2. Development Cooperation and Results-Based Management

As shown in the case of the public sector of the OECD member countries, the agencies of development cooperation, which belongs to one of the key public sectors, also experienced considerable external pressures to reform their management systems to become more effective and results-oriented. "Aid fatigue", the public's perception that aid programs failed to produce significant development results, declined aid budgets, and government-wide reforms all combined to contribute to leading these agencies to establish results-based management systems.

In particular, there have been increasing number of international initiatives and forces pressing governments towards RBM system creating a global force for public accountability and proven results. These include ① Millennium Development Goals (MDGs), ② Highly Indebted Poor Country (HIPC) Initiative, ③ International Development Association (IDA) Funding, ④ World Trade Organization (WTO) membership, ⑤ European Union (EU) enlargement and accession, ⑥ European Union Structural Funds, and ⑦ Transparency International. There are requirements set forth for joining these international organizations and blocs and for reaping the benefits of membership and inclusion.<sup>2)</sup>

Most donor agencies generally agree on the following:

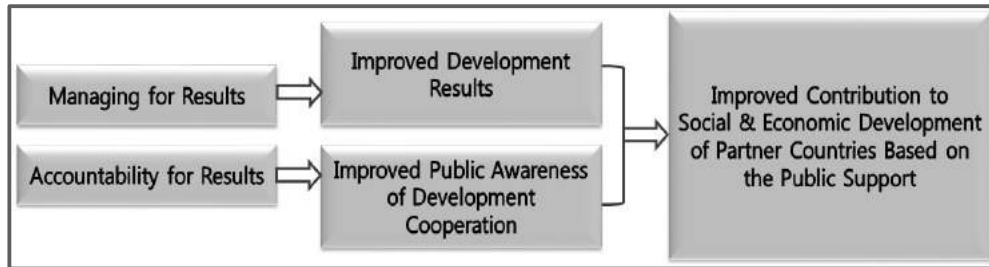
- "Results-based management provides a coherent framework for strategic planning and management based on learning and accountability in a decentralized environment. It is first a management system and second, a performance reporting system";
- "Introducing a results-oriented approach ... aims at improving management effectiveness and accountability by defining expected results, monitoring process toward the achievement of expected results, integrating lessons learned into management decisions and reporting on performance."

In this regard, the basic purposes of RBM can be summarized as first, managing for results and second, accountability for results. Successful fulfillment of these two purposes assure the improved contribution to social and economic development of partner countries based on the public support.

---

2) Kusek, J.Z. & Rist R.C.(2004). Ten Steps to a Results-Based Monitoring & Evaluation System. World Bank. pp.2-9.

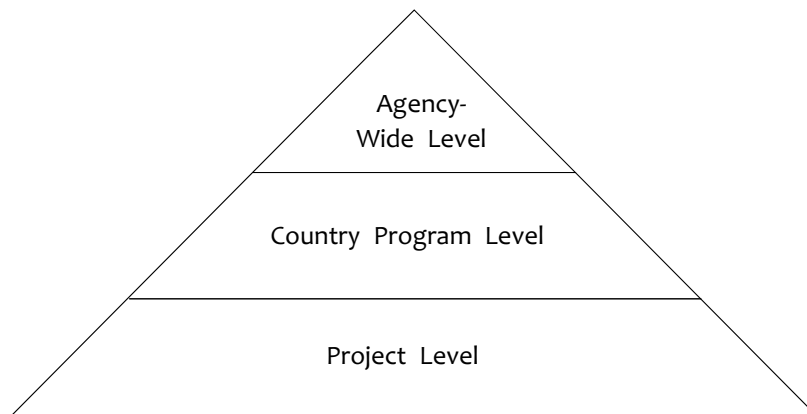
<Figure 1-2> Purposes of RBM



### 3. RBM at Three Different Levels

RBM takes place at three different levels within the donor agencies. The first level is at project level. The second level takes place to establish RBM system at sectoral program level of partner countries. The third level relates to RBM at the corporate or agency-wide level.

<Figure 1-3> RBM at Different Organizational Levels



<Table 1-1> RBM at Different Organizational Levels

Level	Activities	Outputs
Agency-Wide Level	<ul style="list-style-type: none"> <li>• Formulation of Agency Strategic Framework</li> </ul>	<ul style="list-style-type: none"> <li>• Agency Strategic Plan</li> <li>• Agency Strategic Framework</li> </ul>
Country Program Level	<ul style="list-style-type: none"> <li>• Formulation of Country Sectoral Programs</li> </ul>	<ul style="list-style-type: none"> <li>• Sectoral Strategy Paper</li> <li>• Results Framework (Sectoral Program)</li> </ul>
Project Level	<ul style="list-style-type: none"> <li>• Formulation of Projects</li> </ul>	<ul style="list-style-type: none"> <li>• Project Document</li> <li>• Logframe (Project Design Matrix)</li> </ul>

### 3.1. The Project Level

Performance measurement ((① Formulating Objectives ~ ⑤ Reviewing and Reporting Results) at the project level is concerned with measuring both a project's implementation progress (implementation measurement focusing on inputs and activities) and with results achieved (results measurement focusing on immediate outputs, intermediate outcomes and long-term impacts). Since development agencies established, the measurement focus has been shifted from implementation to results, and emphasis from immediate results (outputs) to medium and long-term results (outcomes, impacts).

Measuring performance at the project level can be divided into five phases (① Formulating Objectives, ② Selecting Indicators, ③ Setting Targets, ④ Monitoring (collecting) Performance Information, ⑤ Reviewing and Reporting Performance Information. In formulating objectives as the first step, the major tool is a Project Logical Framework or Logframe for short. Logframe, which was first developed by the United States Agency for International Development (USAID) in the late 1960s, is an analytical

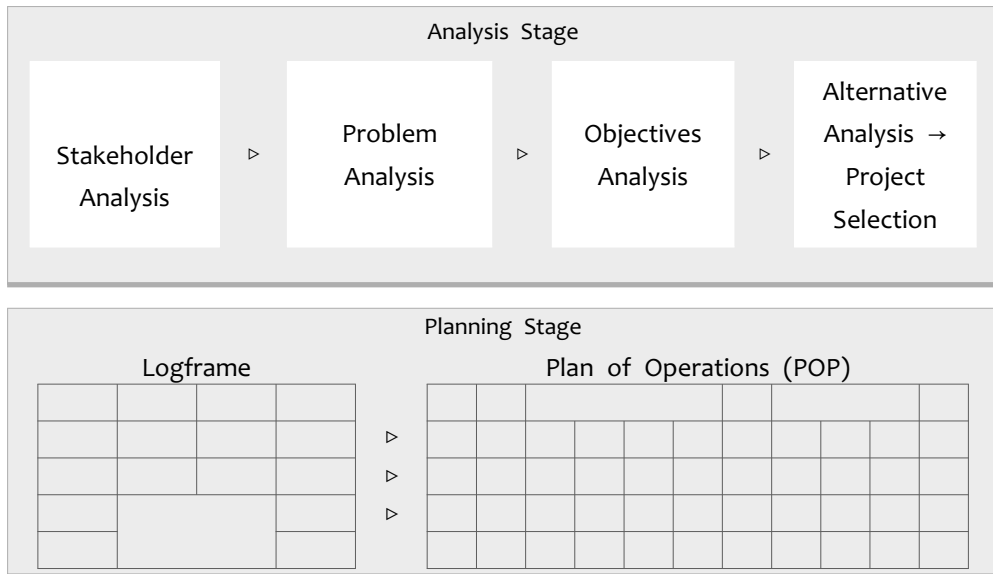
tool (logic model) for graphically conceptualizing the hypothesized cause-and-effect relationships of how project resources and activities will contribute to achievement of objectives or results. The logframe, which is also called Project Design Matrix (PDM), is a summary of the project in a 4x4 matrix format and is almost identical with Logical Framework Approach. The logframe is intended for ① Displaying the project design logic (hierarchical statements of the inputs, activities, outputs, purpose and goal), ② Identifying the indicators (and sometimes targets) that will be used to measure progress, ③ Identifying data sources or means of verifying progress, and ④ Assessing risks or assumptions about external factors beyond project management's control that may affect achievement of results.

<Table 1-2> Project Design Logical Framework Matrix

Narrative Summary	Objectively Verifiable Indicators (OVI)	Means of Verification (MOV)	Important Assumptions
Goal			
Purpose			
Outputs			
Activities			
Inputs			

Logframe is formulated by participatory approach usually in the workshops with attendance of major stakeholders. The participatory approach consists of an analysis stage (stakeholder analysis, problems analysis and objective analysis) and a planning stage (project selection, formulation of logframe, formulation of plan of operations).

<Figure 1-4> Analysis Stage and Planning Stage



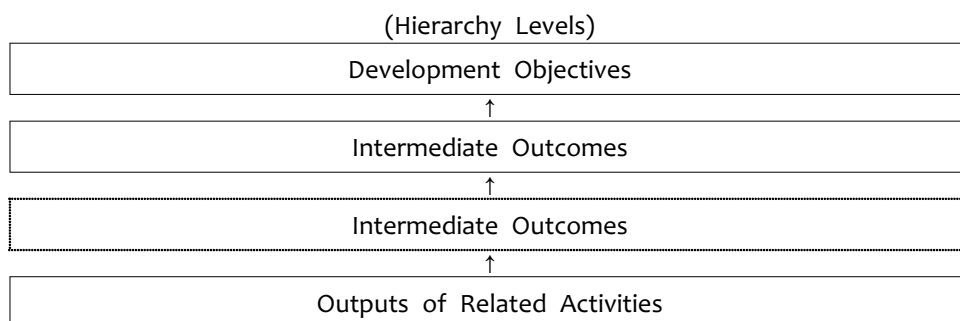
### 3.2. Country Program Level

The country program approach, which is used by an increasing number of donor agencies including USAID, UNDP and World Bank, is a much more comprehensive and strategic to result measurement and management than the project approach. It focuses on a significant development objective within a partner country usually at a broad sector or sub-sector level (but may also focus on a cross-cutting objective such as gender equality), and measures the collective performance of numerous projects and non-project activities all contributing to the development objective. The unit of analysis is a broader country program consisted of many development activities implemented by many different development partners as well as a partner country.

Measuring performance at the country program level can be divided

into five phases (① Formulating Objectives, ② Selecting Indicators, ③ Setting Targets, ④ Monitoring (collecting) Performance Information, ⑤ Reviewing and Reporting Results. In formulating objectives as the first step, the major tool is the Results Framework (also called program logframe, performance framework, etc.)", which is a graphic display of the strategies for achieving a significant or strategic development objective in a partner country at a sector or sub-sector level. The results framework is similar to the project logframe in that both are based on logic models or objective tree concepts linking different levels of objectives via cause-and-effect relationships. Results framework is different from project logframe in the sense that it includes the outcomes of many related development activities, concentrates on the higher-order results levels and its time frame is more longer-term than that of project. Results framework is useful as strategic planning and management tool, which can help a donor agency's operating units at the country level to clarify the significant development objectives they seek to contribute towards, in collaboration with other development partners, and to develop a logical plan or program strategy for their part in achieving them. The following figure illustrates the general structure and levels of a results framework diagram.

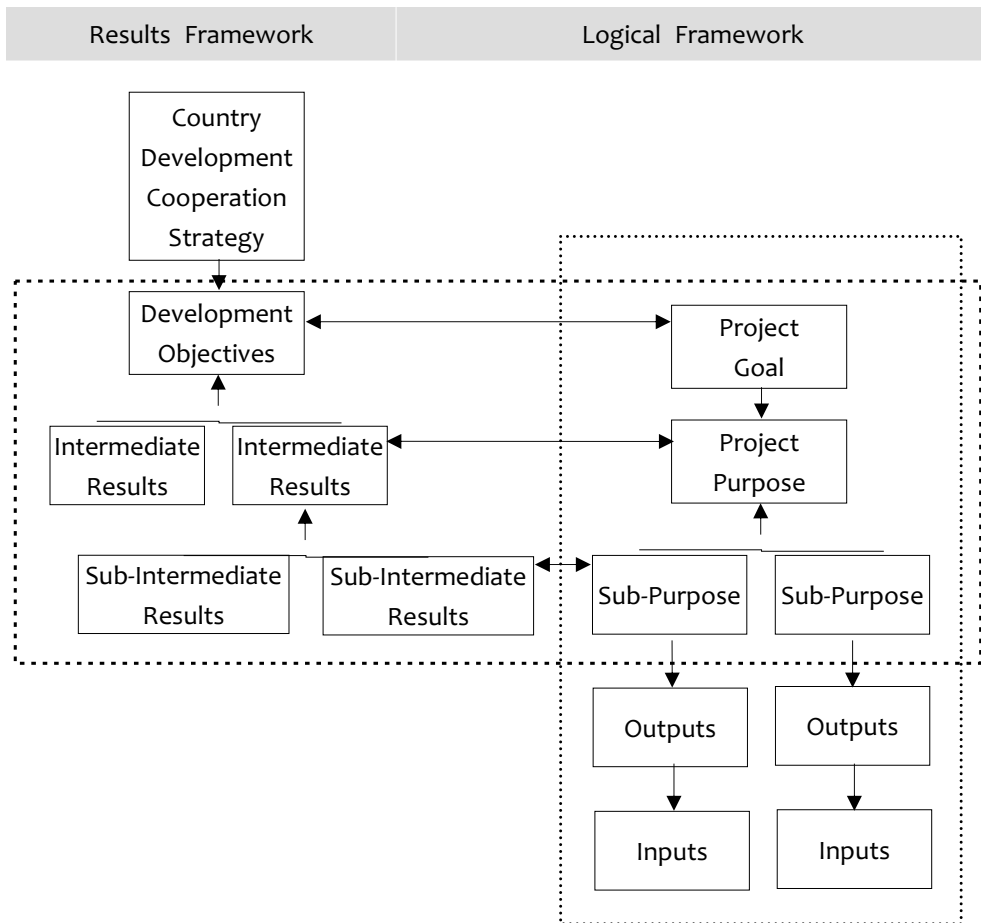
<Figure 1-5> General Structure of Country Program Results Framework





The following figure<sup>3)</sup> shows the relationship between results framework and project logframe.

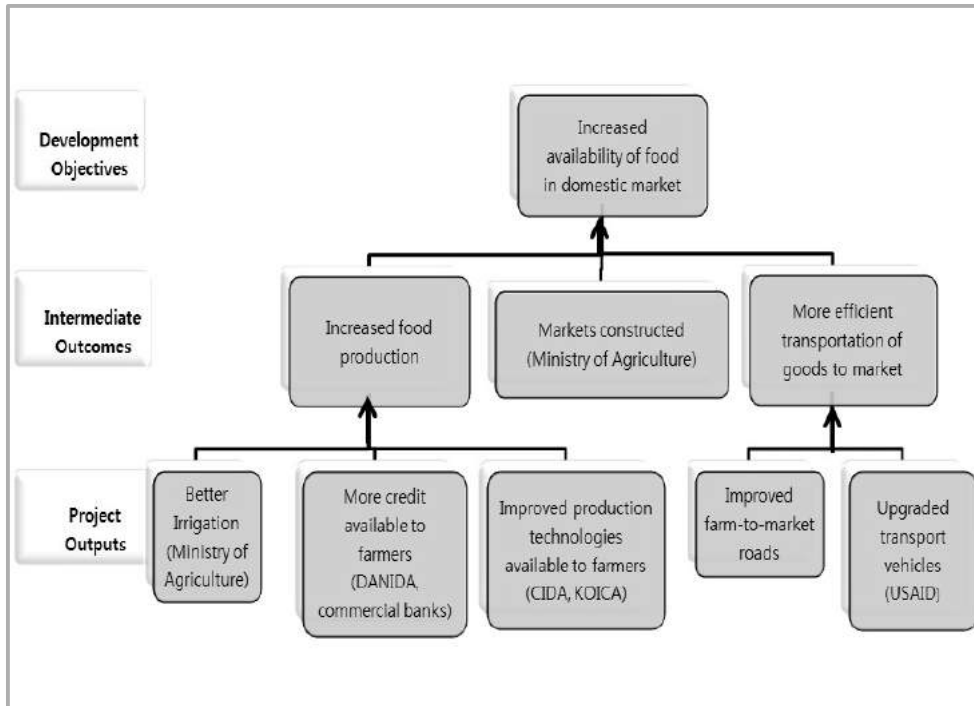
<Figure 1-6> Relationship Between Results Framework and Project Logframe



The following figure provides a hypothetical example of a results framework (limited to development objective and intermediate outcome levels).

3) USAID(2011). Program Cycle Overview. p.8.

<Figure 1-7> Hypothetical Illustration of A Country Program Results Framework



It may be useful to apply the following steps to develop a results framework.

#### Step 1: Clarify the Development Objective

Jointly developing and agreeing to a clear statement of the development objective will help partners gain a shared sense of ownership and responsibility for its achievement. In developing the objective statement, keep them results-oriented, unidimensional, precise and measurable.

#### Step 2: Identify the Key Intermediate Outcomes

Identify all the intermediate outcomes or results that must first be

accomplished in order to achieve the shared development objective. It is useful to clarify which partners are going to be responsible for which intermediate outcome.

#### Step 3: Clarify the Causal Linkages Between Results

Clarify the principle causal connections between the intermediate outcomes and the strategic development objective. There may be multiple levels of intermediate outcomes as well as causal relationships between intermediate results at the same level.

#### Step 4: Identify Critical Assumptions

These are conditions outside the control or influence of the various partners, which are likely to affect the achievement of results in the results framework.

#### Step 5: Finalize the Results Framework

Review the Framework to ensure it is not overly complicated. Recheck that objectives and outcomes are stated as results, are unidimensional, clear and precise, and are objectively verifiable and measurable. Assess if they are feasible given the anticipated resources available to the partners.

Followings are results framework examples of USAID, Asia Development Bank (ADB), Korea International Cooperation Agency (KOICA).

<Table 1-3> USAID's Results Framework Example

USAID Philippine BEST Program: Maternal Child Health			
Goal	To Reduce Maternal and Child Mortality		
Goal Level Targets & Indicator	Indicators	<ul style="list-style-type: none"> <li>• 2015 MDG &amp; Baseline</li> </ul>	
	Maternal mortality ratio	<ul style="list-style-type: none"> <li>• Baseline: 162 (2006 FPS)</li> <li>• 2015 Target: 52 (MDG)</li> </ul>	
	Under five mortality ratio	<ul style="list-style-type: none"> <li>• Baseline: 34 (2008 DHS)</li> <li>• 2015 Target: 27 (MDG)</li> </ul>	
National Priorities	Priorities	<ul style="list-style-type: none"> <li>• 2015 MDG Targets</li> </ul>	
	1. To meet MDG targets		
	2. To rapidly reduce maternal mortality		
	3. ...		
USAID Strategy			
	Near-term (2011-12)	Medium-term (2013-16)	Baseline (2010)/ Target (2016)
	Maternal and Neonatal Health		
Key Interventions	<ul style="list-style-type: none"> <li>• Facilitate budget to MNCHN strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to support MNCHN strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Baseline: 259</li> <li>• Target: 750</li> </ul>
	Child Health		
	<ul style="list-style-type: none"> <li>• Behavior change of children through...</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure poor children are enrolled in PHIC..</li> </ul>	
Approaches	Short-term (2011-12)		Medium-term (2013-16)
	<ul style="list-style-type: none"> <li>• Clinic-level service delivery by...</li> <li>• National &amp; local level policy dialogue...</li> <li>• Logistics management</li> </ul>		<ul style="list-style-type: none"> <li>• Continuation of service delivery</li> <li>• Continuation of strengthening health-system</li> </ul>

<Table 1-4> USAID's Results Framework Example

Country Sector Outcomes		Country Sector Outputs		ADB Sector Inputs	
Outcomes with ADB Contribution	Targets with Indicators and Baselines	Outputs with ADB Contribution	Indicators with Incremental Target	Main Outputs Expected from ADB Interventions	Current & Future ADB Operations
Outcome 1	1. 2.				
Outcome 2	1. 2.				

<Table 1-5> KOICA's Results Framework Example

Systematization of National Health Insurance Program		
Indicator	Baseline	Target
• Enrolment rate of Philippine Health Insurance Corporation (PHIC)	74% (2010)	100% (2015)
• Financial benefit	34% (2008)	100% (2016)
• Turnaround time for core processes	45 days (2011)	5 days (2015)
• Performance index	To be determined	100% (2015)
Philippines' Priority	KOICA's Strategy	
	Intermediate Outcomes	Outputs of Related Activities
Financial securement through improvement of	• Medical fee payment system reviewed	1.1 Improvement of auditing system 1.2 Improvement of review personnel professionalism 1.3 Support computerization of medical fee claim
- Medical fee reimbursement	• Payment system improved	2.1 Diversification of premium pricing 2.2 Raising convenience of premium payment

<ul style="list-style-type: none"> <li>- Payment system</li> <li>- Accreditation of health facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Health care facilities and accreditation improved</li> </ul>	<ul style="list-style-type: none"> <li>3.1 Preparing standards of medical care benefit appropriateness</li> <li>3.2 Introduction of new medical technology assessment and accreditation system</li> <li>3.3 Introduction of medicines pricing accreditation system</li> </ul>
<ul style="list-style-type: none"> <li>PHIC manpower strengthening</li> </ul>	<ul style="list-style-type: none"> <li>• PHIC manpower strengthened</li> </ul>	<ul style="list-style-type: none"> <li>4.1 Cultivation of information management system</li> <li>4.2 Strengthening of monitoring and assessment system</li> <li>4.3 Settlement of performance management system</li> </ul>

### 3.3. The Agency Level

Most of donor agencies have developed policy or strategy plans that clearly articulate the agency's overall mission and the key development goals or priority areas on which they intend to concentrate. The agencies' goals are sector-oriented or cross-cutting special concerns or internal management efficiency. The agency-wide performance is measured and reported based on corporate frameworks under various names from agency to agency as shown in the following examples:

- USAID's strategic framework;
- UNDP's strategic results framework;
- DFID's output and performance analysis;
- AusAID's performance information framework;
- World Bank's scorecard;
- Danida's output and outcome indicator system.

Measuring performance at the agency level can be divided into five phases (① Formulating Objectives, ② Selecting Indicators, ③ Setting

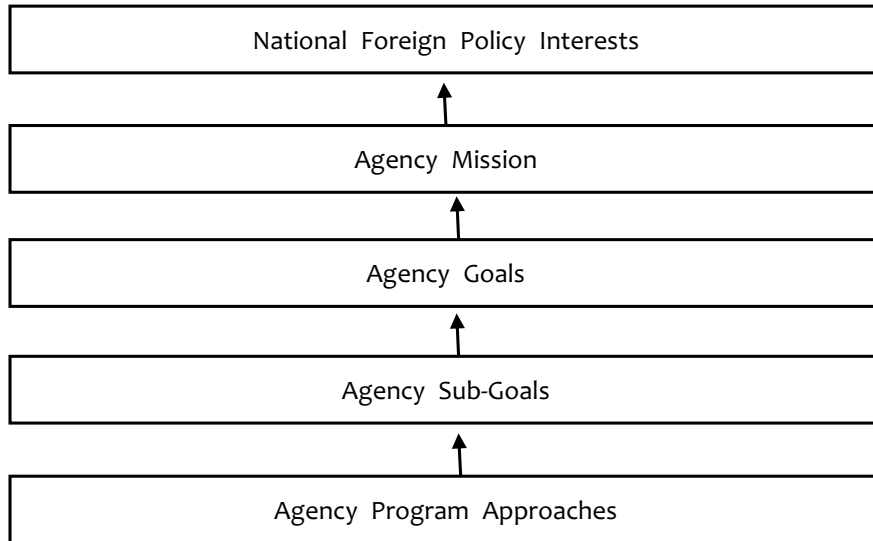
Targets, ④ Collecting Performance Data Agency-wide ⑤ Reviewing and Reporting Performance Agency-wide. In formulating objectives as the first step, the major tool is the agency strategic framework. Agency strategic frameworks are useful management tool that have been used for the following purposes:

- To communicate to stakeholders and partners the essence of the agency's strategic priorities;
- To provide strategic direction - for focusing and concentrating country operating unit's assistance efforts (projects/programs) on these agency priorities;
- To serve as a structure for categorizing, measuring and reporting on development results at the corporate (agency-wide) level;
- To contribute to strategic management decisions - e.g. resource allocations among countries and sectors based on need and performance criteria.

Although the hierarchy levels have different names and definitions from agency to agency, typical levels might be generally described as follows:

- Agency mission: the overall purpose or aim of the agency's development assistance program;
- Agency goal: the priority long-term goals of the agency's development assistance that support the overall mission;
- Agency sub-goals: medium-term agency objectives that contribute to agency goals;
- Agency program approaches: the typical program approaches that the agency's country operating units support in order to contribute to agency sub-goals.

<Figure 1-8> Agency Strategic Framework Hierarchy Levels



<Table 1-6> USAID's Strategic Framework Example

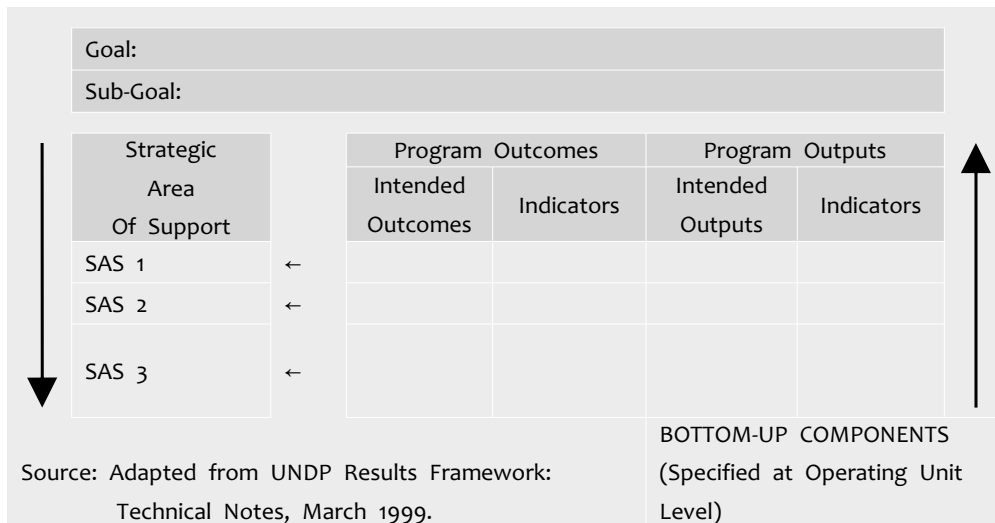
Goal				
"To help build and sustain democratic, well-governed states that respond to the needs of their people, reduce widespread poverty and conduct themselves responsibly in the international system."				
Objectives				
Peace and Security	Governing Justly and Democratically	Investing in People	Economic Growth	Humanitarian Assistance
Program Area and Elements				
1.1 Terrorism 1.1.1 1.1.2,..	2.1 Rule of Law 2.1.1 2.1.2...	3.1 Health 3.1.1 3.1.2...	4.1 Macroeconomic Establishment 4.1.1...	5.1 Assistance and Solutions 5.1.1...
1.2 Combating Weapons of Mass-Destruction 1.2.1...	2.2 Good Governance 2.2.1 2.2.2...	3.2 Education 3.2.1	4.2 Trade and Investment 4.2.1 4.2.2...	5.2 Disaster Readiness 5.2.1 5.2.2...



1.3 Stabilization Operations and Security Sector Reform 1.3.1 1.3.2...	2.3 Political Competition and Consensus-Building 2.3.2, 2.3.5		4.3 Infrastructure 4.3.1 4.3.2...
1.5 Transnational Crime 1.5.1 1.5.2...			4.4 Agriculture 4.4.1 4.5.2...
			4.6 Private Sector Competitiveness 4.6.2, 4.6.3
			4.7 Economic Opportunity 4.7.1, 4.7.6

Followings are agency strategic framework examples of USAID and UNDP.

<Figure 1-9> UNDP's Agency Strategic Framework Example





## **Section 2. Managing for Development Results (MfDR)**

Developments in the 1990s had sharply changed the climate for foreign aid. First, in those years, OECD with aid fatigue, struggled to control fiscal deficits and contain growth in government spending. Second, when the foreign aid started after World War II, it had two main objectives. The first objective was to promote long-term growth and poverty reduction in developing countries and the second was to promote the short-term political and strategic interests of donors, providing aid to regimes that were political allies of major Western power. With the end of the Cold War, however, the foreign aid's strategic importance in the Cold War era was weakened. Instead, it might be possible to make aid more efficient at meeting its primary objectives of long-term growth and poverty reduction.<sup>4)</sup>

Against this background, aid effectiveness movement began taking in the late 1990s. According to the World Bank's "Assessing Aid (1998)", the financial aid works in a good policy environment, improvements in economic institutions and policies in the developing world are the key to a quantum leap in poverty reduction, the value of development projects is to strengthen institutions and policies so that services can be effectively delivered and aid can nurture reform in even the most distorted environments. In this regard, the issues of reform and good governance in developing countries came to the fore. On the other hand, Donor governments and aid agencies began to realize that their many different approaches and requirements were imposing huge costs on developing countries and making aid less effective. They began to take a series of initiatives on aid effectiveness.

---

4) World Bank(1998). Assessing Aid. World Bank. pp.7-9.

The first significant initiative was the International Conference on Financing for Development held in Monterrey, Mexico in 2002, which established the Monterrey Consensus. Since its adoption the Monterrey Consensus has become the major reference point for international development cooperation and a new paradigm of aid as a partnership, rather than a one-way relationship donor and recipient, was evolving. At the first High Level Forum on Harmonization held in Rome, Italy in 2002, at which the Rome Declaration was endorsed, donor agencies committed to work with developing countries to better coordinate and streamline their activities at the country level. At the second High Level Forum held in Paris, France in 2005, donors and recipients from the around the world endorsed the Paris Declaration on Aid Effectiveness, which incorporated the Rome Declaration and the core principles put forward at Marrakech Roundtable on Managing for Results held in Marrakech, Morocco in 2004. The Paris Declaration outlines five fundamental principles for making aid more effective: Ownership, Alignment, Harmonization, Managing for Results and Mutual Accountability.

In "Managing for Results" of Paris Declaration, "Results" means "development results." Development results means "improvements in people's lives" which are a common goal shared by many governments and development partners across the countries. "Managing for development results (MfDR)" means an approach that nurtures development results throughout the management cycle. It promotes continuous learning and enables better decision making about delivering results.<sup>5)</sup>

Then what are the difference between MfDR and RBM? Traditionally, RBM approaches have focused more on internal result performance of

---

5) ADB(2011). Driving Results at ADB.

agencies than on changes in the development conditions of people. MfDR resorts to the same basic concepts of RBM - strategic planning, monitoring, evaluation, learning and feeding back into planning - but seeks to attach a key priority to development assistance demonstrating real and meaning results. MfDR is also an effort to respond to the growing demands for public accountability to citizens in both the donors and recipients on how assistance is used, what results are achieved, and how appropriate these results are in bringing about desired changes in human development. This approach naturally led to partnerships and greater coherence.<sup>6)</sup>

According to the Paris Declaration<sup>7)</sup>, "managing for results" means managing and implementing aid in a way that focuses on the desired results and uses information to improve decision-making.

To this end, partner countries commit to:

- Strengthen the linkages between national development strategies and annual and multi-annual budget processes;
- Endeavour to establish results-oriented reporting and assessment frameworks that monitor progress against key dimensions of the national and sector development strategies; and that these frameworks should track a manageable number of indicators for which data are cost-effectively available (Indicator 11).

Donors commit to:

- Link country programming and resources to results and align them with effective partner country performance assessment frameworks, refraining from requesting the introduction of performance indicators that are not

---

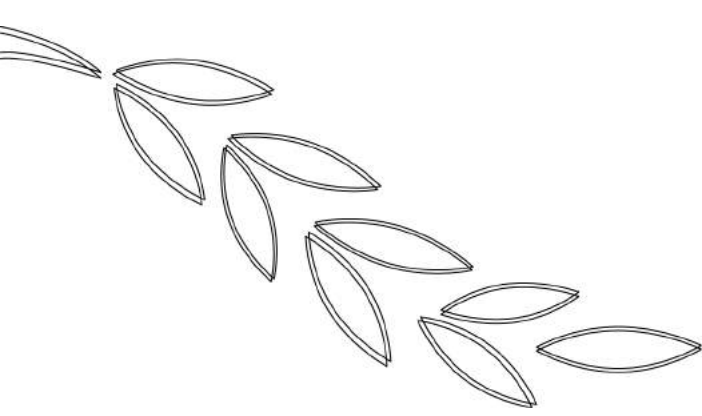
6) UNDP(2009). Handbook on Planning, Monitoring and Evaluating for Development Results. pp.5-6.

7) OECD(2008). The Paris Declaration on Aid Effectiveness and the Accra Agenda for Action.

- consistent with partners' national development strategies;
- Work with partner countries to rely, as far as possible, on partner countries' results-oriented reporting and monitoring frameworks;
  - Harmonize their monitoring and reporting requirements, and, until they can rely more extensively on partner countries' statistical, monitoring and evaluation systems, with partner countries to the maximum extent possible on joint formats for periodic reporting.

Partner countries and donors jointly commit to:

- Work together in a participatory approach to strengthen country capacities and demand for results-based management.



## II . Case Studies of Results-Based Management of Development Study Program

Section 1. Reclassification of Development  
Study Program According to the  
Purpose of RBM

Section 2. Master Plan Study and Basic Study

Section 3. Capacity Development

Section 4. Feasibility Study





## II

# Case Studies of Results-Based Management of Development Study Program



### **Section 1. Reclassification of Development Study Program According to the Purpose of RBM**

#### **1. Concept and Character of Development Study Program**

Development study program is a type of consulting service program concerning development planning and projects in a variety of fields of developing countries. Major fields of this program cover agriculture, forestry, mineral resources and infrastructure construction such as roads, electricity and telecommunications, as well as energy resources and socio-economic development. The final report can be an important source of basic information in policy decisions to determine the feasibility of development planning and projects and to apply for funds to international financial organizations such as the World Bank and regional development banks, or to Korea or other donor countries.

In this regard, this program is equivalent to the first two phases of a project cycle – (1) Identification, (2) Preparation, (3) Appraisal, (4) Implementation, and (5) Evaluation. Its character can be summarized as shown in the following table.



<Table 2-1> Character of Development Study Program

Classification	Contents
Type of Assistance	<ul style="list-style-type: none"> <li>• This program belongs to “Investment-Related Technical Cooperation: (IRTC)” according to DAC Statistical Reporting Directives).               <ul style="list-style-type: none"> <li>- IRTC is defined as the financing of services by a donor country with the primary purpose of contributing to the design and/or implementation of a project or program aiming to increase the physical capital stock of the recipient country.</li> <li>- On the other hand, Free-standing technical cooperation: FTC) comprises activities financed by a donor country whose primary purpose is to augment the level of knowledge, skills, technical know-how or productive aptitudes of the population of developing countries, i.e. increasing their stock of human intellectual capital, or their capacity for more effective use of their existing factor endowment.</li> </ul> </li> </ul>
Phases	<ul style="list-style-type: none"> <li>• This program belongs to the phases before implementation in the project cycle.</li> </ul>
Output	<ul style="list-style-type: none"> <li>• Report</li> </ul>
Implementation Methods	<ul style="list-style-type: none"> <li>• Implementation methods include consulting services, technical support, the provision of know-how linked to the execution of an investment project, and the contribution of the donor’s own personnel to the actual implementation of the project (managers, technicians, skilled labour etc.).</li> </ul>
Purpose	<ul style="list-style-type: none"> <li>• To provide an important source of basic information in policy decisions to determine the feasibility of development planning and projects</li> <li>• Capacity development through consulting services, technical support, the provision of know-how</li> </ul>

## 2. Types and Purpose of Development Study Program

The program ranges from preliminary surveys aimed at identifying the status of present conditions in order to determine the necessity of a full-scale survey, to feasibility studies, master plans, and detailed designs.

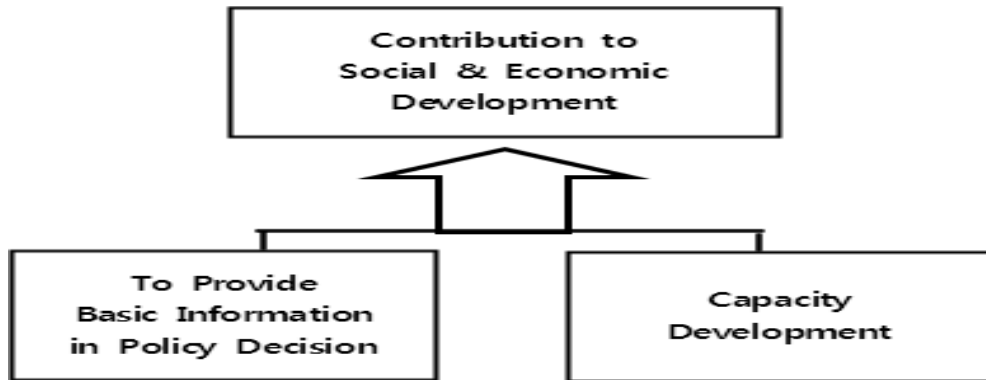
<Table 2-2> Types of Development Study Program

Types	Detail
Master Plan Study (M/P)	<ul style="list-style-type: none"> <li>• Formulate a master plan that proposes a basic direction for a project or program to develop a specific region or industry.</li> </ul>
Basic Study (B/S)	<ul style="list-style-type: none"> <li>• Conduct a research on basic material and produce research documents that can be used as a basic guideline for regional development and other projects.               <ul style="list-style-type: none"> <li>- The research would include surveys on population, traffic volume, geographical formation and other various statistical phenomena.</li> </ul> </li> </ul>
Feasibility Study (F/S)	<ul style="list-style-type: none"> <li>• Conduct a feasibility study to determine whether a specific project is economically and technically feasible.               <ul style="list-style-type: none"> <li>- If the result is positive, a final report proposes methods and goals for the project.</li> </ul> </li> </ul>
Basic & Detailed Design	<ul style="list-style-type: none"> <li>• Formulate a basic and detailed design of a project if a feasibility study indicates that the proposed project can be implemented.</li> <li>• The designs show construction specifications, information for bidding, etc.</li> </ul>

KOICA has not yet clearly defined the stated goal and purposes of this program. However, it will be possible to apply the cases of JICA as follows:

- To provide an important source of basic information in policy decisions to determine the feasibility of development projects;
- Capacity development through consulting services, technical support, the provision of know-how.

<Table 2-3> Goal and Purposes of Development Study Program



### 3. Reclassification of Development Study Program

For the purpose of managing for results, development study program is classified into ① Master Plan Study and Basic Study, ② Feasibility Study, and ③ Capacity Development.



## **Section 2. Master Plan Study and Basic Study**

Except JICA and Asia Development Bank (ADB), most development agencies manage a project in a single cycle without separating a development study stage from a project cycle. Except KOICA, JICA and ADB are probably the only two development agencies which manage a development study program as a type of ODA programs.

### **1. JICA Case**

#### **1.1. Preliminary Stage**

The procedure for a cycle management of a master plan study or a basic study is as follows:

- To receive official request from the partner country in the form of Terms of Reference (TOR);
- To identify a necessity of the study case by dispatching technical cooperation survey team or feasibility study team;
- To decide whether or not the study case should be carried out in the implementation policy meeting chaired by Ministry of Foreign Affairs of Japan and attended by relevant authorities concerned;
- To appraise a feasibility of the study case based on "Appraisal Format."

<Table 2-4> Appraisal Format (Master Plan Study or Basic Study)

1. Name of the Master Plan Study (or Basic Study)
2. Outline of Cooperation
3. Necessity of Cooperation (Relevance)
4. Cooperation Measures
  - 4.1. Lists to be surveyed during a main study
  - 4.2. Outputs and outcomes
  - 4.3. Inputs
5. Expected the upper level outcome after the completion of the study
6. External factors
7. Consideration on poverty, gender, environment and others
8. Lessons from the past similar studies
9. Future evaluation plan

## 1.2. Main Study Stage

The main study is implemented in the order of study for planning, formulation of development strategy, selection of project, finalizing master plan as shown in the <table 2-5> below.

<Table 2-5> Process of Main Study on Master plan

1. Study for Planning
  - (1) Study on Necessity of development
  - (2) Study on development capacity
  - (3) Study on awareness of local residents
  - (4) Study on development impact
2. Formulation of Development Strategy
  - (1) Identification of problem to be solved -> Setting up development objective
  - (2) Setting up numerical goal of development -> Making Macro Frame
  - (3) Selection of development method
3. Selection of Project
  - (1) Project selection, Preparation of investment plan
  - (2) Consideration of cost estimate and financing
  - (3) Consideration of targeted outcomes
  - (4) Consideration of implementing agency

4. Finalizing master plan
  - (1) Writing Tentative Draft Final Report
  - (2) Writing Draft Final Report
  - (3) Completion of Final Report

### 1.3. Implementation Management Phase

Procedure after selecting consulting agency is almost identical to KOICA case, reports to be submitted are Inception report, Periodic project progress report, Interim report, Draft Final report, Final report

The concept of result-based management in JICA's implementation of a development study program including master plan study is not yet fully institutionalized. And the management system of a main study is as follows:

- Monitoring: JICA's manager in charge is commonly designated as a superintendent to supervise all tasks of consultant (Direction, consultation, approval of contract change and fulfillment including process management);
- Evaluation: JICA's managing director in charge is commonly designated as an evaluator to check task completion of consultant (Evaluation of final report and others);
- Supervisory committee: Technical advisory body attended by external experts.

### 1.4. Follow-up Study

Follow-up study is regularly carried out after the completion of the case (usually once a year).

The development study program is categorized into two groups for the follow-up study, and the study result is updated to database every year.

<Table 2-6> Status Distinction and Judgement Criteria by the Group I  
(M/P Research, Basic Survey, etc.)

Distinction	Judgement Criteria
Progress and use	<ul style="list-style-type: none"> <li>• Implementing research in the next stage</li> <li>• Linked to other cooperation project</li> <li>• Adopted specifically in the policy and development plan of the partner country</li> </ul>
Delay	<ul style="list-style-type: none"> <li>• After the research, there is no specific action by the partner country.</li> <li>• After the review of specific directions, there is a delay.</li> </ul>
Stop and Cancellation	<ul style="list-style-type: none"> <li>• Officially stopped the concerned project or adopted other alternatives by the partner country regarding the research results</li> </ul>

<Table 2-7> Status Distinction and Judgement Criteria by the Group II  
(F/S, M/P + F/S, D/D, etc.)

Distinction	Judgement Criteria
1. Progress and Use 1.1. Completion 1.2. Partial Completion 1.3. Under Implementation 1.4. materialization progress	1.1. Completion of the project 1.2. Part of the project is completed 1.3. Project is being implemented 1.4. When the possibility of materialization of the development project is high such as tender, definite financing, working design, etc.
2. Under materialization	<ul style="list-style-type: none"> <li>• When funding cooperation is being requested, detailed design or additional research is being implemented by the domestic capital, having active action for the materialization of other project by the partner country</li> </ul>
3. Delay	<ul style="list-style-type: none"> <li>• When no specific measure is being taken by the partner country after receiving the final report</li> <li>• In the case of delay after the review of the detailed orientation</li> </ul>
4. Stop and Cancellation	<ul style="list-style-type: none"> <li>• Officially stopped the concerned project or implemented other types of project very different from the final report by the partner country</li> </ul>

## 1.5 Ex-post Evaluation

Ex-post evaluation is implemented based on OECD/DAC five evaluation criteria. The master plan studies and basic studies in the same sector in several countries are evaluated after a certain period of time from the completion of the project.

## 1.6. Implications

- To apply DAC's five evaluation criteria from the ex-ante stage;
- To utilize various standardized manuals and work references such as (Standardization of formats, detailed standard operating procedures, manual on scope of work, detailed table of contents of reports, etc.);
- To establish supervision and follow-up study system.

## 2. ADB Case

### 2.1. Technical Assistance (TA) of ADB

ADB has implemented aid projects in the form of technical assistance as seven types presented in <Table 2-8>.

- Master plan is implemented as a part of Policy and advisory technical assistance (PATA);
- Feasibility study is implemented as a part of Project preparatory technical assistance (PPTA);
- Capacity development is implemented as a part of Capacity development technical assistance (CDTA).



<Table 2-8> Objectives of ADB Technical Assistance by Type

Type	Objective
Project Preparatory Technical Assistance (PPTA)	<ul style="list-style-type: none"> <li>• PPTA may be processed for a standalone project or program, or a sector development program;</li> <li>• A subprogram under the program cluster approach;</li> <li>• Single sector lending for a series of sub-projects;</li> <li>• Or a multi-tranche financing facility comprising a series of tranches.</li> </ul>
Policy and Advisory Technical Assistance (PATA)	<ul style="list-style-type: none"> <li>• PATA is usually extended in a sector- or economy-wide context.</li> <li>• It may be on a stand-alone basis or a project.</li> <li>• In some cases it may be project-specific.</li> <li>• PATA assists in               <ol style="list-style-type: none"> <li>(i) preparing national and sector development plans and programs, particularly in small DMCs; and</li> <li>(ii) carrying out sector-, policy-, and issues-oriented studies.</li> </ol> </li> </ul>
Capacity Development Technical Assistance (CDTA)	<ul style="list-style-type: none"> <li>• CDTA assists in               <ol style="list-style-type: none"> <li>(i) establishing or strengthening organizations and institutions in DMCs;</li> <li>(ii) implementing, operating, and managing ADB-financed projects;</li> <li>(iii) enhancing knowledge management.</li> </ol> </li> <li>• CDTA plays an important role in ADB's efforts to improve the technical, managerial, and financial capabilities of recipients.</li> </ul>
Research and Development TA (RDTA)	<ul style="list-style-type: none"> <li>• RDTA involves TA activities conceived to address global or regional development issues which require further analysis or understanding.</li> <li>• The corporate medium-term research agenda is determined through an annual strategic forum and confirmed in ADB's work program and budget framework</li> </ul>
Regional Technical Assistance (RETA)	<ul style="list-style-type: none"> <li>• If a PPTA, PATA, or CDTA covers more than one DMC, it is processed as regional TA (R-PPTA, R-PATA or R-CDTA)</li> </ul>
Small Scale Technical Assistance (SSTA)	<ul style="list-style-type: none"> <li>• PPTA, PATA, CDTA, and RDTA can be in the form of small-scale TA (S-PPTA; S-PATA; S-CDTA or S-RDTA).</li> <li>• TA is considered small-scale if ADB financing does not exceed \$225,000 and the TA does not require substantial logistical support from the recipient.</li> </ul>

Technical Assistance Cluster	<ul style="list-style-type: none"> <li>• PATA, CDTA, and RDTA can be in the form of TA cluster (C-PATA, C-CDTA and C-RDTA).</li> <li>• TA cluster comprises a series of TA sub-projects over an extended period to address constraints in a DMC through a comprehensive and holistic approach.</li> <li>• TA cluster assumes a long-term perspective and partnership between ADB and the DMC concerned and flexibility in the design of the sub-projects.</li> </ul>
------------------------------	--

## 2.2. Importance of TA In ADB Projects

ADB has constantly strived for improving aid effectiveness by strengthening role of TA in ADB projects as shown in the following research results.

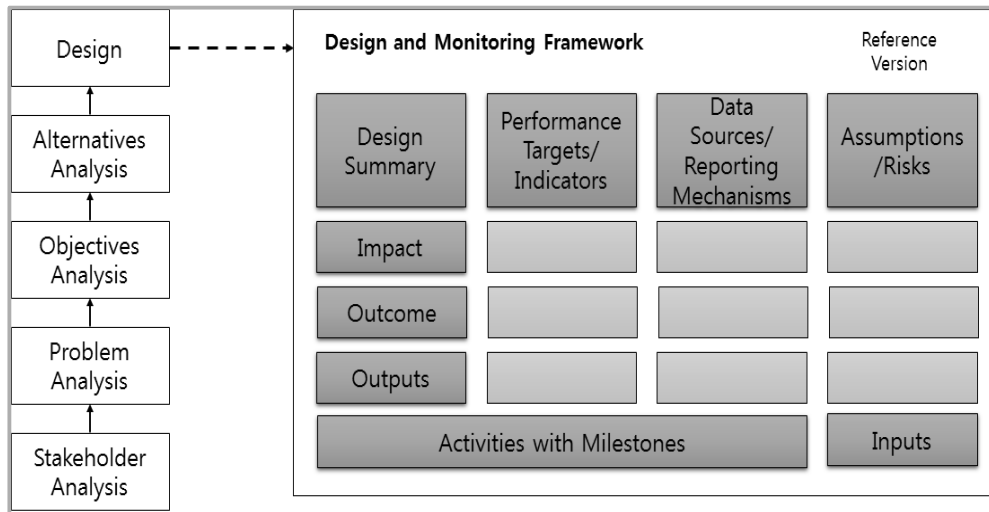
- Review of the Bank's Technical Assistance Operations (1997)
- Review of the Management and Effectiveness of Technical Assistance Operations of the Asian Development Bank (2003)
- Special Evaluation Study: TA Performance (2007)
- Increasing the Impact of the Asian Development Bank's Technical Assistance Program: Policy Paper (2008)
- Thematic Evaluation Study: Role of Technical Assistance(TA) in ADB (2013)
- etc.

## 2.3. Results-Based Management System

ADB makes an effort to improve aid effectiveness in accordance with Paris Declaration's five principles: Ownership; Alignment; Harmonization; Managing for Results; Mutual Accountability).

A basic tool for results-based management such as design, implementation, monitoring and evaluation is "Design and Monitoring Framework (DMF)", which is ADB version of logical framework.

<Figure 2-1> Design and Monitoring Framework(DMF) Format



Documents related to TA is required to be written mainly in compliance with New Business Process and TA Operation Manual issued in 2011.

Major documents related to TA result management include ① Concept Paper, ② TA Report, ③ TA Performance Report, ④ TA Completion Report and others.

- ① Concept Paper, ② TA Report are written before the phase of final approval , ③ TA Performance Report, ④ TA Completion Report are written after the start of the project. Table of contents of each document is as below table.
- ① Concept Paper, ② TA Report, ③ TA Performance Report include “Design & Monitoring Framework” as an attachment, which is formulated according to “Guidelines for Preparing a Design and Monitoring Framework.”

<Table 2-9> TA Related Document and Main Table of Contents

Type of Document	Main Table of Contents	KOICA Standard
Concept Paper	<ul style="list-style-type: none"> <li>I. The Program                             <ul style="list-style-type: none"> <li>A. Rationale,</li> <li>B. Impact, Outcome, and Outputs</li> <li>C. Indicative Implementation Arrangements</li> </ul> </li> <li>II. Due Diligence Required (Analysis by major contents)</li> <li>III.                             <ul style="list-style-type: none"> <li>A. Risk Categorization</li> <li>B. Resource Requirements</li> <li>C. Processing Schedule</li> </ul> </li> <li>IV. Key Issues</li> <li>Appendixes:                             <ul style="list-style-type: none"> <li>1. Basic Project Information</li> <li>2. Problem Tree</li> <li>3. Design and Monitoring Framework</li> <li>4. Project Preparatory Technical Assistance</li> <li>5. Initial Poverty and Social Analysis</li> </ul> </li> </ul>	Preliminary Research Phase (For screening)
TA Report	<ul style="list-style-type: none"> <li>I. Introduction</li> <li>II. Issues</li> <li>III. Methodology and Key Activities</li> <li>IV. The President's Decision</li> <li>Appendixes:                             <ul style="list-style-type: none"> <li>1. Design &amp; Monitoring Framework</li> <li>2. Cost Estimates &amp; Financing Plan</li> <li>3. Outline of TOR for Consultants</li> </ul> </li> </ul>	Action Plan Phase (Approval of implementation)
TA Performance Report	<ul style="list-style-type: none"> <li>A. Introduction</li> <li>B. Preparing the Performance Report</li> <li>C. Content of the TA Performance Report:                             <ul style="list-style-type: none"> <li>1. TA Ratings</li> <li>2. Development Objective</li> <li>3. Implementation Progress</li> <li>4. Potential Problem</li> <li>5. TA at Risk</li> <li>6. Override Facility</li> </ul> </li> <li>Appendixes:                             <ul style="list-style-type: none"> <li>1. Design &amp; Monitoring Framework</li> <li>2. TA Performance Report(Format)</li> <li>3. Rating Criteria for the Assessment of Development Objectives</li> <li>4. Rating Criteria for the Assessment of TA Implementation Progress</li> </ul> </li> </ul>	Interim Report Phase

TA Completion Report	A. Objective & Scope B. Timing C. Preparation D. Intended Use of the TA Report Completion Appendixes: 1. TA Completion Report 2. General Guidelines for Preparing TA Completion Reports	Report Completion Phase
----------------------------	---	-------------------------------

During TA project implementation, periodic monitoring activities including regular meeting among major stakeholders and supervision by survey team to ensure the quality of service provided by consultant during TA project.

## 2.4. Implications

- ADB has implemented TA projects including a similar type to development study program, and established standard operating procedures by each phase.
- “Guidelines for Preparing a Design and Monitoring Framework” is used for each phase to produce Design and Monitoring Framework as a tool of result based management.



## Section 3. Capacity Development

### 1. JICA

JICA has strived to improve the result of capacity development at program and project level, and produced the following documents:

- Research report on Japan-type ODA Effectiveness and Future Tasks (2003);
- Capacity Development Handbook (2004);
- Manual on Outcome Indicators of Technical Cooperation Project (2005);
- Project Management Handbook (2007.12).

One of the important objectives of JICA development study program is capacity development in the recipient country. However, to this end, the results-based management system has not yet been established.

JICA published a "Manual on Outcome Indicators of Technical Cooperation Project" in 2005, in which JICA's technical cooperation projects are categorized in five types as follows:

- Type I: Individual levels of Capacity
- Type II: Organizational levels of Capacity
- Type III: End-Users (beneficiary) levels of Capacity
- Type IV: Institutional and Societal levels of Capacity
- Type V: Problem solving and improvements of Community Capacity.

JICA developed a matrix applying Kirkpartrick model<sup>8)</sup> by each type to measure results or outcomes of technical cooperation projects. For example, a matrix measuring results of Technical Cooperation Type II is provided as below.

---

8) Kirkpartrick Model is developed by Donald Kirkpartrick in 1975, and it is broadly used for evaluating capacity development program

TA Type II	Stage	Measurement Items	Contents
Capacity Development of Counterpart Agency (Organization)	1st Stage (Reaction)	Satisfaction	<ul style="list-style-type: none"> <li>Measures the satisfaction level of participants on developed textbooks</li> <li>Measured by survey right after the completion of training/workshops</li> </ul>
	2nd Stage (Learning)	Knowledge	<ul style="list-style-type: none"> <li>Measures the extent to which participants improve knowledge, and increase skills as a result of attending the program</li> <li>Measured by test/checklists right after the completion of training/workshops</li> </ul>
	3rd Stage (Behavior)	Performance	<ul style="list-style-type: none"> <li>Measures the extent to which change in participants' utilization of knowledge/skills learned by attending the program</li> <li>Measured by interview with training/workshops participants after certain period from the completion of training/workshops</li> </ul>
	4th Stage Results	Impact	<ul style="list-style-type: none"> <li>Measures the final results that occurred because the participants attended the training program</li> <li>Measured by the before-after comparison</li> </ul>

Implications of matrix measuring results of Technical Cooperation Type II are summarized as below.

- To categorize technical cooperation types and develop a matrix applying Kirkpatrick model according to each type to measure results or outcomes of technical cooperation projects;
- To publish a manual to its end.

## **2. ADB**

### 2.1. Overview

ADB is trying to improve development result by strengthen a project selectivity aligning with the country partnership strategy and country sector program.

ADB places a key emphasis on capacity development in providing ODA projects to partner countries in recognition of the fact that capacity development is the most crucial factor to improve development results and produces the following papers:

- Capacity for Results Management: A Guide for Conducting a Rapid Assessment of the Capacity of Developing Member Countries to Manage for Results (2006)
- Integrating Capacity Development into Country Programs and Operations. Medium-Term Framework and Action Plan (2007)
- Special Evaluation Study on Effectiveness of ADB's Capacity Development Assistance: How to Get Institutions Right (2008)
- Practical Guide to Capacity Development in a Sector Context (2011)

### 2.2. Capacity, Capacity Development and Change<sup>9)</sup>

Practical Guide to Capacity Development in a Sector Context (2011) defines that "Capacity is the ability of people, organizations and society as a whole to manage their affairs successfully." This definition can be elaborated as follows:

- (1) Capacity is an attribute of people, individual organizations, and

---

9) ADB(2011). Practical Guide to Capacity Development in a Sector Context



groups of organizations. Capacity is not something external to these units - it is internal.

- (2) Thus, capacity development (CD) is a change process internal to organizations and people. CD, as also defined by the Development Assistance Committee of the Organization for Economic Co-operation and Development (OECD-DAC), is the "process whereby people, organizations, and society as a whole unleash, strengthen, create, adapt, and maintain capacity over time."
- (3) CD can entail changes in knowledge, skills, work processes, tools, systems, authority patterns, management style, and others.
  - Like learning, CD takes place in people or organizations and, like learning, it cannot be forced upon them.
  - People and organizations can have strong or weak incentives to change, develop, and learn coming from the environment or from internal factors.
  - Eventually, however, the change is an internal process that has to happen in people or organizations.
- (4) As a logical consequence, external partners cannot "do" CD for others.
  - Partners can support CD processes and they may choose to manage that support, but they cannot undertake the actual CD of others.
  - Therefore, (i) CD must be owned by those who develop their capacity—otherwise, it simply does not happen. (ii) External partners cannot design and implement CD. However, they can support CD processes or help create the right external incentives for CD processes.

And three essential ingredients comprising the pressure for capacity development are ① Dissatisfaction with the present situation, ② A

credible change process to bring the present situation to a future state, and ③ A shared vision of the future.

<Table 2-10> Ownership In Capacity Development

- Capacity development (CD) must be owned (wanted and managed) by those whose capacity is undergoing development.
- External partners, such as funding agencies, cannot drive or push CD to happen.
- This essential lesson also implies that partners must be leading and driving the assessment and formulation processes to achieve the desired level of CD.

### 2.3. The Four Dimensions Shaping Capacity Development

To design a framework, it is necessary to assess current state of CD. One would have to identify strengths and weaknesses in all four quadrants as below.

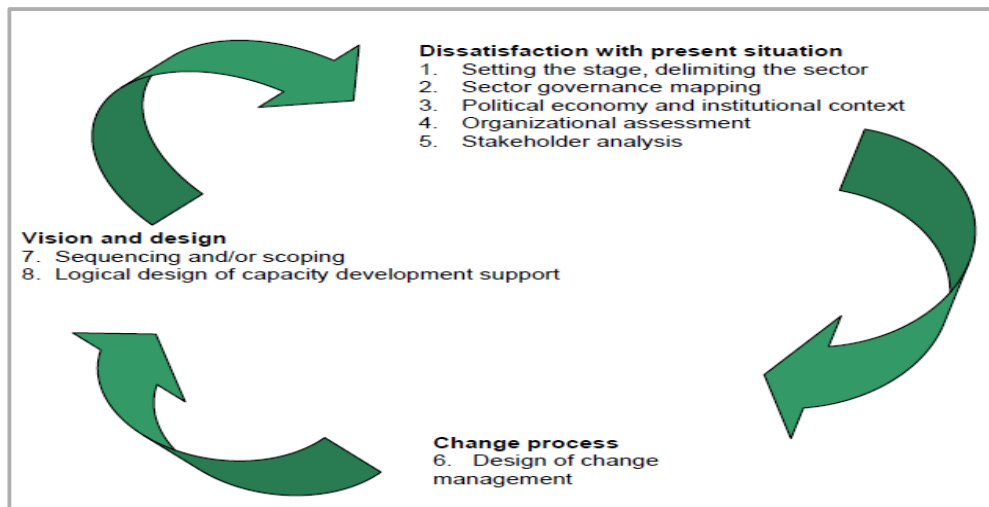
<Table 2-11> The Four Dimensions Shaping Capacity

	Functional Dimension	Political Dimension
Internal Dimension	<u>Internal, Functional Dimension:</u> Strategy, systems, structures, work process, internal relationship, and others	<u>Internal, Political Dimension:</u> Leadership, power distribution, material and non-material incentives, rewards and sanctions, possible vested interests, conflicts
External Dimension	<u>External, Functional Dimension:</u> Legal framework, timeliness and adequacy of resources, results-based performances targets, oversight bodies, formal accountability requirements	<u>External, Political Dimension:</u> Political governance, possible vested interests, pressure from clients and/or customers, competitors, media attention

## 2.4. Preconditions and Tools for Capacity development

Preconditions of change for SD are Dissatisfaction with the present situation, Change process and Vision and design. Preconditions can be utilized by eight tools. Relationship between preconditions and tools is as below.

<Figure 2-2> Preconditions of Change and Tools for Capacity Development



## 2.5. Capacity Development Design Process

Design process for CD is presented as follow.

<Table 2-12> Capacity Development Design Process

No.	Section Name	Function
A.	<b>Setting the Stage: Delimiting the Sector</b>	This tool is used for an initial mapping of the sector organizations that would be involved in a capacity development (CD) process. It helps avoid the inclusion of a too narrow—or too broad—set of organizations.
B.	<b>Sector Governance Mapping</b>	Sector performance and capacity depends critically on adequate governance, accountability, and transparency. This tool maps the existing governance arrangements.
C.	<b>Scanning the Institutional and Political Economy Context</b>	This tool supports an analysis of the context factors that will drive or constrain CD in a sector or an organization. It intends to provide inputs for the strategic-level decision making.
D.	<b>Assessing Organizational Capacity</b>	This tool helps check if critical assessment areas have been considered. Funding agencies and partners may often agree to assess organizational capacity. A guide for making the terms of reference for such an assessment is included in Appendix 1.
E.	<b>Stakeholder and Actor Analysis— Capacity Development Readiness</b>	The level of dissatisfaction with the present situation and the perception of costs involved in CD and change depends on the interests, the power, and the voice of different stakeholders and actors. This tool maps these interests and resources, and facilitates strategic decision making.
F.	<b>Management Design of Capacity Development Change</b>	For planning, this tool enables users to detail typical tasks and responsibilities in change processes. It is helpful at the operational level by prompting users to identify the people who will be in charge of the different aspects of CD processes.
G.	<b>Sequencing and Scoping of Capacity Development and Reform</b>	It is difficult to generalize about how best to sequence and scope CD processes, but a number of factors must be considered. These factors reflect the strategic scenario, which some of the previous tools have helped clarify. This sequencing and/or scoping tool brings all of this together.
H.	<b>Logical Design of Processes and Support to Capacity Development</b>	The well-known logical framework approach is adapted to the logic of output-oriented CD. This tool helps avoid the limited focus on inputs that has plagued many CD efforts. It also allows the operational formulation of specific CD processes and provides support to these processes.
<b>Appendix</b>		
<b>Terms of Reference for Capacity Assessment</b>		This section provides detailed guidelines in preparing the Terms of References for capacity assessments.

## 2.6. Implications

- To establish a clear definition of Capacity Development;
- To develop and utilize a comprehensive manual and practical tool for Capacity Development.

## 3. World Bank (WB)

### 3.1. Overview

World Bank also places a key emphasis on capacity development in recognition of the fact that capacity development is the most crucial factor to improve development results and produces the following papers:

- The Capacity Development Results Framework: A Strategic and Results-Oriented Approach to Learning for Capacity Development (2009)
- A Review of Capacity Development Results Measurement in World Bank Projects: The Need for a Systematic Approach (2011)

### 3.2. Major Concepts

#### (1) Capacity for Development

"Capacity for Development is the availability of resources and the efficiency and effectiveness with which societies deploy those resources to identify and pursue their development goals on a sustainable basis."

- Increasing the capacity for development, by extension, is a process of socio-political, policy-related, and organizational change.
- This process involves driven primarily by changes in how knowledge and

information are applied at various levels of a society.

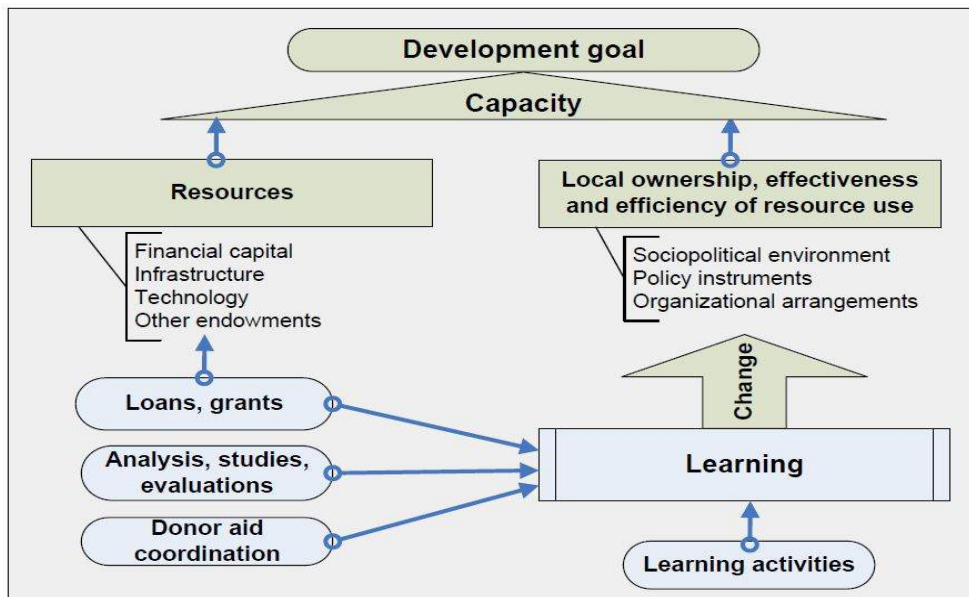
## (2) Capacity Development

“Capacity development is a locally driven process of learning by leaders, coalitions and other agents of change that brings about changes in socio-political, policy-related, and organizational factors to enhance local ownership for and the effectiveness and efficiency of efforts to achieve a development goal.”

## (3) Capacity Development as a Part of the Development Process

Capacity development efforts—whether stand-alone programs or embedded in other projects—are just a part of the larger process of development, as shown in <Figure 2-3>.

<Figure 2-3> Capacity Development as a Part of the Development Process

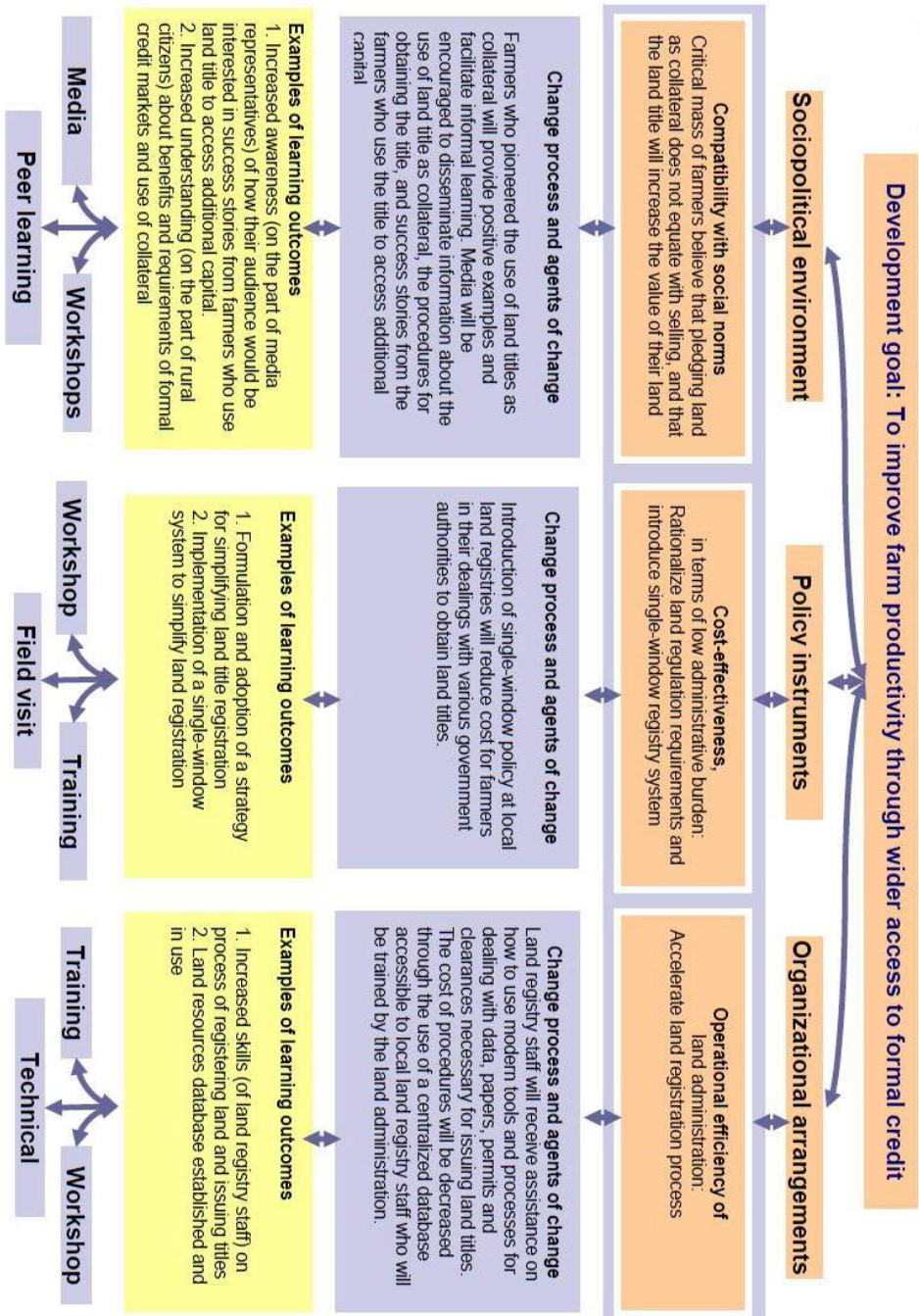


### 3.3. Logic Model for a Capacity Development Program

Achievement of the development goal requires changes in all three capacity factors including the socio-political environment, policy instruments, and organizational arrangements.

- These changes have to be carefully sequenced to insure that the outcome for each component of the program reinforce each other.

<Figure 2-4> Logic Model for a Capacity Development Program





### 3.4. Capacity Development Results Framework (CDRF) Cycle

Capacity Development Results Framework: CDRF comprises four essential stages: ① Identification and Needs Assessment, ② Program Design ③ Implementation and Monitoring, and ④ Completion and Assessment. Detailed information of each stage is presented below.

#### (1) Identification and Needs Assessment

- ① Specification of development goal
- ② Assessment of capacity factors relevant to project goal
- ③ Identification of measurable indicators for each factor are identified, along with changes in those indicators that can be facilitated by learning.

#### (2) Program Design

- ④ Determination of capacity factors that will bring about improvements, together with related indicators
- ⑤ Vision making on changes identified during program implementation
- ⑥ Establishing measurable indicators relevant to targeted learning outcomes
- ⑦ Designing Activities of the program

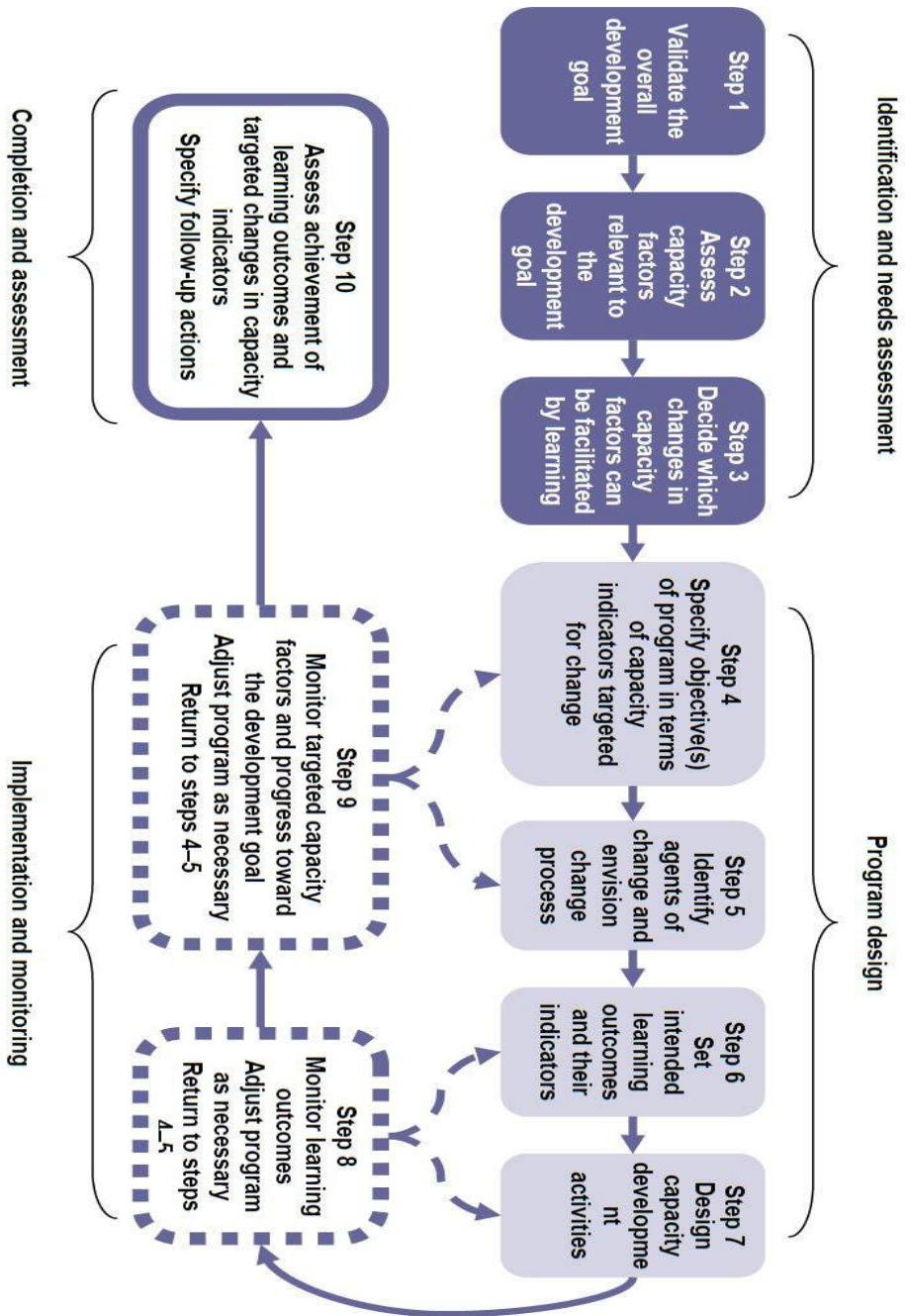
#### (3) Implementation and Monitoring

- ⑧ Monitoring the intended learning outcomes
- ⑨ Periodic review of capacity factors based on the capacity indicators defined in previous stages

#### (4) Completion and Assessment

- ⑩ Assessment of presented development goals to draw conclusions and specification of post-program management

<Figure 2-5> Capacity Development Results Framework (CDRF) Cycle



### 3.5. Implications

- To establish a clear definition of Capacity Development;
- To develop and utilize a comprehensive and practical framework as a tool for achieving capacity development.



## Section 4. Feasibility Study

### 1. Overview

A feasibility study belongs to the project formulation phase for project appraisal in a project cycle and its end-product is in the form of “Project Document.” Its main purpose is to consider all aspects of project including technical, financial, economic, institutional, cross-cutting ones and others and assess whether the project is relevant, viable and implementable.

PD comprises ① Feasibility Study to assess whether project is implementable, ② Design of project implementation plans ③ Logframe (PDM) for results management.

### 2. ADB

#### 2.1. Project Cycle

ADB project cycle comprises five steps that are similar to those of other aid agencies. The following steps must be followed: ① Formulation

of CPS or Regional Cooperation Strategy, ② Preparation, ③ Approval, ④ Implementation, ⑤ Completion and Evaluation.

<Figure 2-6> ADB Project Cycle



## 2.2. Preparation

Feasibility study is a part of preparation stage of project cycle. Preparation stage comprises the process presented below and each process proceeds in line with Operational Manual (Total 51 Operational Manuals are currently being utilized). Every document is publicized based upon the principle of “Communication Policy 2011: Disclosure and Exchange of Information.”

The preparation processes proceed as follows:

- ① Approval of Concept Paper
- ② Project Data Sheet (PDS), which is regularly reviewed and updated on ADB's website
- ③ Initial Poverty and Social Analysis
- ④ Safeguard Documents (Environmental, Involuntary resettlement, Indigenous people)
- ⑤ Final consultant's reports generated from project preparatory technical assistance projects

### 2.3. Approval

The approval processes proceed as follows:

- ① Report and Recommendation of the ADB President to the Board of Directors
- ② Technical Assistance Reports
- ③ Legal Agreement including Loan Agreement

## 2.4. Results Management and Consultant Management

According to the Operational Manual on Project Performance Management System, project results management comprises five components:

- Design and Monitoring Framework;
- TA Performance Report;
- TA Completions Report;
- TA Evaluation Report.

Consultant Management is implemented mainly by workshops and reports:

- Inception, Interim, Final Workshops and irregular meetings;
- Quarterly report, Inception report, Interim report, Final report, Evaluation report and etc.

## 2.5. Implications

- To encourage results management based upon “Design and Monitoring Framework (DMF)”;
- To efficiently facilitate project management by relevant operational manuals.

### 3. Other Development Agencies

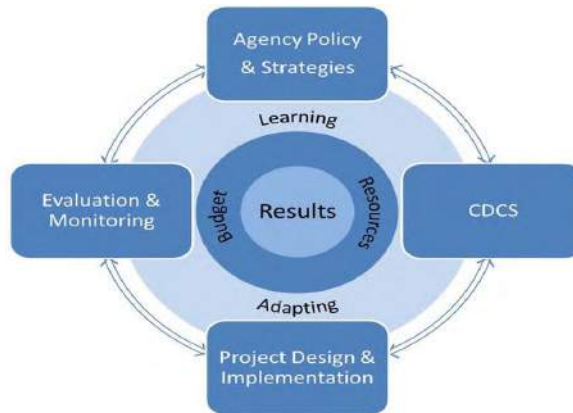
#### 3.1. World Bank (WB)

While the work procedures of the WB and ADB are similar to each other, the WB locates feasibility study in a responsibility of partner country and does not provide technical assistance in the form of ODA. WB generally provides advisory on capacity assessment.

#### 3.2. United State Agency for International Development (USAID)

Project (Program) cycle of USAID is broadly in line with those of other development agencies.

<Figure 2-7> USAID Program Cycle



Source: USAID(2011). Program Cycle Overview

USAID strategically strengthens the linkage with Country Development Cooperation Strategy (CDCS), USAID version of CPS, in selecting projects. USAID attaches an emphasis on project design in a wider context that enables problem solving. The final output of project Design is “Project

Appraisal Document (PAD)” whose major contents are as follows:

- Identification of core problems that are aimed to be achieved by the project;
- Description of technical approach to solving core problems;
- Clarifying targeted achievement such as inputs, output, project goals and development goals;
- Information for budget schedule, plans for implementation, monitoring and evaluation.

### 3.3. Australian Agency for International Development (AusAID)

AusAID also strategically strengthens the linkage with Country Partnership Strategy in selecting projects. Feasibility study is divided into Pre-feasibility study phase and Feasibility Study phase. Both phases are commissioned to external development consultants.

Project appraisal is required to be implemented based on field survey when project costs exceeds USD one million (small scale country) and five million (large scale country).

### 3.4. Economic Development Cooperation Fund (EDCF)

EDCF’s feasibility study procedure is implemented in accordance with “EDCF Project Feasibility Study Guidelines” established in 2007.

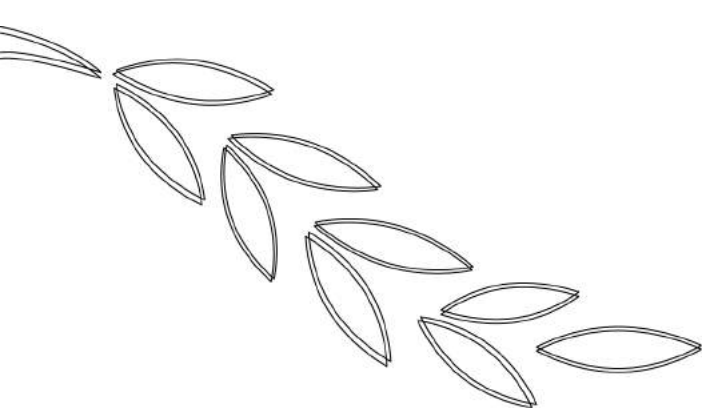
### 3.5. JICA

The procedure of JICA’s feasibility study is similar to that of Master Plan study and tries to strengthen the linkage between the project and CPS.



### 3.6. Implications

- To strengthen the linkage between the project and CPS;
- To establish Detailed Feasibility Study Guidelines;
- To conduct a full-scale feasibility study and appraisal based on field survey, as shown in the case of AusAID.



### III. Results-Based Management of Development Study Program

Section 1. Introduction

Section 2. Project Identification Stage

Section 3. Results-Based Management (RBM)  
Methods

Section 4. Performance Management Measure  
for Master Plan and the Basic  
Survey

Section 5. Results-Based Management of  
Feasibility Study

Section 6. Capacity Development





# III

## Results-Based Management of Development Study Program



### Section 1. Introduction

#### 1. Classification of Development Study Program

Development study Program, for the purpose of managing performance, is classified into the following three types.

- ① Master Plan, Basic Study
- ② Feasibility Study
- ③ Capacity Development
  - Stand-alone project for capacity development
  - Included in the type ① or ② as a component of project

#### 2. Strengthening Strategic Linkage with Upper Level plan

While planning and managing performance at the project level, development study program's strategic linkage with RBMs at the agency level (KOICA) and at the country program as well should be strengthened.

### **3. Integration of Project Identification, Formulation, Monitoring and Evaluation**

Since all stages of project are linked with each other in a project cycle, project identification, design, monitoring and evaluation should be integrated for effective RBM. Basic tool for RBM is Logframe (or PDM) or a modified version.

### **4. Strengthening the Role of Project Formulation**

Project formulation is often likened to making a blueprint for construction. Since construction and supervision is done based on the blueprint, regardless of thorough construction and supervision, it is difficult to expect good results if there is something wrong with the blueprint. Likewise, good performance can not be assured in spite of good implementation, if there is something wrong with project formulation.

Accordingly, major work of donor agency is concentrated on the project formulation. Distinguishing between pre-feasibility study and feasibility study, AusAID carries out both studies by contracting out to the outside consultants. The same is true of most development agencies. In this regard, it is desirable to attach an emphasis on the role of project formulation including feasibility study.

### **5. Active Utilization of Operational Manuals and Quality Standards**

Most donor agencies have actively developed and utilized detailed operational manuals and quality standards for effective and efficient RBM. KOICA needs to follow the suits.

## **6. Active Participatory Approach**

It is important to apply a participatory approach. The concept of "participatory" stems from criticism of the conventional method of development assistance, in which donors offer services and goods to recipients in a rather unilateral manner. The word "participatory," as used in the PCM method, refers to the way in which implementing agencies and beneficiaries in recipient countries, who should be the main actors in development projects, collaborate in decision making and implementation from the beginning of the planning by sharing the ideas of projects, human resources and materials with each other.



### **Section 2. Project Identification Stage**

#### **1. Checking Alignment of Target Project with CPS and Sectoral Results Framework**

##### **1.1. Revision of CPS Results Framework**

CPS shall include its own results framework. Reflecting updated information, material and discussion results, CPS results framework needs to be revised at the phase of project identification. To this end, CPS Results Framework format is presented below.

<Table 3-1> CPS Results Framework

1. Development Objective of Partner Country (Based on the Mid—Long Term Development Plan):	
①	
②	
2. KOICA Strategic Area of Support:	
3. Partner Country Area Objective:	
4. KOICA Outcomes and Indicators (Program Level):	
<Intended Outcomes>	<Indicators>
5. KOICA Support Type	
6. Budget Allocation or Plan	
①	
②	
③	

### 1.2. Checking Alignment of Target Project with Revised CPS Results Framework

In order to ascertain the project's alignment with CPS Results Framework, checking the following six items as shown in the table below is required.

<Table 3-2> Check List

Item	Checking Alignment	
1. Partner Country Development Objective (Based on Long term Development Objective)	<ul style="list-style-type: none"> <li>• Checking alignment with Development Objective proposed by the Partner Country's Development Plan, specify the concerned "Development Objective"                             <ul style="list-style-type: none"> <li>- Relevant Development Objective</li> </ul> </li> </ul>	
2. KOICA Strategic Area of Support	<ul style="list-style-type: none"> <li>• Checking alignment with KOICA Strategic Area of Support, specify the concerned "Strategic Area of Support"                             <ul style="list-style-type: none"> <li>- Concerned Strategic Area of Support</li> </ul> </li> </ul>	
3. Partner Country's Sectoral Performance Target	<ul style="list-style-type: none"> <li>• Checking alignment with Partner Country's Sectoral Performance Targets, specify the concerned "Performance Targets"                             <ul style="list-style-type: none"> <li>- Partner Country's Concerned Performance Target</li> </ul> </li> </ul>	
4. KOICA's Sectoral Performance Target and Indicators at the Program Level (Sector Result Framework)	<p>&lt;Performance Target&gt; Specify KOICA's Sectoral Performance Targets at the Program Level</p> <ul style="list-style-type: none"> <li>- Performance Target 1:</li> <li>- Performance Target 2:</li> </ul>	<p>&lt;Indicator&gt; Specify KOICA's Sectoral Performance Indicators at the Program Level</p> <ul style="list-style-type: none"> <li>- Indicator 1.1.</li> <li>- Indicator 1.2.</li> <li>- Indicator 2.1.</li> <li>- Indicator 2.2.</li> </ul>
5. KOICA Support Type	<ul style="list-style-type: none"> <li>• Relevant Support(Master Plan Study, Base Study, Feasibility Study, Basic and Implementing Design, etc.)                             <ul style="list-style-type: none"> <li>- Support Type</li> </ul> </li> </ul>	
6. Budget Allocation or Plan	<ul style="list-style-type: none"> <li>• Specify the Budget Size already Established or Proposed                             <ul style="list-style-type: none"> <li>- Budget Size</li> </ul> </li> </ul>	



### 1.3. Revision of the Sectoral Results Framework

Reflecting updated information, material and discussion results, Sectoral Results Framework needs to be revised at the phase of project identification. The following table is an example of sector results framework devised by the ADB.

<Table 3-3> Example of ADB's Sector Results Framework

Country Sector Outcomes		Country Sector Outputs		ADB Sector Operations	
Sector Outcomes with ADB Contribution	Outcome Indicators with Target and Baselines	Sector Outputs with ADB Contribution	Output Indicators with Incremental Targets	Planned and Ongoing ADB Interventions	Main Outputs Expected from ADB Interventions
Outcome 1		Output 1 Output 2 Output 3 ... Output n		1. Planned key activities 2. Pipeline projects with estimated amounts 3. Ongoing projects with approved amounts	1. Planned key activities 2. Pipeline projects 3. Ongoing projects
...					
Outcome n					

#### 1.4. Checking Alignment of Target Project with Revised Sector Results Framework

It is necessary to clarify whether or not the target project is aligned with a sector results framework.



### Section 3. Results-Based Management (RBM) Methods

#### 1. RBM Framework and Participatory Approach

##### 1.1. Development of RBM Framework

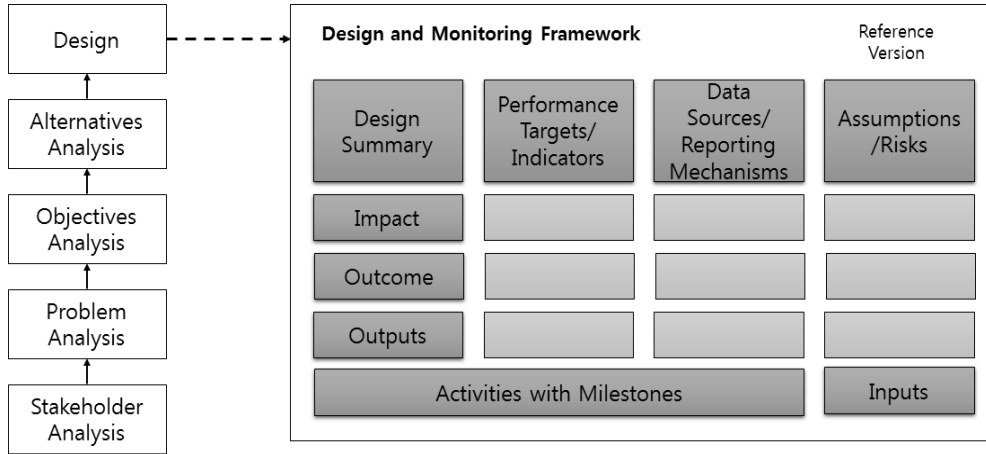
RBM framework at the project level is called Logframe or PDM (Project Design Matrix), and its general form is as follows.

<Table 3-4> Logframe (PDM) Form

Narrative Summary	Objectively Verifiable Indicators: OVI	Means of Verification: MOV	Important Assumptions
Goal			
Purpose			
Outputs			
Activities	Inputs		

A new form of framework, which is used for TA management, developed by the ADB in 2007, is as follows.

<Figure 3-1> Design and Monitoring Framework (DMF) Form



Given that there is no significant difference between the two frameworks in terms of basic structure and contents, a general Logframe (PDM) is used. Instead, reflecting the recent trends, "Goal" is replaced by "Impact" and "Purpose" is replaced by "Outcome" as shown in the table below.

<Table 3-5> Revised Logframe (PDM)

Narrative Summary	Objectively Verifiable Indicators: OVI	Means of Verification: MOV	Important Assumptions
Impact			
Outcome			
Outputs			
Activities	Inputs		

Revised Logframe (PDM) is used for RBM of Development Study Program and Capacity Development.

## 1.2. Participatory Approach

It is necessary to have a consensus among key stakeholders of a project regarding various issues of the project in order to achieve its objectives successfully. To this end, a participatory approach, which is implemented usually by organizing several workshops, is applied.

In a workshop, representatives of both donor and recipient organizations collaborate to formulate a plan by sharing their wisdom. In other words, the workshop promotes discussion among participants at the planning stage so as to create the best possible plan, compared to the situation where just one person in a donor organization works on the plan alone. Such brainstorming and decision making sessions are called "workshops."

The workshop proceeds under the guidance of a moderator who is an expert on the PCM method. Maintaining a strictly neutral stance, the moderator facilitates discussion and helps organize ideas. It is the participants who plan the object, so the moderator will not state his/her opinion during the discussion.





In a workshop, participants visualize their opinions by writing them down on cards and attaching them to a board. Planning is performed through the cooperation of all the participants. To ensure the smooth discussion, participants are required to follow the rules shown below. In addition, discussions and analysis must be conducted in such a way as to encourage participants to express their opinions freely, because decisions should be made by an informed consensus, not simply by majority vote. Eight major principles of card use are as shown below.

### <Eight Rules of Card Use>

- (1) Write your own statement on a card by yourself
- (2) Write only one idea on a card
- (3) Make your statement specific
- (4) Express your statement in a concise sentence
- (5) Stick to the facts and avoid abstractions and generalizations
- (6) All cards must be written before beginning the discussion
- (7) Do not remove a card from the board before a consensus is reached
- (8) Do not ask who wrote which card

If discussion goes round and round on a single subject without any progress in a workshop, participants are encouraged to sort out their opinions by writing them down on cards. When necessary, "traffic sign" cards shown below may also be useful to push the discussion forward.

### <Traffic Signal>

-  : Debate is necessary later.
-  : Information is required.
-  : Opinion is in confrontation.
-  : No need further discussion.
- Consensus among the participants is necessary if the card is taken off from the Board

## 2. Analysis Process

### 2.1. Overview

Formulation of PDM (Project Design Matrix) is composed of “Analysis Phase and “Drawing up Phase.” Analysis phase includes the following four steps: ① Stakeholder Analysis, ② Problem Analysis, ③ Objective Analysis, and ④ Alternative Analysis.

① Stakeholder Analysis and ② Problem Analysis done at the initial stage of the work is a situational analysis to figure out “what are the problems?”

In the objective analysis after the situational analysis, “desirable future situation which is the objective” is the focus of discussion. The discussion includes the following topics:

- What is the vision of the future? (Impact)
- What would we like to get to in the next 5-10 years? (Outcome)
- What are the main things that need to be delivered by the project to achieve the outcome? (Outputs)
- What needs to be done to deliver the outputs in terms of inputs and activities? (Inputs and Activities)

Keeping in mind the availability of technical and financial resources, alternative analysis mainly discusses the feasibility of the plan and reviews the optimal strategy to achieve the objective. The results of such an analysis turn out to be a project in a PDM.

## 2.2. Step 1: Stakeholder Analysis

### 2.2.1. Overview

Development Plan of a developing country reflects the priorities of development areas in the country, and a development project, as part of the Development Plan, is supposed to meet the expectations of partner country and its beneficiaries.

Although people live and work in the same organization and community, their interests and internal issues are different based on the organization, society and strata. Even though people belongs to the same group, we can not say that men and women have the same issues. There could be several groups of people who have different interests and some groups may oppose the development in the same society.

Analyzing the stakeholders by groups at the initial stage of the project, stakeholder analysis designates target groups and prepares necessary response measures by the groups.

### 2.2.2. Analysis Process

- 1) Record all stakeholders representing each group on the card.
- 2) Classify all stakeholders into groups by nature and write down the name of each group on cards.

<Group Example 1>

<Group Example 2>

- Participations
- Non-Participations
- Supporting Institutions
- Opposing Institutions

- Beneficiaries
- Affected Groups
- Decision Makers
- Funding Agents
- Implementing Agents
- Community Leaders
- Potential Opponents, etc.

3) Analyze the characteristics of each group based on the following form.

Sample form to analyze the characteristics of each group is presented in <Table 3-6> below.

<Table 3-6> Recording Form of Stakeholder Analysis by Each Group

Stakeholder Name	xxxxxxx
Characteristics	<ul style="list-style-type: none"> <li>• Nature (national, public, local gov't affiliated or private)</li> <li>• Structure and personnel</li> <li>• Urban or countryside</li> <li>• Related area (including religious or charity org., etc.)</li> <li>• Interests and influence of the project</li> </ul>
Interests	<ul style="list-style-type: none"> <li>• Describing the confirmed interests of each group, it is necessary to pay attention on the vested rights and potential interests for confirmation.</li> </ul>
Required Resources	<ul style="list-style-type: none"> <li>• Things necessary for each group to effectively participate the project                             <ul style="list-style-type: none"> <li>- Wish for joining the project planning</li> <li>- Wish for financial or material support</li> <li>- Wish for getting information regarding project and its progress direction, etc.</li> </ul> </li> </ul>
Available Resources	<ul style="list-style-type: none"> <li>• Things that can be contributed to the project by each group</li> <li>• Examples of contribution                             <ul style="list-style-type: none"> <li>- Financial resources</li> <li>- Material resources : material, facility, equipment, etc.</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>- Structure and network</li> <li>- Human resources : personnel, technology</li> <li>- Related material and information</li> <li>• Describing all the available contents in detail <ul style="list-style-type: none"> <li>- Water contamination information</li> <li>- Information regarding the organization of target village</li> <li>- Provision of meeting places, etc.</li> </ul> </li> </ul>
Measures to be taken	<ul style="list-style-type: none"> <li>• Describing the measures to be taken for each group <ul style="list-style-type: none"> <li>- For example, <ul style="list-style-type: none"> <li>(i) To include the target group in the project planning</li> <li>(ii) To provide orientation and information regarding the project</li> </ul> </li> </ul> </li> </ul> <p>※ Note : “Measures” should be reflected appropriately when drafting the action plan.</p>

#### 4) Stakeholder Analysis<sup>10)</sup>

Stakeholder analysis is composed of four components: ① Importance and Impact Analysis, ② Cooperative Relationship Analysis, ③ Readiness and Power analysis, ④ Supportive/Antagonistic/Constructive/Destructive Relationship Analysis.

##### ① Importance and Impact Analysis

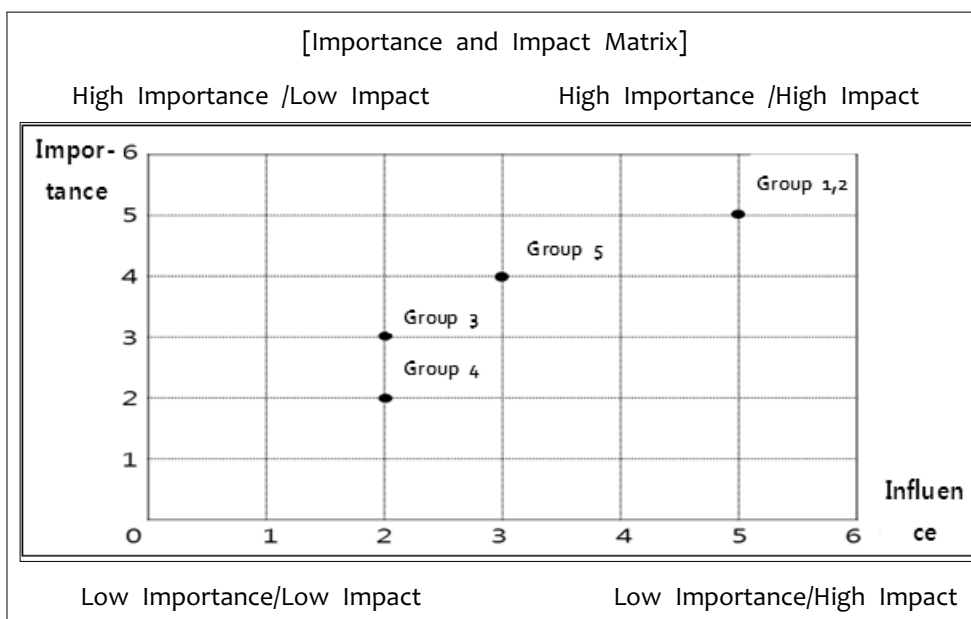
The following is a sample form of stakeholder analysis and its visual expression with a matrix format based on their importance and influence.

<Table 3-7> Importance and Impact by the Stakeholders

[Importance and Impact]: 1 (Low) → 5 (High)			
Stakeholder	Group	Importance	Influence
Group 1	1	5	5
Group 2	2	5	5
Group 3	3	3	2
Group 4	4	2	2
Group 5	5	4	3

10) Types of stakeholder analysis (①-④) are referred to “DFID(2003). Tools for Development: A Handbook for those engaged in development activity. pp.2.3-2.11.”

<Figure 3-2> Importance and Impact Matrix



② Cooperative Relationship Analysis

The result of stakeholder analysis based on the cooperative relationship analysis is shown below with a matrix format.

<Table 3-8> Cooperative Relationship Matrix

Action Stage	Inform	Consult	Partnership	Control
Identification		Rural poor		Gov't Agency
Planning		Rural poor		Gov't Agency
Implementation			Rural Poor Gov't agency	
Monitoring & Evaluation			Rural Poor Gov't agency	

③ Readiness and Power Analysis

A sample of the readiness and power matrix as a result of stakeholder analysis is as follows.

<Table 3-9> Readiness and Power Analysis Matrix

Stakeholders	Readiness			Power		
	High	Medium	Low	High	Medium	Low
1.		○	×	×		
2.	×			○	×	
3.	×					×
4.			×		×	○
etc.						

④ Supportive/Antagonistic/Constructive/Destructive Relationship Analysis

Stakeholders' role is analyzed as four distinctive categories: ① Supportive, ② Antagonistic, ③ Constructive, and ④ Destructive. A sample of the result is as follows.

<Table 3-10> Supportive/Antagonistic/Constructive/Destructive Relationship Matrix

Stakeholders	(+ ) Constructive / Supportive		Destructive / Antagonistic(-)		
	1.	2			
2.			4		
3.				5	
4.					6
5		3			
etc.					

### 5) Reviewing the Group Priorities of the Project

A priority of a project changes depending on the social, political, economic, cultural, and religious positions and background of each group.

Then, it is necessary to clarify the relationships of interests, antagonistic or dependent ones, and social dynamics among groups. It also is important to review the women's role paying attention to the sexual differences (different role of man and woman).

### 6) Deciding the Target Group after Selecting Important Groups

Target group, as a direct subject group, is selected in general among the "beneficiary groups" and the multiple number of target groups can be chosen.

Target group is selected in the process of reviewing the priorities of group interests and concerns.

Clarifying "what is problem" in the process of target group selection, core problem can be chosen in the next stage of problem analysis.

※ If no consensus can be achieved, then decide temporarily on one without selecting the final one at current stage and return at a later stage to discuss the other options.

### 7) Readiness and Demand Analysis of Target Group

There are eight key questions for the readiness analysis of a target group as shown in the table below.

### <Table 3-11> Readiness Analysis

<8 key questions>

1. What are the internal factors of organizational reform drive?
2. Who is the advocate of organizational reform?
3. What is motivating the champion to support the drive?
4. Who will benefit from the reform and has ownership mind?
5. How will the reform support efficient resource allocation and the goal achievement?
6. What are the effective countermeasures to negative elements in the wake of reform?
7. Where does capacity exist to support reform?
8. How will the reform outcome link national development goals, sector, program, and project?

There are also eight elements of demand analysis which contains some key questions as shown in the following table.

### <Table 3-12> Demand Analysis

1. Ownership
  - What are the formal and informal positions of the persons concerned regarding the development project?
  - What are the concerns and demands of the project and are they fulfilled?
  - What are the roles of the persons concerned for the achievement of the project?
  - The extent of internal awareness sharing, preparation of concrete strategy and plan for goal achievement, etc.
2. Policy and Institutional Environment
  - What are the priorities of the government in terms of the development project goal achievement?
  - What are the policy, institutional, and financial supports for achieving the goal?
  - What is the status of the policy related with the project and the possibility of its improvement?
  - Are there any possibility of change of authority such as the establishment of law and authority, privatization and decentralization, etc.?
3. Incentives
  - What are the incentives for the persons concerned and who are the main beneficiaries?
4. Leadership
  - Who are the advocates of change and What are their institutional, economic, and technical positions?
  - What are the incentives for the advocates?

- What is the extent of influence of the advocates and the possibility of smooth communication with the persons concerned?
- What is the impression of the advocates' leadership by the persons concerned?

#### 5. Knowledge and Technological Power

- Do the persons concerned have necessary knowledge and technological power for the implementation of the project?
- If not, in what way can we complement insufficiency and transfer technology?
- Are persons with necessary knowledge and technology assigned properly? Is there any possibility of filling the vacancy?

#### 6. Financial Power

- What is the main financial resources?
- What is the change of financial standing in the past 3 years and the cause behind it?
- Is the financial management system well established and its capability enough? If not, then is the capacity building possible by the project?
- What are the budget size and the execution status of the development project? What are the budget trend and its prospect?

#### 7. Demand

- Is demand for the development project high?
- Is the system established to be able to reflect the stakeholders' positions?

#### 8. External Factors

- If other donor agency supports similar project, what are the contents, purpose, size, progress, and impact of it?
- Is there any other projects to be linked with the project? If linked, what kinds and size are desirable? Are there any necessary measures for it such as incentive, budget, and institutional improvement, etc.?

## 8) Analysis of Target Group in Detail

Target group is further analyzed in detail with the four components as shown in the table below: ① Major characteristics and problems, ② Measures of improvement, ③ Expected effects, and ④ Tools of cooperation.

<Table 3-13> Detailed Analysis Form of Target Group

Major Problems	Measures of Improvement	Expected Effects	Tools of Cooperation

A example case of a city in one Latin American country for participant analysis is given below.

<Case>

L City in Latin American  
Country A Case

- L City, the capital of Latin American Country A, has one public bus corporation, which owns 90% of the buses in the city, and 3 small private bus companies. Over the past 10 years, since the number of accidents caused by buses increased rapidly, more and more people distrust the buses. In addition, due to an increase in casualties recently, lack of trust is growing.
- The media often covers problems with the bus these days, and have been critical of the accident-prone public bus corporation. As a result, citizens have turned to private bus companies that provide relatively safer services and the operations of the public bus corporation have further deteriorated.
- One of the major causes of the public bus corporation’s accidents is the technical problems and its main contents is as follows:
  - The buses are old and in poor condition
  - Lack of regular maintenance and shortages of spare parts and equipments for repairs
- Accidents are also caused by the bus drivers’ failure to comply with traffic laws. They drive excessive speed on poorly maintained roads and disregard traffic signals.
- The public bus corporation, via A’s Ministry of Transportation, has requested the cooperation of the government in improving the public bus corporation’s services.

The result of participant analysis from the case above is as in the following figure.

<Figure 3-3> Participant Analysis

Beneficiaries	Potential opponents	Implementing agencies	Decision-makers	Funding agencies
Public bus corporation	Private bus companies	Public bus corporation	Ministry of Transport	Government of Country A
Bus drivers of the public bus corporation	...	...	L city	Japanese government
Mechanics of the public bus corporation			...	Public bus corporation?
Passengers				...

The result of detailed analysis of a target group is as follows.

<Figure 3-4> Detailed Analysis of Target Group

Detailed Analysis				
Public bus corporation				
Basic information	Problems / Weaknesses		Strength / Potentials	Actions to take
It employs 1,550 people	Accidents occur frequently	Key figures are from the Ministry of Transport	It can be cheap, fast, and safe transportation for citizens of L City.	Improve quality of bus drivers
Annual budget? <b>INFO</b>	Poorly Skilled Bus drivers	Middle-level employees are not being trained	It can expand bus routes.	Repair or replace buses
Organizational structure? <b>INFO</b>	Inability to manage operations	Budget from the city is decreasing	It can be a model for other big cities.	Establish employee training program
It owns 90% of buses in L City	Insufficient maintenance budget	No maintenance facility	...	Advertise activities of Public bus corporation

## 2.3. Step 2 : Problem Analysis

### 2.3.1. Overview

Problem analysis, based on the available information, is a visualizing work arranging the logical hierarchy of the causal relationships of the existing problems in the target area and the sector through the Problem Tree.



### 2.3.2. Analysis Process

#### 1) Turn In A Separate Card for Each Problem

Workshop participants write down a core problem which is considered as the central point of the existing problems in the aid target area or sector, and turn in each card.

#### 2) Select One Core Problem

The participants should discuss each proposal and select one core problem which is agreed out of the proposed problems.

The core problem is not necessarily the most important problem. It is a starting point when making a problem tree.

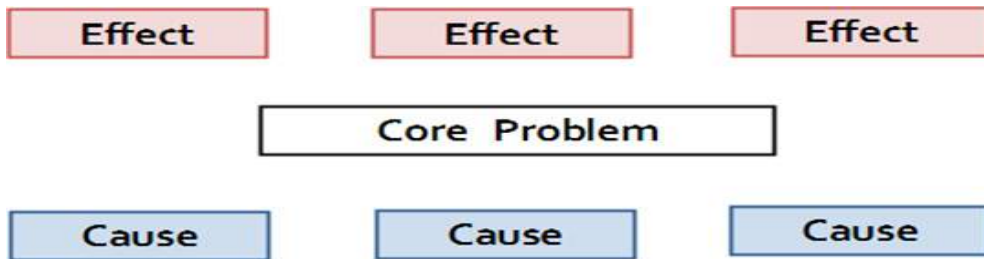
#### 3) Suggested Problems are Arranged by Immediate and Direct Causal Relationship

If agreement on the core problem cannot be reached among the participants, arrange the proposed each problem by cause and effect relationship. Then, focal problem appears naturally as the mutual relationship becomes clear among the problems.

- Identify immediate and direct causes of the core problem under the core problem.
- Identify immediate and direct effects of the core problem above the core problem.
- The immediate and direct causes and effects of the core problem are placed in parallel.

An example of immediate and direct causes and effects surrounding the core problem is shown below.

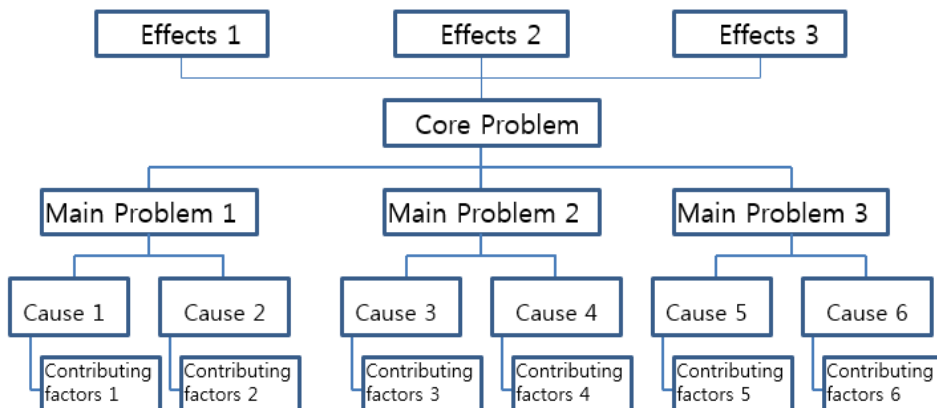
<Example>



#### 4) Develop the Problem Tree from One Dimension to Multi-dimension

Having the causes in the previous one dimension analysis as “main problems,” identify the causes of the main problems in multi- dimension analysis. An example of multi dimensional problem tree is as follows (Contributing factors → Cause → Main Problem → Core Problem → Effects).

<Example>



## 5) Review

Once the problem tree is complete, review ① the expression style of the cards which identified problems, ② the validity of causal relationships, and ③ completeness of the problem tree whether it covers the whole problem.

Since it is not easy to figure out causal relationships clearly at the initial stage of Mini-Workshop due to lack of information, and etc., all the lacking information will be supplemented during the on-site study.

### 2.3.3. Tips for Writing Down the Card

It is essential to identify existing problems, instead of imagined or theoretical ones. It is to put down one problem on each card. A problem should be expressed as a negative sentence.

The expression of “something is not there” should be avoided as much as possible and should rather be phrased as “something happens (or has happened.)”

<Example>      O      : Crops are infested with pests.  
                     X      : No pesticides are available.

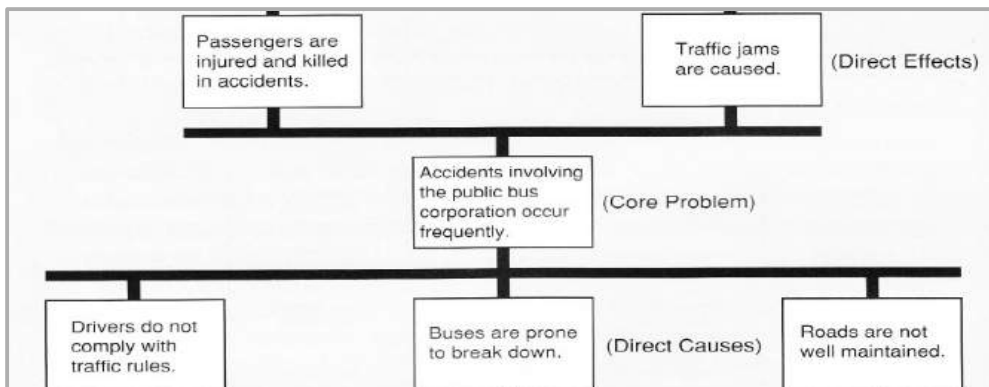
- If a problem is identified as the wrong example mentioned above, “No pesticides are available,” then the only available solution can be “To purchase pesticides.” instead of searching for various alternatives.

It is necessary not to write down both cause and effect on the same card at the same time as shown in the following example.

- <Example>
- O : Skill is insufficient.
  - X : Maintenance of the bus is in poor condition due to lack of skill.

A case of brief problem tree reflecting the direct causes and effects is as follows.

<Figure 3-5> A Case of Problem Tree



## 2.4. Step 3 : Objectives Analysis

### 2.4.1. Overview

The base of project identification is ready with the completion of the problem analysis.

In the objective analysis stage, solutions are sought for the problems identified at the problem analysis stage.

Reformulate the development problem at the problem tree into a positive expression (a style of objective) and analyze the means-end relationship.

## 2.4.2. Analysis Process

### 1) Reformulate the Problem Identified on the Problem Tree into A Style of Objective

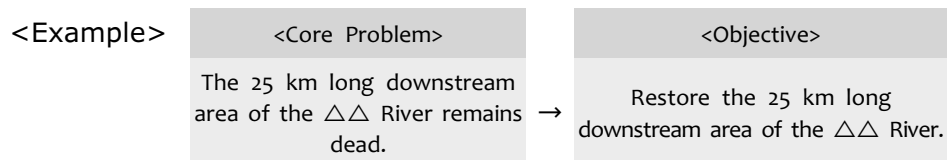
A problem which an expression of negative situation turns into an objective of project which is an expression of future solutions for the problem.



The core problem needs to be converted into an objective as shown in the following example.

- Core problem also needs to be changed to the style of objective like other problems.
- Objective statement should be clearly described not to have any further problems.

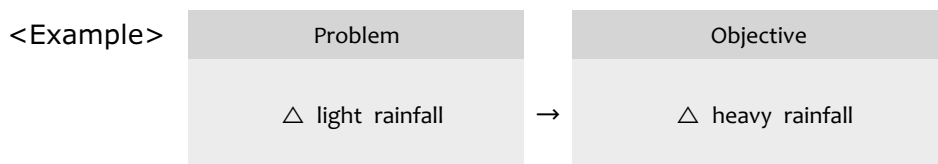
<Example>      O    : Crops are infested with pests.  
                       X    : No pesticides are available.



## 2) Notice When Converting A Problem Into An Objective

If a problem can not be converted into a positive expression, it is necessary to go back to the problem tree and to think over what problem was trying to be articulated.

And it also is necessary to review the objective when it is neither logical nor realistically achievable.



- The objective mentioned in the example above is unrealistic because It is impossible in this case to increase the rainfall through a project.
- Then, it needs to be changed to a more realistic approach such as:
  - ① Improvement of irrigation facility
  - ② Introduction of crops which do not need heavy rainfall

If an objective can not be made up for a given problem, copy the problem on the problem tree as it is, and put separate indication ( \* ).

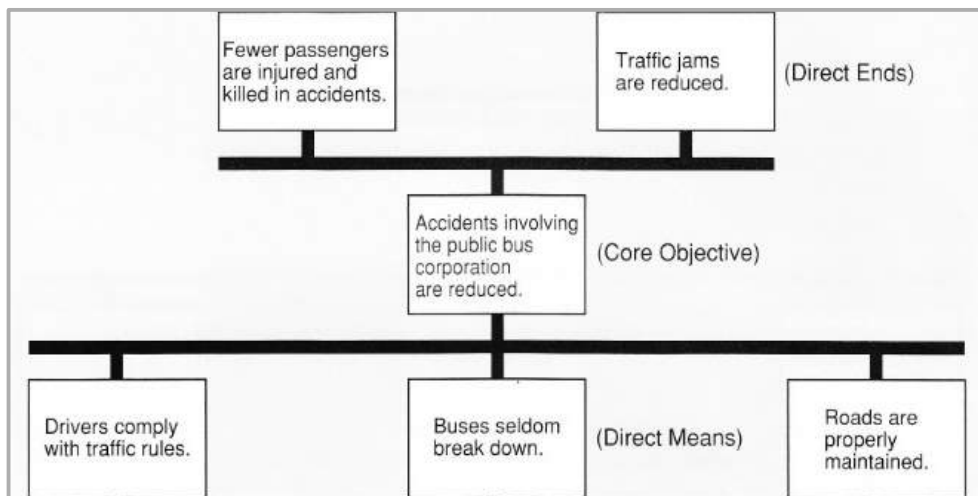
## 3) "Cause and Effect" Relationship Should be "Means and End" relationship

<Example> Problem Tree: <Cause A> brings <Effect B>

Objective Tree: <Means A> is necessary to achieve <End B>

A case of objective tree reflecting direct means and ends is shown below.

<Figure 3-6> A Case of Objective Tree



## 2.5. Step 4 : Alternative Analysis

### 2.5.1. Overview

The alternative Analysis, based on the information gathered from the objective analysis, identifies the alternative projects, assesses the feasibility of each, and selects the specific and the most appropriate target projects.

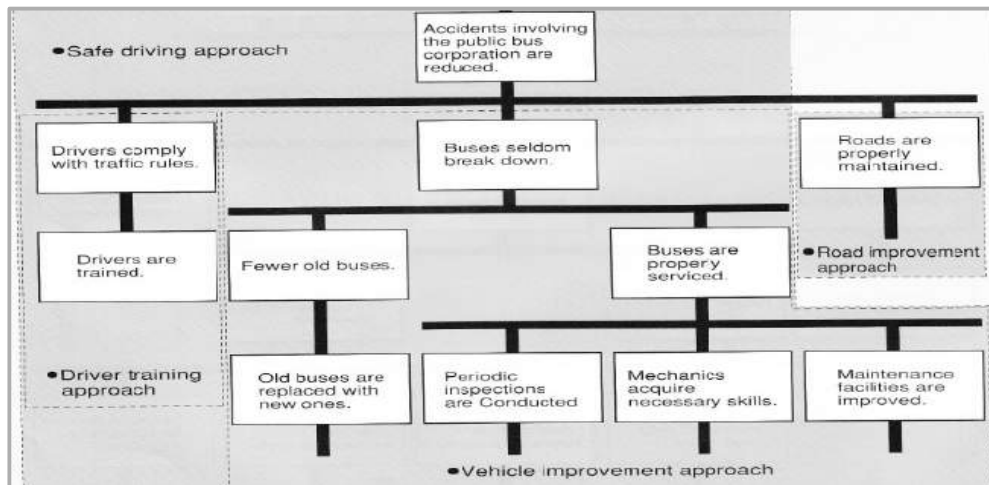
### 2.5.2. Analysis Process

- 1) Classify the groups of close means-end relationships in the Objective Tree

Such a similar means-end group becomes a project for each alternative.

An example of means-end groupings as an alternative analysis approach reflecting different approaches is shown in the following tree format.

<Example>



## 2) Assignment of name and number for each alternative

As a part of analysis process, it is quite effective to put numbers and names for all the alternatives for later distinction as presented in the following example.

<Example>

- Driver Training Project : Alternative 1
- Automobile Improvement Project : Alternative 2
- Road Improvement Project : Alternative 3
- Alternative 1 + Alternative 2 : Alternative 4



### 3) Criteria of Project Selection

There are some criteria for selecting projects such as time period, available resources, feasibility, technical validity, sustainability, and impact on the lower class, etc.

Alternative analysis matrix reflecting the various criteria is shown below.

<Table 3-14> Alternative Analysis Matrix

Alternative	Period	Available Resources			Feasibility	Technical Validity		Sustainability	Impact on the Lower Class	
		Finance	Facility	Personnel		Donor Country	Recipient Institution		Economy	Society
Alternative1	Yes	Yes	?	No	Yes	Yes	?	Yes	Yes	Yes
Alternative2	?	Yes	?	?	?	Yes	?	Yes	?	Yes
Alternative3	?	No	?	?	No	No	No	?	?	?
.										
.										

Code : Yes = Achievable, No = Not Achievable, ? = Not Clear/Need more information,  
 \* = May be a potential assumption in the PDM

#### Items for additional consideration:

- Development or policy priorities of the partner country
- Special circumstances of partner country
- Support experience in the past
- Available human resources
- Support of other donor country
- Cost benefit Analysis
- Environmental factors, etc.

#### 4) Project Selection Method

- To exclude the unrealistic objective or the alternatives which are already implemented by other project;
- To review the feasibility of the project in terms of finance, technology, and time;
- To review the impact of the project and the components of the project on the target group and its society, culture, and tradition, etc.

The final decision of the project should be based on a consensus of the workshop participants

#### 5) Review of the Alternatives

It is necessary to review other alternatives even though there is no need to think of other alternatives because of the peculiarity of the alternatives or no other choice due to political involvement.

It is useful to prepare alternatives when the action plan needs to be changed at the stage of implementation.

### 3. Tips for Making PDM

#### 3.1. Overview

Project Design is a task conceptualizing major contents of the project based on the selected project.

The task results are summarized in the Project Design Matrix (PDM). The following table shows the major factors of PDM.

<Table 3-15> Major Factors of PDM

- What is the long term vision for the future? → Impact
- What is the outcome expected to accomplish in 5-10 years? → Outcome
- What was to be provided through the project to achieve the outcome? → output
- What kind of input and activity is necessary? → Input and Activity
- How to evaluate the project? → Indicators, Means of verification
- What important assumptions are necessary for success? → Important assumptions

Reflecting the major factors of PDM, the form below suggests the contents to be filled in the corresponding form.

<Table 3-16> PDM Form

Narrative Summary	Objectively Verifiable Indicators: OVI	Means of Verification: MOV	Important Assumptions
<p><b><u>Impact</u></b> Broad and higher level Goal to which the project contributes (Example: State, Local or Sectoral Development)</p>	Impact attainment indicators	Relevant material collection and measurement methods	Important Assumptions
<p><b><u>Outcome</u></b> Primary and major reason of the project</p>	Final results of the project	Relevant material collection and measurement methods	Important Assumptions
<p><b><u>Outputs</u></b> Directly measurable results related with the project</p>	Size of the product	Relevant material collection and measurement methods	Important Assumptions
<p><b><u>Activities</u></b> various activities to produce outputs</p>	<b><u>Inputs</u></b>		

## Vertical Logic

### 3.2. Project Narrative Summary

Narrative summary of a project has four components of impact, outcome, output, and inputs/activities as presented in the following figure.

#### 3.2.1. Overview

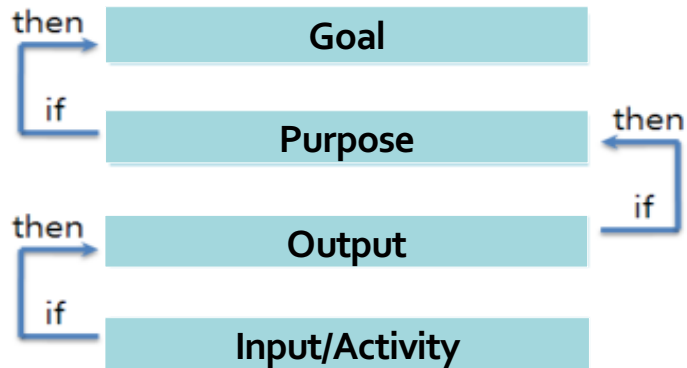
	Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
IP				
OC				
OP				
I/A				

Vertical logic applies to the narrative summary in the PDM.

- It has hierarchy of project objectives: ① Impact → ② Outcome → ③ Output ④ Inputs/Activities.
- Vertical logic is based on the means-end or cause-effects relationship and it can be expressed “If -- then” phrase.

Such vertical logic with hierarchy and means-end or cause-effects is presented in the following figure.

<Figure 3-7> Vertical Logic and Causal Relationship



### 3.2.2. Writing Guide for Narrative Summary

There are some guidelines to follow when writing narrative summary as in the box below.

Guidelines
<ul style="list-style-type: none"> <li>“Narrative Summary” should be clear and succinct reflecting the project.</li> <li>Do not confuse the project of donor country with the project of recipient country.</li> <li>Do not mix Means with End.</li> <li>Each step has to have necessary and sufficient conditions to achieve the goal of the next step.</li> </ul>

#### 1) Impact

	N.S.	O.V.I.	M.V.	I.A.
IP	•			
OC				
OP				
I/A				

The most frequent mistakes in PDM is the confusion of Impact and Outcome.

- Impact is also called as goal or long-term objective, and it does not belong to the project itself, but it means more higher level of program or sectoral object it can partially contribute to.
- Impact also means lower level of goal in a sector or a higher level of national objective.
- Outcome is one of many components which is necessary to achieve the impact.

Impact of a project in general has connection with the outcome of the CPS.

It is necessary to pay attention to the following elements when describing the impact:

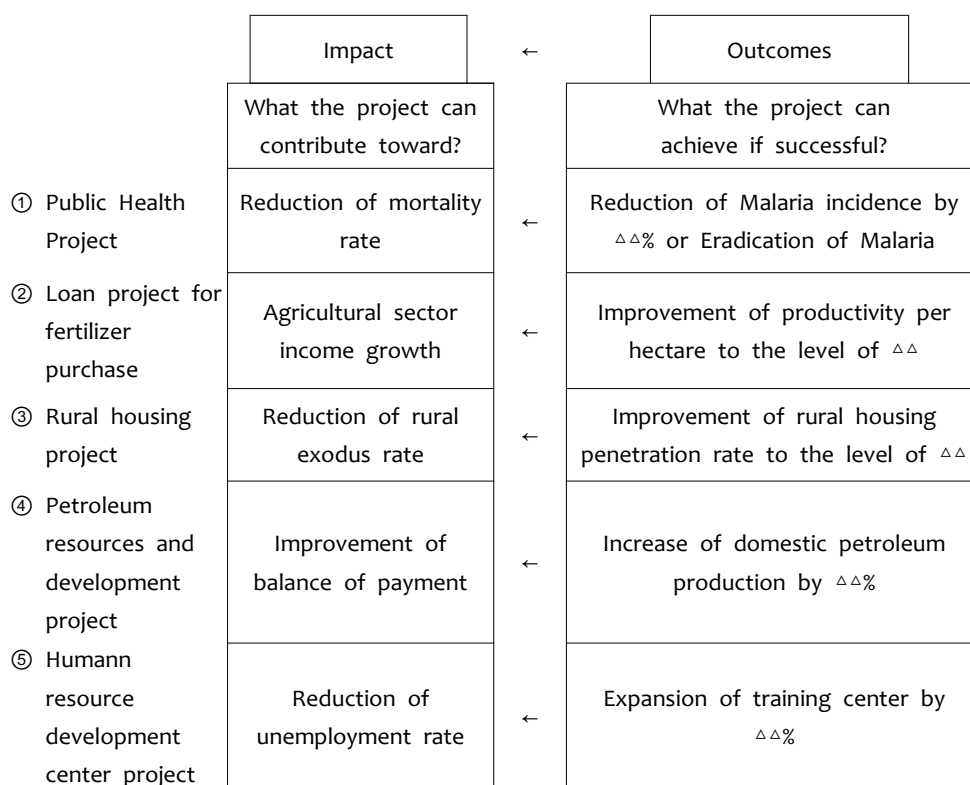
- The impact and outcome relationship is the same as that of ends and means.
- The expected results need to be described without the expression of the active style.
- Do not summarize the logic of the project by using connecting words such as “through” or “by” or “for”, etc.
- It needs to be measurable.
- Poverty reduction could not be an “impact” of a project level because there are many steps between a project and the ultimate goal of poverty reduction.

Here are some examples of impact:

- Incomes of a given population increased
- Income distribution improved
- Increase employment increased
- Health conditions improved
- The rate of rural to urban migration reduced
- Balance of payments improved

Relationship between impact and outcomes is shown in the figure below.

<Figure 3-8> Relationship Between Impact and Outcomes



## 2) Outcome

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC	•			
OP				
I/A				



“Outcome” statement is in fact a starting point for the preparation of the PDM.

- It describes with development terminology and phrases what the project intends to accomplish by the end of project implementation.
- In general, one outcome per one project is desirable.
- More than one outcome per project means there are several sub-projects and components under a project.

Following notices should be paid attention when describing outcomes.

- It should be clear and succinct.
- Not to repeat the expressions used in the impact or outputs and the synonym.
- The passive expression is included, which shows changes such as improved healthcare services, increased immunization rate, improved accessibility, etc.
- It should be quantifiable in terms of quantity, quality, and time frame.
- Such quantified ones should be expressed on the O.V.I column.

### 3) Outputs

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP	•			
I/A				

Outputs are the physical and/or tangible goods and/or services delivered by the input and/or activity of the project. These outputs must be realized to achieve the outcome.

In general, outputs are set as the plural and are selected from the cards of major goals in the objective tree. A new output item can be

added corresponding to the project activity.

Following notices should be paid attention when describing outputs.

- Include only outputs that can be delivered by the project directly.
- Do not use the active form.
- For complex projects, describe the usual work for project management such as planning, monitoring, evaluation, purchase, and report, etc.

Examples of outputs for capacity-building projects include:

- Government policy on capacity development approved
- Capacity development plans finalized
- Agency leadership in place
- Agency staff skills upgraded

#### 4) Activities

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP				
I/A	•			

Activities are the groups of tasks necessary to produce the desired outputs for the project.

- To describe concretely the contents of the major activities necessary to produce the outputs using the inputs
- To describe the transformation process which turns inputs into outputs in the active form

Each activity should be expressed corresponding to the outputs.

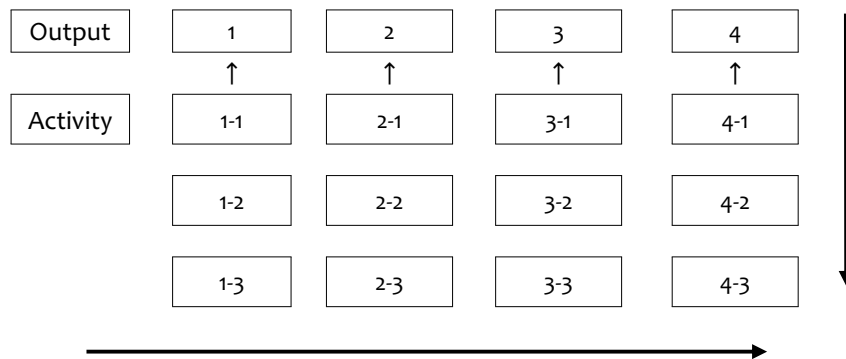
- All the activities related with output 1 can be shown as 1-1, 1-2, 1-3.

The activity needs to be described in chronological order.

- output 1 → output 2 → output 3 → ... output n
- activity 1-1 → activity 1-2 → activity 1-3 → .. activity n

An example of relationship between activity and output is shown below.

<Example>



### 5) Inputs

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP				
I/A		•		

Describe the goods and services needed to produce the outputs by the shares of the donor and the recipient countries respectively.

- To enter the amount of money based on the main contents such as the expense of consulting services, civil engineering and construction, equipment, training, operating expense, etc.

- In the case of consulting, the M/M needs to be put down next to the amount of money column

A case of narrative summary with five areas from impact to inputs and activities is presented in the following table.

<Table 3-17> A case of Project Summary

Narrative Summary	Objectively Verifiable Indicators : OVI	Means of Verification : MOV	Important Assumptions
Impact Bus service has improved.			
Outcome The number of bus accident has reduced.			
Outputs Drivers obey traffic rules and etiquette. Bus operation has improved. Maintenance shop has improved. Periodic maintenance system is introduced.			
Activities 1-1. Train bus drivers. 2-1. Establish bus supplement plan. 2-2. Purchase $\Delta$ buses. 3-1. Procure maintenance equipment and spare parts. 3-2. Train maintenance personnel. 4-1. Decide the regular maintenance system.	Inputs		

### 3.3. Important Assumptions

Important assumptions of a project, unlike narrative summary has three components of outcome, output, and inputs/activities as presented in the following figure.

#### 3.3.1. Overview

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				●
OP				●
I/A				●

Assumptions, though affecting the process and the success or failure of the project, refers to the factors or the uncertainty outside the direct control of the project management. Some examples of important assumptions include:

- Natural environment
- Government policy (For example, the project objective to increase rural income by the increase of agricultural product may be hampered by the government policy for low price of agricultural product.)
- Input component of the project is controlled by the agency which has no interests. (For example, The Ministry of Water Resource Management, not the Ministry of Agriculture which has the direct relationship with the project, has the provision responsibility of the agricultural irrigation facility.)

Although the types and importance of the assumptions is relatively small at the lower level, the importance together with uncertainty, increases as the ladder goes up to the project goal and development

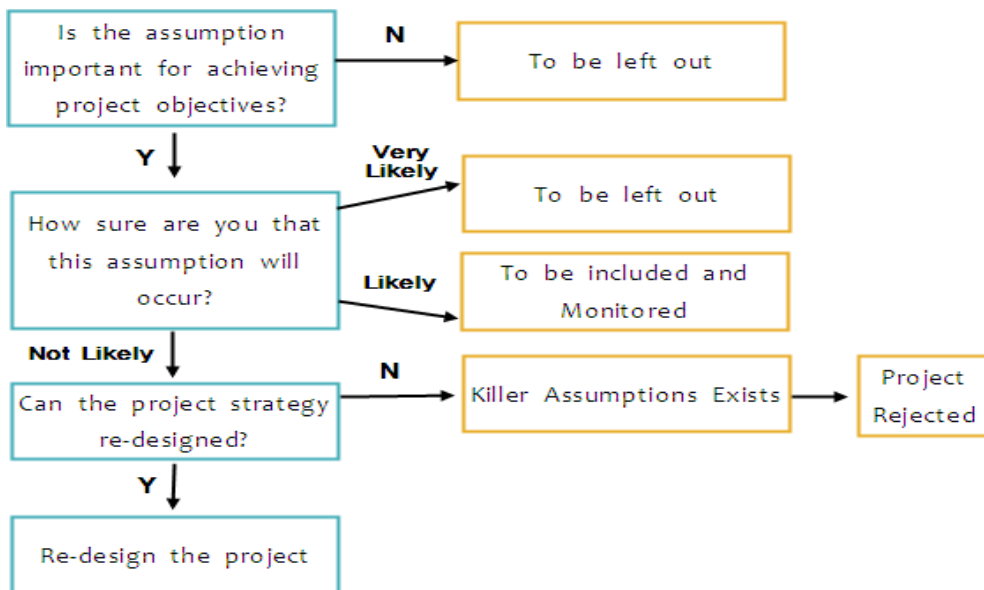
objective.

When there is an assumption which has low possibility to be met, the change of the project contents should be reviewed.

- If the change is impossible, the project outcome can not be expected since there is the Killer Assumption which cancels the project.

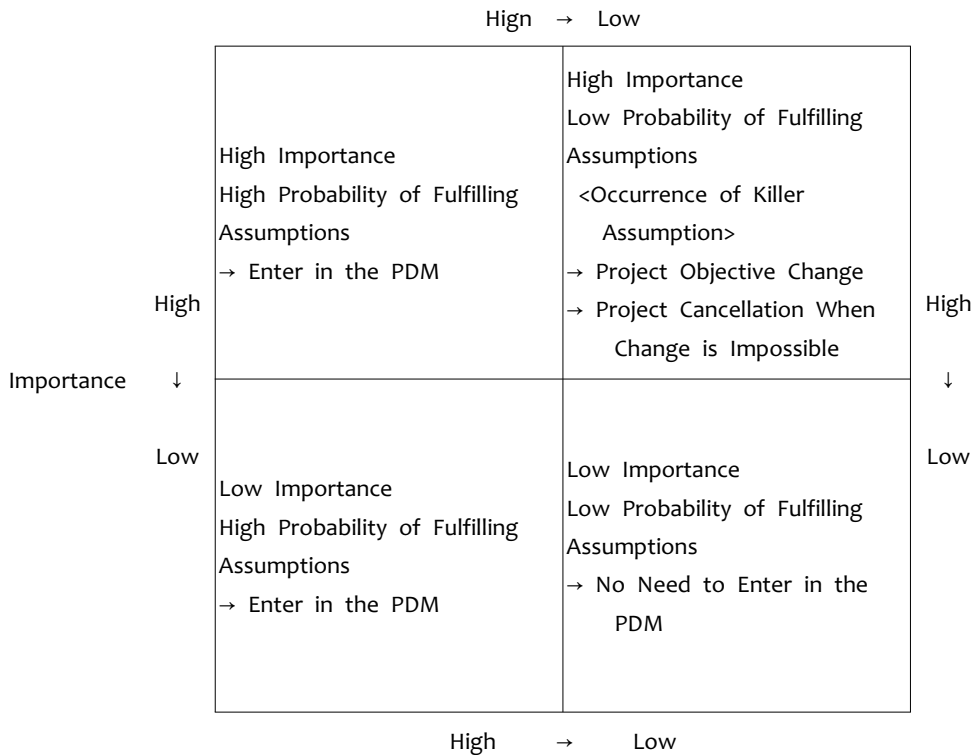
The figure below shows the way how the killer assumption is tested.

<Figure 3-9> Killer Assumption Testing



The contents explained above can be shown in the following figure.

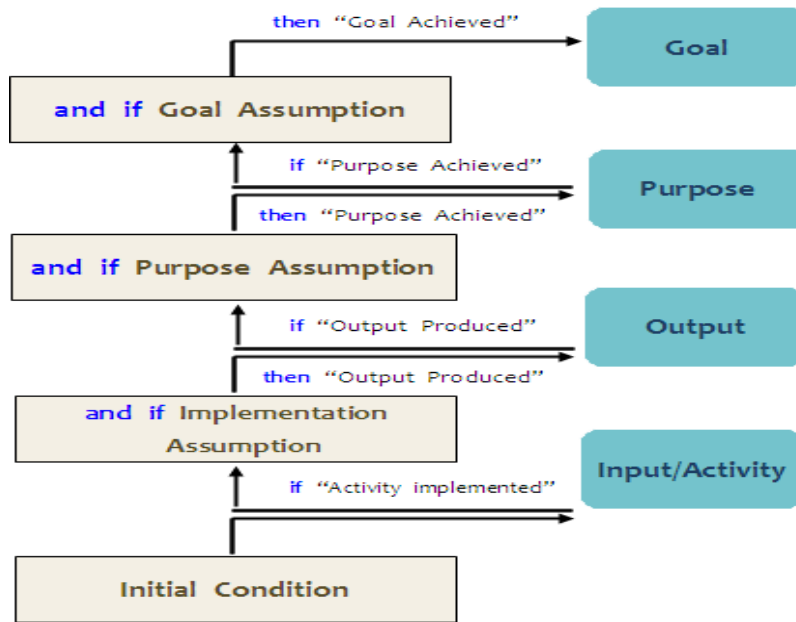
<Figure 3-10> Probability of Fulfilling Assumptions



Considering the assumptions mentioned above, the causal relationships of the narrative summary in the project takes the form of “If --- and if ---, then ----.”

The causal relationship of the project summary is presented in the following figure.

<Figure 3-11> Causal Relationships In The Project Summary



### 3.3.2. Tips for Writing Important Assumptions

#### 1) Initial Condition

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP				
I/A				•

It refers to the assumptions to start the project.

- Some examples include “The residents accept the project,” “Required skills



for the project activity can be used,” and “Enactment/Amendment of the related law.” If the prior conditions are not met, then start of the project is impossible.

## 2) Input (Activity) - Output

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP				
I/A				•

To describe the assumptions related with the correlations between the inputs (activities) and the outputs.

To review the fact that whether each activity can produce the related outputs, and to express them in the style of “conditions for the positive future.”

Some examples of the relationship between the activity or the conditions and the outputs are presented below.

### <Examples>

- If the project activity is the increase of the management staff for environment and air pollution, the output of the activity is the increase of the trained management personnel for the environment and the air pollution control.
- The prior condition for the expression of the outputs in this case could be “the permission of hiring for additional personnel at the Bureau of Environment and Pollution Management by the Ministry of Government Administration.”

The assumptions in this stage should be directly related with the project itself.

- Then, the assistance of the professionals who have experiences of similar project is necessary.
- It also is necessary to refer to the similar project reports in the past.

### 3) Outputs – Project Goals

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP				●
I/A				

In order to clarify the Probability of Fulfilling Assumptions in the prior conditions presumed at this stage, express it with available indicators as shown in the following example.

#### <Example>

“The Ministry of Government Administration allows the increase of 10 persons for the environment and air pollution management by Dec. 15, 1997.”

### 4) Project Goals – Development Objectives

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				●
OP				
I/A				

Describe the assumptions related with the correlations between the project goals and development objectives.

The assumptions at this stage, falling under the general elements, include “price stability,” and “maintenance of the current economic conditions,” etc.

#### <Notice>

No flaws in the vertical logic of the project Narrative Summary does not necessarily guarantee the achievement of the development objective as we will see next. In other words, the benefits of the project turns out to other groups instead of the target group.

- Situation:
  - “There is a high incidence that the children of poor families in a school does not carry a lunch box.”
  - Such incidence is regarded as giving negative impact on the school record.
  - Starting with the provision of lunch box, many children have benefits.  
Then can we say the provision of lunch box project was successful?
- Inputs : Putting manpower, finance, and equipment for the provision of school lunch box
- Outputs : Nutritious lunch was provided.
- Outcome : Many poor children who did not have lunch before were admitted to the school.
- Impact: The poor parents do not need to provide breakfast and/or dinner to their children. It means that, since the school lunch replaces the meals at home, the overall nutrition status and the school records of the children have not changed.

## Horizontal Logic

### 3.4. Objectively Verifiable Indicators : OVI

Objectively Verifiable Indicators of a project has four components of impact, outcome, output, and inputs/activities as presented in the following figure.

#### 3.4.1. Overview

	N.S.	O.V.I.	M.V.	I.A.
IP		•		
OC		•		
OP		•		
I/A		•		

Informing the progress of the project and when the goal will be achieved, OVI, together with the means of verification is the basis for the monitoring and evaluation of the project.

“Objectively Verifiable” means that the indicators are measurable.

- Accordingly, all the persons who are involved in the monitoring and evaluation of the project should reach the same results when they use the same OVI.

The kinds of indicators, based on the vertical logic, are input indicator, process indicator, output indicator, outcome indicator, and impact indicator.

### 3.4.2. Six Components of Indicators

Reflecting the goals to achieve based on the precise principle, indicator specifies the target, quantity, quality, time, and place, etc.

- Measurement Target : What ?
- Beneficiary : For whom ?
- Quantity : How much ?
- Quality : How well ?
- Time : By when ?
- Place : Where ?

#### <Example>

When the project performance is “To finish the water treatment before most of the domestic raw sewage seep into the river,”

- A project manager or an evaluator needs to determine how to confirm that “most raw sewage” is purified.
- For example, “Sewage treated at the sewage treatment plant” can be an indicator.

When translating it to “the Completion indicators,” they include the following:

- By the year 2001 (Time)
- Project target area (Location)
- The whole household (For whom)
- 90% (Quantity)
- Before the sewage seep into the river (What)
- Treat at the same level of the donor country’s criteria (Quality)

When translating it to “the Progress indicators,” they include the following:

- By the year 1996 (Time)
- Project target area (Location)
- 25% of the whole household (For whom and Quantity)
- Establish one sewage treatment facility (Quantity)
- Operates normally (Quality)

### 3.4.3. Five Sufficient Conditions for OVI

Each indicator should satisfy the following five conditions: ① Baseline, ② Importance, ③ Sufficient Numbers, ④ Independence, ⑤ Objective Verification.

#### 1) Baseline

Precise baseline needs to be specified as shown in the following examples with specific numbers.

<Example>

Output	O V I
Expansion of the Product Sale	<ul style="list-style-type: none"> <li>• Increase the quantity of the weekly market supply from 8 million tons in June 1997 to 20 million tons by June 1999</li> </ul>
Road Construction	<ul style="list-style-type: none"> <li>• Completion of the 2,000 km two lane road construction which connects 15 villages to the Provincial Capital by September 1999</li> </ul>

## 2) Importance

To put an emphasis on the matters which are important for the goal achievement of the project.

- For instance, in case of “the Dam Project,” it is required to specify the supply capacity of irrigation water, quantity of electricity generation, and the amount of fish supply, etc. instead of the quantity of water and concrete used for the project.

## 3) Sufficient Numbers

Indicators with sufficient numbers are necessary to be able to properly measure the progress of the project.

It is necessary to break down the indicators depending on the contents and the nature.

The following example shows the sufficient numbers to measure and the break down of the indicators.

### <Example>

Activity	O V I
Equipment Supply	<ul style="list-style-type: none"><li>• Provision of 25 Sprinkler by August 1997</li><li>• Provision of 400 Knapsack Sprayer by Dec. 1997</li><li>• Secure 5 Land-Rover 1997. by Dec. 1997</li></ul>
Training and Placement of Malaria Prevention Personnel	<ul style="list-style-type: none"><li>• Passing the DOH qualification exam by August 1999</li><li>• Placement at each provincial health center by Oct. 1997</li></ul>

#### 4) Independence

Each indicator should be independent.

- A certain indicator, for the purpose of the Narrative Summary, should not be included in the different level objectives nor be expressed changing or subdividing other indicators as shown in the following example.

##### <Example>

In case of “Housing Construction Project,”

- When the “Output 1” is “the construction of 40 houses in the  $\Delta\Delta$  area,”
- Activity 1.1 corresponding to it is “to complete the ground concrete work of 40 houses in the  $\Delta\Delta$  area.”
- It is easy to express the Activity 1.1 as an indicator of Output 1 since the ground concrete work is a necessary step for housing construction.

The ground concrete work can not be regarded as an independent indicator since it is already included in the construction work. It is necessary to identify other indicators and an example maybe “To do a field survey in the 40 housing construction target area by Dec. 1, 1997.”

#### 5) Objective Verification

Each indicator should be objectively verifiable in order to be able to reach the same conclusion by all the different persons involved.

- For example, the statement such as “good livestock” is not specific.
- Then this should be expressed as a measurable indicator such as “the cattle weighing between 800 – 1,000 kg.”



### 3.4.4. Indirect Indicators

When it is difficult to develop a directly verifiable indicator, use the indirect indicator.

#### <Example>

In the case of the “Health project,” which is targeting “Reduction of Infant Mortality Rate,”

- The measurement of infant mortality rate is not easy in a short span of time.
- Then, it is possible to use the indirect indicators including the following:
  - (i) The rate of the new born baby delivered by the trained health personnel.
  - (ii) The type and frequency of the use of the preventive or treatment facility.
- In this case, the health services provided and the infant mortality rate has the reverse relationship.

In case of “the children’s nutrition status improvement project,”

- Instead of measuring the nutritional value of the children’s intake, measure the height, weight, and the chest.

### 3.4.5. Selection Criteria for the Good Indicators

As good indicators selection criteria, SMART and CREAM criteria is presented below.

- SMART Criteria

SMART stands for Simple, Measurable, Attributable, Relevant and

Timely. The specific and detailed contents of each criterion are presented in the following table.

<Table 3-18> Selection Criteria for the Good Indicators

Analytical Factors	Contents
S (Simple)	<ul style="list-style-type: none"> <li>• Is the indicator set as simple as possible?</li> <li>• Is it clearly explained what to measure?</li> <li>• Isn't the indicator vague?</li> <li>• Are the indicators broken down into an appropriate level?</li> <li>• Does the indicator include the differences among the areas and the target people?</li> <li>• Is the indicator specific enough to be able to measure the progress in order to produce the expected results?</li> </ul>
M (Measurable)	<ul style="list-style-type: none"> <li>• Is the change objectively verifiable?</li> <li>• Does the indicator show change?</li> <li>• Is the indicator clear and reliable enough to measure performance?</li> <li>• Is the indicator sensitive to the changes of the policy and the program?</li> <li>• Does the stakeholder agree what to measure?</li> <li>• Can the measured data be acquired through proper finances and efforts?</li> <li>• Is the date of the source known? Is it necessary to establish the principle, mechanism, and responsibility of data collection?</li> <li>• Does the indicator monitoring plan exist?</li> </ul>
A (Attributable)	<ul style="list-style-type: none"> <li>• Does the indicator clearly related with the purpose of measurement?</li> <li>• What kinds of change is expected as a result of development activity?</li> <li>• Is the outcome practical?</li> </ul>
R (Relevant)	<ul style="list-style-type: none"> <li>• Is the indicator related with the intended output and the results?</li> <li>• Can the indicator be measured in a consistent and transparent way?</li> <li>• Does the indicator include the essence of wanted results?</li> <li>• Is the indicator reasonably related with the domain of activity?</li> </ul>
T (Timely)	<ul style="list-style-type: none"> <li>• Can it be measured regularly at the most appropriate time?</li> </ul>

- CREAM Criteria

What CREAM means and what are the basic contents of each criterion are in the following:

- Clear: precise and unambiguous
- Relevant: appropriate for the usable subject
- Economic: available at reasonable cost
- Adequate: sufficient to assess performance
- Monitorable: can be independently verified

Some major performance indicators by the sector are presented in the following table.

<Table 3-19> Major Performance Indicators by the Sector

Sector	Proposed performance indicators
Energy	<ul style="list-style-type: none"> <li>• Capacity of power stations constructed (MW)</li> <li>• Proportion of national power supply from renewable resources (% of MW)</li> <li>• Cost of 1 kWh power in Vietnam as % average regional cost (% of cost)</li> <li>• Proportion of enterprises relying on own power generation (% of #)</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>• Yield per hectare</li> <li>• Quantity of Fertilizer used per hectare</li> <li>• Percentage of land cultivated</li> <li>• Percentage of land irrigated</li> <li>• Weight per head of livestock</li> <li>• Ration of no. of head of livestock : area of grazing land</li> <li>• No of watering points Per area of grazing land</li> </ul>
Health	<ul style="list-style-type: none"> <li>• Mortality rate</li> <li>• Infant mortality rate</li> <li>• Number of doctors/nurses per 1,000 inhabitants</li> <li>• caloric consumption per head per day</li> <li>• Protein consumption per head per day</li> <li>• Incidence of specific diseases per 1,000 inhabitants</li> <li>• Quantity (litres) of potable water available per head per day</li> <li>• % of population within × kilometres of specific types of health care facilities (hospital, clinic, dispensary)</li> </ul>

Education	<ul style="list-style-type: none"> <li>• % of children of school age attending school</li> <li>• % of population having completed "x" years formal education.</li> <li>• Literacy rate</li> <li>• % of students in specific disciplines (e.g., agricultural science, science, mathematics, engineering, etc.) for given levels of formal education (primary, secondary, university)</li> <li>• Number of volumes in public libraries</li> <li>• Average number of students per class</li> <li>• Number of non-formal education agents per "x" inhabitants</li> </ul>
Transportation	<ul style="list-style-type: none"> <li>• Km national highways, provincial and rural roads built (km)</li> <li>• Km national highways, provincial and rural roads maintained (km)</li> <li>• Average travel time on national highways and provincial roads (km/hr)</li> <li>• Capacity of ports (million tons)</li> <li>• Proportion of rural households within 2km of all weather road (%)</li> </ul>
Environment	<ul style="list-style-type: none"> <li>• Net new area of forest, mangrove &amp; watershed planted (ha)</li> <li>• Area of river basin under river basin organization management (ha)</li> <li>• Area of irrigation areas under water user group management (ha)</li> <li>• Proportion of EIA/SIA implemented to international standards (% of #)</li> <li>• CO<sub>2</sub> emissions from industry, power generation and vehicles (t/yr)</li> </ul>
Urban Development	<ul style="list-style-type: none"> <li>• Proportion of households with quality solid waste collection (%)</li> <li>• Proportion of wastewater treated to MONRE standards (%)</li> <li>• Average travel time on urban roads (km/ hr)</li> <li>• Proportion of households with reliable access to power and water (%)</li> </ul>
Social Issues	<ul style="list-style-type: none"> <li>• Proportion of people classed as poor under new standard (%)</li> <li>• Proportion of poor people with access to credit (%)</li> <li>• Proportion of provinces adopting participatory planning (%)</li> <li>• Proportion of citizens satisfied with participatory planning (%)</li> </ul>
Social Security and National Defence	<ul style="list-style-type: none"> <li>• Ratio of capital: recurrent expenditure in line agencies (% of value)</li> <li>• Proportion of GOV agencies using unified chart of accounts (% of #)</li> <li>• Proportion of ODA using GOV procurement systems (% of value)</li> <li>• Proportion of GOV agencies making budget public (% of #)</li> </ul>
Finance - Banking	<ul style="list-style-type: none"> <li>• Incremental capital to output ratio (ICOR - %)</li> <li>• FDI as proportion of total investment (% of value)</li> <li>• Ratio non-performing loans to total credit (% of value)</li> </ul>
Administrative Reform	<ul style="list-style-type: none"> <li>• Proportion of surveyed enterprises reporting administrative procedures as a constraint (%)</li> <li>• Average time taken to process import customs clearance (days)</li> <li>• Number of districts and communes adopting "one-stop-shop" model(%)</li> <li>• % surveyed citizens satisfied with public services (%)</li> </ul>

Post and Telecommunication	<ul style="list-style-type: none"> <li>• Number of internet users (#)</li> <li>• Number of telephones per 100 people (#)</li> <li>• Proportion of rural villages with access to telephone/internet (% of #)</li> </ul>
Enterprises Development	<ul style="list-style-type: none"> <li>• Number of SOEs equitised (#)</li> <li>• Ratio of exports to GDP (% of value)</li> <li>• Net number of new private enterprises established (#)</li> </ul>

### 3.4.6. Setting Baselines and Targets

The correlation between the types of change, baselines, and the targets is as follows.

<Table 3-20> The Correlation Between the Types of Change, Baselines, and the Targets

Types of Change		Baselines	Targets
Relative Change	<ul style="list-style-type: none"> <li>• Observing the relative changes of capacity development and service improvement, etc. between the situation just before the implementation and after the completion of the project</li> </ul>	The level prior to the project	Established target
Absolute Change	<ul style="list-style-type: none"> <li>• Observing the absolute changes arisen from making the new things such as the establishment of institutions, systems, etc.</li> </ul>	None	Yes
Status Quo	<ul style="list-style-type: none"> <li>• Observing the status quo or not to prevent the worsening of the situation</li> </ul>	The level prior to the project	Status Quo Level

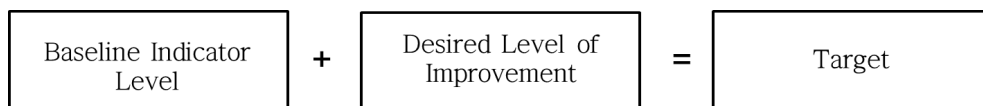
Baseline is recognized by the means of verification. Target level means the combination of the baseline and the desired level of improvement, and it's setting is as follows:

- It should be described in concrete terms which reflect realistic numbers, time, and location, etc.

- It is a quantitative indicator attainable within the constraints of time available.

The concept of target level is basically an addition of desired level of improvement to the baseline level as shown in the following figure.

<Figure 3-12> Concept of Target Level



The methods of setting target level can include the following considerations:

- Reflecting the opinion of the target group such as its readiness, ownership, and participation, etc.
- Considering the national average and the average of the upper level administrative unit which includes the project target area
- Reflecting the other conditions of the target project referring to the similar project cases
- Referring to the target levels of the international organizations concerned such as WHO, FAO, etc.

The following table shows a case of the education sector indicators with its baselines and target levels.

<Table 3-21> Baselines of the Education Sector and Their Target Level Case

Outcomes	Indicators	Baselines	Targets
Improvement of the availability of preschool program for children	<ul style="list-style-type: none"> <li>Enrollment rate of preschool program for children in urban area</li> <li>Enrollment rate of preschool program for children in rural area</li> </ul>	<ul style="list-style-type: none"> <li>Year 1999, 75% of the 3-5 year old children</li> <li>Year 2000, 40% of the 3-5 year old children</li> </ul>	<ul style="list-style-type: none"> <li>85% of the 3-5 year old children by the year 2006</li> <li>60% of the 3-5 year old children by the year 2006</li> </ul>
Improvement of learning at the primary school	<ul style="list-style-type: none"> <li>Ratio of the 6th grade school children who acquired more than 70% in the evaluation of the standardized test of mathematics and science</li> </ul>	<ul style="list-style-type: none"> <li>In the year 2002, in mathematics 75%, in science 61% of the students got grades over 70.</li> </ul>	<ul style="list-style-type: none"> <li>By the year 2006, in mathematics 80%, in science 70% of the students achieve grades over 70</li> </ul>

Source: World Bank(2004). Ten Steps to a Results-Based Monitoring and Evaluation System. p.95.

### 3.4.7. OVI Writing Guide

Objectively Verifiable Indicator (OVI) of a project has four components of impact, outcome, output, and inputs/activities.

#### 1) Impact

Because the impact extends beyond the scope of the project, the indicator setting is not easy.

Then, it depends on the indicators such as MDGs, etc. already selected by the international organizations or on the estimation to a considerable degree and indirect indicators.

	N.S.	O.V.I.	M.V.	I.A.
IP		•		
P				
O				
I/A				

## 2) Outcome

	N.S.	O.V.I.	M.V.	I.A.
IP				
P		•		
O				
I/A				

OVI at the outcome stage reflects the final situation of the project.

- Accordingly, certain conditions necessary for the evaluation of the project's success or failure should be reflected.

Related with this, OVI at the stage of outcome requires the following:

- It maintains the consistency with the contents of the project Narrative Summary.
- It focuses on the important things to achieve the outcome.
- It expresses in measurable terms.

## 3) Output

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP		•		
I/A				



Quantification at the stage of output is relatively easy, but qualitative consideration also needs to be emphasized.

- Although qualitative criteria need not be included in detail in the PDM, it is necessary to specify in the Project Design Document.

The target date of the output accomplishment should be included in the OVI.

#### 4) Input/Activity

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP				
I/A		•		

OVI at the input stage needs to quantify all the contents of input and needs to specify the probable date of the output attainment.

- An estimate and a plan need to be made by putting down the required human resources, equipment, and financing, etc. in detail for each activity.
- The input needs to be filled in by separating the donor country side from the recipient country side.
- For the donor country, the numbers and Man/month of the dispatched person, cost of the equipment aggregated by the model, and the local operating expenses necessary during the period of project implementation need to be indicated.
- It is necessary to review the input-output relationship from the cost-benefit perspective when the input statement is made.

### 3.5. Means of Verification : MOV

#### 3.5.1. Overview

MOV has the following two functions:

- To identify the feasibility of the selected materials; and
- To make the project evaluation work smoothly by implementing the success criteria of the project beforehand.

MOV needs to be connected to the OVI in each stage.

#### 3.5.2. MOV Classification

MOV is classified into the following three types:

- Collected data type;
- Information source type;
- Data collection method type.

##### 1) Type of Data Gathered

Type of data gathered means the information necessary for the measurement of the OVI.

When gathering the data, above all, the nature of data should be specified.

- “Specify” here does not necessarily mean the quantification of data and the qualitative data gathering is also possible.
- For example, the style of listening to opinion regarding the concerned problem from the target group is possible.
- Although the MOV can have various types, the most important point is simplicity and obviousness.

## 2) Sources of Information

In order to secure the practicality of the indicator, sources of information need to be identified.

Sources of information are fallen into the three categories of ① Person, ② Place, and ③ Document.

- For instance, quality of a well can be measured based on ① the professional ② the field research and ③ the statistical data of the WHO report, etc.
- The most important thing in the selection of the sources of information rests on the credibility.
- Nevertheless, data gathering expenses and the approachability of information sources, etc. need to be taken into consideration.

## 3) Data Collection Technique

This refers to the method by which the necessary information will be gathered. Major research methods for collecting data are as follow:

<Table 3-22> Research Methods

Methods	Contents
Literature Review	<ul style="list-style-type: none"><li>• Necessary information is gathered through the study and analysis of various materials such as the literature and statistical data of the related areas, and similar project materials of the other donor agencies, etc., including the various reports related with the target project for evaluation</li></ul>
Direct Observation	<p>(1) Purpose</p> <ul style="list-style-type: none"><li>• It draws a more practical and live conclusion in the analysis of the effect and sustainability of the project.</li></ul> <p>(2) Method</p> <ul style="list-style-type: none"><li>• Agreement about the object of observation and target of information gathering</li></ul>

	<ul style="list-style-type: none"> <li>• Decision of participatory observer</li> <li>• Gathering relevant information visiting the project target area directly</li> <li>• Hold a discussion session concerning the results gathered</li> <li>• Arrangement of objective information attentive to the bias and the distort by the observer</li> </ul>
Survey Research	<p>(1) Purpose</p> <ul style="list-style-type: none"> <li>• Collecting information regarding particular questions form as many evaluation targets as possible mainly for the purpose of statistical analysis</li> </ul> <p>(2) Method</p> <ul style="list-style-type: none"> <li>• Gathered information, questionnaire type and contents</li> <li>• Decision making in the questionnaire target</li> <li>• Questionnaire making: multiple choice and open-ended questionnaire</li> <li>• Distribution: Sending one month before the start of the local survey</li> <li>• Collecting questionnaire: During the on-site survey</li> <li>• Information analysis</li> </ul>
Interview	<p>(1) Purpose</p> <ul style="list-style-type: none"> <li>• Collecting information which is necessary for indepth qualitative analysis through the face-to-face interview with the key figures</li> </ul> <p>(2) Method</p> <ul style="list-style-type: none"> <li>• Gathered information, questionnaire type and contents</li> <li>• Decision making in the questionnaire target</li> <li>• Preparation of interview material and carrying out interview</li> <li>• Information analysis</li> </ul>
Group Discussion	<p>(1) Purpose</p> <ul style="list-style-type: none"> <li>• Collecting objective information through the various opinion gathering of stakeholders</li> </ul> <p>(2) Method</p> <ul style="list-style-type: none"> <li>• Gathered information, questionnaire type and contents</li> <li>• Decision making in the target participants</li> <li>• Preparation of the group discussion Template and its implementation</li> <li>• Analysis of the group discussion results</li> </ul>
Comparative Case Study	<p>(1) Purpose</p> <ul style="list-style-type: none"> <li>• Drawing the implication through the comparative survey of similar projects to the target project for evaluation</li> </ul> <p>(2) Method</p> <ul style="list-style-type: none"> <li>• Decision making in the target project</li> <li>• Implementing a comparative survey according to the five criterion of evaluation</li> <li>• Drawing the implication through the comparative survey</li> </ul>

#### 4) Qualitative Sufficing Conditions of The Material

There are three qualitative sufficing conditions of the material: ① Reliability, ② Validity, and ③ Timeliness. The detailed contents of the conditions are in the following table.

<Table 3-23> Qualitative Sufficing Conditions of the Material

Qualitative Sufficing Conditions	Qualitative sufficing conditions for the material
Reliability	<ul style="list-style-type: none"> <li>Maintaining the consistency of the material collecting method regardless of time and place</li> </ul>
Validity	<ul style="list-style-type: none"> <li>Indicator should be able to measure performance level as much direct and simple as possible, and the results should be practical</li> </ul>
Timeliness	<ul style="list-style-type: none"> <li>Collecting the updated relevant materials regularly</li> </ul>

#### 3.5.3. MOV Writing Tips

Means of Verification (MOVs) of Indicators have four components of impact, outcome, output, and inputs/activities corresponding to each indicator.

	N.S.	O.V.I.	M.V.	I.A.
IP			•	
OC			•	
OP			•	
I/A			•	

## 1) Impact

	N.S.	O.V.I.	M.V.	I.A.
IP			•	
OC				
OP				
I/A				

It is not easy to acquire MOV regarding the Goal.

Therefore, it is necessary to have a consultation with a professional, and experts, etc.

## 2) Outcome

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC			•	
OP				
I/A				

MOV at this stage is more complicated than those of output or input stages, and it is desirable to include basic and time series data related with the socioeconomic issues. The expenses for research need to be included in the Input column.

### 3) Output

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP			•	
I/A				

The quantity and quality of the output produced during the project implementation period, and the target date for completion need to be indicated.

It is relatively easier to secure information source in this stage.

- Largely an on-the-spot survey and various reports, etc. provide the needed information.

It may be difficult to get the reliable MOV in the case of the following:

- When the qualitative aspect of the output is crucial to the project.
- When output happens to be in several areas, MOV should be able to provide complete and somewhat possible data covering all the areas.
- When output is not concrete material in nature.

When output is split between the final and mid-term phases, MOV should include the both phases.

#### 4) Input/ Activity

	N.S.	O.V.I.	M.V.	I.A.
IP				
OC				
OP				
I/A			•	

The nature, quantity, and costs of the resources required, and mobilization plan schedule for each input elements need to be indicated.

Securing MOV, as in the case of output, is not difficult.

- Bilateral Agreement related with the project
- All the documents of both sides of the donor and the recipients countries related with the project
- Results of the local survey
- Regular reports, etc.

## 4. Monitoring

### 4.1. Establishment of the monitoring system and the Qualitative Sufficing Conditions of the Material

When establishing the monitoring system, the following three points of material collection, material analysis, and material utilization need to be taken into consideration. The specific contents of the three categories of conditions are illustrated in the following table.



<Table 3-24> Qualitative Sufficing Conditions of the Material

Category	Contents
Material Collection	<ul style="list-style-type: none"> <li>The in-charge of collection, material source, frequency and method of collection</li> </ul>
Material Analysis	<ul style="list-style-type: none"> <li>The in-charge of analysis, analysis method</li> </ul>
Material Utilization	<ul style="list-style-type: none"> <li>An intended recipient of the report, An intended target to utilize</li> </ul>

Detailed contents of the qualitative sufficing conditions of the material are presented in the following table.

<Table 3-25> Qualitative Sufficing Conditions of the Material

Qualitative Sufficing Conditions	Contents
Reliability	<ul style="list-style-type: none"> <li>Maintaining the consistency of material collection methods regardless of the change in time and place</li> </ul>
Validity	<ul style="list-style-type: none"> <li>Indicator should be able to measure performance level as much direct and simple as possible, and the results should be practical.</li> </ul>
Timeliness	<ul style="list-style-type: none"> <li>Collecting the updated relevant materials regularly</li> </ul>

## 4.2. Types of Monitoring and Implementation

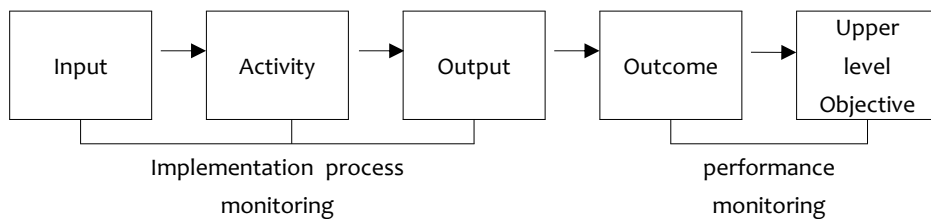
Monitoring can be divided into the three: implementation monitoring, performance monitoring, and risk monitoring.

- In the implementation monitoring, monitoring the strategy and the means such as inputs, activities, and outputs found in the annual or multi-year plan used to achieve the outcomes is carried out.
- Performance monitoring focuses on monitoring the consequence itself instead of the strategy or the means such as input and activity, etc.

- Risk monitoring, focusing on the prerequisites of PDM and major assumptions, implements monitoring their fulfillment.

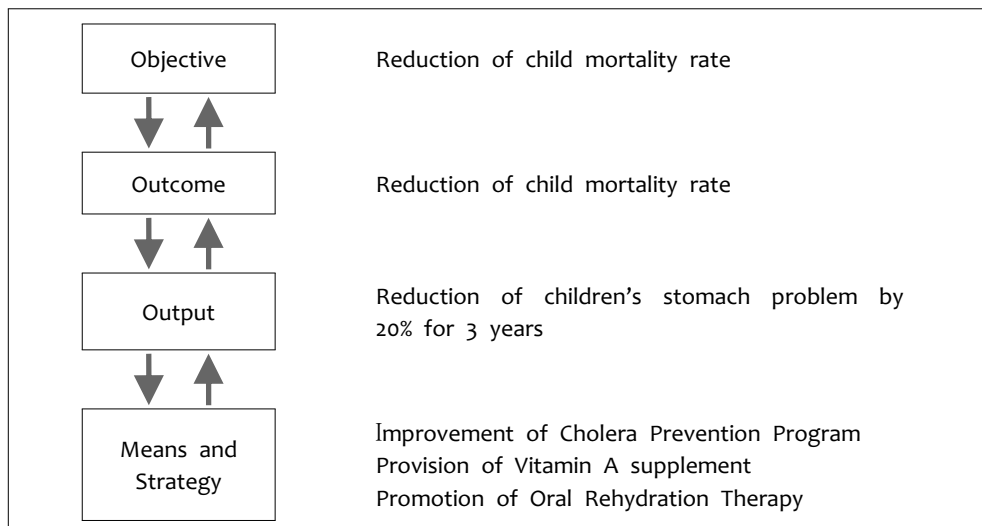
Implementation monitoring and performance monitoring process explained above is shown in the following figure.

<Figure 3-13> Implementation Monitoring and Performance Monitoring



The figure below shows the correlation between the implementation monitoring and the performance monitoring.

<Figure 3-14> The Correlation between Implementation Monitoring and Performance Monitoring



The main contents of monitoring depending on the three types of monitoring are presented in the following table.

<Table 3-26> Main Contents of Monitoring

Types of Monitoring	PDM Item	Monitoring contents	In charge
Implementation Monitoring	<ul style="list-style-type: none"> <li>• Input</li> <li>• Activity</li> <li>• Output</li> </ul>	<p>&lt;Input&gt;</p> <ul style="list-style-type: none"> <li>• Progress of the Input as planned</li> <li>• Appropriacy of the quantity, quality, and the timing of the input</li> <li>• Obstacles leading to problem occurrence</li> </ul> <p>&lt;Activity&gt;</p> <ul style="list-style-type: none"> <li>• Progress of the activity as planned</li> <li>• Appropriacy of technology transfer</li> <li>• Obstacles leading to problem occurrence</li> <li>• Appropriacy of communication</li> <li>• Leading role integrity and participation level of the recipient country</li> </ul>	PMC
Performance Monitoring	<ul style="list-style-type: none"> <li>• Project Goal</li> <li>• Development Objective</li> </ul>	<ul style="list-style-type: none"> <li>• Possibility of the goal attainment as planned</li> <li>• Barriers to reaching goal</li> </ul>	<ul style="list-style-type: none"> <li>• PMC</li> <li>• KOICA Overseas Office</li> </ul>
Risk Monitoring	<ul style="list-style-type: none"> <li>• Precondition</li> <li>• External Condition</li> <li>• Activity</li> <li>• Output</li> <li>• Project Goal</li> <li>• Development Objective</li> </ul>	<ul style="list-style-type: none"> <li>• The possibility of fulfilling the precondition and external conditions step by step</li> </ul>	<p>&lt;Precondition&gt;</p> <ul style="list-style-type: none"> <li>- KOICA HQ,</li> <li>- Overseas Office</li> </ul> <p>&lt;Activity, Output&gt;</p> <ul style="list-style-type: none"> <li>- PMC</li> </ul> <p>&lt;Goal&gt;</p> <ul style="list-style-type: none"> <li>- KOICA HQ,</li> <li>- Overseas Office</li> </ul>

PDM form for monitoring the implementation and performance achievement is as follows.

<Table 3-27> PDM for Monitoring Implementation and Performance Achievement

Narrative Summary	Indicator	Monitoring Project Progress and Goal Attainment
Development Objective		Development Objective - In charge / occurrence frequency / MOV
Project Goal		Project Goal - In charge / occurrence frequency / MOV
Output 1. 2.		Output 1. In charge / occurrence frequency / MOV 2. In charge / occurrence frequency / MOV
Activity 1.1. 1.2. 2.1. 2.2.	Input	Activity 1.1. In charge / occurrence frequency / MOV 1.2. In charge / occurrence frequency / MOV 2.1. In charge / occurrence frequency / MOV 2.2. In charge / occurrence frequency / MOV

Regular monitoring of the preconditions and major assumptions based on the PDM for risk monitoring and the risk management chart is necessary because various risks can occur during the project implementation process.

The following table, PDM for Risk Monitoring, presents the contents of assumptions or risks depending on the categories of narrative summary.

<Table 3-28> PDM for Risk Monitoring

Narrative Summary	Indicator	MOV	Assumption / Risk	In charge
Objective			<ul style="list-style-type: none"> <li>External conditions and risks for the sustainability of the development objective</li> </ul>	HQ, Overseas Office
Outcome			<ul style="list-style-type: none"> <li>External conditions and risks connecting up the project goal and the development objective</li> </ul>	HQ, Overseas Office
Output			<ul style="list-style-type: none"> <li>External conditions and risks connecting up the output and project goal</li> </ul>	PMC
Activity	Input		<ul style="list-style-type: none"> <li>External conditions and risks connecting up the activity and the output</li> </ul>	PMC
			<ul style="list-style-type: none"> <li>Preconditions and input level risks</li> </ul>	HQ, Overseas Office, PMC

The risk management chart which includes 9 categories from contents to in-charge is shown in the following table.

<Table 3-29> Risk Management Chart

No.	Contents	Cause	Impact	Probability	Impact	Judgement	Preventive Measure	Post Measure	In charge
1	Delay of construction permission	Change of permission personnel	Project delay	2	3	6 (high)	Frequent contact	Work support	

\* Probability: 1 (Low), 2 (Medium), 3 (High)

\* Impact: 1 (Low), 2 (Medium), 3 (High)

\* Judgement: 1-2 (Low), 3-4 (Medium), 5-6 (High)

## 5. Evaluation

The specific contents of the requirements of the use of evaluation results and the qualitative evaluation for performance management are presented in the following table.

<Table 3-30> Requirements of the Use of Evaluation Results and the Qualitative Evaluation

Distinction	Contents
Use of Evaluation Results	<ul style="list-style-type: none"> <li>• Decision making on resource distribution</li> <li>• Reconsideration of the cause of the problem</li> <li>• Identify the newly standing out problem</li> <li>• Decision on the optimal alternative</li> <li>• Reform of the public sector and the support of innovation</li> <li>• Drawing a consensus regarding the cause of problem and the corresponding measure</li> </ul>
Requirements for Qualitative Evaluation	<ul style="list-style-type: none"> <li>• Impartiality</li> <li>• Usefulness</li> <li>• Technical adequacy</li> <li>• Stakeholder involvement</li> <li>• Feedback &amp; dissemination</li> <li>• Value for money</li> </ul>

The information suggested by the evaluation is classified into three categories of strategy aspect, operation aspect, and learning aspect. The detailed contents of the information is presented in the table below.

<Table 3-31> Information Suggested by the Evaluation

Classification	Contents
Strategy Aspect	<ul style="list-style-type: none"> <li>• Is the project implementing the right work?</li> <li>- Suggestion of judgement criteria in terms of necessity and validity</li> <li>- Suggestion of the clear logic that can bring about change</li> </ul>
Operation Aspect	<ul style="list-style-type: none"> <li>• Are the works implemented properly?</li> <li>- Suggestion of effectiveness criteria for performance achievement</li> <li>- Suggestion of efficiency criteria for resource recycle</li> <li>- Suggestion of customer satisfaction criteria</li> </ul>
Learning Aspect	<ul style="list-style-type: none"> <li>• Are there any better approaches?</li> <li>- Preparation of alternatives</li> <li>- Identifying Best practices</li> <li>- Learning lessons</li> </ul>

## 6. Report and Use of Evaluation Results

Evaluation Results Report is largely composed of the three components: ① The purpose of Monitoring and Evaluation, ② Precise Understanding of the Report Recipient, and ③ Report Writing. The main contents of the three areas related with the evaluation results report are presented in the following table.

<Table 3-32> Three Elements of Evaluation Results Report

Classification	Contents
Purpose of monitoring and the evaluation results report	<ul style="list-style-type: none"> <li>• Report responsibility to the taxpayers and the stakeholders</li> <li>• Training purpose of the institution concerned and the stakeholders</li> <li>• Searching for the problem and its cause</li> <li>• Accumulation of the records and information</li> <li>• Leading the Interest, understanding, and participation of the taxpayers and stakeholders</li> <li>• Securing the support through performance delivery</li> </ul>

Precise understanding of the report recipient	<ul style="list-style-type: none"> <li>To whom provide information: <ul style="list-style-type: none"> <li>① What kinds, ② In what form, and ③ When?</li> </ul> </li> <li>Grasping the person who is preparing and delivering the information</li> </ul>
Report writing	<ul style="list-style-type: none"> <li>Using simple, clear, and easily understandable form</li> <li>Comparison of Baseline data with previous data</li> <li>Use of visual material such as chart, graphs, and maps</li> <li>Notice: understanding report recipient, delivering message, reporting time, and reporting materials, etc.</li> <li>Negative contents can be used as the early warning item</li> </ul>

The main contents related with the use of evaluation results are following:

<Table 3-33> Main Contents Related with the Use of Evaluation Results

Classification	Contents
Three utilities of Evaluation Result	<ul style="list-style-type: none"> <li>Work report, Knowledge accumulation and sharing, Learning</li> </ul>
Incentives for using Evaluation Results results	<ul style="list-style-type: none"> <li>Development of Guideline and manual</li> <li>Provision of training program</li> <li>Regular meeting for information sharing</li> <li>Compensation for the best practice</li> <li>Expansion of the application scope: discover the best practice, problem, and the solution, identify the training demand, and identify the priorities of resource distribution</li> </ul>
Strategies of information sharing	<ul style="list-style-type: none"> <li>Active use of mass media</li> <li>Enactment of the law for the promotion of information disclosure</li> <li>Realization of E-Government</li> <li>Publication of periodic reports</li> <li>Inducement of an active participation of civil society organizations, etc.</li> </ul>





## Section 4. Performance Management Measure for Master Plan and the Basic Survey

### 1. Project Assessment Phase

A report for assessment is made based on the results of the feasibility study or the preliminary feasibility study.

The form of assessment report quotes “the project pre-assessment table” with the attachment of “the Design and Monitoring Framework” used by the ADB.

The following table includes the list of the project pre-assessment table.

<Table 3-34> List of the Project Pre-assessment Table

1. Project Name
2. Overview of Cooperation
(1) Project Objective
(2) Study Period
(3) Project Budget
(4) Responsible Institution of the Counterpart Country
(5) Target Sector, Area, and Size, etc.
3. Necessity of Cooperation(Appropriateness)
(1) Current Situation and Problem
(2) Relevance to the Development Policy of the Partner Country
(3) Relevance to and Harmony with the Donor Agency
(4) Relevance to the Japanese Government Policy and the JICA Policy
4. Cooperation Measure
4.1. Survey list of the Main Study:
(1) Situation Analysis: Socioeconomic situation, concerned sector situation, analysis of association with the national development plan, comparison with the concerned sector of the neighboring area, etc.
(2) Drawing some tasks in the concerned sector

- (3) implementing strategy
- (4) Short term action plan
- (5) Comprehensive evaluation and suggestion
- 4.2. Output and Outcome
- 4.3. Input
- 5. The Upper level Objective expected after completion of the project
- 6. Assumption
- 7. Consideration of poverty, gender, and environment, etc.
- 8. Use of the lesson from the past similar project
- 9. Future Evaluation Plan

“The Design and Monitoring Framework” used by the ADB is in the following table.

**DESIGN AND MONITORING FRAMEWORK**

<b>Design Summary</b>	<b>Performance Targets and Indicators with Baselines</b>	<b>Data Sources and Reporting Mechanisms</b>	<b>Assumptions and Risks</b>
<b>Impact</b> Improved energy security in Afghanistan	Gas production increased from 360,000 m <sup>3</sup> /day in 2012 to 5 million m <sup>3</sup> /day in 2025  Grid-connected electrification ratio increased from less than 20% in 2012 to 40% in 2025	Afghanistan Central Statistical Organization and Ministry of Mines and Petroleum publications  Inter-Ministerial Commission for Energy quarterly reports  Da Afghanistan Beshna Sherkat annual reports	<b>Assumption</b> Government and donors remain committed to energy sector reforms and investments  <b>Risks</b> Political stability and security deteriorate  Contractors and consultants lack interest to implement power projects in Afghanistan
<b>Outcome</b> Improved Ministry of Mines and Petroleum capacity in the areas of investment planning and programming in gas sector supply chain	Gas resource potential estimated and investment programming prioritized in accordance with projects identified and sequenced in gas development master plan by December 2014  Gas development master plan approved by the Cabinet and the Parliament by December 2014  Gas development master plan institutionalized and department established in the Ministry of Mines and Petroleum by December 2014	Inter-Ministerial Commission for Energy quarterly reports Ministry of Mines and Petroleum publications and website Gas sector master plan reports  Inter-Ministerial Commission for Energy quarterly reports Ministry of Mines and Petroleum publications and website  Ministry of Mines and Petroleum publications and website	<b>Assumptions</b> Strong political will to make Afghanistan self-sustaining in the gas sector  Prompt decision making by Ministry of Mines and Petroleum and other stakeholders  <b>Risk</b> Other capacity-development programs and initiatives in the sector are discontinued due to insufficient support from international development partners

<b>Activities with Milestones</b> 1. Selection and recruitment of consultants and the deputation of seconded counterpart staff from Ministry of Mines and Petroleum (30 September 2013). 2. Consultants begin field work, gather and analyze data, consult with stakeholders and submit inception report by 30 November 2013 and interim report by 31 March 2014. 3. Presentation of inception reports to relevant stakeholders by 31 December 2013 and interim report by 30 April 2014. 4. Convening regular monthly meetings and quarterly workshops and technical working groups meetings during 1 September 2013 through to 31 August 2014. 5. Ministry of Mines and Petroleum staff to undergo training on updating of gas development master plan during 1–30 September 2014. 6. Consultants present the draft final report on 30 September 2014, and hold workshops and dissemination sessions to finalize the report by 31 October 2014.	<b>Inputs</b>  <b>ADB - \$700,000</b> <table border="1"> <thead> <tr> <th>Item</th> <th>Amount (\$)</th> </tr> </thead> <tbody> <tr> <td>Consulting</td> <td>300,000</td> </tr> <tr> <td>Travel</td> <td>120,000</td> </tr> <tr> <td>Reports</td> <td>70,000</td> </tr> <tr> <td>Equipment</td> <td>40,000</td> </tr> <tr> <td>Training</td> <td>50,000</td> </tr> <tr> <td>Surveys</td> <td>10,000</td> </tr> <tr> <td>Misc.</td> <td>10,000</td> </tr> <tr> <td>Contingency</td> <td>100,000</td> </tr> </tbody> </table>		Item	Amount (\$)	Consulting	300,000	Travel	120,000	Reports	70,000	Equipment	40,000	Training	50,000	Surveys	10,000	Misc.	10,000	Contingency	100,000
	Item	Amount (\$)																		
Consulting	300,000																			
Travel	120,000																			
Reports	70,000																			
Equipment	40,000																			
Training	50,000																			
Surveys	10,000																			
Misc.	10,000																			
Contingency	100,000																			
<b>Afghanistan Infrastructure Trust Fund - \$800,000</b> <table border="1"> <thead> <tr> <th>Item</th> <th>Amount (\$)</th> </tr> </thead> <tbody> <tr> <td>Consulting</td> <td>800,000</td> </tr> </tbody> </table> <p>Note: The Government will provide counterpart support in the form of security, office space, transportation, counterpart staff, and other in-kind contributions, facilitate meetings and provide access to requisite data.</p>		Item	Amount (\$)	Consulting	800,000															
Item	Amount (\$)																			
Consulting	800,000																			

m<sup>3</sup> = cubic meter

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
a 20-year period (2015–2035) 3. Formulation of strategy for upstream, midstream, and downstream gas sector development 4. Identification of investment projects to sustain Afghan gas sector and its linkages with power sector investments 5. Preparation of capacity development plan for Ministry of Mines and Petroleum to sustain gas development master planning in Afghanistan	Petroleum trained to update and sustain the Gas Development Master Plan		

## 2. Performance Management Phase

### 2.1. Monitoring

Performance management focuses on the enhancement of report's completeness. "Board of supervisors" is established and operated for it. Standardized table of contents is set at the initial stage of the project and is revised and supplemented with the progress of the project.

Standardized table of contents, referring to that of the ADB and JICA, etc., is decided at the initial stage of the project. As a example, standardized table of contents used in the case of "the Philippines Agusan River Basin Project" by the ADB is presented in the following table.

<Table 3-35> Case of "The Philippines: Master Plan for the Agusan River Basin" by ADB

<b>MASTER PLAN FOR THE AGUSAN RIVER BASIN PROJECT</b>	
<b>TABLE OF CONTENTS</b>	
<b>LIST OF TABLES</b> .....	<b>v</b>
LIST OF FIGURES .....	viii
ACRONYMS and ABBREVIATIONS .....	ix
<b>1.0 INTRODUCTION</b> .....	<b>1-1</b>
1.1. BACKGROUND .....	1-1
1.2. STUDY AREA .....	1-1
1.3. GOAL AND OBJECTIVES .....	1-1
1.4. APPROACH AND METHODOLOGY .....	1-2
1.5. KEY ACTIVITIES .....	1-2

<b>2.0 PHYSICAL AND ENVIRONMENTAL CONDITION .....</b>	<b>2-1</b>
2.1. GEOGRAPHIC SETTING .....	2-1
2.2. CLIMATE .....	2-3
2.3. RAINFALL .....	2-5
2.4. STREAM FLOW .....	2-7
2.5. GROUND WATER .....	2-9
2.6. ENVIRONMENTAL SETTING .....	2-9
2.6.1. Natural Physical Environment .....	2-10
2.6.2. Biological Environment .....	2-13
<b>3.0 SOCIO-ECONOMIC CONDITION .....</b>	<b>3-1</b>
3.1. ECONOMIC SETTING .....	3-1
3.1.1. Economic Profile .....	3-1
3.2. THE SOCIAL SETTING .....	3-10
3.2.1. Stakeholders of the Basin .....	3-11
3.2.2. Demographic and Socio-economic profile .....	3-15
<b>4.0 REVIEW AND ASSESSMENT OF RELEVANT POLICIES AND PLANS .....</b>	<b>4-1</b>
4.1. INTERNATIONAL ORGANIZATIONS INITIATIVES ON WATER MANAGEMENT .....	4-1
4.2. WATER POLICIES AND MULTI-LATERAL AGENCIES .....	4-2
4.3. NATIONAL POLICY OBJECTIVES .....	4-2
4.4. SECTOR POLICIES .....	4-3
4.5. REGULATORY FRAMEWORK .....	4-4
4.6. REGIONAL AND PROVINCIAL POLICY OBJECTIVES AND TARGETS .....	4-9
4.6.1. Caraga Region .....	4-9
4.6.2. Davao Region .....	4-12
4.7. AGUSAN RIVER BASIN WATER POLICY .....	4-14
4.7.1. Assessment of Policy Context .....	4-14
4.7.2. Harmonization of the Basin Policy .....	4-15
4.8. GENDER AND DEVELOPMENT .....	4-18
4.8.1. Gender, Age and Household Distribution .....	4-18

4.8.2. Gender Analysis .....	4-18
4.8.3. Policies and Institutions on Gender .....	4-24
<b>5.0 INSTITUTIONAL FRAMEWORK .....</b>	<b>5-1</b>
5.1. INSTITUTIONAL PARTICIPATION .....	5-1
5.1.1. Existing Institutional Set-up in National Water Resources Management .....	5-1
5.1.2. Institutional Stakeholders in the ADB .....	5-1
5.2. MAJOR INSTITUTIONAL IMPLEMENTS .....	5-2
5.2.1. National Level .....	5-2
5.2.2. ARB Level .....	5-3
5.3. FORMATION OF THE AGUSAN RIVER BASIN ORGANIZATION .....	5-6
5.3.1. Tapping the Potentials of Existing Basin Organizations .....	5-7
5.3.2. Existing Working Models .....	5-7
5.3.3. Imperatives for RBO Formation .....	5-12
5.4. FUNDING THE AGUSAN RIVER BASIN ORGANIZATION AND ITS DEVELOPMENT ACTIVITIES .....	5-15
5.4.1. Identified Funding Sources of Selected IRBM Organization .....	5-15
5.4.2. Funding the Agusan RBO .....	5-17
5.5. RBO FORMATION AND DEVELOPMENT .....	5-21
5.5.1. Basin Governance Options .....	5-21
5.5.2. The Proposed RBO .....	5-22
5.5.3. The Proposed Structure .....	5-25
<b>6.0 PARTICIPATORY APPROACHES AND DEVELOPMENT STRATEGIES .....</b>	<b>6-1</b>
6.1. KEY ENVIRONMENT ISSUES AND STAKEHOLDER PRIORITIES .....	6-1
6.2. BASIN REALITIES AND KEYS TO INTEGRATION .....	6-5
6.2.1. Key Basin Realities .....	6-7
6.2.2. Keys to Integration .....	6-8
6.3. ARBMP DEVELOPMENT VISION, GOALS AND OBJECTIVES .....	6-11
6.3.1. Development Vision .....	6-11
6.3.2. Development Goal .....	6-12
6.3.3. Development Objectives .....	6-12

6.3.4. VGO and the ARB Policy .....	6-13
6.4. ARB DEVELOPMENT STRATEGY .....	6-15
6.4.1. General .....	6-15
6.4.2. Why a Governance Initiative and RBO Formation Strategy .....	6-15
6.4.3. Why an Intervention Initiative and WRM Intervention Strategy .....	6-16
6.4.4. Why a knowledge Development Initiative and GIS Development Data Banking Strategy .....	6-17
6.5. UNITY OF THE DEVELOPMENT STRATEGY .....	6-17
6.6. FROM POLICY TO STRATEGY TO PRINCIPLES .....	6-19
6.7. FROM POLICY TO STRATEGY TO PROJECTS .....	6-20
<b>7.0 BASIN PROGRAMS AND PROJECTS .....</b>	<b>7-1</b>
7.1. ASSESSMENT OF BASIN WATER CONTROL STRUCTURE .....	7-2
7.1.1. Irrigation Development .....	7-2
7.1.2. Water Supply Systems .....	7-8
7.1.3. Flood Control .....	7-12
7.1.4. Roads and Bridges .....	7-13
7.1.5. River Transport .....	7-13
7.1.6. Hydropower .....	7-14
7.2. PROGRAMS/PROJECTS BY KEY THEME .....	7-14
7.2.1. Water Quality Management Program .....	7-2
7.2.2. Flood Management Program .....	7-8
7.2.3. Water Resources Development Program .....	7-8
7.2.4. Watershed Management Program .....	7-8
7.2.5. Agusan Marsh and Wildlife Sanctuary (AMWS) Management .....	7-8
7.2.6. Indigenous Peoples Development Program .....	7-8
7.2.7. River Basin Organization Development Program .....	7-27
<b>8.0. IMPACT ASSESSMENT .....</b>	<b>8-1</b>
8.1. STRATEGIC ENVIRONMENTAL ASSESSMENT .....	8-1
8.1.1 Objectives .....	8-1
8.1.2 Methodology .....	8-1
8.1.3 Categories of Projects .....	8-3

8.1.4 Key Environmental Issues .....	8-3
8.1.5 Potential Environmental Impacts .....	8-3
8.1.6 Cumulative Impacts and Mitigating Measures .....	8-8
8.1.7 Potential Benefits .....	8-15
8.1.8 Institutional Requirements and Environmental Monitoring .....	8-20

ANNEXES

The case of the standard model of the JICA's report is presented in the table below.

<Table 3-36> Case of the Standard Model of the JICA's Report

<Model of the Report>	
Summary and Conclusion	III-6 Social Service
1. Purpose of the Planning	Education, School education (primary, middle, high, vocational school), Job training, Social education, Health, Hospital, Health Center, Pharmacy, Family planning, Welfare (assistance system, church, etc.)
2. Target Area and the Residents (Beneficiary)	
3. Overview of the Project and Priority	
4. Planning Period	
5. Estimation of the Expenses	
6. Expected Outcome	
Body	III-7 Housing, Community
I . Introduction	Housing (numbers, structure, facility, size per eprson, quality) Housing demand, Park, Recreational facility, Meeting place, Civic Building, etc. Church, Mosque, etc. Police, Fire fighting
I -1 Background of the Study Request	
I -2 Major Purpose of the Planning	
I -3 Progress of the Study	
I -4 Relationship with the Planning Institution of the Partner Country	III-8 Culture
I -5 Relationships with Other Country, and International Organizations, etc.	Societal structure (Family, village, tribe, power and control relation), Race, Ethnic Group, Language, Value system, Religion, Charm, Custom and Practice, Way of life, Urbanization, Impact of migration (youngsters' behavior in particular), Contact with foreign culture (colonial relationship, missionary, impact of war,
II . Background of the Comprehensive Development Plan	
II -1 Characteristics of the Country	
Geography (location, area size, topography, etc.) Characteristics of the Nature, Endowed	



Resource situation, Population (numbers, growth rate, distribution, etc.), Brief political history, External Relations, Relationship with Japan	etc.), Ideology of anti-government and anti-development movement, cultural heritage (except historic remains)
II -2 Current Situation of the Economy Size of the Economy, Growth Rate, Economic Cycle, Employment Situation, Employment Policy, Price Situation, Price Policy, Structure of the economy (Capital Ownership System), Fiscal Balance, Fiscal Policy, Financial Situation, Financial Policy, International Balance of Payment (trade, current account, capital account), Reserve in foreign currency, Balance of foreign liabilities, Exchange rate policy, Trade policy, Foreign capital policy	III-9 Administrative System and Private Organization Administrative System of government (Central government, Provincial (Prefectural) government, local self-governing system), Agriculture related organization (agricultural auxiliary organization), Industry relationship(industrial business association, union), Labor union, Religious organization, Volunteer organization
II -3 Industry Situation Industrial Structure and change, Production of major industry, Income trend, Industrial Policy, Resources and energy, Trends of foreign capital (company), Current status of technology and absorbing capacity of foreign capital	IV. Development Strategy IV-1 National Development Plan and Policy Current and under contemplation program, Current situation, Planning and Implementation Structure IV-2 Selection of Target Area IV-3 Development Strategy Mentality IV-4 Project Selection
III. Project Area III-1 Nature Location, Weather (annual, monthly rainfall and seasonal change, temperature, humidity, flood damage, typhoon, frost, outbreak of drought situation <Land> Topography (topographic map), Geological features (geological map), Soil (land classification map), Land use(land use map), (farmland, forest, field, surface, road, factory, housing, park, etc.) <Water> Water resources (fountainhead, water rights), Water usage (agricultural water, industrial water, water works, hydroelectric power, etc.) <Resources> Forest resources, Orthotropous, Fishery	V. Project V-1 Brief explanation of the Plan Project purpose, location, component, cost, step by step program implementation method, and effect V-2 Detailed Plan <Comprehensive Agricultural Development Case> Agricultural development, Agricultural support based industry and facility, Agricultural support service, Social service (insurance[hospital, health center, pharmacy, etc.], Water

resources, Mineral resources (energy resources)	supply[water works]), Rural telephone <General Regional Comprehensive Development Case>
III-2 Industry The primary industry (agriculture, ranching, forest, fishery), The secondary industry(mining industry, manufacturing, construction, electricity, gas, etc.), The tertiary industry (transportation, communication, commerce, financial business, various services, etc.)	Agriculture, Ranching, Fishery, Mining, Manufacturing (by the types of industry), Infrastructure industry (social substructure), Road, Railway, Port, Transportation (land, sea, air), Electricity, Communication, etc. Water resources and use, Land utilization, Regional social development (urban planning, rural area planning, housing, leisure, etc.), Tourism, Social service (health, education, improvement of living environment, etc.)
III-3 Economy Local income, Local fiscal balance (including aid), public investment, Local private savings, private investment, Foreign investment in the local area	V-3 Implementation Schedule
III-4 Society Population, Number, Growth rate (birth and mortality rate) Composition of population(sex, age and class, region, etc.), Population density (rural, urban area), Mobility (between rural and urban, and immigration), Supply of workforce, Employment, Unemployment, Types of employment, Condition of employment(besides wage), Wage (level, system), education and training level, household income and expenditure, agriculture management situation, land holding situation, number of laborers without land, history of land reform and progress situation, income disparity within the region, earning gap among the class, Intention and hope of local people, trends of anti-government movement	V-4 Cost Estimate Capital Cost Recurrent Cost Contingencies  V-5 Financing domestic fund(fiscal fund, private financing fund, farmers, private enterprise, burden on beneficiary, etc.), foreign fund(international organization, bilateral aid, foreign loan, private direct investment)
III-5 Infrastructure Industry Road Network(main road, feeder road, extension distance, structure), Bridge(by grade, structure), Railroad, Port, Airport, Number of automobile, Transportation capacity, Number of ships, Transportation capacity, Number of aircraft, Transportation	VI. Performance(benefit) VI-1 Economic benefit production enhancement effect, employ increase effect  VI-2 Social Benefir income distribution effect, population mobility effect, educational effect, nutritional effect, the standard of living indicator effect  VII. Implementing Organization VII-1 Central organization

capacity, Number of warehouse, Capacity, Communication(mail, telegraph, telephone, radio, television, cable broadcasting, etc.), Electricity(hydroelectric, thermal power, nuclear power, transmission and transformation), Gas, Waterworks(agriculture, industry, household)	central government, Provincial(Prefectural) level, County level, city/municipality/town level, related development financing institution
[Rural relationship]	VII-2 Sub-organization, structure
Irrigation facility, drainage, farm produce storage, processing, sales facility, agricultural machine sales route	VIII. Other Special Feature
	Appendix
	1. Attachment
	2. Study Overview

### 2.1.1. Establishment and use of the Board of Supervisors

The nature, composition, and role of the board of supervisors are specified in the following table.

<Table 3-37> Board of Supervisors

Classification	Contents
Nature	<ul style="list-style-type: none"> <li>• Technical advisory organization commissioned by the chairperson of the board</li> </ul>
Composition	<ul style="list-style-type: none"> <li>• Standing member: relevant field specialist 1-3 persons, KOICA person concerned</li> <li>• Non-standing member: relevant authority, consultant</li> </ul>
Role	<ul style="list-style-type: none"> <li>• Advice about technically specific policy and method related with carrying out the full-fledged study</li> <li>• Guidance and advice about the research work and report by the consultant</li> <li>• Attending regular briefing session(launching, interim, and final)</li> <li>• Report deliberation</li> <li>• Local seminar participation, etc.</li> </ul>

Assessment of the report contents maintains the current method (100 points full mark system.)

Meetings are held and the supervisory team is dispatched frequently if necessary, besides the regular briefing session during the project implementation period.

### 2.2.2. Risk Monitoring

The monitoring is implemented based on the PDM designed for risk monitoring and the risk management chart because periodic monitoring focusing on the precondition and external condition of the PDM is necessary due to the possibility of the occurrence of various risks during the project implementation process.

The following table, PDM for Risk Monitoring, presents the contents of assumptions or risks depending on the categories of narrative summary.

<Table 3-38> PDM for Risk Monitoring

Narrative Summary	Indicator	MOV	Assumption/ Risk	In charge
Impact			<ul style="list-style-type: none"> <li>External conditions and risks for the sustainability of the impact</li> </ul>	KOICA HQ, Overseas Office
Outcome			<ul style="list-style-type: none"> <li>External conditions and risks connecting up the outcome and the impact</li> </ul>	KOICA HQ, Overseas Office
Output			<ul style="list-style-type: none"> <li>External conditions and risks connecting up the output and the outcome</li> </ul>	PMC
Activity	Input		<ul style="list-style-type: none"> <li>External conditions and risks connecting up the activity and the output</li> </ul>	PMC
			<ul style="list-style-type: none"> <li>Preconditions and input level risks</li> </ul>	KOICA HQ, Overseas Office, PMC

The risk management chart which includes nine categories from contents to in-charge is shown in the following table.

<Table 3-39> Risk Management Chart

No.	Contents	Cause	Impact	Probability	Impact	Judgement	Preventive measure	Post measure	Incharge
1	Delay of construction permission	Change of permission personnel	Project delay	2	3	6 (high)	Frequent contact	Work support	
2	...								
3									

\* Probability: 1 (Low), 2 (Medium), 3 (High)

\* Impact: 1 (Low), 2 (Medium), 3 (High)

\* Judgement: 1~2 (Low), 3~4 (Medium), 5~6 (High)

## 2.2. Evaluation

The interim evaluation and the end of the project evaluation is implemented following the current practice of evaluation, and the table of contents in the reports of both the interim and the end of the project evaluation can be the same as one used before. Sample table of contents of evaluation report is presented in the following table.

<Table 3-40> Sample Table of Contents of Evaluation Report

Summary of the Evaluation Results
Ch. 1: Overview of the Evaluation
1. Purpose and the Account of the Dispatch of the Research Team
2. Composition and Research Period of the Research Team
3. Overview of the Evaluation Target Project
Ch. 2: Evaluation Methodology
1. Evaluation Questionnaire and necessary material, evaluation indicator
2. Material collection methods
3. Material analysis methods
4. Restriction and limitation of evaluation research
Ch. 3: Accomplishment
1. Input performance, output performance
2. Special features during the implementation process
Ch. 4: Evaluation Results
1. Evaluation by the 5 criteria of evaluation
2. Conclusion
Ch. 5: Conclusion
1. Suggestion
2. Lesson
Appendix

There are several ways of grading the attainment of development objective. The ADB has four levels of grade from “Not Satisfied” to “Very Satisfied” as shown in the following table.

<Table 3-41> Criteria of the Development Objective Attainment Grade by the ADB

<Development Objective Grade>

- Very Satisfied (3 points): Exceed the major development objectives
- Satisfied (2 points): Achieve the major development objectives
- Partially Satisfied (1 point): Achieve part of the major development objectives
- Not Satisfied (0 point): Hard to achieve the major development objectives

<Grade of the Progress>

- Rating the progress as Very Satisfied (3 points), Satisfied (2 points), Partially Satisfied (1 point), Not Satisfied (0 point) depending on the work progress situation

- AusAID case: Best Practice(5), Fully Satisfactory(4), Satisfactory overall(3), Marginally Satisfactory(2), weak(1)

### 3. Follow-up Study (JICA Case)

#### 3.1. Overview

After the completion of the project, regular “Follow-up” study is implemented once a year on average.

Dividing the development program study into two groups, study is implemented and the results of the study are up-loaded to the database every year.

Status distinction and judgement criteria by the group I is shown in the table below.

<Table 3-42> Status Distinction and Judgement Criteria by the Group I  
(M/P Research, Basic Study, etc.)

Distinction	Judgement Criteria
Progress and Use	<ul style="list-style-type: none"> <li>• Implementing research in the next stage</li> <li>• Linked to other cooperation project</li> <li>• Adopted specifically in the policy and development plan of the partner country</li> </ul>
Delay	<ul style="list-style-type: none"> <li>• After the research, there is no specific action by the partner country.</li> <li>• After the review of specific directions, there is a delay</li> </ul>
Stop and Cancellation	<ul style="list-style-type: none"> <li>• Officially stopped the concerned project or adopted other alternatives by the partner country regarding the research results</li> </ul>

Status distinction and judgement criteria by the group II is shown in the table below.

<Table 3-43> Status Distinction and Judgement Criteria by the Group II  
(F/S, M/P + F/S, D/D, etc.)

Distinction	Judgement Criteria
1. Progress and Use 1.1. Completion 1.2. Partial Completion 1.3. Under Implementation 1.4. Materialization	1.1. Completion of the project 1.2. Part of the project is completed 1.3. Project is being implemented 1.4. When the possibility of materialization of the development project is high such as tender, definite financing, working design, etc.
2. Under materialization	<ul style="list-style-type: none"> <li>• When funding cooperation is being requested, detailed design or additional research is being implemented by the domestic capital, having active action for the materialization of other project by the partner country</li> </ul>



3. Delay	<ul style="list-style-type: none"> <li>• When no specific measure is being taken by the partner country after receiving the final report</li> <li>• In the case of delay after the review of the detailed orientation</li> </ul>
4. Stop and Cancellation	<ul style="list-style-type: none"> <li>• Officially stopped the concerned project or implemented other types of project very different from the final report by the partner country</li> </ul>

### 3.2. Questionnaire Form

The following table shows the follow-up study questionnaire. Questionnaire form is quoted from one being used by JICA.

<Table 3-44> Follow-up Study Questionnaire

Country Name	Study Type
	Feasibility Study, etc.
Item No.	Status
	Under materialization
Consultant Name	
1)	2)
Item Name	

1. Check (√) all the applicable items related with the proposed project in the final report or the appropriate cases in the following five situations related with the research, and fill in the detailed contents. When there are more than two cases of the proposed project or of the research, copy and use the pages 2 and 3.

Name of the Proposed Project (Research)		
Situation		
1. Though the proposed project was implemented, it is being implemented		
2. Financing for the proposed project is finalized		
3. The proposed project was placed a tender or is being placed a tender.		
4. Research of the next stage for the proposed project implementation was implemented or is being implemented.		
5. The possibility of the proposed project's implementation is very high due to other particular reasons.		
Detailed Situation		
1. Proposed project was implemented or under implementation		
Name of the Implemented Project		
Implementation Period (year / month – year / month)	Implementing Agency of Partner Country	Other Implementing Agency
Goal, Objective of the Implementing Project		
Relationship between the Implementing Project and the Proposed Project		
Progress Situation after the Project Implementation		

2. Financing of the proposed project is finalized		
Financing Amount	Financing Source (check the appropriate box)	
	<input type="checkbox"/> Korean government <input type="checkbox"/> Loan /A conclusion date <input type="checkbox"/> Grant Cooperation: E/N conclusion date <input type="checkbox"/> International Organization(Institution Name) <input type="checkbox"/> Other donor country(Country Name)	
Currency Unit	<input type="checkbox"/> Aid recipient country's own fund <input type="checkbox"/> Aid recipient country's private fund <input type="checkbox"/> BOO (Build Own Operate) <input type="checkbox"/> BOT (Build Own Transfer)	
Exchange Rate	<input type="checkbox"/> Other: <input type="checkbox"/> Not clear:	
Financing contents		
3. The proposed project was placed a tender or is being placed a tender.		
Tender Date	Successful Tender	
Contents		
4. Research of the next stage for the proposed project was implemented or is being implemented.		
Name of the Next Stage's Research Project		
Implementation Period (year / month – year / month)	Implementing Institution of Partner Country	Other Implementing Agency
Goal and Objective of the Research Project in the Next Stage		

5. The possibility of the proposed project's implementation is very high due to other particular reasons.

Detailed Contents  
(facilitating factors for the implementation of the proposed project, etc.)

II. In case of the new progress other than the five items mentioned above, write it down in the following box.

Contents

Respondent

Telephone No.

E-mail Address

The Questionnaire for the status of the completed project is presented in the following table.

<Table 3-45> Questionnaire for The Status of The Completed Project

Country Name	Study Type
	Master plan study, etc.
Item No.	Status
	Progress-Use
Consultant Name	
1)	2)
Item Name	

1. Check (√) all the applicable items related with the proposed project in the final report or the appropriate cases in the following five situations related with the research, and fill in the detailed contents.

Answer the following questions related with the implemented study (hereafter “next stage study”) or project (hereafter “implementation project”) based on the proposed project or study (hereafter “proposed project (study)”) in the final report. When there are more than 2 cases concerned, copy and use the pages 2 and 3.

Proposed Project(Study) Name		
1. Basic Information		
Name of the Study(Implementation) Project in the Next Stage		
Implementation period (year/month – year/month)	Implementing institution of partner country	Other implementing agency
Goal and Objective of the study project in the next stage		
Relationship between the implementing project and the proposed project		
2.Detailed contents of financing		
Financing amount	Funding source(check the following box)	
	<input type="checkbox"/> Korean government <input type="checkbox"/> Loan /A conclusion date <input type="checkbox"/> Grant Cooperation: E/N conclusion date <input type="checkbox"/> International Organization(Institution Name) <input type="checkbox"/> Other donor country(Country Name) <input type="checkbox"/> Aid recipient country’s own fund <input type="checkbox"/> Aid recipient country’s private fund <input type="checkbox"/> BOO (Build Own Operate) <input type="checkbox"/> BOT (Build Own Transfer) <input type="checkbox"/> Other: <input type="checkbox"/> Not clear:	
currency unit		
Exchange rate		

Financing contents	
3. Progress Situation when the design and construction are implemented	
Design-Construction Period (year/month – year/month)	Construction Progression State
-	
Management-Operation agent after completion of design-construction	
Contents of design-construction	
4. In case of the technical cooperation implementation from Japan, check the appropriate box below and write down the related contents.	
<input type="checkbox"/> training program	contents
<input type="checkbox"/> expert dispatch	contents
<input type="checkbox"/> other technical cooperation	contents

II. Write down the benefits of the proposed project (study) already implemented. When there are more than 2 cases, copy the current page and use it.

Proposed Project(Study) Name
Name of the Study(Implementation) Project in the Next Stage
Intended Beneficiary (Resident, Area, etc.)

Effect of Benefits(Write down the project performance in quantity as much as possible such as the number of People, Area, Carrying Capacity, Traffic Volume, etc.

Extent of the proposed project(research) use

Others

III. When there is a change after the proposed project is industrialized such as management, operation, renovation, etc., write down the contents in the following.

Name of the Proposed Project(Study)

Name of the Project(Study) in the Next Stage

Contents

Respondent	Telephone No.	E-mail Address

#### 4. Post Evaluation

After a certain period has passed after the completion of the project, post evaluation is carried out based on the five OECD/DAC evaluation criteria.



## Section 5. Results-Based Management of Feasibility Study

### 1. Project Formulation Phase

The final output of a feasibility study project is in the form of “Report paper,” of which main purpose is to decide whether or not to initiate the project. Here the case of AusAID, using a detailed operating manuals, is mainly referred.

The process of feasibility study is summarized in the <Table 3-46>, resorting to the AusAID' case.

<Table 3-46> Feasibility Study Activities

1. Preliminary Feasibility Study
  - 1.1. Terms of Reference(TOR) Preparation
  - 1.2. Selection of PMC
  - 1.3. Implementation of Preliminary Feasibility Study
  - 1.4. Reporting
2. Feasibility Study
  - 2.1. Terms of Reference(TOR) preparation
  - 2.2. Selection of PMC
  - 2.3. Implementation of Feasibility Study
  - 2.4. Reporting
3. Appraisal
  - 3.1. Decision of Appraisal Types
  - 3.2. Appraisal Schedule
  - 3.3. TOR Preparation
  - 3.4. Appraisal Team Selection
  - 3.5. Field Survey
  - 3.5. Project Design Document for Appraisal
  - 3.6. Approval



Key Document Forms are "Feasibility Study TOR Form", "Project Document Form", and "Project Appraisal Check List", whose samples are provided as below.

<Table 3-47> Feasibility Study TOR Form

1. Introduction
2. Purpose, Scope and Duration
  - 2.1. Purpose
  - 2.2. Scope
  - 2.3. Duration
3. Evaluation Team
4. Report
5. Individual TOR (Division of Works)

<Table 3-48> Project Document Form

- Map of the Country
- Executive Summary
1. Introduction
    - 1.1. Project Background
    - 1.2. Formation Process
  2. Validity for Assistance
    - 2.1. Development Opportunity
    - 2.2. Development Priority
    - 2.3. Related Programs
    - 2.4. Limitation, Strategies and Policies
    - 2.5. Expected Outcomes
  3. Project Component and Implementation
    - 3.1. Purpose
    - 3.2. Cooperative Group
    - 3.3. Location, Project Duration and Promotion
    - 3.4. Inputs, Activities, Outputs, Achievement, and Impacts
    - 3.5. Costs and Procurement

- 3.6. Organizational Management
  - 3.7. Monitoring
  - 4. Review
    - 4.1. Project Feasibility (Technical, Financial, Economic, Organizational, Environmental and etc.)
    - 4.2. Sustainability
    - 4.3. Capability for Assistance
    - 4.5. Alternatives and Risks
    - 4.6. Overall Feasibility Evaluation
  - 5. Expected Benefits
- Appendix

<Table 3-49> Project Appraisal Check List

<b>1. Project Details</b>		
Project Title		
Evaluation Document		
Country		
Cost	Date	
Duration (Year)	Program Number	
Evaluation Manager	File Number	
Feasibility Study Contract		
<b>2. Evaluation Summary</b>		
	Evaluation	Comment
<b>2.1 Project Feasibility</b>		
Rational Reasons		
Logic		
Feasibility and Sustainability		
Technical		
Social		
Institutional		
Financial		
Economic		
Gender Analysis		
Poverty		
Environment		
Trade/ Commercial		

Management/ Implementation		
Training		
Considered Options		
Risk		
<b>2.2 Project Overview</b>		
Log Framework		
Implementing Schedule		
Cost Schedule		
Budget		
Donor Country		
Recipient Country		
Costing cleared PSS		
TOR Requirements		
<b>3. Evaluation Approach</b>		
<hr/>		
<hr/>		
<hr/>		
<b>4. Evaluation Results</b>		
Evaluation	Meaning	Corrective Measures
Highly sufficient	A high level of satisfaction	None
Sufficient	Moderate	Not mandatory
Partly sufficient	Corrective measures required	Required
Insufficient	A low level of satisfaction	Re-try
Unqualified	Non applicable	None



## **Section 6. Capacity Development**

As shown in the cases of the ADB and World Bank, recently many development agencies have exerted strenuous efforts to establish their own frameworks to strengthen capacity development. Nonetheless, the universally applicable standard framework has not yet been established. According to interview results with officials of ADB and World Bank stationed in Vietnam, it was revealed that the methods developed by these agencies were not in a full operation at a field level. And it seems to be difficult to apply their frameworks to KOICA's case in the sense that the cases of ADB and World Bank are targeting the program level capacity development rather than the project level.

In this context, it is more feasible to apply the case of JICA, which developed its own framework for managing technical cooperation project based on Kirkpatrick Model.

JICA's technical cooperation, which focuses on capacity development, aims to bring about stakeholders' behavioral and social and economic structural changes after the completion of the project. These changes are referred as "outcomes" and these outcomes categorizes into "direct outcomes", "intermediate outcomes", and "Ultimate outcome" according to the stage of the project.

JICA's technical cooperation is classified into the following four types according to its objectives:

- Type I: Individual levels of Capacity;
- Type II: Organizational levels of Capacity;
- Type III: End-Users (beneficiary) levels of Capacity;

- Type IV: Institutional and Societal levels of Capacity.

Perhaps the best known evaluation methodology for judging learning processes is Donald Kirkpatrick's Four Level Evaluation Model that was first published in a series of articles in 1959 in the Journal of American Society of Training Directors and in 1994 the book titled "Evaluating Training Programs." Nowadays, his four levels remain a cornerstone in the learning industry. The four steps of evaluation are summarized as below.

<Table 3-50> Kirkpatrick's Four Level Evaluation Model

Stage	Items	Contents
1st stage (Reaction)	Satisfaction	<ul style="list-style-type: none"> <li>To what degree participants react favorably to the learning event</li> </ul>
2nd stage (Learning)	Knowledge	<ul style="list-style-type: none"> <li>To what degree participants acquire the intended knowledge, skills and attitudes based on their participation in the learning event</li> </ul>
3rd stage (Behavior)	Performance	<ul style="list-style-type: none"> <li>To what degree participants apply what they learned during training when they are back on their jobs</li> </ul>
4th stage (Results)	Impact	<ul style="list-style-type: none"> <li>To what degree targeted outcomes come occur as a result of learning events and subsequent reinforcement</li> </ul>

JICA applies Kirkpatrick model to each type of technical cooperation as follows.

<Table 3-51> Type I: Individual Capacity Development

Stage	Indicators	Means of Verification
① Reaction	-	-
② Learning	<ul style="list-style-type: none"> <li>Knowledge Level of individuals</li> </ul>	<ul style="list-style-type: none"> <li>Test</li> <li>Interview</li> </ul>
③ Behavior	<ul style="list-style-type: none"> <li>Behavioral Change</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> <li>Evaluation by observation</li> <li>Interview</li> </ul>
④ Results	<ul style="list-style-type: none"> <li>Final Results</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> <li>Evaluation by observation</li> <li>Interview</li> </ul>

<Table 3-52> Type II: Organizational Capacity Development

Stage	Indicators	Means of Verification
① Reaction	-	-
② Learning	<ul style="list-style-type: none"> <li>Knowledge Level of members of organization</li> </ul>	<ul style="list-style-type: none"> <li>Refer to type I</li> </ul>
	<ul style="list-style-type: none"> <li>Existence of data-sharing network within an organization</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> <li>Interview with members of organization</li> </ul>
③ Behavior	<ul style="list-style-type: none"> <li>Organization Behavioral changes</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> <li>Evaluation by observation</li> <li>Interview with members of organization</li> </ul>
	<ul style="list-style-type: none"> <li>Implementation status of organizational systems</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> </ul>
④ Results	<ul style="list-style-type: none"> <li>Management indicators and financial statement</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> </ul>
	<ul style="list-style-type: none"> <li>Quantity of provided service by organization</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> </ul>
	<ul style="list-style-type: none"> <li>Quality of provided service by organization</li> <li>- Customer satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> <li>End-User(Beneficiary) Survey</li> <li>Evaluation by observation</li> </ul>

<Table 3-53> Type III: End Users (Beneficiary) Capacity Development

Stage	Indicators	Means of Verification
① Reaction	<ul style="list-style-type: none"> <li>level of satisfaction with provided service</li> </ul>	<ul style="list-style-type: none"> <li>End-users survey</li> </ul>
② Learning	<ul style="list-style-type: none"> <li>Knowledge level of end users</li> </ul>	<ul style="list-style-type: none"> <li>Test</li> <li>Interview with end-users</li> </ul>
③ Behavior	<ul style="list-style-type: none"> <li>Behavioral changes of end users</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> <li>Evaluation by observation</li> <li>Interview with stakeholders and end users</li> </ul>
④ Results	<ul style="list-style-type: none"> <li>Quality and Quantity of provided service measured by end users</li> </ul>	<ul style="list-style-type: none"> <li>Project Operational Management Records</li> <li>End-Users Survey</li> <li>Evaluation by observation</li> <li>Interview with stakeholders and end-users</li> </ul>

<Table 3-54> Type IV: Community Capacity Development

Community Capacity Development	Indicators	Means of Verification
Organizational Capacity Development	Refer to type II	Refer to type II
End Users Capacity Development	Refer to type III	Refer to type III
Related Stakeholders' Capacity Development	Refer to type I or II	Refer to type I or II
Establishment of Related Regulative Systems	Documented Regulations	Project Operational Management Records
	Traditional Regulations	Project Operational Management Records
		Evaluation by observation
		Interview with institutions and end users

	Implementation status of existing regulations	Project Operational Management Records
		Evaluation by observation
		Interview with institutions and end users

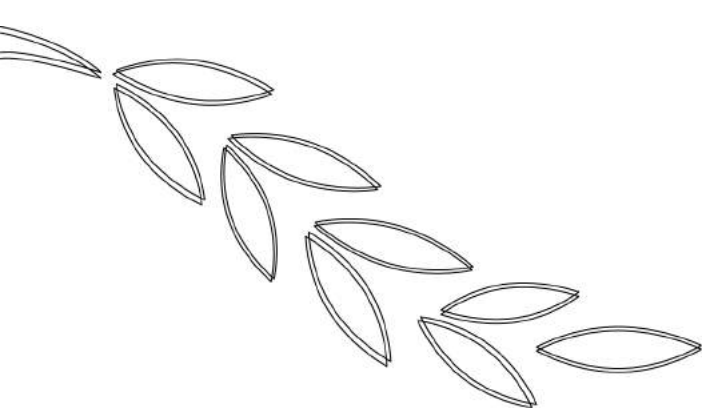
Resorting to the JICA's case, Capacity Development PDM for the Master Plan for Haiphong New Town Development can be produced as below.

<Table 3-55> Capacity Development PDM for Master Plan for Haiphong New Town Development

Narrative Summary	Objectively Verifiable Indicators: OVI	Means of Verification: MOV
<b>Impact</b> Settlement of Town Development Model	Omit	Omit
<b>Outcome</b> Research results management system is established in an organizational level	Omit	Omit
<b>Outputs</b> <ul style="list-style-type: none"> <li>• Organizational Level               <ol style="list-style-type: none"> <li>1. Research Data network is built</li> <li>2. Research software is developed</li> <li>3. Domestic and overseas research network established</li> </ol> </li> <li>• Individual Level               <ol style="list-style-type: none"> <li>4. Capacity Developed</li> </ol> </li> </ul>	Omit	Omit
<b>Activities</b> 1.1. Database Network Building 1.2. Equipment Utilization Training  2.1. Research software provision 2.2. Research software utilization training	Experts (M/M)  - KOICA: 400 - Vietnam: 80  Trainee -Decision Making Board:13, 5 Days	



3.1. Provision of network building lecture on domestic and foreign research institutions	
4.1. Provision of New Town development methodology lecture	- 1st manger: 12, 14day - 2nd manger: 12, 14day
4.2. Provision of New Town development methodology Training	
4.3. Result management methodology workshop	



## Reference





## Reference



### **Korean literature**

공동성 외 (2011), 정부업무 성과관리제도 발전방안연구. 총리실

공동성 외 (2013), 성과관리: 외국제도편. 도서출판 대영문화사

공동성 외 (2013), 성과관리: 한국제도편. 도서출판 대영문화사



### **English literature**

ADB. 1997, "Review of the Bank's Technical Assistance Operations" ADB

ADB. 2003, "Review of the Management and Effectiveness of Technical Assistance Operations of the Asian Development Bank" ADB

ADB. 2006, "Capacity for Results Management: A Guide for Conducting a Rapid Assessment of the Capacity of Developing Member Countries to Manage for Results" ADB

ADB. 2007, "CPS Guidelines" ADB

ADB. 2007, "Special Evaluation Study: TA Performance" ADB

ADB. 2007, "Guidelines for Preparing a Design and Monitoring Framework" ADB

- ADB. 2007, “Integrating Capacity Development into Country Programs and Operations: Medium–Term Framework and Action Plan” ADB
- ADB. 2008, “Effectiveness of ADB's Capacity Development Assistance: How to Get Institutions Right” ADB
- ADB. 2008, “Increasing the Impact of the Asian Development Bank's Technical Assistance Program: Policy Paper” ADB
- ADB. 2011, “Driving Results at ADB” ADB
- ADB. 2011, “Practical Guide to Capacity Development in a Sector Context” ADB
- ADB. 2013, “Thematic Evaluation Study: Role of Technical Assistance (TA) in ADB” ADB
- ADB. 2013, “Evaluation Approach Paper, Thematic Evaluation Study: Role of Technical Assistance (TA) in ADB” ADB
- AIDAB. 1990, “Country Programs Operations Guide” AIDAB
- DAC Working Party on Aid Evaluation. 2000, “Results Based Management In the Development Co–operation Agencies: A Review of Experience” ADB
- DFID. 2003, “Tools for Development: A Handbook for those engaged in Development activity” DFID
- JICA. 2003, “일본형 국제협력의 유효성 및 과제 (일본어)” JICA
- JICA. 2004, “프로젝트 평가의 실천적 방법 (일본어)” JICA
- JICA. 2004, “역량개발 핸드북 (일본어)” JICA

- JICA. 2005, “기술협력 프로젝트 성과지표 매뉴얼 (일본어)” JICA
- JICA. 2007, “사업관리 핸드북 (일본어)” JICA
- Kusek, J.Z. & Rist R.C. 2004, “Ten Steps to a Results-Based Monitoring & Evaluation System” World Bank
- UNDP. 2009, “Handbook on Planning, Monitoring and Evaluating for Development Results” UNDP
- USAID. 2011, “Program Cycle Overview” USAID
- World Bank. 2009, “The Capacity Development Results Framework: A Strategic and Results-Oriented Approach to Learning for Capacity Development” WB
- World Bank. 2011, “A Review of Capacity Development Results Measurement in World Bank Projects: The Need for a Systematic Approach” WB



---

**Research on Means of Results-Based Management (RBM) for  
the Development Consulting Project “DEEP”**

---

Copyright © 2013 by KOICA

Published by the Korea International Cooperation Agency(KOICA)

825 Daewangpangyo-ro, Sujeong-gu, Seongnam-si,

Gyeonggi-do, Korea 461-833

C.P.O Box 2545

Tel: 82-31-740-0114, Fax: 82-31-740-0693

Website: <http://www.koica.go.kr>

ISBN : 978-89-6469-235-6 93320