# Capacity Enhancement Program to Reduce Water Contamination

Study period from December 2007 to March 2008

### Summary of the Evaluation

An internal evaluation using JICA's program evaluation method was conducted of the ongoing Capacity Enhancement Program to Reduce Water Contamination in Mexico. The study considered the realignment of the program and JICA's future cooperation policy. At the time of the study, only one year had passed since the program's commencement, and some of the projects were still in their planning phase.

Thus the focus of this evaluation is to review the program's plans for the future, so as to make it more formative.

### Background and Objectives of the Evaluation

Mexico's water quality is one of the worst in the world (106th among 122 countries)\*1 and is necessitating prompt measures.

The Mexican National Water Commission formulated a five-year National Water Program in 2007 that states the objectives for resolving the country's water issue, including water quality. Furthermore, based on international water aid trends, Japan's initiatives for environmental issues include measures to reduce water contamination, along with air pollution countermeasures and waste disposal.

Prior to this program, JICA has initiated a water quality monitoring

### **Program Overview**

Program objective: To enhance the basic capacities and build a legal system necessary for the promotion of water contamination reduction.

#### Target year: FY2013

Component outcomes: The program consists of three outcomes: Outcome 1) Water quality criteria are formulated for public water development study in 1999, and in 2003, has also conducted a study for sanitation environment management of Coastal areas. This program, including the technical cooperation project proposed in the development study, was selected in FY2007.

This study was conducted the year following the program's commencement.. The main purposes are to: examine the outcomes expected and achieved ; reorganize the content of the program to achieve the objectives; and present a more appropriate draft plan.

supplies; Outcome 2) Water quality monitoring skills improved and method is standardized; and Outcome 3) Capacity to formulate measures based on monitoring data is enhanced.

Evaluation period: FY2006 to FY2013.

Projects subject to evaluation: Projects implemented during the above period and projects still in the planning phase.

#### Program Component Projects and Outcomes\*2 Project Title (Scheme) Implementation Period\*3 Outcome Capacity Enhancement for Establishing Mexican Norms of Water Quality June 2008 - June 2010 Outcome 1 Criteria (technical cooperation project) Costal Water Quality Monitoring Network Project (technical cooperation Outcome 2 January 2007 - December 2009 project) Outcome 2 2000 -Water environment monitoring (group training) Outcome 3 Groundwater Management in Yukatan Peninsula (technical cooperation 2009 - (waiting for approval) Outcome 3 project) The Study on Development of the National Water Quality Monitoring January 1999 - March 2000 Ex-ante Program in Coastal Area (development study) Development Study of Environmental Management in the Caribbean Coast March 2003 - August 2004 Ex-ante of Quintana Roo (development study)

## The Framework and the Policy for Evaluation

An evaluation using JICA's program evaluation method was conducted. This evaluation confirms the program's: 1) consistency with the development strategy of the counterpart government and Japan's assistance policy; 2) strategy (consistency and outcome); and 3) contribution (possibility) from a qualitative standpoint. Based on the aforementioned analyses, the evaluation: 4) makes recommendations about the program's remaining implementation period and derive lessons learned from the program's outcomes.

### Evaluation Results and Lessons Learned / Recommendations

#### >> Evaluation results

The evaluation study confirmed that the program is consistent with the policies and strategies of Japan and Mexico, including Japan's

Country Assistance Program for Mexico, JICA's assistance implementation policy, and Mexico's National Water Program.

However, because the National Water Program (2007-2012) was

\*2. The two development studies listed among the program component projects are not directly subject to the evaluation. They will be noted on the basis of their relevance to the program. \*3. Period that was confirmed at the time of this evaluation study.

<sup>\*1.</sup> UNEP, Water Quality Index 2002.

still being formulated when the program was designed, JICA's program and the National Water Program inevitably do not strongly correspond with each other. Also, there was no priority orders for the objectives of the National Water Program which led to the limited situation of making the program clearly aligned with the Plan. But nevertheless, it can be said that the relevancy of the program can be observed firmly since through the discussion with the National Water Commission, the content of the program corresponds to the needs of the Mexican Government and Japan's superiority in experience and technology can be recognized.

As from the strategic point of view, the component projects are, in general, logically linked with the program outcomes and objectives. The program is structured so that the outcomes can be shared more widely, and so that it corresponds with the objectives in Mexico's development strategy. The scaling-up effect of the combination of development studies and technical cooperation projects were also confirmed. However, only a part of the Groundwater Management in Yukatan Peninsula corresponds with the outcome 3, and there is a need for further consideration

When this study was conducted, major parts of the program's component projects were yet to be implemented. Under such circumstances, the revision of the program was made as follows in consultation with Mexico's water commission and other stakeholders.

1. Revision of program objective: The original objective "To enhance the basic capacities and build a legal system necessary for the promotion of water contamination reduction" was changed "To enhance the capacities necessary to reduce water contamination." Although the program still endeavors to formulate legal standards and standards-based monitoring, the revised objective places more focus on the necessary capacity building.

2. Modification of outcome components with proposal of new project: After closely reviewing the project contents for outcomes 2 and 3, the contents were modified and additional project is proposed to support outcome 3.

3. Establishing program indicators: The indicators for measuring program objectives and outcomes were reconsidered and established.

#### Lessons learned and recommendations

Based on the evaluation results, the reorganization of the program

was discussed with Mexico's National Water Commission and was revised as follows: 1) To restructure the program scenario into a chronological or "vertical scenario," in which outcomes 1 and 2 lead to outcome 3; 2) To rearrange the project contents of Groundwater Management in Yukatan Peninsula and 3) Additionally implement a new project, for enhancement of water contamination reduction, as an input for outcome 3. Moreover, provisional indicators for the program objectives and outcomes were established. In implementing the program, it is necessary for JICA and the National Water Commission clarify and strengthen the coordination so as to make necessary adjustments to coordinate and manage the program as a whole. The lessons learned from the evaluation results are the two items below

#### 1. Lessons learned on program design and implementation:

1) As can be observed in the case for this program, when the formulation of the program is conducted at the time the country development strategy formulation is on-going in the target country, there is a merit for the program to be more effective in terms of alignment with the country's strategy. However, if the country development strategy is before it's finalization stage the program is considered to contain risks which might give effect to the program design since the country development strategy itself can undergo some changes. 2) When formulating a program for a upper middle income country like Mexico, where the country is capable of implementing many activities on its own, it is necessary to examine thoroughly and focus the scope of cooperation. Furthermore, given the few number of donors in the country, conscious efforts need to be made to exchange information on a daily basis to regularly update the information.

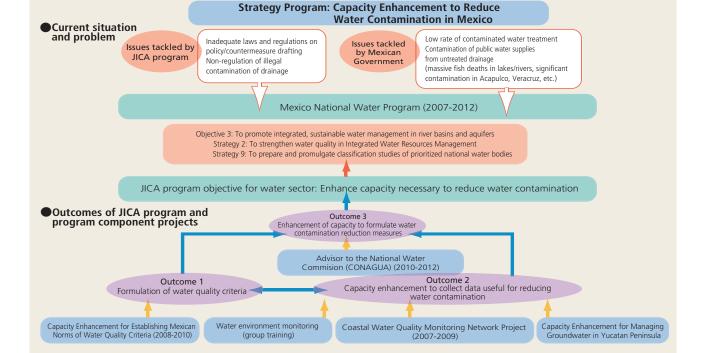
2. Lessons learned on implementation of program evaluation study: In upper middle income country like Mexico, the development strategy is formulated on it's own with less implication from the regularly held donor meetings, where the sector's priority issues are often discussed and identified.

When a program is to be formulated under the similar context, it is essential that the program's alignment with the development strategy of the recipient country's government and sector is clarified, and that appropriate program indicators are established at the initial stage to evaluate the program's contribution.

Part 1. Project Evaluation in J

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Reference List of Evaluations and Glossary



#### Figure 1 Diagram of Revised JICA Program