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1. 合同中間レビュー調査報告書に関する協議議事録 (M/M)

MINUTES OF MEETING
BETWEEN JAPAN INTERNATIONAL COOPERATION AGENCY
AND
AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF
INDONESIA
ON
THE PROJECT FOR “STRENGTHENING ENVIRONMENTAL MANAGEMENT
CAPACITY OF LOCAL GOVERNMENT IN INDONESIA (SEMAC)”

The Midterm Review Team (hereinafter referred to as “the Team”) headed by Mr. Kiichi TOMIYA, conducted the midterm review of Project for “Strengthening Environmental Management Capacity of Local Governments in Indonesia (SEMAC)” (hereinafter referred to as “the Project”) in Indonesia from 26th July to 6th August 2010.

During the period which mentioned above, the Team reviewed the performance of the Project and had a series of discussions with the Indonesian authorities.

As a result of the study and discussions, both sides agreed in 2nd Joint Coordination Committee to report to their respective Governments the matters referred to in the document attached hereto.

Jakarta, August 6, 2010

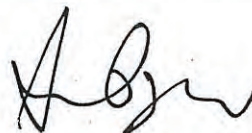


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JOINT MIDTERM REVIEW REPORT
ON
THE PROJECT FOR
STRENGTHENING ENVIRONMENTAL MANAGEMENT
CAPACITY OF LOCAL GOVERNMENT IN INDONESIA (SEMAC)

Jakarta, August 6, 2010

Midterm Review Team

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1. OUTLINE OF THE PROJECT

1-1 Background of the Project

Recently the role of the local government in environment management became more and more important, while the capacity of the local government in enforcing the laws and regulations was still not enough due to a lack of experience. In order to solve the above problem, “the Project for Strengthening Environmental Management Capacity of Local Government in Indonesia” was proposed by the Government of Indonesia (hereinafter referred as “GOI”) to the Government of Japan (hereinafter referred as “GOJ”). The Record of Discussion for this project was signed in December 31, 2008.

It has been almost one (1) and half (1/2) years since this project started in March 2009. In order to review the current progress of the project, and to assess whether the project has been properly implemented as planned in Project Design Matrix (PDM) agreed between JICA, Ministry of Home Affairs and State Ministry of Environment, the Midterm Review was conducted.

1-2 Summary of the Project

Summary of the Project such as Overall Goal, Project Purpose, and Outputs is shown in Table 1 below.

Table 1: Summary of the Project

<u>Overall Goal</u> Capacity development of the local governments in enforcing the environmental laws and regulations is performed.
<u>Project Purpose</u> Local governments develop their capacity of water quality management to enforce the environmental laws and regulations in the pilot sites.
<u>Outputs</u> 1. Documents on the laws and regulations about water quality management are prepared and utilized appropriately. 2. Technical guidance for water quality management plan and a manual for province to support the regency/municipality are used for establishing a cooperative framework. 3. Water quality management plan is formulated and implemented in pilot sites.

2. OBJECTIVE AND METHODOLOGY OF JOINT MIDTERM REVIEW

2-1 Objective of the Joint Midterm Review

The Project is expected to be terminated in September 2011, and the Joint Midterm Review is to be implemented to assess whether the Project is properly producing effects as planned. Therefore, the objective of review is to determine the achievement of the Project as regards the Project Purpose, Outputs, and other emerging issues and to map out its direction in the remaining Project period as well as towards the achievement of the Overall Goal after the Project period comes to an end. The specific objectives of the review were as follows:

- 1) To review the degree of achievement of Input, Output, and Project Purpose based on the Project Design Matrix attached (hereafter referred to as “PDM”, which is shown in Annex 1)
- 2) To evaluate the Project based on the five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact and Sustainability)¹. Detail of the criteria is explained in Table 2.

¹ Development Assistance Committee (DAC) of OECD. “Glossary of Key Terms in Evaluation and Results Based Management.” www.oecd.org

- 3) To make recommendations regarding measures to be taken for the improvement of the Project as well as to learn lessons for the improvement in planning and implementation of similar Technical Cooperation Projects

Table 2: Five Evaluation Criteria

Relevance	Relevance is to question whether the project purpose and overall goal are still in keeping with the priority needs and concerns at the time of evaluation.
Effectiveness	Effectiveness concerns the extent to which the project purpose has been achieved, or is expected to be achieved, in relation to the outputs produced by the projects
Efficiency	Efficiency is a productivity of the implementation process: how efficiently the various inputs are converted into outputs.
Impact	Impact is intended and unintended, direct and indirect, positive and negative changes as result of the project. Also, expectation of reaching to Overall Goal shall be examined.
Sustainability	Sustainability of the development project is to question whether the project benefits are likely to continue after the external aid has ended.

2-2 Members of the Midterm Review Team from Japan

The member of the Midterm Review Team from Japanese side is shown in Table 3.

Table 3: Members of the Joint Midterm Review Team from Japanese Side

Name	Job Title	Occupation
Mr. Kiichi Tomiya	Team Leader	Deputy Representative, JICA Indonesia office
Ms. Hiroko Kamata	Water Environment	Senior Advisor, JICA Head Quarters
Ms. Keiko Kitamura	Cooperation Planning	Project Formulation Advisor, JICA Indonesia office
Mr. Harumi Iida	Evaluation Analysis	Researcher, Global Link Management, Inc.

2-3 Schedule of Joint Midterm Review

Schedule of the Joint Midterm Review is shown in Annex 2.

2-4 Status of the Joint Midterm Review Report

The Joint Midterm Review Report has been drafted by the Midterm Review Team, submitted and finalized in the Joint Coordination Committee (JCC) on 6 August 2010, the JCC members discussed the Midterm Review report. The result of the discussion is concluded in the Minutes of Meeting.

2-5 Data Collection Methods and Analysis

Data collection methods used by the Midterm Review Team were as follows:

- 1) Review of project documents such as the Record of Discussions, PDM, progress reports and minutes of meetings in order to examine the progress and achievements of the Project.
- 2) Review of data collected by the Midterm Review Team.
- 3) Questionnaire survey and interviews of key Indonesian counterparts and stakeholders to confirm the findings from the document review and obtain their insights regarding the Project. (The list of interviewees is shown in Annex 3)

3. REVIEW OF THE PROGRESS

3-1 Inputs to the Project (as of the time of Midterm Review)

Inputs made by both Japanese and Indonesian sides during the project period since the inception in March 2009 are summarized as follows. (List of Japanese and Indonesian inputs are shown in Annex 4 & Annex 5)

3-1-1 Inputs from the Japanese side

Inputs from the Japanese side are as follows:

- 1) Experts
7 (seven) persons (Totally 40.6 MM)
- 2) Counterpart Personnel Training in Japan
15 (fifteen) persons participated in four training courses in JFY 2009.
- 3) Provision of Equipment

For the smooth implementation of the project activities, JICA provided the equipment base upon request from Indonesian Counterparts during the project period, total cost of equivalent were 3,424,326 Yen (364,603,933 Rp.).

- 4) Local operational expenditure (including the cost of provided equipment)

The local operational expenditure for implementing activities in the Project, borne by Japanese side is 17,967,000 Yen (1,931,763,079Rp.) for 1st phase (from March 2009 and for April 2009 to March 2010). And, it is estimated 19,427,326 Yen (1,860,854,981Rp.) for 2nd phase (from May 2010 to March 2011). Therefore, total operational expenditure for the Project would be estimated 37,394,326 Yen (3,792,618,060 Rp.) for this two years. (See Table 4 Local Operational Expenditure of Japanese Side)

Table 4: Local Operational Expenditure of Japanese Side in Yen (Rp.)

Phase	Amount
1 st phase	17,967,000 (1,931,763,079)
2 nd phase	19,427,326 (1,860,854,981)
Total	37,394,326 (3,792,618,060)

3-1-2 Inputs from the Indonesian side

Inputs from the Indonesian side are as follows:

- 1) Counterpart Personnel necessary for the Project

Totally, 91(ninety-one) counterpart personnel are assigned for the Project in GOI and Local governments (Province and Regency/Municipality).

- 2) Necessary budget for the operation of the Project

Counterpart organizations (Provincial and Regency/Municipal governments) have disbursed necessary for the Project activities. Total expenditure from those counterpart organizations was more than 475,000,000 Rp. for year 2009 and year 2010.

- 3) Land, Facilities and Equipment

One (1) office space has been offered for the Project in Directorate General of Regional Development of Ministry of Home affairs (BANGDA).

3-2 Achievement of Outputs and Project Purpose (as of the time of Midterm Review)

The summary of Achievement of the Project is shown below. (Detail of the achievements is shown in Annex 6).

3-2-1 Achievement of Outputs

Output 1: Documents on the laws and regulations about water quality management are prepared and utilized appropriately.

Indicator:

1-1 Booklets on the laws and regulations related to water quality management are available.

1-2 Number of seminars and number of people attended.

First of all, WGs consisting of counterparts, JICA experts and local consultants were organized in the Project. WG1 was organized to work for legal and organizational matter of WQM/WPC, while WG2 was organized for technical matter of WQM/WPC. Number of participants from local governments in each WG is shown in Table 5.

Table5 Number of participants in Working Groups

	WG1	WG2	Sub-total
West Java Province	5	4	9
Bogor Regency	5	6	11
Bogor Municipality	5	6	11
Banten Province	5	5	10
Tangerang Regency	4	5	9
Tangerang Municipality	5	11	16
South Tangerang Regency	7	7	14
Total	36	44	80

The Project organised a seminar and four workshops to discuss environmental management and role of local government. The outputs of these activities were producing several documents. Total number of participants in those events was 217, which is shown in Table 6.

Table 6 Number of Participants in Seminars and Workshops

	Date	No. of participants
1 st workshop	August 19, 2009	36
1 st seminar	November 16, 2009	55
2 nd workshop	December 10, 17, 2009	35
3 rd workshop	March 15, 2010	59
4 th workshop	July 14, 2010	32
Total		217

Through activities of Working Group 1(WG1) in the Project, "Booklet on the Environmental Laws and Regulations related to Water Quality Management and Water Pollution Control" (First edition) has been compiled. The booklet explains contents of related laws and government regulation (GR) such as the Regional Administration Law regarding Regional Governance (No.32 of 2004), GR regarding Distribution of Governmental Affairs among Government, Regional Government of Province and Regional Government of Regencies/Municipalities (No.38 of 2007) and GR regarding Water Quality Management and Water Pollution Control (No.82 of 2001). It clearly articulates role and responsibility of staffs of environmental institution in regional governments in above laws and GRs.

The booklet has been widely distributed to stakeholders in related organization, and counterparts have utilized the booklet in their daily duty. It has contributed to strengthening environmental management of those local governments. For example, counterparts in Tangerang Municipality have used the booklet in series of seminar, to disseminate importance of environmental management to participants from schools, households and industry.

In addition, WG1 prepared a draft of "Policy Paper for Strengthening Organization and Institution". The policy paper will make recommendation to take necessary arrangement in local government for effective WQM/WPC.

Output 2: Technical guidance for water quality management plan and a manual for province to support the regency/municipality are used for establishing a cooperative framework.

Indicator:

- 2-1 Technical guidance and manual for province to support the regency/municipality are available.
- 2-2 Cooperative framework is established.

Working Group2 (WG2) in the Project has worked for technical matter of water quality control on the river. As the result of activities by WG2, a draft of “Technical Guideline for Water Quality Management and Water Pollution Control Plan” was compiled. The guideline which refers to KLHR No.01 of 2010 regarding implementation of water pollution control was prepared to support local governments to make Water Quality Management/Water Pollution Control plan (hereafter referred as “WQM/WPC plan”). The guideline shows the procedure to make WQM/WPC plan by each local government such as preparation of academic draft.

WG2 utilized the draft technical guideline to conduct activities for development of pollution source inventory of the Cisadane river basin which will be used to estimate pollution load generation and study assimilative capacity. They also made “Garbage maps for the Cisadane River Basin” by using acquired information and data from the field survey. Counterparts in WG2 have developed their capacities on pollution control through these activities.

On the other hand, the Project has planned to create “Manual for Province to Support Regency/Municipality” through activity of WGs. The manual will make clear the role and duty of Provincial government to support local government on WQM/WPC. Provincial governments in target area are expected to have efficient coordination among local government as well as technical assistance to them.

Output 3: Water quality management plan is formulated and implemented in pilot sites.

Indicator:

- 3-1 Comprehension and capacity level of counter parts on water quality management are enhanced.

The capacity assessment for counterpart personnel was implemented in the Project in order to identify necessary capacity for provincial and local government on WQM/WPC. Several trainings on water quality management, those were field survey on the Cisadane River Basin, study tour on North Sumatra province, Training course in Japan and etc. were conducted in the Project activities. Member of WGs discussed how to improve WQM/WPC in each local government by utilizing result of those trainings.

3-2-2 Achievement of Project Purpose

Local governments develop their capacity of water quality management to enforce the environmental laws and regulations in the pilot sites.

Indicator:

- 1. Water quality management plan in pilot sites is available.
- 2. Number of policies and programs developed in the pilot sites.

Through the activities that mentioned above, the Project has produced several outputs to establish self-reliant environment management by local government. It could be expected that the Project will support local governments to formulate WQM/WPC plans by the end of the project term. Some local government would be able to implement pilot activities such as water quality monitoring, inspection, coordination with other institutions/sections, public awareness, etc to improve water quality of the Cisadane River.

4. EVALUATION BASED ON THE FIVE EVALUATION CRITERIA

The summary of Five-evaluation criteria of the Project is shown below. (Detail of the evaluation is shown in Annex 7).

4-1 Relevance

The aim of the Project is considered as relevance to national development policy in Indonesia, local needs in target areas, and Japanese aid policy as follows.

(1) Coincide with national development policy in Indonesia

In Indonesia, protection of environment which includes WQM in the river has been mandate of local government by enforcement of the Regional Administration of Law regarding Regional Government (No.32 of 2004) and Government Regulation (GR) regarding Distribution of Governmental Affairs among Government, Regional Government of Province and Regional Government of Regencies/Municipalities (No.38 of 2007). Also, GR regarding Water Quality Management (WQM) and Water Pollution Control (WQC) (No.82 of 2001) stated that WQM and WPC are handed over to local government from central government. In addition, Government of Indonesia (GOI) stated new Law regarding Protection and Environmental Management Law (No.32 of 2009), which confirms that local government is required to make Environmental Protection and Management Plan. Therefore, local government is necessary to develop their capacity to protect and manage environment including water quality of the river basin.

(2) Coincide with local needs in target area

Although Indonesia has already developed the legal system on various environmental management including WQM and environmental impact assessment, which explained above, those laws and regulations have not still properly enforced by local government due to insufficient capacities and lack of experience. Therefore, capacity development of local government is essential to effective implementation of the legal system. In addition, the Cisadane River was selected by Ministry of Environment to improve water quality as one of important river basin out of thirteen rivers in the country.

(3) Coincide with Japanese aid policy

Japanese Aid Policy is keen to protect environment in Indonesia. Government of Japan (GOJ) and JICA has supported GOI by several assistant program, those are dispatching environmental policy advisor, establishing Environmental Management Center (EMC) under Ministry of Environment, and technical assistance to environmental management system in North Sumatra Province. Aims of these assistant were mainly to strength capacity at national level. Therefore, GOI and JICA recognized that strengthening of local government on environmental management has been important for next step, to establish self-reliant environment management under circumstance of decentralization.

4-2 Effectiveness

The Project is expected to achieve its purpose that "Local governments develop their capacity of water quality management to enforce the environmental laws and regulations in the pilot sites." by the end of the Project. In order to achieve the project purpose by the end, the Project should solve several issues, which explained below.

(1) Expectation to achieve the Project Purpose

Through the activities in the Project, counterparts in local governments have developed their capacity on WQM on the Cisadane River Basin. They could understand the role and responsibility of environmental institution in local government among related laws and GRs by compiling of "Booklet on the Environmental Laws and Regulations related to Water Quality Management and Water Pollution Control". In addition, they have prepared a draft of "Technical Guideline for Water Quality Management and Water Pollution Control Plan". And then, they have implemented "Pollution Inventory Survey in the Cisadane River Basin" based on secondary data. Counterparts have proceeded step by step to make WQM/WQC Plan in each local government.

(2) Remaining issues

a) Selection of pilot site

While the Project has supported five local governments, capacity of those organizations are different. Due to limited period, the Project needs to select pilot sites to implement pilot activities

along WQM/WPC plan in the local government.

b) Revise of the booklet

The "Booklet on the Environmental Laws and Regulations related to Water Quality Management and Water Pollution Control" needs to be revised to ensure consistency with modification of several government regulations such as GR No.82 of 2001 due to introduction of New Law on Environmental Protection and Management (Law No.32 of 2009).

c) Job rotation of counterparts in local governments

Frequent job rotation of counterparts to another position in the local government would hamper to maintain developed capacity of counterparts. Also many of them have not yet fully shared acquired skills and knowledge on WQM/WPC within their organizations.

d) General Plan of the Cisadane River Basin

Ministry of Environment is planning to finalize the draft the General Plan for the Cisadane River Basin. The finalization of above General Plan is indispensable to allocate pollution load and to set up target water quality as water class to each segment along with the Cisadane River Basin, Therefore, Ministry of Environment is required to provide the local governments with such items for considering the contents of their WQM/WPC plans.

e) Revise of Project Design Matrix

Content and composition of present PDM made at December 2008 has not been coincided with actual project activities. Therefore, PDM needs to be revised its content especially Outputs and Activities.

4-3 Efficiency

The project activity has been implemented along the plan, and inputs are effectively utilized to implement those activities. Also, the Project has been well managed through organized WGs as well JCC. In this regards, the Project has been efficiently implemented to produce Outputs.

(1) Inputs by Japanese and Indonesian sides

Inputs from Japanese and Indonesian sides were effeciently used to the project activites. In Japanese inputs, providing equipment to Bogorl Regency was effective to increase capacity of laboratory. On the other hand, WGs were well organized and worked in the activities, totally 80 counterparts have joined. In addition, local expenditure by local government were disbused to support the activities of WGs. There were no such obstacles to cause delay for the project activities as compared to the original plan. Therefore, the Project have been utilized effectively to produce each Output.

(2) Project management

Regarding the management of the Project, official dialogue between Indonesian counterparts and JICA experts have been kept well. The Joint Coordination Committee is organized once a year, and important issues are discussed for smooth implementation of the project.

4-4 Impact

Impacts of the Project are realized from possibility of reaching Overall goal and positive and negative impacts to outsides of the Project.

(1) Expectation of reaching overall goal of the Project

Reaching to the Overall goal "Capacity development of the local governments in enforcing the environmental laws and regulations is performed." is still not easy to be expected at this point. However, local governments in target area would be able to formulate WQM/WPC plan by strong support of Provincial governments. Along each plan, local governments would be able to enforce laws and regulations on WQM/WPC, by implementing priority activities to improve water quality.

(2) Positive and negative impacts

The project has provided the related institution with the opportunities to share the information on WQM/WPC. On the other hand, there were no negative impacts observed at this time of the Midterm Review.

4-5 Sustainability

Sustainability of the project outcome after the termination of the Project is not easy to anticipate at this stage. Policy and Institution would be fulfilled for the local government, which needs to take initiative on WQM/WPC. However, sufficient budget allocation and maintaining of human resources to implement WQM/WPC plan in each local government in target area should be key to sustain the project outcome.

(1) Policy and institutional aspect

Indonesia has already developed the legal system on various environmental managements, which described in "4-1. Relevance". And also, GR regarding Water Quality Management (WQM) and Water Pollution Control (WQC) (No.82 of 2001) which stated that WQM and WPC are handed over to local government from central government, is expected to be modified due to adaption of new Law regarding Protection and Environmental Management Law (No.32 of 2009).

(2) Organizational and financial aspect

Local governments in target area have disbursed necessary expenditure for the Project activities. They are expected to finance that budget by the end of the Project. In addition, local governments are required to finance to implement the WQM/WPC plan, which are going to be compiled by their own.

(3) Technical aspect

Counterparts in local governments who participated in WGs are expected to maintain and to share with colleagues their acquired skills and knowledge on WQM/WPC in the Project. However, many of them had not yet shared those skills and knowledge within their organizations. Also, job rotation of counterparts to another position that often happens in the local government would be risk to maintain developed capacity in those organizations.

5. CONCLUSIONS OF EVALUATION

The Midterm Review Team discussed and evaluated the relevance, effectiveness, efficiency, impact and sustainability of the Project. Through careful studies and discussions, the Team concluded that the Project is justified in needs of Indonesia and target area, as well as Japanese ODA policy. The Project has been widely implemented on schedule since the activity started.

However, the Project needs to focus on formulation and implementation of WQM/WPC plan by the end. Therefore, pilot sites should be selected to concentrate activities. In addition, the Project needs to tackle remaining issues, which explained in "4-2 Effectiveness" to achieve its purpose.

6. RECOMMENDATION

The Midterm Review Team from Japanese side strongly recommend the GOI as follows:

- The Joint Coordination Committee Meeting (hereinafter referred as "JCC Meeting") shall be chaired by the Director General of Regional Development, or at least by the Director.
- In order to achieve the project purpose within the project period (by the end of September 2011),
 - i) The pilot sites shall be selected within August 2010.
 - ii) Water Quality Management (WQM)/Water Pollution Control (WPC) Plan shall refer to the General Plan of the Cisadane River Basin, which has been preparing by the Ministry of Environment. In this regards, the finalization of draft General Plan by the Ministry of Environment is strongly required by the end of 2010.

- During the project implementation,
 - i) The Provincial Governments concerned shall take more initiative in coordinating among the local governments, monitoring their performance and giving necessary support.
 - ii) The WG meetings shall be held so that the WG members can learn and share the know how to prepare WQM/WPC plan and experiences of implementation of the pilot activities in the pilot sites. If necessary, the WG meetings shall be held in the related local governments in addition to the Ministry of Home Affairs for more active and efficient participation of the members to the meetings. In addition, the WG members shall share the results/outputs of the project with the officials/staffs concerned within their institution/department/division.
 - iii) The provincial/local government shall make any effort to maintain the knowledge and skills obtained by the Project in order to minimize the risk by the job rotation.
- After the project completion,
 - i) The Ministry of Environment shall provide the local governments with the necessary technical advice for preparation and implementation of the WQM/WPC plan.
 - ii) The local government in the pilot site shall make an effort to allocate the necessary budget to implement the activities in the draft of WQM/WPC Plan. The central/provincial government shall provide necessary support for the above.

During the Joint Coordination Committee held in 6 August 2010, the following comments were made by Indonesian side:

- i) Ministry of Environment requested the Project to assist the finalization of General Plan. The project explained that, although the General Plan shall be finalized by Ministry of Environment, the necessary data and input for finalizing the General Plan would be provided by the Project.
- ii) Ministry of Home Affairs requested JICA to provide the overseas training in Japan. JICA took notes of it.
- iii) The local environmental division of Bogor municipality explained their lack of budget for the water quality. Ministry of Environment informed that there is Special Allocation Budget (DAK), which can be used for the activities related to the improvement of water quality so that the Bogor Municipality can propose to get it.
- iv) The technical guideline made through this project is helpful, but the local environmental institutions still need assistance in implementation based on the above technical guidelines. In addition to the above, there was a comment that, while there had been many manuals, guidelines and plans made by previous technical assistances, there had been no actual implementation using the above manuals, guidelines and plans. Therefore, not only making manual, guidelines and plan, but also implementation of the manual and plan is very much expected. The Midterm Review Team agreed with the necessity of implementation.

Project Design Matrix (as of December 2008)

Project Title: Project on Strengthening Environment Management Capacity of Local Governments in Indonesia	Period of Cooperation: 2.5 years (Mar 2009 – Aug 2011)	Target Group: Provincial Environmental Institutions (BAPEDALDA), and Regencies/Municipalities in Bogor City, West Java Province, Tangerang City, and Tangerang District, Banten Province.	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Implementing Agency in Beneficiary Country: Ministry of Home Affairs, Ministry of Environment(KLH), Provincial environmental institution, and Regency/Municipalities selected as pilot site.</p>			<ol style="list-style-type: none"> Number of the enforced environmental laws and regulations is increased Number of programs on Water quality management in the pilot sites will be improved based on the implementation of the water quality management plan For long-term, water quality in pilot sites will improved. 	<p>- Official report of the province, and regencies/municipalities</p>	<p>-The government policy about environmental reservation does not change very much.</p>
<p>NARRATIVE SUMMARY</p> <p>Overall Goals Capacity development of the local governments in enforcing the environmental laws and regulations is performed.</p> <p>Project Purpose Local governments develop their capacity of water quality management to enforce the environmental laws and regulations in the pilot sites.</p> <p>Outputs</p> <ol style="list-style-type: none"> Documents on the laws and regulations about water quality management are prepared and utilized appropriately. Technical guidance for water quality management plan and a manual for province to support the regency/municipality are used for establishing a cooperative framework. Water quality management plan is formulated and implemented in pilot sites. 			<ol style="list-style-type: none"> Water quality management plan in pilot sites is available. Number of policies and programs developed in the pilot sites 	<p>- Reports from the JICA project team. - Official report of the province, and regencies/municipalities</p>	<p>-The budget to implement the water quality management plan is secured.</p>
			<ol style="list-style-type: none"> 1-1. Booklets on the laws and regulations related to water quality management are available. 1-2. Number of seminars and number of people attended. 2-1. Technical guidance and manual for province to support the regency/municipality are available. 2-2. Cooperative framework is established. 3-1. Comprehension and capacity level of counter parts on water quality management are enhanced. 	<p>- Reports from the JICA project team. - File of environmental laws and regulations - the manual for management plan - the manual for province - Official report of the province, and regencies/municipalities</p>	<p>-Positive participation of the central counterpart management organizations, and the local organizations of provinces and regencies/municipalities at the project sites.</p>

Project Design Matrix (as of December 2008)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Activities</p> <p>JICA project team supports and facilitates in the implementing agencies to conduct activities below;</p> <p>1-1. Responsibility and mandates for water quality management plan in each institution, section are clarified at both provincial, and regency/municipal levels.</p> <p>1-2. Booklets on the environmental laws and regulations related to water quality management plan are prepared and distributed.</p> <p>1-3. Seminars and workshops are held to introduce laws and regulations as well as mandates of each institution.</p> <p>2-1. Local task team is developed to operate and promote water quality management plan in pilot sites.</p> <p>2-2. Technical guidance for water quality management plan is created.</p> <p>2-3. Manual for province to support the regency/municipality is prepared.</p> <p>3-1. On the Job training for water quality management plan is conducted in pilot sites.</p> <p>3-2. Policy paper based on the project is prepared and proposed.</p>	<p>Inputs</p> <p>Japan:</p> <ul style="list-style-type: none"> - Shuttle dispatch of the expert as the consultant team including expert for the Water Quality Management System Development and Water Quality Management Planning and other experts necessary for the implementation of the Project - Local consultant teams: <p>Indonesia:</p> <ul style="list-style-type: none"> - Government staff as counterpart personnel - Administrative and operational costs - Provision of land, buildings, facilities, and equipment for the project 	<p>Pre-conditions</p> <p>To have well experienced and efficient local consultants.</p>	

Schedule of Midterm Review

Date		Time	Place to visit
7/25	Sun	PM	Arrival at Jakarta
7/26	Mon	9:00	Kick-off Meeting in BANGDA
		14:00	Meeting in JICA Indonesia office.
7/27	Tue	10.00	Research Center for Water Resources in Ministry of Public Works
		13:00	Environmental Institution of West Java Province
7/28	Wed	9.00	Environmental Institution of Bogor District
		15:00	Assistant Deputy for Small Scale Enterprises and Domestic Waste Pollution Control in Ministry of Environment
7/29	Thu	8:30	Environmental Institution of Banten Province
		13:00	Environmental Institution of Tangerang District
		15:00	Environmental Institution of Tangerang Municipality
7/30	Fri	8:30	Environmental Management Center (EMC) in Ministry of Environment
		13:30	JICA expert in Ministry of Environment
8/1	Mon	9:00	Environmental Institution of South Tangerang Municipality (team1)
		9:00	Assistant Deputy for Agro-Industry Pollution Control in Ministry of Environment (team2)
		13:00	Rivers Basin Organization (RBO) in Ministry of Public Works
		15:00	Assistant Deputy for Lake and River Degradation Control Ministry of Environment
8/2	Tue	10.00	Environmental Institution of Bogor Municipality
		13:00	Assistant Deputy for Manufacture Pollution Control in Ministry of Environment
		15:00	Assistant Deputy for Environmental Administration and Criminal Law Enforcement, Deputy V, Ministry of Environment
8/3	Wed.	9.00	Meeting with the Project team
		13:00	Meeting for preparation of the Review report and draft MM
8/4	Thu.	9.00	Sub-Directorate Capacity Development Natural Resources and Environmental Management, Ministry of Interior (BANGDA)
		13:00	Meeting about Review report and draft MM
8/5	Fri.	9.00	2nd Joint Coordination Committee (JCC) and sign of MM
		PM	Leaving to Narita

List of Interviewees

1. Ministry of Home affairs

Ms. Diah Indrajati Head, Sub-directorate Capacity Development, Directorate for Spatial Planning and Environmental Management, Director General Regional Development

2. Ministry of Environment

(1) Head Quarter

Ms. Rini Assistant Deputy for Small Scale Enterprises & Domestic Waste Pollution Control, Deputy II

Mr. Mohammed Helmy Advisor in Deputy II

Mr. Antung Dedy R., Assistant Deputy for Lake and River Degradation Control, Deputy III

Ms. Titi N. Head, Water Quality Standard Sub-division, Deputy III

Ms. Masako Ogawa JICA expert for Environment Policy

(2) Environment Management Center

Ms. Halmah Syafrul Head, Monitoring Division

Ms. Lita Staff, Monitoring Division,

Ms. Uman Staff, Monitoring Division,

3. Ministry of Public Works

(1) Research Center for Water Resources, Research and Development Agency

Mr. Iskandar A. Yusuf Head of Experimental Station for Water Resources Environment,

(2) BBWS, River Basin Organization

Mr. Teguh T., Head of Operation & Maintenance Division

Mr. Sihar Simanjudak Staff, Operation & Maintenance Division

4. Provincial Governments

(1) West Java Provincial Government, Environmental Management Institution

Mr. Ranto S. Head of Environment and Pollution Division,

(2) Banten Provincial Government, Environmental Institution

Mr. Aris	Head, Pollution Management Control Division
Mr. Agus	Head, Human Resource Improvement Sub-division

5. Regency/Municipal Government

(1) Bogor District Government, Environmental Institution

Ms. Elina Permana	Staff, Environmental Monitoring Division
Ms. Ririn Agustina L.	Staff, Environmental Impact Assessment & Environment Management Sub-division
Mr. Aan Sahar	Head of Laboratory & Technical Implementation Unit

(2) Bogor Municipal Government, Environmental Institution

Ms. Mari Mariam	Head, Control of Environmental Pollution Division
Ms. Dwi Darmayant VS.	Staff, Control of Environmental Pollution Division

(3) Tangerang Municipal Government, Environmental Institution

Mr. M. Datang	Head, Environmental Quality Monitoring Sub-division
Mr. Budi Santoso	Head, Planning Sub-division
Mr. Sigi Harjanto	Staff, Monitoring & Restoration Division

(4) South Tangerang Municipality Government Environmental Institution

Mr. Tedi Krisna	Head, Control of Management Liquid Waste Sub-division
Ms. Rika	Water Resource Management Sub-division
Ms. Laily	Staff, Control of Management Liquid Waste Sub-division

(5) Tangerang District Government, Environmental Institution

Mr. Sandy	Staff, Management Control of Waste Division
Ms. Diah M.	Staff, Information, Human Resource Improvement Division
Ms. Nestri	Staff, Laboratory Division

6. JICA Expert Team of SEMAC

Mr. Toshiyuki Ujiie	Chief Advisor/Water Quality Management Policy
Mr. Takashi Kaji	Water Quality Management/Coordinator
Mr. Shunsuke Hieda	Inventory/Water Pollution Analysis
Mr. Suprayogi Mudianto	Organization/Institution

List of Japanese Inputs

1. JICA Experts and Project staffs

(1) Experts

	Title/Sector	MM
1	Chief Advisor/Water Quality Management Policy	7.5
2	Water Quality Management Technology	7.0
3	Organization/Institution	10.5
4	Water Quality Monitoring/Coordinator (1)	10.6
5	Inventory/Water Pollution Analysis	2.3
6	Waste Management/Environmental Education/Coordinator (2)	1.9
7	Laboratory Management/Coordinator (3)	0.8
Total		40.6

(2) Project staffs

	Position	Number
1	Secretary	1
2	Interpreter	1
3	Driver	2
4	Assistant	1

2. Training Course in Japan

	Name of courses	No. of trainee	Date and Period
1	Training course on the Project	12	Jan.30,2010~Feb.6,2010 (8 days)
2	Training course on Domestic Wastewater Treatment Techniques	1	Aug. 24, 2009~Dec.12, 2009 (111days)
3	Training course on Environmental Administration with Community Participation	1	Sep.27, 2009~Nov.7, 2009 (42 days)
4	Workshop for Enhancement of the Governmental Capacity on Water Environment in Asia Countries	1	Nov.23,2009~Dec.5, 2009 (13days)

3. Provided Equipment

No*.	Equipment	Unit
1.	Desktop PC	3
2.	Laptop PC	1
3.	Ink-jet printer	3
4.	Laser printer	1
5.	Projector	1
6.	Photocopy machine	1
7.	GPS	2

No*.	Equipment	Unit
8.	UPS	4
9.	Telephone/Fax	1
10.	Arc GIS	2
11.	Lab equipment (equipment for analysis of BOD, copper, mercury, lead, surfactant, phenols)	1set
12.	Lab equipment (BOD incubator)	1

*No.1~No.11 was provided in 1st phase (total cost was 3,120,000 Yen), and No.12 was provided in 2nd phase (cost was 285,000 Yen)

4. Expenditure of Local Cost

Items	1 st phase (Mar.2009~Mar.2010)		2 nd phase (May 2010~Mar.2011)	
	Yen	Rp.	Yen	Rp.
General*	6,124,000	658,435,860	11,411,000	1,093,007,661
Equipment	3,120,000	335,453,933	304,326	29,150,000
Local consultant fee	8,723,000	937,873,287	7,712,000	738,697,318
Total	17,967,000	1,931,763,079	19,427,326	1,860,854,981

*General cost includes employment of project staff, transportation and travel, implementing training course, consumption and etc.

List of Indonesian Inputs

1. Assignment of Counterpart Personals

Institution	No. of CP
Ministry of Interior, Director General of Local Government (BANGDA)	5
Ministry of Environment (KLH)	5
National Development Planning Board (BAPPENAS)	1
West Java Province, Environmental Institution	9
Banten Province, Environmental Institution	10
Bogor Regency, Environmental Institution	11
Bogor Municipality, Environmental Institution	11
Tangerang Regency, Environmental Institution	9
Tangerang Municipality, Environmental Institution	16
South Tangerang Municipality, Environmental Institution	14
Total	91

2. Allocation of Local Budget for the operation of the Project (in Rp.)

	1 st phase (Mar.2009~Mar.2010)	2 nd phase (May 2010~Mar.2011)
Ministry of Interior, (BANGDA)	NA*	300,000,000
Ministry of Environment (KLH)	NA	NA
West Java Province	NA	NA
Banten Province	NA	NA
Bogor Regency	NA	15,000,000
Bogor Municipality	NA	20,000,000
Tangerang Regency	NA	40,000,000
Tangerang Municipality	NA	40,000,000
South Tangerang Municipality	NA	60,000,000

*NA: There were no specialized budgets for the Project, but ordinal annual budgets in each institution were used to the activity of counterparts.

3. Land, Facilities and Equipment

One (1) office space has been offered for the Project in Directorate General of Local Governments of Ministry of Home affairs (BANGDA).

Result of Evaluation Grid for the Project on Strengthening Environment Management Capacity of Local Governments in Indonesia

A. Actual Project Achievement and Project Implementation Process		EVALUATION QUESTIONS		Information/Indicators	Result
EVALUATION CRITERIA	Questions	Sub-questions	Information/Indicators		
1. Project Achievement	1-1. Achievement of Overall Goal (expected) "Capacity development of the local governments in enforcing the environmental laws and regulations is performed."	1-1-1 Is the indicator 1 will be fulfilled as "Number of the enforced environmental laws and regulations is increased."?	Expected number of the enforced environmental laws and regulations.	Reaching to the Overall goal "Capacity development of the local governments in enforcing the environmental laws and regulations is performed" is still not easy to expect at this point. However, local governments in target area would be able to formulate WQM/WPC plan by strong support of Provincial governments. Along each plan, local governments would be able to enforce laws and regulations on WQM/WPC, by implementing priority activities to improve water quality.	
		1-1-2 Is the indicator 2 will be fulfilled as "Number of programs on Water quality management in the pilot sites will be improved based on the implementation of the water quality management plan."?	Expected number of improved programs on Water quality management in the pilot sites based on the implementation of the water quality management plan.		
		1-1-3 Is the indicator 3 will be fulfilled as "For long-term, water quality in pilot sites will improved."?	Improvement of water quality in pilot sites		
	1-2. Achievement of Project Purpose (expected) "Local governments develop their capacity of water quality management to enforce the environmental laws and regulations in the pilot sites."	1-2-1 Is the indicator 1 will be fulfilled as "Water quality management plan in pilot sites is available."?	Availability of Water quality management plan in pilot sites	The Project has produced several outputs to establish self-reliant environment management by local government through the activities. It could be expected that the Project will support local governments to formulate WQM/WPC plans by the end of the project term. Some local government would develop their capacity through implementing pilot activities such as water quality monitoring, inspection, coordination with other institutions/sections, public awareness, etc to improve water quality of the Cisadane River. Therefore, local governments would be able to develop their capacity of WQM/WPC to enforce the environmental laws and regulations in the pilot sites, through above process.	
1-2-2 Is the indicator 2 will be fulfilled as "2. Number of policies and programs developed in the pilot sites."?	Increased number of policies and programs developed in the pilot sites.				
1-3. Achievement of Outputs	1-3-1 Output 1: Documents on the laws and regulations about water quality management are prepared and utilized appropriately.	Indicators for Output 1 are followings; 1-1; Booklets on the laws and regulations related to water quality management are available. 1-2; Number of seminars and number of people attended.	Through activities of Working Group 1(WG1) in the Project, "Booklet on the Environmental Laws and Regulations related to Water Quality Management and Water Pollution Control" (First edition) has been compiled. The booklet explains contents of related laws and government regulation (GR) of No.32 of 2004, GR of No.38 of 2007 and GR of No.82 of 2001. It clearly articulates role and responsibility of environmental institution in regional governments in above laws and GRs. It has contributed to strengthening environmental management of those local governments. For example, counterparts in Tangerang Municipality have used the booklet in series of seminar, to disseminate importance of environmental management to participants from schools, households and industry.		
1-4. Actual Inputs	1-4-1 Japanese Inputs	1-3-2 Output 2: Technical guidance for water quality management plan and a manual for province to support the regency/municipality are used for establishing a cooperative framework. 1-3-3 Output 3: 3. Water quality management plan is formulated and implemented in pilot sites.	Indicators for Output 2 are followings: 2-1; Technical guidance and manual for province to support the regency/municipality are available. 2-2; Cooperative framework is established. Indicators for Output 3 are followings: 3-1; Comprehension and capacity level of counterparts on water quality management are enhanced.	Working Group2 (WG2) in the Project has worked for technical matter of water quality control on the river. The result of activities by WG2, a draft of "Technical Guideline for Water Quality Management and Water Pollution Control Plan(WQM/WPC plan)" was compiled. WG2 utilized the guideline to conduct fieldwork and questionnaire survey to estimate pollution load and assimilative capacity, then the "Pollution Inventory Survey in the Cisadane River Basin" was made. They also made "Garbage maps for the Cisadane River Basin" by using acquired information and data from the field survey. Counterparts in WG2 have developed their capacities on pollution control through these activities. On the other hands, the Project has planned to create "Manual for Province to Support Regency/Municipality" through activity of WGs. The manual will make clear the role and duty of Provincial government to support local government on WQM/WPC. Provincial governments in target area are expected to have efficient coordination among local government as well as technical assistance to them. At first stage, capacity assessment for counterpart personnel was implemented in the Project in order to identify necessary capacity for provincial and local government on WQM/WPC. Several trainings on water quality management, those were field survey on the Cisadane River Basin, study tour on North Sumatra province, Training course in Japan and etc. were conducted in the Project activities. Member of WGs discussed how to improve WQM/WPC in each local government by utilizing result of those trainings. In addition, WG1 prepared a draft of "Policy Paper for Strengthening Organization and Institution". The policy paper will make recommendation to take necessary arrangement in local government for effective WQM/WPC. 7 persons (Chief Advisor/Water Quality Management Policy, Water Quality Management Technology, Organization/Institution, Water Quality Monitoring/Coordinator-1, Inventory/Water Pollution Analysts, Waste Management/Environmental Education/Coordinator-2 and Laboratory Management/Coordinator-3) are allocated. Total MM is 40.6 MM by the time of midterm review. 1 Secretary, 1 Interpreter, 2 Drivers and 1 assistant are employed.	

Achievement

		<p>③ Local expenditure —</p> <p>a) Organizing seminar/training course</p> <p>b) Equipments and facilities</p>	<p>The operational expenditure for implementing activities in the Project, borne by Japanese side is 17,967,000 Yen (1,931,763,079Rp.) for Phase I (from March 2009 and for April 2009 to March 2010). And, it is estimated 19,427,326 Yen (1,860,854,981Rp.) for Phase II (from May 2010 to March 2011). Therefore, total operational expenditure for the Project would be estimated 37,394,326 Yen (3,792,618,060 Rp.) for these two phases.</p>
		④ Training course in Japan	15 persons participated in four training courses in JFY 2009.
	1-4-2 Indonesian Inputs	① Allocation of Counterparts and staffs	Totally, 91 counterparts personnel are assigned for the Project in Government of Indonesia and Local governments (Province and Regency/Municipality).
		② Local expenditure	Counterpart organizations (Provincial and Regency/Municipal governments) have spent for budget necessary for the Project activities. Total expenditure from those counterpart organizations was more than 475,000,000 Rp. for year 2009 and year 2010.
		③ Facilities	One (1) office space has been offered for the Project in Directorate General of Regional Development, Ministry of Home Affairs (BANGDA).
	2-1 Appropriateness of the implementation process	Points and remarks concerned from planning to actual implementation	Activities were implemented along the plan on the schedule.
	2-1-1 Activities which were implemented along with the plan	Progress of capacity and accumulation of knowledge of Indonesian C/Ps	Technical transfer from JICA experts to Counterpart personals (Province and Regency/Municipal government) were appropriate in the activities. It was done through WGs as well as visiting counterpart organization by JICA experts.
	2-1-2 Appropriateness of technical transfer from Japanese experts/Project staff to Counterparts/Concerned personnel	Degree of involvement and collaboration of Counterparts and related institution into the Project	Through WGs in the Project, counterparts were involved and they were active to produce several document such as the booklet, technical guideline and policy paper.
	2-1-3 Degree of involvement of Counterparts into the Project activities	Monitoring plan and results (to show that monitoring and evaluation system was established)	Monitoring of the Project was done through Plan of Operation (Detailed Activity Plan).
	2-2 Project Management	Frequency of communication between Japanese experts and Indonesian counterparts	Official dialogues between Indonesian counterparts and JICA experts has been kept well. WGs were well organized, and JICA experts and counterparts collaborated in activities.
		Number of organized committees to manage the Project between Indonesia and Japan	The Joint Coordination Committee is organized once a year, important issues are discussed for smooth implementation of the project.
		Coordination and cooperation with other organizations in the Project activities	The Project has approached Environmental Management Center (EMC) to have mutual collaboration on WQM/WPC. Further collaboration with EMC is expected to support local governments.
	2-3-1 Important assumption and/or problems which affect project activities	Important assumption such as Government policies and/or any unexpected factor which affect the Project activities	Ministry of Environment are required to take initiative to support Province and Regency/Municipality governments on WQM/WPC. And, revise of the general plan by Ministry of Environment are important to have harmonization of the Project outputs.

Achievement

Result of Evaluation Grid for the Project on Strengthening Environment Management Capacity of Local Governments in Indonesia

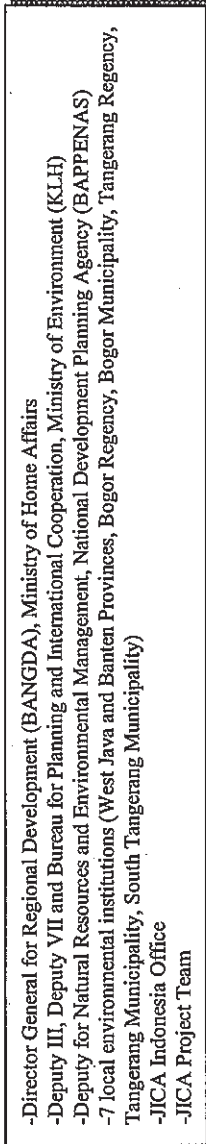
B. Analysis on 5 evaluation criteria

EVALUATION CRITERIA	EVALUATION QUESTIONS		Information/Indicators	Results
	Questions	Sub-questions		
3. Relevance	3-1 Coincidence and appropriateness of Overall goal and Project purpose to National development policy and regional needs in Indonesia	3-1-1 Are Overall goal and Project purpose coincided with Development policy in Indonesia?	Coincidence with National development policy in Indonesia	In Indonesia, projection of environment which include WQM in the river has been mandate of local government by enforcement of the Regional Administration of Law regarding Regional Government (No.32 of 2004) and Government Regulation (GR) regarding Distribution of Government Affairs among Government, Regional Government of Province and Regional Government of Regencies/Municipalities (No.38 of 2007). Also, GR regarding WQM and WQ (No.82 of 2001) stated that WQM and WPC are handed over to local government from central government. In addition, Government of Indonesia (GOI) stated new Law regarding Protection and Environmental Management Law (No.32 of 2009), which confirms that local government is required to make Environmental Protection and Management Plan. Therefore, local government is necessary to develop their capacity to protect and manage environment including water quality of river basin.
		3-1-2 Are Overall goal and Project purpose coincided with needs in the target areas?	Coincidence with needs in targeted area	Although Indonesia has already developed the legal system on various environmental management including WQM and environmental impact assessment, those laws and regulations have not still properly enforced by local government due to insufficient capacities and lack of experience. Therefore, capacity development of local government is essential to effective implementation of the legal system. In addition, the Cisadane River has been selected by Ministry of Environment to improve water quality as one of important river basin out of thirteen in the country.
	3-2 Appropriateness as Japanese ODA	3-2-1 Is the Project appropriate as Japanese ODA and JICA technical assistance?	Coincidence with Japanese ODA policy and JICA country assistant plan	Japanese Aid Policy is keen to protect environment in Indonesia. Government of Japan (GOJ) and JICA has supported GOI by several assistant program, those are dispatching environmental policy advisor, establishing Environmental Management Center (EMC) under Ministry of Environment, and technical assistance to environmental management system in North Sumatra Province. Aims of these assistant were mainly to strength capacity at national level. Therefore, GOI and JICA recognized that strengthening of local government on environmental management has been important for next step, to establish self-reliant environment management under circumstance of decentralization.
		3-2-2 Does the Project represent technical advantage of Japan in this field?	Comparison with other donor projects/programs	
4. Effectiveness (expected) (See the Project Achievement table for the italics)	3-3 Relevance of project design	3-3-1 Appropriateness of composition between Overall goal, Project purpose, Outputs and Activities.	Comparison between plan and present achievement	Composition between Overall goal, Project purpose, Outputs and Activities seems to be appropriate to reach the aim of the Project. However, PDM as of Dec.2008 has not reflected present situation.
		3-3-2 Appropriateness of selection of target area and groups	Comparison between planned target group and area and present situation	Cisadane River has been selected by Ministry of Environment to improve water quality as one of important river basin out of thirteen in the country.
	4-1 Degree of achievement of Project Purpose	4-1-1 Is achievement of project purpose expected as originally planned?		The Project is expected to achieve its purpose through following activities, counterparts in local governments have developed their capacity on WQM on the Cisadane river basin. They could understand the role and responsibility of environmental institution in local government among related laws and GRs by compiling of "Booklet on the Environmental Laws and Regulations related to Water Quality Management and Water Pollution Control". And, they have prepared a draft of "Technical Guideline for Water Quality Management and Water Pollution Control Plan". And then, they have implemented "Pollution Inventory Survey In the Cisadane River Basin" based on secondary data. Counterparts have proceeded step by step to make WQM/WQC Plan in each local government.
		4-1-2 Are there any inhibiting factors to achieve project purpose?	See Project Achievement	The Project needs to concern issues remains to reach to Project purpose, those are section of pilot sites, revise of the booklet, relocation of counterparts in local government, and general plan of Cisadane river by KLI.
4-2 Was the project design appropriate to achieve the project purpose?	4-2-1 Were Outputs appropriate enough to achieve Project Purpose?	See Project Achievement	Outputs were appropriate to achieve Project Purpose. Composition between Overall goal, Project purpose, Outputs and Activities seems to be appropriate to develop capacity of local government.	
	4-2-2 Is important assumption still available and/or satisfied in the future?	Change of external condition for the project, etc	In PDM, important assumption that "Positive participation of the central counterpart management organizations, and the local organizations of provinces and regencies/municipalities at the project sites." has not met yet. Active participation and initiative of Ministry of Environment are still required.	

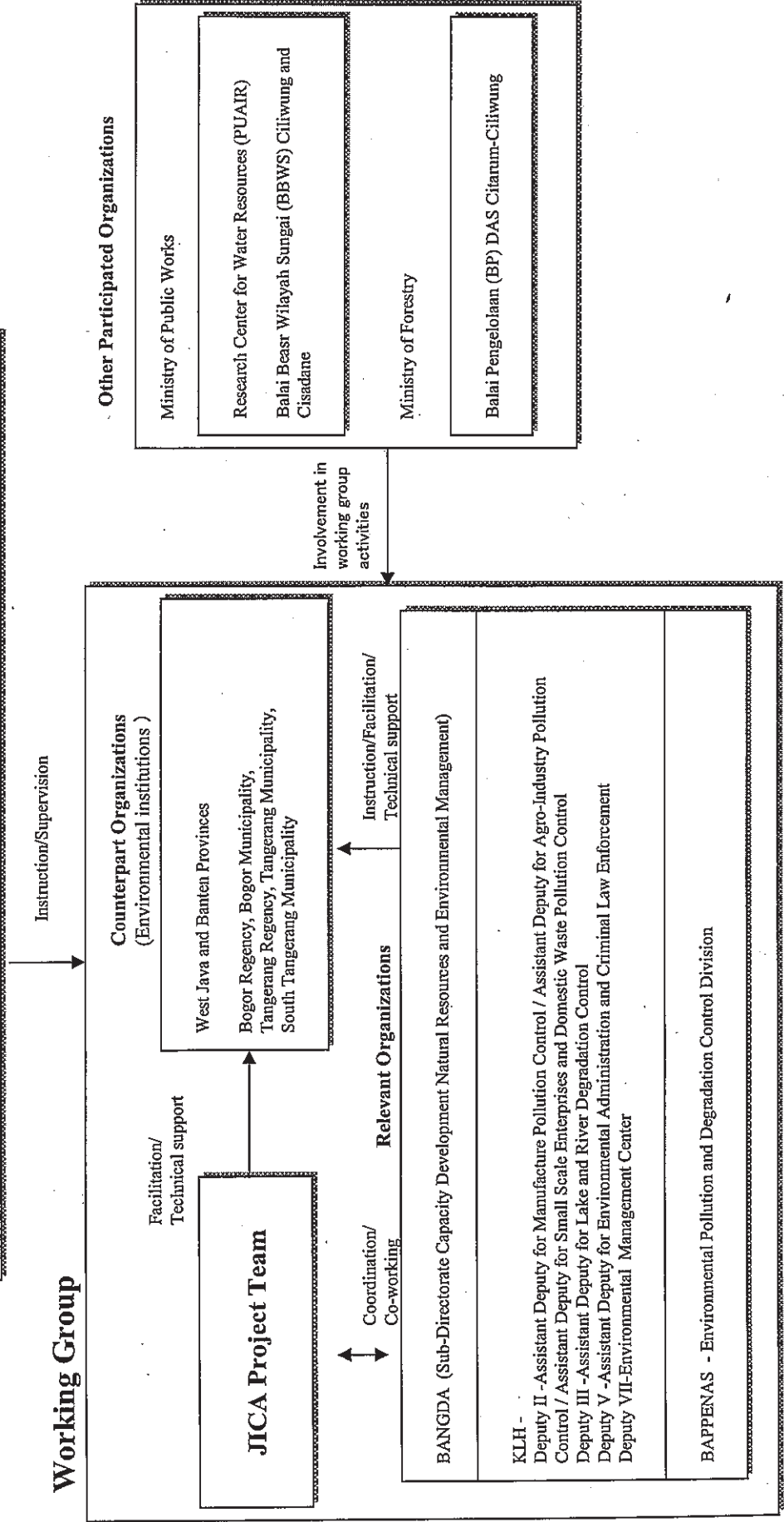
5. Efficiency (See the Project Achievement table for the italics)	5-1 Degree of achievement of Outputs 5-2 Efficiency of Activities 5-3 Appropriateness of Inputs in relation to the produced Outputs (Have the timing, quality, and quantity of inputs been necessary and sufficient to achieve outputs?)	5-1-1 Are achievement of Outputs as originally planned? 5-1-2 Are there any inhibiting factors to achieve Outputs? 5-2-1 Were Activities appropriate to produce Outputs? 5-3-1 Are Japanese inputs appropriate? 5-3-2 Are Indonesian inputs appropriate? 5-3-3 How are the degree of utilization of inputs? 5-3-4 Is the project management efficient?	See Project Achievement See Project Achievement See Project Achievement ① JICA experts (Number, Timing, field) ② Provision of equipment (variety, number, content/quality of the training) ③ Training course in Japan (timing, number, local cost expenditure such as conducting training, seminar, workshop, and etc.) ④ Local cost expenditure of equipment and facilities provided ① Allocation of C/Ps (Number, timing, field) ② Operational cost for the project ③ Quality and quantity of equipment and facilities provided 1) Personnel 2) Equipment and facilities 3) Local operational cost See Project Achievement	For Output 1 were achieved as originally planned by the time of midterm review. Activities will be implemented for Output 2 and 3 for next term. See "4. Effectiveness" of "4-1-2" Activities were seemed to be appropriate to produce Outputs at the time of midterm review. Inputs from Japanese side were efficiently used to the project activities. For example, providing equipment to Bogor Regency was effective to increase capacity of laboratory. WGs which totally 80 counterparts joined were well organized by JICA experts and worked to produce Outputs. Inputs from Indonesian side were utilized effectively to produce each Output. WGs were well organized and worked in the activities, totally 80 counterparts have joined. In addition, local expenditure by local government were spent to support the activities of WGs since year 2010. Inputs from both sides were fully utilized in the activities. The Joint Coordination Committee is organized once a year, important issues are discussed for smooth implementation of the project. Reaching to the Overall goal "Capacity development of the local governments in enforcing the environmental laws and regulations is performed" is still not easy to expect at this point. However, local governments in target area would be able to formulate WQM/WPC plan by support of Provincial governments. Along each plan, local governments would be able to enforce laws and regulations on WQM/WPC, by implementing priority activities to improve water quality. WQM/WPC plan in pilot sites will be able to give important data and information for General Plan of the Cideane river basin prepared by Ministry of Environment. The Project has produced manuals and booklet on WQM/WPC plan but actual pilot activities along WQM/WPC implement those pilot activities.
6. Impact (See the Project Achievement table for the italics)	6-1 Impacts of the Project for the long term, and other fields	6-1-1 Will Overall Goal be estimated to be achieved? Any inhibited factor arise? 6-1-2 Will the project outcome be able to affect any impact to formulate policy in Indonesia? 6-1-3 Are there any positive situation produced by the project? 6-1-4 Are there any negative situation produced by the project?	See Project Achievement Related government policy/plan, etc Positive impact, if any. Negative impact, if any.	The Project has produced manuals and booklet on WQM/WPC plan but actual pilot activities along WQM/WPC implement those pilot activities. Indonesia has already developed the legal system on various environmental management, which described in "Relevance". And also, GR regarding WQM and WQC (No.82 of 2001) which stated that WQM and WPC are handed over to local government from central government, is expected to be modified due to adaptation of new Law regarding Protection and Environmental Management Law (No.32 of 2009). Local governments in target area have been expended necessary expenditure for the Project. They are expected to finance that budget by the end of the Project. In addition, local governments are required to finance to implement the WQM/WPC plan, which are going to be compiled by their own. Ministry of Environment are expected to have financial support to local government if necessary.
7. Sustainability (expected)	7-1 Sustainability of project effects	7-1-1 Are there any possibility that policies and institution will be fulfilled for sustaining of project outcome at national, provincial and local levels? 7-1-2 Are there any possibility that national, provincial and local governments will deal with necessary arrangement on budgets and operation to utilize project outcome? 7-1-3 Are there any possibility that provincial and/or local governments will maintain transferred technologies and/or approaches from the Project?	Present and future aspect of policy and institution among National and/or provincial government regarding environmental management in target area Organizational arrangement of National and/or Provincial governments on budgets and operation Maintenance of transferred technologies in Provincial and District governments	Indonesia has already developed the legal system on various environmental management, which described in "Relevance". And also, GR regarding WQM and WQC (No.82 of 2001) which stated that WQM and WPC are handed over to local government from central government, is expected to be modified due to adaptation of new Law regarding Protection and Environmental Management Law (No.32 of 2009). Local governments in target area have been expended necessary expenditure for the Project. They are expected to finance that budget by the end of the Project. In addition, local governments are required to finance to implement the WQM/WPC plan, which are going to be compiled by their own. Ministry of Environment are expected to have financial support to local government if necessary. Counterparts in local governments who participated in WGs are expected to maintain and to share their acquired skills and knowledge on WQM/WPC with colleagues. However, many of them had not yet had formal opportunity to train for those skills and knowledge within their organizations. Also, job rotation of counterparts to another position that often happen in the local government would be risk to maintain developed capacity in those organizations.

Organizational Chart of SEMAC

Joint Coordination Committee



Working Group



Project Design Matrix (PDM) of the Project on Strengthening Environmental Management Capacity of Local Governments in Indonesia (SEM-AC)

Target Group : Environmental Institutions in Province (Tangerang and Banten) and Regencies/Municipalities (Bogor Municipality, Bogor Regency, Tangerang Municipality, and Tangerang District)

Duration : 2.5years (Mar 2009 -- Aug 2011)

PDM No.2

Date: 2010.08.06

OVERALL GOAL	NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATIONS	IMPORTANT ASSUMPTIONS
	The laws and regulations regarding water quality management and water pollution control (WQM/WPC) are enforced by local governments in the Cisadane river.	<ol style="list-style-type: none"> 1 Formulation and adaption of WQM/WPC plan by all local governments along the Cisadane river 2 Improved performance on WQM/WPC such as water quality monitoring, database, inspection, coordination with other institutions/sections, public awareness, etc. along Cisadane river 3 Necessary support and coordination to local government by province on WQM/WPC 	<p>Official report of the Ministry of Environment, province and Regency/Municipal Governments regarding WQM/WPC</p> <p>WQM/WPC plan in each Regency/Municipal Governments</p>	
	PROJECT PURPOSE Local governments develop their capacity of water quality management and water pollution control (WQM/WPC) to enforce the environmental laws and regulations in the pilot sites.	<ol style="list-style-type: none"> 1 Appropriate allocation of resources (staff, budget, facilities) to implement WQM/WPC plan in pilot site 2 Recognition of draft WQM/WPC plan at organizational level in pilot site 3 Improved performance on WQM/WPC such as water quality monitoring, database, inspection, coordination with other institutions/sections, public awareness, etc. in pilot sites 	<p>Reports from the Project and official report of the Ministry of Environment, province and Regency/Municipal Governments regarding WQM/WPC</p>	<p>General Plan of Cisadane river which is formulated by Ministry of Environment harmonize those WQM/WPC plans in target area.</p>
	OUTPUTS			
1	Responsibilities and mandates on WQM/WPC of local governments are clarified.	<ol style="list-style-type: none"> 1-1 Preparation of booklets regarding laws and regulations on WQM/WPC 1-2 Distribution of 100 copies Booklets and socialization to stakeholders 1-3 Preparation of a manual for province to support regency/municipality 	<p>Reports from the Project</p> <p>Booklet regarding environmental laws and regulations</p> <p>Manual for province to support regency/municipality</p>	<p>Legal framework regarding WQM/WPC along Cisadane river have not changed.</p>
2	Draft of WQM/WPC plan is compiled by local governments in pilot sites.	<ol style="list-style-type: none"> 2-1 Preparation of a technical guideline for formulation of WQM/WPC plan for local governments 2-2 Development of pollution source inventory 2-3 Formulation of draft WQM/WPC plan in pilot sites 	<p>Technical guideline for formulation of WQM/WPC plan for local governments</p> <p>Pollution source inventory</p> <p>Draft WQM/WPC plan in pilot sites</p>	
3	Implementation of pilot activities along the WQM/WPC plan in pilot sites.	<ol style="list-style-type: none"> 3-1 More than four pilot activities such as water quality monitoring, database, inspection, coordination with other institutions/sections, public awareness, etc. along the WQM/WPC plan in pilot sites 3-2 Formulated budget plan to implement pilot activities in FY 2012 	<p>Draft WQM/WPC plan in pilot sites</p> <p>Budget report of local governments</p>	

ACTIVITIES	INPUTS	PRECONDITIONS
<p>1-1 Clarify responsibilities and mandates for WQM/WPC in each institution, section at both provincial, and regency/municipal levels through working group activities</p> <p>1-2 Prepare the Booklets regarding the laws and regulations on WQM/WPC</p> <p>1-3 Distribute the Booklets to all concerned stakeholders</p> <p>1-4 Organize seminars and workshops to introduce laws and regulations as well as mandates of each institution by utilizing the Booklets</p> <p>1-5 Prepare the policy paper for strengthening organization and institution</p> <p>1-6 Prepare a manual for province to support regency/municipality</p>	<p>Japanese Inputs: Experts include Chief Advisor/Water Quality Management Policy, Water Quality Management Technology, Organization/Institution, Water Quality Monitoring/Coordinator (1), Inventory/Water Pollution Analysis, Waste Management/Environmental Education/Coordinator (2), Laboratory Management/Coordinator (3)</p> <p>Project staffs for administration</p> <p>Budget for activities including equipment</p>	<p>Active engagement of Ministry of Environment, Provincial and Regency/Municipal governments in target area.</p>
<p>2-1 Prepare a technical guideline for formulation of WQM/WPC plan for local governments</p> <p>2-2 Recognize and identify the water quality conditions of the Cisadane river basin (study tour, improvement of water quality monitoring, monitoring data compilation, etc.)</p> <p>2-3 Identify pollution sources in the Cisadane river basin including preparation of garbage maps</p> <p>2-4 Develop pollution source inventory and data base</p>	<p>Indonesian Inputs: Allocation of counterpart personnel from: Ministry of Interior (BANGDA), Ministry of Environment (KLH), Provincial Government of Tangerang and Banten and Regency/Municipal Governments (Bogor Municipality, Bogor Regency, Tangerang Municipality, South Tangerang Municipality, and Tangerang District)</p> <p>Administrative and operational costs necessary for activities</p>	<p>Provision of land, buildings, facilities, and equipment for the project office</p>
<p>2-5 Conduct study assimilative capacity of the Cisadane river in pilot site coordinating with the Ministry of Environment</p> <p>2-6 Set up target water quality of the Cisadane river in pilot sites coordinating with the Ministry of Environment</p> <p>2-7 Consider necessary measures and actions for WQM/WPC in pilot sites</p> <p>2-8 Prepare Academic draft for WQM/WPC plan in pilot site</p> <p>2-9 Compile draft of WQM/WPC plan in pilot sites</p> <p>2-10 Revise the draft WQM/WPC plan according to result of pilot activities if necessary</p>		
<p>3-1 List up and prioritize the items in WQM/WPC plan for pilot activities in pilot sites</p> <p>3-2 Conduct pilot activities based on WQM/WPC plan in pilot sites</p>		

2. 評価グリッド結果 (和文)

インドネシア国地方政府環境管理能力強化プロジェクト評価グリッド結果

A. プロジェクトの実績及び実施プロセスの検証

評価項目	評価設問		必要データ/指標	評価結果
	大項目	小項目		
1. プロジェクトの 実績	1-1 上位目標の達成状況(見込み) 「各地方政府(県/市政府)の環境関連の法令と規則を執行する能力が発揮される。」	1-1-1 指標1 “執行された環境関連法と規則の増加数”は満たされるか。	環境関連法と規則の想定執行数	上位目標は「各地方政府(県/市政府)の環境関連の法令と規則を執行する能力が発揮される」としており、具体的なプログラムや事業の実施が想定されている。現状において、プロジェクト目標達成後に、ハイロケットサイト以外の県/市政府においても、そのような状況が具体化されるかの判断は困難である。その場合、面ジャワ及びバンテンの両州政府が、プロジェクトで得られた知識と経験を生かし、ハイロケットサイト以外の県/市政府への水質管理計画の策定と実施を図る技術的な支援を行うことが必要となる。
		1-1-2 指標2 “ハイロケットサイトで、水質管理計画に沿って実施されたプログラムの数”は満たされるか。	水質管理計画に沿って実施される改善されたプログラムの想定数	
		1-1-3 指標3 “ハイロケットサイトの河川の水質が改善する”は満たされるか。	ハイロケットサイトにおける河川の水質改善状況	
		1-2 プロジェクト目標の達成上状況(見込み) 「各地方政府(県/市政府)の環境関連の法令と規則を執行するために、水質管理能力の開発を図る。」	1-2-1 指標1 “ハイロケットサイトで水質管理計画が有効となる。”は満たされるか。 1-2-2 指標2 “ハイロケットサイトで政策とプログラムが策定される。”は満たされるか。	
1-3 成果の達成状況	1-3-1 成果1: 水質管理に関連する法規を取り続けた文書が作成され、適切に使用される。	成果1のための指標: 1-1 水質管理に係る法規制のブックレットが作成される。 1-2 関連セミナー開催数と参加者数	プロジェクトは、活動内容に応じてカウンターパートによる二つのワーキンググループ(以下、WG1及びWG2)を形成して、活動を実施した。WG1の活動を通じて、「法令規定実務マニュアル」の第1版が作成された。同マニュアルにおいて、「地方分権化法」(2004年第32号)、「水質管理や水質汚濁の防止に関する政令」(GR2001年第82号)、「中央政府と県/市政府(州及び市/県)間の行政事務の配分に係る政令」(GR2007年第38号)等の法令や規則の内容が確認され、河川の水質管理における州及び県/市環境管理当局の職員の定められた職務と責任についてで活用されている。	
1-4 Actual inputs	1-4-1 日本側投入	1-3-2 成果2: 水質管理計画のための技術仕様書と州による県/市の支援マニユアルが相互協力的な組み合わせのために使用される。	成果2のための指標: 2-1 州による県/市の支援のための技術仕様書とマニユアルが作成される。 2-2 相互協力的な組み合わせが構築される。	WG2の活動を通じて、「水質管理計画作成業務マニユアル(案)」が作成された。同マニユアル(案)では、河川を、中央もしくは州、県/市が管理責任を持つ河川ごとに、水質管理計画を策定する際に、国、州、県/市がそれぞれ異なる作業を解説している。今後、対象地域の県/市では、同マニユアル(案)を活用し、水質管理計画の策定が行われる。また、WG2では、同マニユアル(案)を活用して、対象地域であるチサダネ川流域における既存情報に基づき「チサダネ川全流域汚染源イベント」を作成した。併せて現地調査を行い「チサダネ川流域ゴミマップ」が作成され、同河川の水質汚染の実態が明らかになった。他方、州による県/市への支援体制も検討されており、「州政府環境管理部門による県/市政府の調整業務ガイドライン」としてまとめられる予定。
		1-3-3 成果3: ハイロケットサイトにおいて、水質管理計画が策定され、実施される。	成果3のための指標: 3-1 カウンターパートの水質管理に係る理解と能力が向上する。	カウンターパートのキャパシティ・アセスメントの結果を受けて、州及び県/市による水質管理と水質汚濁防止に必要となる知識や能力の追加が明らかになった。その結果を受けて、WG1及びWG2の活動を通じて、水質管理能力向上のための技術指導が継続的に行われたと共に、スタディツアーや本邦研修等が実施された。WG1では、州及び県/市が水質管理業務を効率的に行うため、「組織制度改善のための政策提言ペーパー」(第1版)が作成中である。

プロジェクトの実績1ページ

			<p>③ 現地業務費の支出 a) セミナーや現地研修などの活動経費 b) 供与機材費</p> <p>④ 本邦研修受け入れ状況</p>	<p>プロジェクトの活動に使用するとして、現在までに、12項目の機材が導入された。同機材の購入額は総計364,603,933ルピア(3,424,326円)である。また、機材供与額を含めた、プロジェクトの活動に伴う現地業務費の支出内容は、第1フェーズの支出合計は1,931,763,079ルピア(17,967,000円)、第2フェーズの予算は1,860,854,981ルピア(19,427,326円)となっており、これらの2つのフェーズの合計額は、3,792,618,060ルピア(37,394,326円)と算出されている。</p> <p>本邦研修は、これまでに、「本プロジェクトによる本邦研修」、「集団研修・生活排水対策」、「集団研修・住民との協働」による環境都市づくり、「地域別研修・アジア水環境ガバナンス強化ワークショップ」の4種類が実施され、計16名が参加した。</p>
	1-4-2 インドネシア創投入		① カウンターパートの配置状況	インドネシア創カウunterパート機関である内務省地域開発総局、環境省、国家開発企画庁、西ジャワ州及びバンテン州政府環境管理前局、タングラン県、タンゲラン市、南タンゲラン市、ボゴール県、ボゴール市の各県／市政府環境管理前局より、カウンターパートが配置された。その合計は、91名となっている。
			② ローカル・コスト負担状況	プロジェクト活動の実施において、各カウンターパート機関より、以下の表3-7のとおり、ローカルコストの負担が行われた。第1フェーズでは、プロジェクト開始時にはイ国の予算執行が開始されていたことにより、全ての機関において、通常の予算執行の中から捻出された。また、第2フェーズでは、環境省、西ジャワ州、バンテン州は、特にプロジェクトに対する予算付けを行わず、通常の予算より執行されている。そのため、特にプロジェクト活動に対して予算付けがなされた額は、第2フェーズにおいて475,000,000ルピアとなっている。
			③ 施設及び機材提供状況	内務省地域開発総局内に、プロジェクト用事務所として一室が確保され、事務用机、椅子、空調機器等が提供された。
2. プロジェクトの実施プロセス	2-1 実施プロセスの適正度	2-1-1 計画に則った活動の実施	プロジェクト計画時から実施におけるポイント及び考慮事項	活動は計画に沿って実施された。
		2-1-2 活動における日本人専門家の活動や技術移転の適切度	インドネシア創カウunterパート、関係者の能力改善状況	JICA 専門家からカウunterパートへの技術移転は、主にWGの活動を通じて、適切に行われた。
		2-1-3 実施機関やカウunterパートのプロジェクトへの関与度合い	プロジェクトの活動における実施機関やカウunterパートの参加度合い、貢献度	プロジェクトは、カウunterパートによるワーキンググループ(以下、WG)を形成し、活動を実施してきた。WGは、活動内容に応じて、WG1及びWG2の2つに分けられ、其々の参加者数は、36名及び44名で、その合計数は80名である。
2.2 プロジェクトマネージメント		2-2-1 モニタリング・システムの有無とその機能	モニタリング計画、モニタリング、評価システムの構築状況と機能	プロジェクトの活動は活動実施計画に則って実施された。
		2-2-2 活動における日本専門家及び関係者との関係性	プロジェクト実施における日本人専門家とインドネシア創カウunterパートとの関係性	JICA 専門家とカウunterパートは、年一回開催されるプロジェクトの合同調整員会(JCC)や、内務省地方自治総局や環境省の関係総局との間では、適宜、必要に応じた会合が行われており、これらの会合を通じて、JICA 専門家とカウunterパートとの関係性は保たれてきた。
		2-2-3 プロジェクトの管理における意思決定状況	合同調整員会等の開催状況	JCC は年一回開催され、これまでに計2回行われている。JCC では、プロジェクトの運営に係る協議を行い、必要な調整を図ってきた。
		2-2-4 他機関・組織との協力状況	プロジェクト活動での他機関・組織との調整、協力	プロジェクトは環境省の環境管理センター等と必要な情報交換を行っており、今後、活動において協調して行くことも検討されている。
2.3 その他		2-3-1 その他、プロジェクトの活動における阻害要因、対象地の特殊性等	外郭要因、及び、プロジェクト計画時に予期していない状況の発生等	環境省による、州及び県／市に対するより積極的な水質管理分野の技術的な支援が望まれている。また、同省が作成しているチヌタネ川の総合計画の修正について、プロジェクトと協調していくことが重要である。

インドネシア国地方政府環境管理能力強化プロジェクト評価グリッド結果

B. 評価5項目の検証

評価項目	評価設問		必要なデータ/指標	評価結果
	大項目	小項目		
3. 妥当性	3-1 上位目標及びプロジェクト目標等とインドネシアの国家政策や、対象地域のニーズ等との整合性	3-1-1 上位目標及びプロジェクト目標はインドネシア政府の政策と合致しているか。	インドネシア政府の国家開発政策との一致状況	インドネシアでは、環境保護・管理は、国から州及び県/市が主導して行うことが「地方分権化法」(2004年第32号)、「水質管理の水質汚濁の防止に関する政令」(GP2001年第82号)、「中央政府と県/市政府(州及び市)間の行政事務の配分に関する政令」(GR2007年第38号)などで定められている。これらの法律や政令によって、河川の水質管理と水質汚濁防止も県/市政府が主導的に行うこととなっている。更に、同国は、「新環境保護・管理法」(2009年第32号)を制定し、その中で、県/市政府が環境保護・管理計画の策定を定めている。
		3-1-2 上位目標及びプロジェクト目標は対象地域のニーズと合致しているか。	対象地域のニーズとの一致状況	インドネシアでは、県/市政府が環境保護・管理政策の策定する法的枠組みは整えられているものの、現状では、県/市政府の能力不足によって、効果的な業務の遂行が十分に行われていない。そのため、県/市政府が、法令に則って、本来、求められている責務を主体的に実施するには、特に環境管理部門の能力開発が不可欠となっている。他方、同国環境省は、国内の河川環境管理を目的として、国内の13河川を指定し、総合計画等を策定するなどして、管理を強化することとしている。チサダネ川も、その重要河川の一つとして指定されており、総合計画(Draft of General Plan)が既に策定されている。
		3-2 日本の政府開発援助としての適格性	3-3-1 プロジェクトは日本の政府開発援助及びJICAの技術協力事業として適切か。	日本の政府開発援助政策及びJICAの援助実施計画との合致状況
4. 有効性 (斜体字についてはプロジェクトの実績の項参照)	3-3 プロジェクトデザインの適切度	3-4-1 プロジェクト目標の達成において、活動の種類、実施順位等、成果の構成等、適切にデザインされたか。	計画時と現在の達成度との比較	PDMMの上位目標、プロジェクト目標、成果、活動の構成は、その目的の達成において、適切であると思われる。一方で、活動内容や各指標に關し、現状に合わせた修正も必要である。
		3-4-2 対象地域の選定は適切であったか。	同上	チサダネ川はインドネシア政府によって、環境保護の対象である13河川の一つとして選定されており、プロジェクトの対象地域として適切である。
		4-1-1 投 入、活 動、アウ トプ ッ トの要 績の状 況を鑑み て、プ ロジ ェ ク ト目 標 達 成の 見 込 みはあ るの か。	"プロジェクトの実績"の項参照	プロジェクトでは、これまでの活動を通じて、各県/市政府の環境管理部門がチサダネ川流域の水質管理/汚濁防止を法令に沿って実施するための能力開発を様々な形で行ってきた。主にWGsの活動を通じて、県/市政府の役割の明確化と組織の強化、河川の水質管理に係る知識と技術の習得、他地方の事例研究等、様々な成果を生み出している。また、県/市政府を支援する立場にある州政府の役割の強化も取り組まれていることとなっている。これらの活動と成果は、各県/市政府による水質管理計画の策定と実施に集約されていくことが見込まれている。
4. 有効性 (斜体字についてはプロジェクトの実績の項参照)	4-1-2 プロジェクト目標の達成を阻害する要因はあるか。	"プロジェクトの実績"の項参照	プロジェクト目標達成のためには、1) パートナーの人事異動への対処、4) チサダネ川流域総合計画との調整、5) PDMMの現状に沿った修正などへの対処が必要とされる。	
	4-2 プロジェクト目標を達成し、適切なプロジェクト・デザインの実現するプロジェクト・デザインの実現度はどの程度か。	"プロジェクトの実績"の項参照	プロジェクトでは、これまでの活動を通じて、各県/市の環境管理部門がチサダネ川流域の水質管理/汚濁防止を法令に沿って実施するための能力開発を様々な形で行ってきた。主にWGsの活動を通じて、県/市の役割の明確化と組織の強化、河川の水質管理に係る知識と技術の習得、他地方の事例研究等、様々な成果を生み出している。更に、州による県/市を支援の強化も取り組まれていることとなっており、確実に成果が積み上げられ、終了時点で目標を達成することが見込まれる。	
	4-2-2 プロジェクトの外部条件は現時点でも正しいか、今後とも満たされる可能性はあるのか。	外部条件の変化、プロジェクト内部の状況等	特に、環境省による、州及び県/市に対するより積極的な水質管理分野の技術的な支援が望まれている。また、同省が作成しているチサダネ川の総合計画の修正について、プロジェクトと協調していくことが重要である。	

5-1 アウトプットの達成度	5-1-1 アウトプットの達成度は適切か(実績と目標との比較)。 5-1-2 アウトプット達成を阻害した要因はあるのか。 5-2 活動の効率性の確保 5-3 アウトプットを生産するための投入の適正度(投入時期、投入量及び質)	"プロジェクトの表請"の項参照 "プロジェクトの表請"の項参照 "プロジェクトの表請"の項参照	成果1は、当初の計画どおりに達成されている。成果2及び3については、これからの活動期間において達成される見込みである。 プロジェクト目標達成の達成のための課題と同様に、1) パイロットサイトの選定による活動の集中、2) 「法令規定集美務マニュアル」の改訂、3) カウンターパートの人事異動への対応、4) チサダネ川流域総合計画との調整、5) PDMの現状に沿った修繕などへの対応が必要とされる。 各活動は、其々の成果を生み出すために適切であったと思われる。 日本側投入として、専門家派遣、機材供与、本邦研修、現地業務委託は遅延なく行われ、活動において有効に活用された。例えば、ボコー川流域環境管理事務局のラボトリーの機能改善に対しての機材供与と共に専門家による技術支援は、同局の水質分析能力を向上させるのに有効であった。
5-2 活動の効率性の確保	5-3-1 日本側の投入は適切であったか? 5-3-2 インドネシア側の投入は適切であったか? 5-3-3 投入は十分に活用されたか? 5-3-4 プロジェクトは効率的に運営されたか?	①JICA専門家(人数、時期、分野) ②機材の供与(種類、数量、時期) ③本邦研修の受け入れ状況(実施時期、人数、研修内容等) ④現地業務費支出の状況 ①カウンターパートの配置状況 ②プロジェクト経費の支出状況 ③採与された施設、機材 1)人材 2)機材及び施設 3)現地活動経費 "プロジェクトの表請"の項参照	インドネシア側投入として、カウンターパートの配置、ローカルコスト負担、プロジェクト事務所提供は適切に行われ、円滑な活動の実施に貢献した。総計80名のカウンターパートが参加したWGは、日本側専門家等との間で効率的に活動し、一定の成果を生み出した。 プロジェクトにおいて、日本側及び「イ」国側の投入は十分に活用され、活動は計画通りに実施された。 JOCは年一回開催され、これまでに計2回行われている。JOCでは、プロジェクトの運営に係る協議を行い、必要な調整を図ってきた。
6. インパクト(斜体字についてはプロジェクトの実績の項参照)	6-1 プロジェクト実施による長期的及び他分野におけるインパクト	"プロジェクトの表請"の項参照	上位目標は「各地方政府(県/市)の環境関連の法令と規則を執行する能力が確保される」としており、具体的なプログラムや事業の実施が想定されている。現状において、プロジェクト目標達成後において、パイロットサイト以外の県/市において、そのような状況が具体化されるかの判断は困難である。その場合、西ジャワ及びリンジャンの両州政府が、プロジェクトで得られた知識と経験を生かし、パイロットサイト以外の県/市政府への水質管理計画の策定と実施を図る技術的な支援を行うことが必要となる。
7. 自立発展性(見込み)	7-1 プロジェクト効果の持続性の確保 7-1-2 州及び県/市において、プロジェクトの効果を継続していくための財政的な措置はなされるのか。 7-1-3 州及び県/市において、プロジェクトで移転された技術や知識を維持していくための措置はなされるのか。	"プロジェクトの表請"の項参照 "プロジェクトの表請"の項参照 "プロジェクトの表請"の項参照	パイロットサイトで確定が予定されている水質管理計画からは、環境者が修正を図っているチサダネ川の総合計画に対する重要なインパクトを期待することが出来る。 現状においては明確なボジティブなインパクトは確認されていないが、プロジェクトは、河川管理に関わる様々な機関に、水質管理に係る情報共有の機会を提供しており、今後の成果の波及が期待される。また、ネガティブなインパクトは特に観察されていない。 「妥当性」の項で前述したとおり、「イ」国では様々な環境管理を行うための法制度が整備されている。特に、「水質管理及び水質汚濁の防止に係る政令」(GR2001年第82号)では、河川の水質管理/水質汚濁防止について、県/市が責任を負担することが明記されている。また、「新環境保護管理法」(2009年第32号)では、県/市政府が環境管理計画を策定することが明確にされている。このような法令によって、パイロットサイトである県/市政府が水質管理計画を実行して行く政策・制度的な枠組みは維持されていると思われる。 これまでプロジェクトの対象地域の各県/市は、活動によって得られた知識と技術を維持していくことが期待されてきた。この経費負担は、プロジェクト実施期間の終了時まで継続することが見込まれている。一方、特にパイロットサイトとなる県/市政府は、プロジェクト終了後も引き続き水質管理計画を実行して行くため、活動経費等の財政的措置や人員配置などの組織体制を整備することが、プロジェクト効果の維持の観点からは必要となる。 プロジェクトのWGに参加したカウンターパートは、活動によって得られた知識と技術を維持していくことが期待されている。しかしながら、「4-2 有効性」の項で前述したとおり、多くのカウンターパートは、プロジェクトから得られた知識と技術者、環境管理事務局の他の関係と共有する機会を持っていない状況である。そのため、カウンターパートが他局に人事異動してしまつた場合、組織として得られた能力が失われてしまつたことが懸念されるため、ワークショップの開催等、プロジェクトの経験をいかに環境管理当局全体で共有し、活用していくか検討することが不可欠である。

3. 法令規定集実務マニュアル 目次

法令規定集実務マニュアル 目次

- I インTRODクシヨン
 - 1.1 マニュアルの使用法
 - 1.2 河川水質管理に係る法令の構造
 - 1.3 関係法令の概要
 - 1.3.1 環境保護管理法（2009年32号）
 - 1.3.2 地方分権化
 - 1.3.3 地域開発計画と森林管理
 - 1.3.4 水資源と河川管理
 - 1.3.5 水質管理
 - 1.3.6 汚濁管理
 - 1.3.7 廃棄物管理
 - 1.4 水質汚濁管理における地方分権

- II 実務事項
 - 2.1 水質モニタリング
 - 2.1.1 目的
 - 2.1.2 水質環境基準
 - 2.1.3 排水基準
 - 2.1.4 水のサンプリング、保存、分析法
 - 2.1.5 河川流量の測定方法
 - 2.1.6 水質モニタリング結果の報告
 - 2.2 水質管理
 - 2.2.1 目的と方法
 - 2.2.2 汚濁負荷の削減量の把握
 - 2.2.3 水質管理計画
 - 2.3 水質汚濁管理
 - 2.3.1 定義と目的
 - 2.3.2 汚染源インベントリ
 - 2.3.3 環境容量
 - 2.3.4 査察
 - 2.3.5 調整とプログラム
 - 2.3.6 排水管理

- III その他の参照事項
 - 3.1 環境影響評価システム
 - 3.1.1 環境影響評価（AMDAL）
 - 3.1.2 環境管理とモニタリング（UKL-UPL）
 - 3.2 河川の管理
 - 3.2.1 河川流域グループの分類
 - 3.2.2 河川管理における権限
 - 3.2.3 河川管理における関係者間の調整
 - 3.3 質問と回答

4. 水質管理計画作成業務マニュアル 目次

水質管理計画作成業務マニュアル 目次

- パート 1 中央政府が管理する河川での水質汚濁管理計画の策定
 - 1. イントロダクション
 - 1.1 背景
 - 1.2 ガイドラインの目的
 - 1.3 ガイドラインの使用範囲
 - 1.4 ガイドラインのユーザー
 - 1.5 定義
 - 2. 水質汚濁管理計画の枠組み
 - 2.1 水質汚濁管理
 - 2.2 水質汚濁管理計画の枠組み
 - 2.3 水質汚濁管理計画の策定の流れ
 - 3. 水質汚濁管理計画の策定の流れと手法
 - 3.1 枠組みの設定
 - 3.2 汚染源インベントリの作成
 - 3.3 環境容量（1日最大負荷量）の推定
 - 3.4 水質に関する問題の把握
 - 3.5 水質汚濁管理計画の策定
 - 3.6 水質モニタリング計画のリビュー
 - 3.7 水質管理／水質汚濁管理計画の実施
 - Annex 1: 汚染源インベントリ・シート
 - Annex 2: 汚濁負荷量の排出原単位
 - Annex 3: 水質汚濁管理に関する総合計画の事例
- パート 2 州政府が管理する河川での水質汚濁管理計画の策定
 - 1. イントロダクション
 - 2. 水質汚濁管理計画の枠組み
 - 2.1 水質汚濁管理計画
 - 2.2 州政府が管理する河川での水質汚濁管理計画の枠組み
 - 2.2.1 州政府及び県/市政府の役割
 - 2.2.2 地域をまたぐ河川管理の枠組み
 - 2.3 水質汚濁管理計画の策定の流れと役割
 - 2.3.1 水質汚濁管理計画の策定の流れ
 - 2.3.2 州政府が管理する河川での水質汚濁管理計画の策定における役割
 - 3. 水質汚濁管理計画の策定の技術的な流れと手法
- パート 3 県/市政府が管理する河川での水質汚濁管理計画の策定
 - 1. イントロダクション
 - 2. 水質汚濁管理計画の枠組み
 - 2.1 水質汚濁管理計画
 - 2.2 県/市政府が管理する河川での水質汚濁管理計画の枠組み
 - 2.3 水質汚濁管理計画の策定の流れと役割
 - 2.3.1 水質汚濁管理計画の策定の流れ
 - 2.3.2 県/市政府が管理する河川での水質汚濁管理計画の策定における役割
 - 3. 水質汚濁管理計画の策定の技術的な流れと手法

5. 組織制度改善のための政策提言ペーパー 目次

組織制度改善のための政策提言ペーパー 目次

1. 水質汚濁管理の現状
 - 1.1 組織
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2. 水質汚濁管理に関する組織と制度上の課題
 - 2.1 インドネシアにおける水質汚濁管理に関する課題
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3. 組織制度改善のための提言
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 - 4.1 地方政府による活動計画の全体枠組み
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