

**Fiscal Year 2015**  
**Ex-Post Evaluation Survey of**  
**JICA Knowledge Co-Creation Programs**  
**(“Group and Region Focus” & “Young Leaders”)**  
**Report of Survey**

**March 2016**

**Japan International Cooperation Agency (JICA)**

**Japan International Cooperation Center (JICE)**

**International Development Center of Japan (IDCJ)**

## Table of Contents

### Foreword

I. Background and Objectives of the Survey	
II. Survey Policies and Remarks .....	ii
III. Implementation System of the Survey .....	vii

### Section 1 Executive Summary

Chapter 1. Thematic Verification Survey .....	1
1-1. Survey Summary .....	1
(1) Survey Objectives .....	1
(2) Survey Targets .....	1
(3) Survey Methods .....	2
1-2. Survey Results .....	2
(1) Survey Targets .....	2
(2) Main Outcomes of the Training Programs .....	4
(3) Facilitating and Constraining Factors for Outcomes.....	7
(4) Efforts, Concerns and Prospects of Japanese Training Organizations (Water Supply Sector).....	10
Chapter 2. Complete Count Questionnaire Survey .....	13
2-1. Survey Summary.....	13
(1) Survey Objectives .....	13
(2) Survey Targets .....	13
(3) Survey Methods .....	13
2-2. Survey Results .....	14
Chapter 3. Overall Evaluation and Lessons Learned .....	17
3-1. Overall Evaluation .....	17
3-2. Lessons Learned.....	18
(1) Lessons Learned on Formation and Implementation of Training Programs and Technical Assistance Projects in the Selected Fields .....	18
(2) General Lessons Learned on Capacity Development of Individuals and Organizations .....	20
(3) Lessons Learned on Improving the Quality of Training Courses of the Thematic Programs and the Young Leader Programs .....	21

## Section 2 Thematic Verification Survey

Chapter 1. Overseas Field Survey: the Philippines .....	27
1-1. JICA Programs in the Philippines .....	32
(1) Japan's Assistance Policies for the Philippines .....	32
(2) JICA Cooperation Projects in the Thematic Area.....	32
1-2. Needs of the Philippine Government.....	33
(1) The Country's Policies and Development Needs in the Water Supply Sector .....	33
(2) Training Needs in the Water Supply Sector .....	34
1-3. Survey Targets and Methods .....	34
1-4. Outcomes of the Training Programs .....	36
(1) Capacity Development at the Individual Level.....	36
(2) Contribution to Organization, Policy and/or System due to Behavior Change of Former Participants .....	37
(3) Enhancement of Understanding Japan (Changes Obtained by Associating with Japan and Japanese People) .....	41
1-5. Facilitating and Constraining Factors for Training Outcomes.....	42
(1) Facilitating Factors .....	42
(2) Constraining Factors .....	43
(3) Characteristics in the Process of Realizing Training Outcomes.....	44
1-6. Training Programs by Other Donors and Comparison with JICA Programs.....	47
1-7. Status of Networking among Former Participants (Alumni Activities).....	49
Chapter 2. Overseas Field Survey: Rwanda.....	52
2-1. JICA Programs in Rwanda.....	56
(1) Japan's Assistance Policies for Rwanda.....	56
(2) JICA's Related Projects in the Thematic Area.....	56
2-2. Needs of the Rwandan Government .....	56
(1) The Country's Policy and Development Needs in the Water Supply Sector.....	56
(2) Training Needs in the Water Supply Sector .....	57
2-3. Survey Targets and Methods .....	57
2-4. Outcomes of the Training Programs .....	59
(1) Capacity Development at the Individual Level.....	59
(2) Contribution to Organization, Policy and/or System due to Behavior Change of	

Former Participants .....	61
(3) Enhancement of Understanding Japan (Changes Obtained by Associating with Japan and Japanese People) .....	67
2-5. Facilitating and Constraining Factors for Training Outcomes.....	68
(1) Facilitating Factors.....	68
(2) Constraining Factors .....	69
(3) Characteristics in the Process of Realizing Training Outcomes.....	69
2-6. Training Programs by Other Donors and Comparison with JICA Programs.....	70
2-7. Status of Networking among Former Participants (Alumni Activities).....	70
Chapter 3. Overseas Field Survey: Sri Lanka .....	72
3-1. JICA Programs in Sri Lanka .....	76
(1) Japan's Assistance Policies for Sri Lanka .....	76
(2) JICA Cooperation Projects in the Thematic Area.....	76
3-2. Needs of the Sri Lanka Government.....	77
(1) The Country's Policy and Development Needs in the Water Supply Sector.....	77
(2) Training Needs in the Water Supply Sector .....	77
3-3. Survey Targets and Methods .....	78
3-4. Outcomes of the Training Programs .....	80
(1) Capacity Development at the Individual Level.....	80
(2) Contribution to Organization, Policy, and/or System due to Behavior Change of Former Participants .....	82
(3) Enhancement in the Understanding of Japan (Changes Obtained by Associating with Japan and the Japanese people).....	85
3-5. Facilitating and Constraining Factors for Training Outcomes.....	85
(1) Facilitating Factors .....	85
(2) Constraining Factors .....	87
(3) Characteristics in the Process of Realizing Training Outcomes.....	88
3-6. Training Programs by Other Donors and Comparison with JICA Programs.....	88
3-7. Status of Networking among Former Participants (Alumni Activities).....	90
Chapter 4. Survey on Training Organizations (Water Supply Sector).....	91
4-1. Survey Objectives and Methods .....	91
4-2. Survey Targets .....	91

4-3. Survey Results .....	92
(1) Characteristics of the Training Organizations .....	92
(2) Efforts for Enhancing Training Program Management .....	93
(3) Concerns of Training Organizations.....	96
(4) Significance of Conducting JICA Training Programs and Future Prospects.....	99
Section 3 Complete Count Questionnaire Survey	
Chapter 1. Survey Objectives and Implementation Policies .....	103
1-1. Survey Background and Objectives.....	103
1-2. Survey Targets .....	103
1-3. Survey Methods/Survey Flow.....	104
(1) Survey Methods .....	104
(2) Questionnaire .....	105
(3) Evaluation Method.....	105
1-4. Survey Methods and Remarks .....	105
Chapter 2. Survey Results .....	107
2-1. Outcomes of the Training Program.....	107
(1) The Thematic Programs (Water Supply).....	107
(2) The Young Leader Programs.....	116
2-2. Analyses of Complete Count Questionnaire Survey.....	121
(1) The Thematic Programs (Water Supply).....	121
(2) The Young Leader Programs.....	132
Appendix	
Appendix 1. Good Practice Collection.....	145
Appendix 2. Survey Schedule and Interview Lists .....	167
Appendix 3. Questionnaire of Complete Count Questionnaire Survey .....	174
Appendix 4. Data Analyses of Complete Count Questionnaire Survey.....	183

---

## Abbreviations

---

(Alphabetical Order)

➤ General Abbreviations

Abbreviation	Organization
ADB	Asian Development Bank
JDS	Japanese Grant Aid for Human Resource Development Scholarship
JICA	Japan International Cooperation Agency
KOICA	Korea International Cooperation Agency
PPP	Public Private Partnership
USAID	United States Agency for International Development
WHO	World Health Organization
WSP	Water Safety Plan

➤ Overseas Field Survey: the Republic of Philippines

Abbreviation	Organization
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
JAAP	JICA Alumni Association of the Philippines, Inc.
LWUA	Local Water Utilities Administration
MCWD	Metropolitan Cebu Water District
MWSI	Maynilad Water Services, Inc
NEDA	National Economic and Development Authority
NWRB	National Water Resources Board

➤ Overseas Field Survey: the Republic of Rwanda

Abbreviation	Organization
EWSA	Energy, Water and Sanitation Authority
IFC	International Finance Corporation
JAAR	JICA Alumni Association of Rwanda
RURA	Rwanda Utilities Regulatory Authority
WASAC	the Water and Sanitation Corporation

➤ Overseas Field Survey: the Democratic Socialist Republic of Sri Lanka

Abbreviation	Organization
BOI	Board of Investment of Sri Lanka
GIS	Geographic Information System
HDPE	High-Density Polyethylene
IDB	Industrial Development Board
NRW	Non-Revenue Water
NWSDB	National Water Supply and Drainage Board
RSC	Regional Support Center

➤ Complete Count Questionnaire Survey

Abbreviation	
OJT	On-the-Job Training

**【English Terms for JICA Training Programs】**

Since July 2015, the English terms for JICA training programs have been modified.

In the Development Cooperation Charter which was released from the Japanese Cabinet in February 2015, it is clearly pointed out that, furthering the development of cooperative initiatives, Japan has maintained the approach of building reciprocal relationships with developing countries. Regarding training programs, JICA previously used the terms “Training” and/or “Training & Dialogue Program”. In order to address the mutual learning process (both sides learn from each other, grow and develop together), the new term “Knowledge Co-Creation Program” was released. However, for international documents between Japan and partner countries, there will be NO change of the previous term “training”.

The title of the survey in FY2014 was, “Ex-Post Evaluation Survey of JICA Training and Dialogue Program & Training for Young Leaders”. Because of the modification of the English terms for JICA training programs, from this fiscal year, the survey title will be, “Ex-Post Evaluation Survey of JICA Knowledge Co-Creation Programs (“Group and Region Focus” & “Young Leaders”)”. The comparative terminology is listed below:

<b>Previous English Terms</b>	<b>Modified English Terms</b>	<b>Abbreviations in this Survey Report</b>
Thematic Training and Dialogue Programs	Knowledge Co-Creation Program (Group and Region Focus)	Thematic Programs
Training Programs for Young Leaders	Knowledge Co-Creation Program (Young Leaders)	Young Leader Programs



## Foreword

### I. Background and Objectives of the Survey

This report summarizes the results of Fiscal Year 2015 Ex-Post Evaluation Survey of JICA Knowledge Co-Creation Programs (“Group and Region Focus” & “Young Leaders”), conducted under the commission of Japan International Cooperation Agency (JICA).

#### Background

JICA’s training programs, as the first scheme of Japan’s official development assistance (ODA), began in FY1954 and celebrated its 60<sup>th</sup> anniversary in FY2014. More than 320,000 trainees have completed a training program in Japan. The programs consist of three varieties: “Country Focused Training and Dialogue”, which is offered based on specific requests from an individual developing country; “Thematic Programs”, in which Japan poses a training plan and contents to a developing country and offers training when a request is submitted; and “Young Leader Programs”, which places a focus on developing the next generation’s young leaders. The target programs for this report are the Thematic Programs and the Young Leader Programs.

The post evaluation of the Thematic Programs has been conducted annually since a trial survey in FY2009; this year marks the 6<sup>th</sup> year. The evaluation of the Young Leader Programs has been part of the post evaluation survey since FY2013; this year marks the 3<sup>rd</sup> year. Each survey consists of two main components: Thematic Verification Survey, conducting interviews with survey targets, and Complete Count Questionnaire Survey, conducting a questionnaire survey to all trainees within target years.

In FY2014, two Thematic Programs--Disaster Management and Environmental Management--along with the Young Leader Programs, were selected as survey target training areas. In the Thematic Verification Survey, the design of training programs was found to be consistent with the needs and policies of target countries (Vietnam and Turkey), as well as the foreign aid policies of Japan. Moreover, in both the Thematic Verification Survey and Complete Count Questionnaire Survey, the follow-up activities, including those provided by JICA experts, were proven to be beneficial for the continuous realization of training outcomes. The importance of strengthening follow-up activities, including monitoring of action plans after training participants’ return to their home countries and information management, was considered to be a key lesson from the survey.

This year, the Thematic Programs of “Water Supply” (including water supply in rural areas)

(hereinafter, “Water Supply”) and the Young Leader Programs were selected as target training areas for the survey. A Thematic Verification Survey (including Overseas Field Survey and Survey on Training Organizations) and Complete Count Questionnaire Survey were conducted to examine training outcomes, and the facilitating/constraining factors. In the field of Water Supply, Japan has a long history of contributing to international society through utilizing local water bureaus’ expertise, and has made positive impacts on the improvement of water supply in developing countries. Therefore, as we examined the training outcomes, we were also searching for further possibilities of cooperation between developing countries and Japanese municipal water utilities.

### **Objectives**

Based on the Monitoring and Evaluation System for Thematic Program and Young Leader Programs, evaluation was conducted through a Thematic Verification Survey and a Complete Count Questionnaire Survey. The Objectives are as follows:

- (1) To obtain lessons with regard to program improvement and new projects resulting from the training programs.
- (2) To summarize past training achievements and utilize these results for PR materials.

## **II. Survey Policies and Remarks**

The Thematic Verification Survey consists of an Overseas Field Survey and a Survey on Training Organizations. Through the Overseas Field Survey, the current status of the Republic of the Philippines (“Philippines”), the Republic of Rwanda (“Rwanda”), and the Democratic Socialist Republic of Sri Lanka (“Sri Lanka”) were first examined in light of each country’s social economic plans and JICA’s aid policies for each target training area. Interview targets were primarily former participants and their supervisors within training courses of Water Supply offered between FY1996 and FY2014, and the Young Leader Programs conducted between FY2007 and FY2014. In order to compare JICA to other donor organizations and learn about their experience, interviews with other donor organizations were also conducted. In addition, the alumni associations of former training participants were examined to understand the current status of network development after the former participants returned home.

For conducting the Complete Count Questionnaire Survey, questionnaires were sent to all former training participants of the Thematic Programs of Water Supply in FY 2012 and FY2013, and the Young Leader Programs in FY2013. Quantitative analyses were then conducted.

Prior to the Overseas Field Survey and the Complete Count Questionnaire Survey, interviews with

training implementing partner organizations (“training organizations”) of Japan were conducted. This year marks the 2<sup>nd</sup> year for training organization interviews in the target training areas, since post evaluation survey of JICA Training and Dialogue Programs & Training Program for Young Leaders (currently under the name of JICA Knowledge Co-Creation Programs (“Group and Region Focus” & “Young Leaders”)) was carried out. During the interviews, efforts toward smooth training program implementation and unaddressed challenges were examined. The interview results are beneficial to understand the characteristics of Water Supply training programs, and to effectively analyze facilitating and constraining factors for training outcomes. In addition, literature research on documents of the study seminars (held annually by JICA collaborating with Japanese water utilities for training organizations in the field of Water Supply) was conducted.

In principle, evaluation was conducted based on the Evaluation Framework, which is in accordance with Development Assistance Committee (DAC)’s 5 evaluation criteria (relevance, effectiveness, efficiency, impact and sustainability). Since this post evaluation is meant to provide lessons on JICA training programs, special attention was paid to effectiveness, impact and sustainability.

In conclusion, the evaluation survey was conducted to learn overall lessons on JICA training programs, through qualitative evaluation (Thematic Verification Survey), and quantitative evaluation (Complete Count Questionnaire Survey).

Table 1. Evaluation Framework

Criteria	Evaluation Questions		Resources
	Category	Description	
Relevance	Consistency with and priority of policies	Consistency of training contents with government policies of partner country	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>
		Consistency with Japanese aid policies	<ul style="list-style-type: none"> <li>• JICA project development plans for Philippines, Sri Lanka and Rwanda</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> </ul>
	Partner country's needs of training	Consistency of training contents with needs of target groups in partner country	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>
	Relevance of means	Consistency of training contents with needs of participants	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with training organizations in Japan; literature research of evaluation reports</li> <li>• Complete Count Questionnaire Survey</li> </ul>
	Verification of relative advantage	Japanese training programs' characteristics, strength and weakness compared to other donor	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with training organizations in Japan</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Complete Count Questionnaire Survey</li> </ul>
Effectiveness	Achievement of training goals	Achievement level of goals set up at beginning	<ul style="list-style-type: none"> <li>• Interviews with training organizations in Japan; literature research of evaluation reports</li> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>
		Obtained level of training contents by participants	<ul style="list-style-type: none"> <li>• Interviews with training organizations in Japan; literature research of evaluation reports</li> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>
	Driving factors	Facilitating factors / Constraining factors toward achieving goals	<ul style="list-style-type: none"> <li>• Interviews with training organizations in Japan; literature research of evaluation reports</li> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>

Criteria	Evaluation Questions		Resources
	Category	Description	
	Satisfactory level	Satisfactory level on training contents	<ul style="list-style-type: none"> <li>• Interviews with training organizations in Japan; literature research of evaluation reports</li> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>
Efficiency	Driving factors	Driving factors toward satisfaction and dissatisfaction	<ul style="list-style-type: none"> <li>• Interviews with training organizations in Japan; literature research of evaluation reports</li> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>
	Efficiency of inputs	Proper securing of human resources, machinery and funds; efficient and effective use of the resources	<ul style="list-style-type: none"> <li>• Interviews with training organizations in Japan; literature research of evaluation reports</li> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Complete Count Questionnaire Survey</li> </ul>
	Input-Output relationship	Sufficient level of inputs (quality and quantity) for delivering outputs	<ul style="list-style-type: none"> <li>• Interviews with training organizations in Japan; literature research of evaluation reports</li> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>
	Driving factors toward impact realization	Facilitating factors / Constraining factors toward smooth training implementation	<ul style="list-style-type: none"> <li>• Interviews with training organizations in Japan</li> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> </ul>
Impact	Achievement of objective	Utilization of obtained knowledge / skills in former participants' country (how and at what level) (contribution to improvement of organizational activities, project formation, establishment of policies and systems, etc.)	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Complete Count Questionnaire Survey</li> </ul>
		Sharing obtained knowledge / skills with colleagues and parent organization (how and at what level)	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>

Criteria	Evaluation Questions		Resources
	Category	Description	
	Driving factors toward training achievement	Facilitating factors / Constraining factors toward utilization of obtained knowledge / skills	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Complete Count Questionnaire Survey</li> </ul>
	Other impacts	Other positive and/or negative impacts	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Complete Count Questionnaire Survey</li> </ul>
Sustainability	Sustainability of training goals	Initiative of utilizing training outputs	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Complete Count Questionnaire Survey</li> </ul>
		Development of action plan / Implementation of action plan	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Complete Count Questionnaire Survey</li> </ul>
		Network development (among former training participants; between former participants and instructors)	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Interviews with training organizations in Japan</li> <li>• Complete Count Questionnaire Survey</li> </ul>
		Maintaining database of former participants' contact information after returning from Japan	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Interviews with training organizations in Japan</li> <li>• Complete Count Questionnaire Survey</li> </ul>
	Driving factors	Facilitating factors / Constraining factors toward training impacts' sustainability	<ul style="list-style-type: none"> <li>• Interviews with former training participants and parent organizations through Overseas Field Survey</li> <li>• Interviews with JICA office of Philippines, Sri Lanka and Rwanda</li> <li>• Interviews with training organizations in Japan</li> <li>• Complete Count Questionnaire Survey</li> </ul>

### III. Implementation System of the Survey

The survey was conducted by the JV of Japan International Cooperation Center (JICE), the main consultant, and the International Development Center of Japan (IDCJ).

Point Person	Task	Organization
Masako Kishimoto	Manager	Japan International Cooperation Center (JICE)
Ayako Nomoto	Training Outcomes Analysis 1 (Thematic Verification Survey: Sri Lanka)	International Development Center of Japan (IDCJ)
Keiichi Takaki	Training Outcomes Analysis 2 (Thematic Verification Survey: Rwanda)	International Development Center of Japan (IDCJ)
Yuka Tanikawa	Training Outcomes Analysis 3 (Thematic Verification Survey: the Philippines)	Japan International Cooperation Center (JICE)
Kazuya Nakayama	Complete Count Questionnaire Survey	International Development Center of Japan (IDCJ)
Hiromitsu Muta	Advisor	International Development Center of Japan (IDCJ)

## **Section 1 Executive Summary**



## Chapter 1. Thematic Verification Survey

### 1-1. Survey Summary

#### (1) Survey Objectives

The objectives of the Thematic Verification Survey are to clarify what training outcomes were achieved through the implementation of the Thematic Programs and the Young Leader Programs, to validate the corresponding factors therein, and to compile the survey results as good examples and lessons for improving future Thematic Programs and Young Leader Programs. The survey was conducted in terms of the following:

- Capacity development of training participants at the individual level
- Contributions to organizations, policies and systems due to the change in former participants' performance behavior
- Enhancement of understanding Japan (changes obtained by associating with Japan and Japanese people, etc.)

#### (2) Survey Targets

The Overseas Field Survey was conducted as part of the Thematic Verification Survey. It was designed to evaluate the thematic programs of specific countries. The Thematic Program courses are those offered between FY1993 to FY2014, and the Young Leader Program courses are those offered between FY2007 and FY2014, after the program was revised and became one of the JICA Acceptance of Technical Training Participants programs.

##### 1) Water Supply in the Philippines, Rwanda and Sri Lanka

The Philippines: 41 courses (42 participants)

Rwanda: 17 courses (23 participants)

Sri Lanka: 28 courses (33 participants)

##### 2) Young Leader Programs in the Philippines, Rwanda and Sri Lanka

The Philippines: 36 courses (586 participants)

Rwanda: 25 courses (69 participants)

Sri Lanka: 8 courses (181 participants)

In the interviews with training organizations in Japan, the focus area is the same as in the Overseas Field Survey, which is Water Supply.

### (3) Survey Methods

In the Overseas Field Survey, group or individual interviews were conducted with former training participants and their supervisors based on prepared questionnaires. (Appropriate interview formats were selected with consideration of the number of interviewees and preferences at their parent organizations.) Interviews were also conducted with alumni associations to clarify whether former training participants formed networks after they returned home. Additionally, interviews with other donor organizations were conducted in order to understand comparable training programs and the activities of other organizations' alumni associations for training participants.

In the interviews with training organizations of Japan, interviews were conducted with training course leaders and/or program managers in the area of Water Supply. Prior to the interviews, a questionnaire was sent to the target training organizations via email, and interviews were then conducted based on the questionnaire. All interviews were conducted by interviewers in person, with one exception due to the person-in-charge of training programs at a training organization being overseas for business. His answer to the questionnaire was received via email.

## 1-2. Survey Results

### (1) Survey Targets

#### ① Overseas Field Survey: the Philippines

##### 【Former Participants and Supervisors】

Training Programs	Number of Former Participants Interviewed	Number of Supervisors Interviewed
Water Supply	14	2
Young Leader Programs	10	2
Total	24	4

##### 【Other Donor Organizations】

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Korea International Cooperation Agency (KOICA)

##### 【Alumni Associations】

JICA Alumni Association of the Philippines, Inc. (JAAP)

## ② Overseas Filed Survey: Rwanda

## 【Former Participants and Supervisors】

Training Programs	Number of Former Participants Interviewed	Number of Supervisors Interviewed
Water Supply	10	2
Young Leader Programs	5	0
Total	15	2

## 【Other Donor Organizations】

Korea International Cooperation Agency (KOICA)

## 【Alumni Associations】

JICA Alumni Association of Rwanda (JAAR)

## ③ Overseas Field Survey: Sri Lanka

## 【Former Participants and Supervisors】

Training Programs	Number of Former Participants Interviewed	Number of Supervisors Interviewed
Water Supply	10	3
Young Leader Programs	7	2
Total	17	5

## 【Other Donor Organizations】

Asian Development Bank (ADB)

Embassy of the People's Republic of China

Australian Awards

Korea International Cooperation Agency (KOICA)

## 【Alumni Associations】

JICA Ex-Participants Association on Solid Waste Management

## ④ Interviews with Training Organizations of Japan (Thematic Area: Water Supply)

In the target training courses of Water Supply, interviews were conducted with the following 7 experienced training organizations. In addition, literature research on documents of the study seminars (organized annually by JICA collaborating with Japanese water utilities for training organizations in the area of Water Supply since FY2013) was conducted.

## 【Interviewed Training Organizations】

Osaka Municipal Waterworks Bureau

Japan International Corporation of Welfare Services

Japan Water Works Association

Nagoya City Waterworks and Sewerage Bureau

Fuji Women's University

Yokohama Water Co., Ltd.

Yokohama Waterworks Bureau

## (2) Main Outcomes of the Training Programs

Through the Overseas Field Survey, it was confirmed that former participants shared training contents with parent organizations by submitting reports, holding seminars and workshops, conducting (internal) training programs, etc. It was also revealed that outcomes were achieved through implementing action plans and applying obtained knowledge and skills to daily work and projects. Positive influence on organizational systems and policies was also observed. The main outcomes of the training programs are summarized in Table 1.

Capacity development at the individual level includes changes in the former participants' way of thinking. Former participants expanded their visions through discussing common issues with peer trainees from various countries. They also increased their awareness on issues in specific areas.

Table 1. Outcomes of the Training Programs

Capacity development of training participants at the individual level	Contributions to organizations, policies and systems due to former participants' behavior change	Enhancement of understanding Japan, etc.
<ul style="list-style-type: none"> <li>Improvement of professional knowledge and skills</li> <li>Improvement of motivation for work</li> <li>Improvement of awareness of issues</li> <li>Improvement of time management</li> <li>Improvement of communication skills</li> <li>Improvement of presentation skills</li> </ul>	<p><b>【Shared Knowledge and Skills】</b></p> <ul style="list-style-type: none"> <li>Sharing training contents with parent organizations through reports (written reports, seminars, etc.)</li> </ul> <p><b>【Application of Skills】</b></p> <ul style="list-style-type: none"> <li>Planning and implementing projects</li> <li>Water Supply: improving water supply management including installing and maintaining water pipes and meters</li> </ul> <p><b>【Collaboration with JICA Projects】</b></p> <ul style="list-style-type: none"> <li>Former participants' participation in JICA projects</li> <li>Developing new grassroots technical assistance projects</li> </ul> <p><b>【Reflection on Policies】</b></p> <ul style="list-style-type: none"> <li>Establishing new laws, systems, policies, etc.</li> </ul> <p><b>【Contribution to Development Impact】</b></p> <ul style="list-style-type: none"> <li>Water Supply: improving water quality and total amount of water supply (including reducing water leakage)</li> </ul>	<ul style="list-style-type: none"> <li>Facilitating the understanding of Japan, Japanese culture and its society</li> <li>Practicing work ethics of Japanese people (teamwork, mutual support, schedule management, punctuality, accountability, etc.)</li> <li>Building domestic and international networks</li> </ul>
<p>(Other Outcomes):</p> <ul style="list-style-type: none"> <li>Being promoted</li> </ul>		

Specific examples for each training field are as follows:

➤ **Water Supply**

**【Enhanced Awareness and Inspiration】**

- Learned about water pollution and discussed this topic with other participants from various countries. Realized that it's not only an issue in the Philippines, but a global issue which requires focused efforts to overcome. (NWRB, the Philippines)
- The awareness of non-revenue water issue has been improved. Before training, a former participant was not aware that non-revenue water meant a waste of capital investment. Through training, he realized that any drop of water shouldn't be wasted. (WASAC, Rwanda)

**【Improved Performance】**

- A former participant learned how to use leakage detectors to effectively reduce water leakage in Japan. Currently, he's working to procure Japanese leakage detectors. In addition, through the training, this participant learned how to use high-density polyethylene (HDPE) pipes for effectively reducing water leakage. He then created an action plan for introducing these pipes to an ongoing USAID supported water supply project in Badulla. His action plan was approved and the recommended HDPE pipes were installed in the project. (NWSDB • RSC, Sri Lanka)
- A training participant's motivation for learning about Water Safety Plans (WSP) increased after training. During training, he systematically learned about WSP design (based on the guideline of the World Health Organization), maintenance, auditing and administration. He created an action plan for introducing WSPs to his responsible district, and implemented the plan in 4 locations within his district. In addition, based on the experience of visiting a training facility (for practicing pipe networking) at Tokyo Waterworks Bureau, the participant initiated a proposal for building a similar training facility in Sri Lanka. The proposed 0.5 hectare land plot has been approved by the government. The required capital for equipment procurement and facility building is under discussion. (NWSDB • RSC, Sri Lanka)

**【Contribution to Development Impact】**

- In order to increase the total amount of water supply, a former participant initiated an action plan for installing water pipes and adding reservoirs in his responsible water district. After returning from training, he immediately divided the contents of his action plan into several projects and started implementation. Consequently, the total number of reservoirs has increased from 16 to 26; old pipes have been replaced; new pipes have been installed. The rate of non-revenue water has dropped from 69% to 34%. Total amount of water supply has been increased. (MWSI, the Philippines)
- After returning to his home country in 2013, a former participant conducted training programs for local officers in 12 branches of the Water and Sanitation Corporation (WASAC). The

training programs focused on non-revenue water deduction and leakage detection, with each program lasting for 2 weeks (1 month total), and 87 officers in attendance. Actions in response to water leakage were previously taken only after a breakage of water pipes was found. In order to manage water leakage, a team has been established to conduct regular leakage detection and water pipe network maintenance. Due to these effective countermeasures, the rate of non-revenue water has improved nationwide, with the national average dropping from 42% to 38%. The Ngoma branch's rate of non-revenue water has been significantly improved from 28% to 10%, ranking as the national leader in this area for 3 consecutive months since August. The Nyagartare branch's rate of non-revenue has also been improved, from 70% to 38%. (WASAC, Rwanda)

➤ **Young Leader Programs**

**【Improved Performance】**

- After visiting Japanese fish markets, a former participant realized that the biggest difference between Cebu's fish market and Japanese markets is the strict control of sanitation in Japan, resulting in Japanese markets with fresh fish. In order to improve the environment and management of Cebu's fish market, after returning to the Philippines, she began to advocate for cleaning floors thoroughly and wearing long boots inside the market (supported by her colleagues). Additionally, she initiated a proposal for building a facility next to the fish market to examine fish. The required budget has been successfully secured. (Veterinary Medicine and Fishery Department, Cebu City Government, the Philippines)

**【Contribution to Development Impact】**

- While visiting a site where cooperative members process agricultural products, and having conversations with them, a training participant was inspired by how people cooperated as a group to use local materials for economic development. He believed that similar activities would benefit Rwanda, and then initiated a project - Hanga Umurimo (job creation). The project was approved by the government and achieved great impacts. (Ministry of Trade and Industry, Rwanda)
- During training, 2 training participants visited Japanese schools where "Learner-centered approach" was practiced. They were convinced by the effectiveness of this approach and decided to introduce it to Rwanda. After returning from training, they became lecturers of seminars for spreading this approach to 88 trainers (part of JICA's project of Strengthening Mathematics and Science in Secondary Education). The 88 trainers then held 10-day training courses in 10 local training centers to 4,000 teachers. The project has greatly contributed to the rise of "Learner-centered approach" in education in Rwanda. (The Ministry of Education, Rwanda)

**【Collaboration with JICA projects and Contributions to Policies】**

- A former training participant learned about Japan's elderly care through the Health & Medical Administration course in the Young Leader Program. He created an action plan for establishing policies for elderly care and presented to the Secretary after his return. His action plan was approved without delay, and became a JICA grassroots technical cooperation project entitled "Health Plan and Model Forming Project for Integrated Health and Welfare Service System for the Elderly in Sri Lanka". Moreover, the action plan is supported by the Ministry of Health, Nutrition & Indigenous Medicine, and the proposed policy is expected to be released and adopted in the first quarter of 2016. (Ministry of Health, Nutrition & Indigenous Medicine, Sri Lanka)

**(3) Facilitating and Constraining Factors for Outcomes**

The main factors facilitating or constraining outcomes of the training programs are as in Table 2:

Table 2. Factors Facilitating or Constraining Outcomes

	<b>Facilitating Factors</b>	<b>Constraining Factors</b>
<b>Factors Associated with Training Participants</b>	<p><b>【Before training】</b></p> <ul style="list-style-type: none"> <li>• High level of motivation and awareness of issues</li> <li>• Thorough preparation (concerned issues, draft action plans)</li> </ul> <p><b>【During training】</b></p> <ul style="list-style-type: none"> <li>• Discussion and information exchange with other peer training participants</li> <li>• Establishment of highly feasible action plans in terms of topics, project scale, budget, training participant's position and responsibilities</li> </ul> <p><b>【After training】</b></p> <ul style="list-style-type: none"> <li>• Passion on reporting and sharing training experience with supervisors and colleagues</li> <li>• High level of motivation for implementing created action plans</li> </ul> <p><b>【Overall】</b></p> <ul style="list-style-type: none"> <li>• High level motivation and awareness of issues</li> </ul>	<p>Low feasibility in action plans in terms of limited authorization, capital and an unrealistic project scale</p>
<b>Factors Associated with Organizational Environment</b>	<p><b>【Before training】</b></p> <ul style="list-style-type: none"> <li>• Appropriate process for screening training participants based on training contents, assignments, positions, etc.</li> <li>• Clarity of objectives confirmed between training participants and their supervisors</li> </ul> <p><b>【After training】</b></p> <ul style="list-style-type: none"> <li>• Mechanism of sharing training contents through training reports, seminars, etc.</li> </ul> <p><b>【Overall】</b></p> <ul style="list-style-type: none"> <li>• Understanding and support from parent organization (supervisors)</li> <li>• Accumulation of training effects within parent organizations through continuous training participation</li> </ul>	<ul style="list-style-type: none"> <li>• Work transfer after returning to the home country</li> <li>• Lack of budget</li> </ul>
<b>Factors Associated with Training Contents</b>	<ul style="list-style-type: none"> <li>• Facilitation and thorough instructions on action plans provided by lecturers and course leaders</li> <li>• Courteous support from lecturers, course leaders and coordinators</li> <li>• Opportunities for peer training participants to discuss issues and exchange information</li> <li>• Appropriate combination of lectures, site visits and practice, with great consideration for overall learning effects of training participants</li> <li>• Appropriate curriculum with knowledge and skills easily applied to participants' home countries</li> </ul> <p>(Others)</p> <ul style="list-style-type: none"> <li>• Follow-ups and advice from JICA local offices and JICA experts</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of time for questions and answers or discussion</li> <li>• Training contents not matching the needs of training participants</li> </ul>



Specific examples are as follows:

➤ **Facilitating Factors**

- The selection process of screening participants for JICA training programs was appropriate. The implementation of action plans was well supported at the workplace.
- Before attending training, participants had an opportunity to discuss draft action plans with their supervisors. Therefore, they were able to begin implementing the action plans (refined at training) immediately after returning to the home country.
- A great deal of attention was paid to the feasibility of action plans. Compared to action plans with large scales and a long time frame, action plans designed to start from small themes and progress with several steps are easier to be implemented smoothly. With this approach, outcomes are measureable, and training participants' motivation levels can remain high.
- A former participant's action plan was highly appraised by his training lecturer. The action plan was then refined with the advice of the lecturer for higher relevance and feasibility. Because the plan was well designed with a clear concept, it was supported by the participant's parent organization. The plan also contributed to the establishment of a JICA grassroots technical assistance project.
- Training participants gained opportunities to visit water utilities and observe how employees worked at those sites. In this way, site visits reinforced the lecture materials.
- As the Director of the Engineering Department of a Municipal Council, a former participant was in a prime position to implement his action plan. His plan was supported by the Mayor and higher authorities so that implementation was smooth.
- The advice and follow-up activities from JICA offices and JICA experts were effective. Training participants were provided with "Concept Paper" for preparation prior to training. They used the Concept Paper to develop a learning plan including their training goals, expectations and desired achievements. Additionally, with the support from JICA experts and JICA offices, they became aware of the issues of their specific professional area, and prepared themselves to learn possible approaches to solve relevant issues through training. As a result, these former participants were able to gain support from higher authorities after their return and effectively apply their acquired knowledge and skills to work.

➤ **Constraining Factors**

- Because the contents of an action plan were associated with organizational and/or national policy development, it was difficult for an individual to implement his action plan.
- The contents of an action plan created by a former participant were not consistent with the needs of his parent organization. Therefore it was not supported by his supervisor.

- The former participant's work department was not the proper place to utilize the knowledge and skills obtained from training. The selection of training participants was not appropriate.
- Required capital was not successfully secured.

#### **(4) Efforts, Concerns and Prospects of Japanese Training Organizations (Water Supply Sector)**

##### **➤ Characteristics of Japanese Training Organizations**

In the training field of Water Supply, regional (municipal) water bureaus are the main training courses providers. Not-for-profit organizations related to water supply, water utilities owned by the local governments, and universities are also training providers or sub-contractors.

Currently, a great number of international cooperation projects are conducted through the collaboration of JICA and Japanese municipal governments. The main types are Technical Cooperation (including conducting training programs in Japan), Grant Aid, Dispatch of Volunteers, and Grassroots Technical Cooperation (a special frame for local community enhancement). In the future, it's believed that more similar projects will be conducted.

Water supply planning and operational management in Japan are conducted with consideration of the characteristics of the land (urban or rural usage, geographical diversity such as cold areas, highlands) and budget based cost-effectiveness in each water district. Based on regional characteristics of water supply, training organizations have utilized their own networks (water utilities, local governments, and corporations), facilities (water system engineering training centers and water supply related facilities) and human resources (experienced lecturers who understand both water supply services in Japan and the reality of developing countries) to develop an appropriate training curriculum.

##### **➤ Efforts for Enhancing Training Program Management**

The Japanese training organizations have made the following efforts to help develop participants' capacity and enlarge training outcomes after their return. These efforts are revealed by the Overseas Field Survey and the Complete Count Questionnaire Survey as driving facilitating factors for training outcomes.

##### **· Training Curriculum Development:**

The requirements of participants before attending training, and feedback after training, are reflected in curriculum revision. In order to enhance learning effects, attention is paid to instruction regarding action plans and the combination of lectures, site visits and practice of learned knowledge and skills. Additionally, when designing curriculum, technical skills are included, as well as the social factors that accompany water supply services, project planning and presentation.

- **Networking with Former Training Participants:**

Some training organizations have maintained relationships with former training participants through Facebook, emails and personal visits (when available). There are cases showing that a continuous relationship helps training organizations to refine training curriculum, and even contribute to strengthening of the relationship between Japanese municipal governments, local enterprises and developing countries.

- **Collaboration with JICA:**

Collaboration with JICA is considered significant with regard to conducting training programs. Since FY2013, JICA has collaborated with Japanese municipal governments to hold an annual study seminar focused on water supply. The seminar provides an opportunity for municipal governments and water utilities to exchange opinions on the training program topics regarding course management and developing businesses overseas through the programs.

➤ **Concerns of Japanese Training Organizations**

As described above, training organizations have made considerable efforts to enlarge training outcomes. In terms of operating training programs, these training organizations still have the following concerns:

- **Selection of Training Participants:**

Training participants are expected to have relevant professional specialties and language capabilities to learn and communicate with lecturers and peers. Without these two, it's difficult for participants to maintain a high level of motivation and their overall learning experience will conclude with negative impacts. On the other hand, in consideration of applying obtained knowledge and skills after training, it's desirable to have participants coming from countries with similar water supply issues. It's also beneficial if parent organizations continuously participate in JICA training programs. The synergistic and ripple effects brought by former training participants over the years can be expected. The relationship between Japanese training organizations and participants' parent organizations is strengthened as well.

- **Insufficient Lecturers and Facilitators:**

It's difficult to find lecturers who not only have expertise regarding water supply issues, but who also understand the background and current situation of water supply services in developing countries. Many courses are taught by the same lecturers over years. Although it's necessary to introduce new methods of teaching (i.e. workshops), and to focus more on human resources, required capital has not been secured yet.

- **Networking with Former Training Participants:**

Although lecturers desire to follow up with training participants regarding their action plans, communication remains limited.

- **Others :**

Training organizations have made significant efforts to enhance training contents and run training programs effectively. However, preparation typically starts months before the training begins, and the associated expenses have become the responsibility of training organizations. In light of this preparatory process, it will reduce the total cost if the procedure of hiring lecturers and determination of reimbursement can be more rational and simplified. Additionally, it's desirable to add more coordinators to support training participants, and to share experiences with other training organizations.

- **Training Programs' Significance and Prospects**

- **Establishment a Cooperative Relationship between Japanese Municipal Governments and Developing Countries**

As training organizations, Japanese municipal governments are fully aware that the relationship between Japanese municipalities and developing countries, and the relationship between local Japanese people/enterprises and developing countries, have been built through these training programs. It's confirmed that the positive relationship has contributed to some water supply related projects collaboratively managed by the collaboration of Japanese municipalities and developing countries. Additionally, Japanese training organizations consider providing training courses as an important opportunity to develop skills relating to human resources. Being involved in managing training programs, lecturers, support staff, and observers have a chance to better understand the current situation of water supply in developing countries, and to reflect on Japan's technology. Some of them have later become involved in expanding water businesses overseas, or become experts dispatched to developing countries.

- **Establishment of a Business Relationship between Japanese Enterprises and Developing Countries**

Among water supply-related enterprises, some companies are aiming to sell their products or technology to overseas markets. Efforts have been made by training organizations to bring these companies and foreign training participants together. It's confirmed that one former participant learned about Japanese water leakage detectors during training, and helped purchase detectors from a Japanese company after returning to his home country. In addition, the collaboration among JICA, municipalities and enterprises has contributed to business development for Japanese enterprises in developing countries. In the field of water supply, Japanese products have been introduced to developing countries through the cooperation of JICA and Japanese municipalities, and are highly evaluated by customers. The positive relationship between Japanese municipalities and training participants' parent organizations can be considered as a driving factor for the development of these businesses.

## Chapter 2. Complete Count Questionnaire Survey

### 2-1. Survey Summary

#### (1) Survey Objectives

This complete count questionnaire survey was conducted with the goal of quantitatively understanding the outcomes of the Thematic Programs and the Young Leader Programs, as well as giving feedback for improving the training system. The survey also attempted to quantitatively clarify how training effects emerge through training participants' activities after returning to home countries and what factors facilitate or constrain positive impacts. This year, the number of free-answer questions was increased to supplement the quantitative analysis with the qualitative answer.

#### (2) Survey Targets

The survey targeted 583 participants of FY2012 and FY2013 Thematic Programs in water supply and the Young Leader Programs, whose valid email addresses were known to JICA. In consideration of the significance of monitoring the activities of former participants beginning soon after their return, and the impact of networking with them, the targets of this Complete Count Questionnaire Survey were JICA training program participants from the past 2-3 years. In terms of the Young Leader Programs, because the participants of FY 2012 were the survey targets of last year's survey, the targets of this year's survey were limited to the participants of FY2013.

Considering the importance of monitoring the early stage that immediately follows training and the resulting relationship with the trainee, we conducted the Complete Count Questionnaire Survey by targeting the trainees who came back to their home countries within the past two or three years. As for the Young Leader Programs, this survey targets only the programs from 2013, since the survey for the program from 2012 had already been finished by the time the survey of last year was initiated.

- Target years: FY2012 and FY2013 (FY2013 only for Young Leader Programs)
- Target fields: Thematic Programs (Water Supply), Young Leader Programs
- Target regions: All

#### (3) Survey Methods

The survey was conducted using two types of methods: Paper questionnaires and online questionnaires using Google Docs. A questionnaire prepared in an Excel format was sent to the survey targets as an attachment, along with a URL for the online questionnaire. The questionnaire

and the invitation to the online questionnaire were sent to the targets beginning on November 27, 2015 and the responses were received until January 18, 2016.

## 2-2. Survey Results

### (1) The Recovery Result of the Questionnaires

The recovery result of the questionnaires is summarized in Table 3. The number of recovered responses and the recovery rates include a total of 166 responses (28.5%): for the Thematic Programs, 36 (33.6%); for the Young Leader Programs, 130 (27.3%); for the total, 166 (28.5%).

Table 3. Number of Survey Targets and the Questionnaire Recovery Results

Training Programs	Number of Training Participants	Number of Email Addresses Managed by JICA	Number of Valid Email Addresses	Number of Responses (Recovery Rate: %)
Thematic Programs (Water Supply)	291	126	107	36 (33.6)
Young Leader Programs	1,083	590	476	130 (27.3)
Total	1,319	716	583	166 (28.5)

### (2) Relevance and Effectiveness of the Training Programs

In terms of relevance, 97.1% (34 responses) in the Thematic Programs and 86.5% (109 responses) in the Young Leader Programs answered “The contents of the Training matched my organization’s needs.” Furthermore, 97.1% (34 responses) in the Thematic Programs and 91.5% (118 responses) in the Young Leader Programs answered “The knowledge and skills I learned in the Training are relevant at present”. Therefore, it can be concluded that the relevance of the training programs was generally high.

In terms of efficiency, 97.1% (34 responses) in the Thematic Programs answered “The training was implemented efficiently for achieving its goals”. Furthermore, the average score of agreeing with the statement “The training was implemented efficiently for achieving its goals” was 4.71 (maximum 5.0). Therefore, it can be concluded that the efficiency of the training program was generally high.

### (3) Realization of Training Outcomes

Regarding the realization of training outcomes/positive impacts, the number of training participants who answered that they contributed to preparing, implementing and improving policies, systems, projects, etc. utilizing knowledge and skills acquired in the training programs are summarized in

Table 4. The participants reporting positive impacts accounted for approximately 45% to more than 85% of the overall respondents.

Table 4. Positive Impacts of the Training Programs' Contribution to the Establishment or Implementation of Policies, Systems and Projects

Areas of Contributions	Thematic Programs No. of Responses (%)	Young Leader Programs No. of Responses (%)
1) Establishment or improvement of policies and systems by national or local governments	16 (45.7)	76 (60.8)
2) Establishment or improvement of a system in one's organization	28 (77.8)	101 (77.7)
3) Establishment or improvement of methods and techniques used at work	31 (86.1)	111 (85.4)
4) Project formulation and implementation in one's organization	29 (80.6)	103 (79.8)
5) Development, improvement and implementation of action plans in one's organization	28(77.8)	110 (84.6)

As for the facilitating/constraining factors of the above contributions, applicability of acquired knowledge and skills, as well as support from supervisors and colleagues within a training participant's organization, were especially important in both the Thematic Programs and the Young Leader Programs.

#### **(4) Behavior and Attitude Changes after Returning to their Home Countries**

Regarding the former participants' behavioral and attitude changes after returning to their home countries, the results show that awareness of topics in the respective training fields, motivation for contributing to the development of the participants' countries, and understanding their own countries' situation from an international perspective have improved for both the Thematic and the Young Leader Programs.

#### **(5) Changes in Perception of Japan**

Regarding the former participants' increased awareness of Japan, the results show that trust in Japan and Japanese people has improved and the understanding of the Japanese society and culture has been deepened by their participation in the training programs, both the Thematic and Young Leader Programs.

#### **(6) The Ratings for the Training Curriculum**

The ratings for the training curriculum by the training participants were generally high. The overall

scores were 8.53 points (Thematic Programs), and 8.94 points (Young Leader Programs) out of 10 points. Regarding each evaluation item, the ratings for the performance of training coordinators/staff members and the practical training/field visits were especially high. As for the treatment factors that were newly added for this study, “Accommodation” was also evaluated highly. However, the evaluation of “Allowance” and “Meal” was relatively low compared with the evaluation of curriculum.

**(7) Implementation of Action plan**

The number of respondents who implemented their action plans was 20 (55.6%) in Thematic Programs, and 82 (73.9%) in Young Leader Programs.

**(8) Participation in Other Organizations' Training Programs**

The cumulative total number of people who participated in other organizations' training programs was 20 in Thematic Programs and 66 in Young Leader Programs.



## Chapter 3. Overall Evaluation and Lessons Learned

### 3-1. Overall Evaluation

Based on the results of the Thematic Verification Survey and the Complete Count Questionnaire Survey, overall evaluation was conducted as follows:

In terms of “Relevance”, in the field of Water Supply, the Thematic Verification Survey and the Complete Count Questionnaire Surveys confirmed that the training programs corresponded to the policies and developmental needs of the Philippines, Rwanda and Sri Lanka; they also corresponded to the aid policies of Japan. The Young Leader Program training courses also corresponded to the needs of the training participants and their parent organizations. Therefore, it can be concluded that there is high relevance for the training programs.

In terms of “Effectiveness”, through the Thematic Verification Survey, it was clarified that both the training programs of Water Supply and the Young Leader Programs were effective as programs that facilitated learning, increased the awareness of issues, and contributed to training participants’ individual capacity development. Additionally, through the Complete Count Questionnaire Survey, the “acquisition rate of offered knowledge/skills” and “achievement of training goals” were 85.4% and 77.3% respectively for the programs of Water Supply. These rates were 84.8% and 82.0%, respectively, for the courses of the Young Leader Programs. Therefore, it can be concluded that the training programs were effective.

In terms of “Efficiency”, the results of the Survey on Training Organizations and the Complete Count Questionnaire Survey confirmed that curriculum development, selection of lecturers and the instruction of action plans were conducted appropriately with consideration to cost-effectiveness. Additionally, because the overall evaluation was high from the Overseas Field Survey and the Complete Count Questionnaire Survey, the efficiency of the training programs can be considered high.

In terms of “Impacts” of the training programs, the “contributions to organizations, policies and systems due to the behavior changes of former training participants”, and the “enhancement of understanding Japan” were confirmed to be significant overall. Former training participants shared the obtained knowledge and technologies with their parent organizations, and initiated activities to improve policies and systems based on learned skills, and created action plans. Through the Thematic Verification Survey, it was confirmed that many former participants utilized learned

technology at their workplace. Other initiatives, such as improving non-revenue water management, contributing to establishing policies, and cooperating with Japanese local governments and private enterprises, were confirmed through the survey. Additionally, data from the Complete Count Questionnaire Survey indicated that 45.7% in the field of Water Supply responded “strongly contributed” or “contributed” for the question of “having positive impacts on policies and institutions of national and local governments”, while 60.8% in the Young Leader Programs agreed. For the question of “having positive of impacts on policies and institutions of parent organizations”, 78% in the fields of both Water Supply and the Young Leader Programs responded “strongly contributed” or “contributed”. 55.6% in the field of Water Supply and 73.9% of the Young Leader Programs said that they implemented their action plan. According to the survey, the training participants enhanced their understanding of Japan, and their appreciation of Japanese culture has been maintained after they returned to their home countries. Based on the above evaluations, it can be concluded that the training programs had an overall high level of impacts.

In terms of “Sustainability”, evaluation was performed from the perspective of maintaining networks with former training participants, and making efforts toward continuously enhancing training outcomes. Many former participants keep in touch through Facebook or email, but the frequency of communication decreases in the months following training. The alumni associations provide opportunities for general communication, and also for sharing information on a professional level. Although reporting to JICA about the progress of action plans motivated some former participants, monitoring the implementation of action plans has not been regularly conducted. Follow-ups from JICA have remained limited. On the other hand, according to many interviewed former training participants, this survey itself provided a valuable opportunity for reviewing the training programs, reflecting on their action plans, and contemplating future activities. Based on the evaluations described above, the sustainability of the programs can be considered as medium-level.

### **3-2. Lessons Learned**

#### **(1) Lessons Learned on Formation and Implementation of Training Programs and Technical Assistance Projects in the Selected Fields**

##### **① Enhancing Training Outcomes through Collaboration of JICA Training Programs and Other Assistance Schemes**

In the Philippines, through the Overseas Field Survey, it was revealed that the Metropolitan Cebu Water District (MCWD) has a long history of implementing JICA’s aid projects under various schemes (feasibility study, ODA loan assistance, grant aid, and assistance for small and medium-sized enterprises). MCWD has also participated in JICA training programs (both Thematic

and Country-focused courses) by sending a steady stream of trainees. Former participants have actively contributed to improving water supply services in metropolitan Cebu through both JICA and MCWD projects.

In Sri Lanka, a former training participant of the Young Leader Programs worked with his former lecturer, who later became the project manager of a JICA grassroots technical cooperation project for promoting elderly care. The proposed policies of the project were successfully approved by the government of Sri Lanka.

In Rwanda, a former participant who attended training on non-revenue water management in Japan, worked for a water supply facility supported by JICA's grant aid and successfully reduced the rate of non-revenue water in his responsible district. He is expected to become the local counterpart of a new technical assistance project aiming to strengthen non-revenue water management. As described above, the collaboration between JICA training programs and other assistance schemes (such as technical assistance projects) has enhanced the training outcomes. The relationship between former participants and JICA has not been limited to the training programs, but continues to develop. A long-term relationship has greatly contributed to the realization of training outcomes.

## **② Conducting Thematic Training Programs by Region**

The overall social and economic environment of water supply varies from country to country, region to region, and the requirements of training participants also vary. Grouping participants from regions of similar water supply environments is considered to be an effective approach for enhancing training outcomes.

According to the interviewed Japanese training organizations, they introduced social factors (along with technologies) into the rural water supply training courses for participants coming from certain African regions. This additional consideration was highly appreciated by the participants. On the other hand, through the Overseas Field Survey, it was revealed that the issue of non-revenue water had been tackled seriously in both Sri Lanka and the Philippines, but it seemed to be the first time for the participants from Rwanda to consider this problem. Working toward reducing non-revenue water has just begun in Rwanda. In conclusion, because of the difference in overall water supply environments and the diversified requirements of local communities, it's meaningful to conduct training within Thematic Programs by region.

### **③ Use of Training Programs to Promote the Public-Private Collaboration between Japanese Municipal Governments/Enterprises and Developing Countries**

Japanese municipal governments/enterprises and the developing countries have conducted projects together and cooperated on developing businesses as well. In the field of Water Supply, this collaboration was confirmed during the survey.

Japanese training organizations have committed to using Japanese products during training, and to introduce training participants to Japanese enterprises and their products (technologies). The training organizations also put forth effort to maintain their relationship with participants after training, primarily through participation in JICA follow-up projects. An employee of a Japanese municipal government later became an expert of JICA, and led a grassroots technical assistance project. Additionally, it was revealed that through JICA's assistance scheme of promoting small and medium-sized enterprises, several Japanese enterprises have worked with Japanese municipal governments (who have built a close relationship with water utilities of developing countries through training programs) to develop businesses in these countries.

Notably, in the field of Water Supply, training organizations in Japan are mainly municipal governments. By running training programs, they have become familiar with the overall situation of water supply services in developing countries. The relationship between the Japanese municipal governments (and the enterprises that collaborate with them) and water utilities of developing countries can be considered as a key driving factor for projects and business development in developing countries. Several successful cases were observed during the survey.

## **(2) General Lessons Learned on Capacity Development of Individuals and Organizations**

### **① Emphasis on the Project Planning Method while Outlining Instructions for Action Plans**

Action plans that were successfully implemented generally had an appropriate topic, scale, sufficient budget and executing authorization. Through creating action plans, training participants learn how to clarify issues, how to choose approaches to solve the issues, and how to transfer ideas to projects. This systematic thinking process is not only beneficial for creating action plans, but also can be applied to design projects. Therefore, the framework for creating action plans can be considered as instructional for project planning.

According to some interviewed training organizations, they have deliberately built time and human resources into their teaching curriculum for outlining action plans. These initiatives should be considered as a good reference for other training organizations.

## **② Enhancing Capacity Development through Contributing to Organizations, Policies and Systems**

According to the results of the Overseas Field Survey and the Complete Count Questionnaire Survey, former participants have utilized the obtained knowledge and skills at their daily work; therefore, some have successfully implemented their action plans. It can be concluded that the training programs have contributed to the overall capacity development at the individual level.

## **(3) Lessons Learned on Improving the Quality of Training Courses of the Thematic Programs and the Young Leader Programs**

### **① Establishment of Supporting System for Training Participants**

Through the survey, it was clarified that enthusiastic teachings from training lecturers, course leaders, and passionate support from training coordinators were the key driving factors for achieving the high level of overall learning effects for training participants. Due to the same reasons, there was a high feasibility level of their action plans. Training organizations have been making efforts to support training participants. Yet, issues of high operating cost and insufficient human resources have remained challenging. There is still room for further improvement.

### **② Realization of Learning Effects through Combinations of Lectures, Site Visits and Practice**

Many former training participants highly evaluated the combination of lectures, site visits and practice. Through site visits and practice, they were able to observe how technologies presented at training were utilized in the workplace. They also gained an opportunity to witness employees at worksites, and communicate with them regarding worksite routines. Site visits and practice not only enhanced the overall learning experience, but also helped promote participants' motivation for learning. Additionally, some participants gained fresh ideas (not possible from lectures) for action plan development. In the future, the continued combination of lectures, site visits and practice is desirable.

### **③ Emphasis on Enhancing Understanding of Japan**

Through the Overseas Field Survey and the Complete Count Questionnaire Survey, former participants were confirmed to have a good impression about Japan, in general. According to these results, some returned from training with the motivation to practice Japanese ethics at work, including practices such as high hospitality, strong integrity, teamwork and punctuality. Additionally, as described above in Section (3)-②, training participants had opportunities to observe some workplaces during site visits. Finally, some participants of the Young Leader Programs highly evaluated the home-stay program and considered it a priceless experience for understanding Japan. If

provided with a chance, many former participants would like to visit Japan again.

The survey revealed that some former participants expressed a willingness to learn more about the Japanese culture. Because the schedule of training courses was rather tight, these participants felt they didn't have enough time to experience Japan. Considering that attending JICA training was the only opportunity for many of them to visit Japan, it's worthy to develop programs with more time allocated to cultural activities to promote understanding and interest in Japan.

#### **④ Compatibility of Training Contents and Training Participants**

The survey confirmed that the compatibility of training contents and training participants was essential for enhancing the training outcomes. According to the results of the Survey on Training Organizations, when some training participants' expertise were not consistent with the training contents, and/or they didn't understand the language of the course instruction, it became difficult for these individuals to participate in training. Furthermore, their lack of prerequisite knowledge and language capabilities can also affect the learning progress of the entire course. During interviews with former training participants, it was revealed that most of them attended training courses with relevant professional knowledge; these participants had enhanced training outcomes after their return. However, some went to irrelevant courses that required expertise that they didn't have. In these cases, (because of the mismatch of training contents and requirements from their workplaces), former participants didn't have opportunities to utilize what they learned in training.

In the field of Water Supply, some parent organizations have continuously sent training participants to the same JICA training courses for years. The relationship built by the Japanese training organizations (mainly municipal governments) and parent organizations, through training, was confirmed to be a key driving factor for enhancing training outcomes. Yet, from the parent organizations that don't consistently participate in JICA training programs, some former participants achieved a high level of outcomes after returning from training. It was proven that the realization of outcomes is possible when former participants are highly motivated and supported by their parent organizations.

To further address the importance of the compatibility of training courses and training participants, JICA headquarters, JICA overseas offices, and the Japanese training organizations have placed an emphasis on the process of selecting training participants. In the future, continuous efforts along these lines are desirable.

### **⑤ Follow-Up after Training**

The Overseas Field Survey revealed that in the Philippines, Rwanda and Sri Lanka, former training participants enhanced training outcomes by participating in JICA projects (either by joining ongoing projects or proposing and implementing new projects) after returning to their home countries. They received advice from JICA experts and obtained new knowledge and technologies. In this way, these projects can be considered follow-up after the training programs, which further enhanced the training outcomes. From this perspective, conducting JICA projects with former training participants and their parent organizations is significantly meaningful.

In addition, according to the interviewed former participants, this survey provided an opportunity for them to review the training programs, to reflect on the implementation of their action plans, and to contemplate future activities. This survey itself can be considered as a follow-up to the training programs as well.

### **⑥ Methods of Measuring Training Outcomes**

This survey measures the training outcomes from three perspectives: “Capacity Development of Training Participants at the Individual Level”, “Contributions to Organizations, Policies and Systems due to the Behavior Change in Former Participants”, and “Enhancement of Understanding Japan”.

From the three perspectives, this survey revealed that former participants increased their awareness of issues, improved their specialties in assigned areas, enhanced work motivation, and implemented action plans. Some were promoted due to their training experiences and improved performance that resulted from training. The enhancement of understanding Japan through training was also confirmed in the survey. These are the important outcomes of both the Thematic Programs and the Young Leader Programs.

In the field of Water Supply, JICA projects were confirmed to be conducted by Japanese municipal governments and collaborating enterprises in developing countries. Some Japanese products were introduced by former training participants, which provided Japanese enterprises with new opportunities overseas. This collaboration and its contribution to new business development can be considered as a novel factor when measuring training outcomes.

### **⑦ Overall Training Evaluations**

The post-evaluation surveys of JICA training programs in the past five years clearly revealed the current outcomes of the training programs and their facilitating/constraining factors. The understanding of these facilitating and constraining factors can be applied to further refine training

curriculum, and to make survey methods more appropriate.



## **Section 2 Thematic Verification Survey**

## Chapter 1. Overseas Field Survey: the Philippines

### Location



### Basic Information

<b>Name of the Country</b>	Republic of the Philippines
<b>Constitution</b>	Constitutional Republic
<b>Area</b>	299,404km <sup>2</sup> (approximately 80% the size of Japan) 7,109 islands
<b>Population</b>	Approximately 92.34MM (2010 Philippine National Census)
<b>Language</b>	National language: Filipino Official Language: Filipino, English
<b>GDP</b>	US\$284.9BN (2014)
<b>GDP per Capita (nominal)</b>	USD\$2,865 (2014)
<b>Economic Growth Rate</b>	6.1% (2014)
<b>Consumer Price Index</b>	4.1% (2014)
<b>Unemployment Rate</b>	6.8% (2014)
<b>Bilateral Agreements</b>	<ul style="list-style-type: none"> <li>• Reparations Agreement between Japan and the Republic of the Philippines (signed May 9<sup>th</sup>, 1956; became effective Jul. 23<sup>rd</sup>, 1956)</li> <li>• Exchange of Notes between the Government of Japan and the Government of the Republic of the Philippines Constituting a Provisional Agreement Concerning the Simplification of the Entry and Sojourn Procedures (signed Jul. 24<sup>th</sup>, 1958; became effective Aug. 1<sup>st</sup>, 1958)</li> <li>• Treaty of Amity, Commerce, and Navigation between Japan and the Republic of the Philippines (signed Dec. 9<sup>th</sup>, 1960; became effective Jan. 27<sup>th</sup>, 1974)</li> <li>• Air Services Agreement between the Government of Japan and the Government of the Republic of the Philippines (signed Jan. 20<sup>th</sup>, 1970; became effective May 14<sup>th</sup>, 1970)</li> </ul>

	<ul style="list-style-type: none"> <li>• Protocol Amending the Treaty of Amity, Commerce, and Navigation between Japan and the Republic of the Philippines (signed May 10th, 1979; became effective Jul. 20th, 1980)</li> <li>• Convention between Japan and the Republic of the Philippines for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income (signed Feb. 13rd, 1980; became effective Jul. 20th, 1980)</li> <li>• Agreement on Technical Cooperation between the Government of Japan and the Government of the Republic of Philippines (signed Apr. 4<sup>th</sup>, 2006; became effective Apr. 8<sup>th</sup>, 2010)</li> <li>• Agreement between Japan and the Republic of the Philippines for an Economic Partnership (signed Sep. 9<sup>th</sup>, 2006; became effective Dec. 11<sup>th</sup>, 2008)</li> <li>• Protocol Amending the Convention between Japan and the Republic of the Philippines for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income (signed Dec. 9<sup>th</sup>, 2006; became effective Dec. 5<sup>th</sup>, 2008)</li> </ul>
<b>Recent Japanese Aid (E/N base; technical cooperation is JICA base)</b>	<ol style="list-style-type: none"> <li>(1) Loan Assistance: 2,420.92 billion yen (FY 2013)</li> <li>(2) Grant Aid: 275.98 billion yen (FY 2013)</li> <li>(3) Technical Cooperation: 213.48 billion yen (FY 2013)</li> </ol>

Source: Ministry of Foreign Affairs, Japan

## Photographs

	
<p>Participated in training programs on Water Supply; Utilized JICA-obtained knowledge and skills for policy formation and project evaluation. (NWRB)</p>	<p>Attended several training programs on Water Supply in Yokohama; has become a core member of MCWD projects. (MCWD)</p>
	
<p>Received training in Yokohama, and applied the obtained knowledge to work; is a core member for developing projects in MCWD. (MCWD)</p>	<p>Diola (right), who attended the training on Water Supply, works with his supervisor (left) on numerous projects. (MCWD)</p>
	
<p>Attended Engineering on Water Supply System program; implements action plan to better strengthen water supply networks. (MWSI)</p>	<p>“It’s very memorable being able to discuss the issues on water supply with Japanese engineers and other international participants.”(MWSI)</p>

	
<p>Studied Japanese Politics and Economics; has become a Japan specialist and is able to develop comprehensive projects after training. (NEDA)</p>	<p>Young Leader Program Participants who liked Japan. Dakmos (right) applied for JDS and received her Masters' Degree in Japan. (NEDA)</p>
	
<p>Became confident attending international conventions through discussions with lecturers and other participants. (NEDA)</p>	<p>A member of JAAP. Has utilized obtained knowledge and skills from training; keeps in touch with other former participants. (NEDA)</p>
	
<p>Leyson (left) with her supervisor (right), also a former JICA training participant. Works in rural communities with his support. (Cebu City Government)</p>	<p>Tejano (left), a rose producer, is proud of Leyson being able to attend training in Japan and spread her knowledge to rural areas. (Cebu City Government)</p>



	
<p>Gained confidence at training; has become more proactive after return; was selected “Best Employee” for young officers. (Cebu City Government)</p>	<p>Using Japanese fish markets as models, Catipay, with her supervisor and colleagues, improves market management in Cebu. (Cebu City Government)</p>
	
<p>Utilizes obtained fishery knowledge in Japan to form and implement projects; shares experience with colleagues. (Cebu City Government)</p>	<p>A former participant of the Young Leader Program, the president of JAAP, is aiming to get more former participants involved. (JAAP)</p>
	
<p>Committee Members of JAAP. Most are former participants of the Young Leader Programs; attend regular meetings and run JAAP inside and outside Manila. (JAAP)</p>	<p>A local staff of JICA, Philippines office, who has been supporting training programs and alumni association. (JICA Philippines office)</p>

## 1-1. JICA Programs in the Philippines

### (1) Japan's Assistance Policies for the Philippines

Per the Agreement between Japan and the Republic of the Philippines for an Economic Partnership, effective December 2008, the two countries have maintained a strong economic relationship. Moreover, “Strategic Partnership” was confirmed between the countries in 2011. For years, Japan has been a major partner for developmental assistance to the Philippines; the two countries have built a close and strong relationship.

The Philippines is considered to be on the threshold of becoming a Middle Income Country. Its GNI per capita reached USD2,050 in 2010. The indexes in the areas of primary education and maternal and child health are expected to achieve Millennium Development Goals. Yet, compared to other more developed ASEAN countries (such as Indonesia, Thailand and Malaysia), the Philippines' GDP growth was relatively low for the past 50 years. The speed of poverty reduction remains slow, and the gap between the rich and the poor is still significantly large. In addition, the country is facing the challenge of supporting its continuous population growth, averaging 2% per year.

Based on the situation described above, JICA considers the following as major areas for assistance: (1) promoting sustainable economic growth through investment; (2) overcoming vulnerability; and (3) building peace in the Mindanao region. Within these major areas, JICA has made efforts to help strengthen infrastructure through the collaboration of public and private sectors, to develop policies for better investment environments, to improve natural disaster reduction and risk management, and to develop human resources for peace in the Mindanao region.<sup>1</sup>

### (2) JICA Cooperation Projects in the Thematic Area

Relevant to the major assistance area, “Promoting sustainable economic growth through investment”, investment opportunities are necessary in order to achieve sustainable economic growth and create sufficient work opportunities. Assistance for strengthening infrastructure, including transportation/road networks (primarily in greater Manila), energy production, and improved water supply systems have been emphasized, along with assistance for improving oversight to implement these projects. Moreover, from the perspective of minimizing the concentration of government, businesses, and population in greater Manila, and developing a geographically balanced economy, JICA has encouraged cooperation with Japanese private sectors and local governments to help build infrastructure and develop local areas of the Philippines.

<sup>1</sup> Sources: “Country Assistance Policy for the Republic of the Philippines” of Japan Ministry of Foreign Affairs; “Assistance by Country and Region” of JICA (website).

In the area of water supply, due to the rapid social and economic development since the 1990s, demand has increased and strengthening of the water supply system has become a challenge. In order to meet increased demands and develop water resources nationwide, JICA helped develop National Water Resources Development plan (1998). The importance of securing water resources in greater Manila, Cebu and Baguio was emphasized<sup>2</sup>. Based on understanding the needs of the Philippines, JICA then conducted projects in greater Manila and other local cities to address water supply issues.

Projects in the area of water supply<sup>3</sup> are as follows:

- Small Water Districts Improvement (Technical Cooperation) (2005/07~2012/03)
- Seminar on General Water Resources Management (Advisor) (2006/03~2006/12)
- The Study for Improvement of Water Supply and Sanitation in Metro Cebu (Development Study) (2009/01~2010/08)
- Study on Pampanga River Water Resources Management (Development Study) (2009/02~2011/02)
- Water Supply Services Operation and Management Support in Metropolitan Cebu Water District (Technical Assistance related to ODA Loans) (2012/03~2013/03)
- Local Governance and Rural Empowerment Project for Davao Region (Individual Case – Country Focused Training) (2012/07~2014/08)
- Rehabilitation Project for Cagayan de Oro Water District's Facilities Damaged by Typhoon Sendong (Technical Assistance related to ODA Loans) (2012/09~2013/11)
- Improvement of Water Supply in Metropolitan Cebu Water District (Grant) (2014/04~2017/03)

## **1-2. Needs of the Philippine Government**

### **(1) The Country's Policies and Development Needs in the Water Supply Sector**

The Philippines' mid-term inclusive economic development plan - Philippine Development Plan 2011-2016 - was formed and released in May 2011; NEDA served as core policy makers. One of the goals is to realize an “inclusive” economic growth by increasing work opportunities for the poor and overall reduction in poverty. In order to achieve the goal, the following strategies are being developed: (1) boosting competitiveness of (industrial and social) sectors for generating mass employment; (2) improving accessibility to finance (financial system) to meet the needs of various people; (3) facilitating infrastructure development; (4) promoting transparency and accountability in governance; and (5) developing human resources on refined social services and safety networks.

<sup>2</sup> Based on the summary of The Study for Improvement of Water Supply and Sanitation in Metro Cebu.

<sup>3</sup> JICA Knowledge Site.



Facilitating infrastructure development is one of the key components of the Philippine Development Plan 2011-2016, and the issue of water supply is emphasized. Water is a basic need; access to water supply services is a basic human right. The country, however, has been facing challenges such as: (1) limited access to safe water; (2) lack of capital and low investment level for improvements; and (3) lack of new water sources to meet demands of current and future water use.

## **(2) Training Needs in the Water Supply Sector**

As described above, water supply is an important area that presents challenges to the Philippine government. How to respond to the demand of water supply due to rapid population growth has become a serious issue. Through interviews at the overseas field survey, it's confirmed that the training needs in the areas of non-revenue water deduction, water pipe network design, and water quality control are high.

### **1-3. Survey Targets and Methods**

Group or individual interviews were conducted with former participants and their supervisors based on questionnaires. A list of organizations surveyed and interviewees are as follows: (See Appendix 2 for a list of interviewees.)

#### **< List of Parent Organizations >**

National Economic and Development Authority (NEDA)

National Water Resources Board (NWRB)

Local Water Utilities Administration (LWUA)

Maynilad Water Services, Inc. (MWSI)

Metropolitan Cebu Water District (MCWD)

#### **Water Supply**

#### **< Number of Interviewees by Parent Organizations >**

	NWRB	LWUA	MCWD	MWSI	Total
Former Participants	7	3	2	2	14
Supervisors	-	-	2	-	2

## &lt;Number of Interviewed Former Participants by Training Courses&gt;

	Number of Interviewees
Integrated Water Resource Management	6
Engineering on Water Supply System	2
Non-Revenue Water Management (Leakage Control)	2
Operation and Maintenance of Urban Water Supply System	2
Management of Local Water Resources Environment	1
The Second Executive Forum for Enhancing Sustainability of Urban Water Services in Asian Region	1
Total	14

Young Leader Programs

## &lt; Number of Interviewees by Parent Organizations &gt;

	Cebu City Government	NEDA	Total
Former Participants	4	6	10
Supervisors	2	-	2

## &lt;Number of Interviewed Former Participants by Training Courses&gt;

	Number of Interviewees
Fishery by Resource Management Approach	2
Promotion of Agriculture	2
Promotion of Local Small and Medium Sized Enterprises	2
Administrative Management	2
Administrative Management on Economy Development (Promotion of Industries)	1
Management of Urban Environment	1
Total	10

## &lt; Other Donor Organizations and Alumni Associations Interviewed &gt;

Other Donor Organizations

- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Korea International Cooperation Agency (KOICA)

Alumni Associations

- JICA Alumni Association of the Philippines, Inc. (JAAP)

## 1-4. Outcomes of the Training Programs

### (1) Capacity Development at the Individual Level

Former training participants, of both the Thematic Programs (Water Supply) and Young Leader Programs, have experienced growth after training:

- 1) Upgraded knowledge and skills in the specific training area
- 2) Gained confidence in the specific area due to obtained knowledge and skills from the training program
- 3) Gained confidence in themselves due to interactions with other training participants from various countries
- 4) Improved presentation skills in front of an audience

In the respective training areas, the following specific capacity developments have been confirmed.

### ① Water Supply

#### 【Enhanced Awareness and Inspiration】

- Realized the importance for citizens, who are the stakeholders of water supply services, to understand the value of water, which is an important perspective in terms of managing water supply services. (NWRB, MCDW)
- Was impressed to see how Japanese dams are like parks, where local residents—children, adults and the elderly—enjoy this setting on a regular basis; also, how people learn to respect water resources naturally. In the Philippines, dams are just dams; they can be developed the Japanese way. (NWRB)
- Learned about water pollution and discussed this topic with other participants from various countries. Realized that it's not only an issue in the Philippines, but a global issue which requires focused efforts to overcome. (NWRB)
- Understood that there are countries facing more challenging water issues, with less capital and less developed infrastructure than the Philippines. Started to think about the situation of the Philippines from a more comprehensive perspective. Felt pride in the rewarding experience of introducing the Philippines' experience to training participants of other countries. (MCDW, MWSI)

#### 【Improved Commitment to Work】

- Learned the Japanese history of water resource management and how Japan reached a high standard in the 50 years after the war; believed the Philippines could improve water resource management as well, using Japan as a model; became more proactive at work. (NWRB)

## ② Young Leader Programs

### 【Enhanced Awareness and Inspiration】

- Was surprised to see that, not only cities, but rural areas also have influence in Japan. Although having the issue of depopulation, the industrial and agricultural products of Japanese rural areas have gained a high reputation in international markets. (Cebu City Government • Urban and Rural Department, NEDA)
- Attended the program of Rural Development; learned about Japanese farmers and agriculture-related NPOs. Felt willing to study more about Japan after returning from training, applied for JDS (Japanese Grant Aid for Human Resource Development Scholarship) and earned a Master's Degree in agriculture development in Japan. (NEDA)

### 【Improved Commitment to Work & Contribution to Career Progress】

- Was selected to attend the training program because of working in rural communities; became more confident in leading activities; earned respect from rural residents because of the training experience. (Cebu City Government • Urban and Rural Department)
- Gained confidence due to training participation and became more proactive at work; entered a contest for young officers in Cebu, and was rewarded as the Excellent Young Officer (the highest reward). Was promoted; the experience of attending the JICA training was considered an important international experience; the attitude toward work, influenced by Japanese people during training, was also an important point for the promotion. (Cebu City Government • Human Development and Career Introduction Department)
- Was a Japan specialist in the department of public investment when attending the training program and learned about Japanese economic management during the training. After returning from Japan, has become more proactive and able to develop comprehensive project proposals. Was promoted after training; the experience in Japan and work performance after training was highly evaluated. (NEDA)

## (2) Contribution to Organization, Policy and/or System due to Behavior Change of Former Participants

All former training participants, both from the Water Supply and the Young Leaders Programs, shared their experiences and obtained skills with parent organizations, through submitting training reports, presenting in seminars and meetings, etc. Many former participants utilized their knowledge and skills to initiate projects, and by doing so, they have brought out further impacts. Thus, the knowledge and skills obtained from training have been utilized by not only former participants, but by organizations.

Regarding action plans, all former participants have reported to their supervisors. Although some of

the action plans are not implemented due to lack of financial resources, some are partially implemented, some are reserved as future goals, and some (though few) have been refined and implemented successfully. Moreover, beyond implementing actions plans, situations involving former participants utilizing knowledge and skills to participate in forming policies and improving non-revenue water are confirmed through the survey.

Contributions due to behavioral changes made by the former JICA training participants of Water Supply Service and Young Leader Programs are confirmed as follows:

## ① Water Supply

---

### **【Improved Performance】**

- When implementing projects on groundwater development, the knowledge and skills obtained from training, including project designs from geographical and hydrogeological perspectives, are very helpful. (NWRB)
- A former participant learned at training that it's possible to supply water by time zone and regionally through controlling water pressure in the pipe networks. He then became responsible for the operation of water pressure control and the implementation of required equipment. (MCWD)
- Having realized, through training, that it's important to continuously develop human resources for better water leakage detection, former participants (as core members of a team) helped initiate a plan to build a training facility for water leakage detection by using the training center of a Japanese waterworks bureau as a model. The plan has successfully secured the required budget. (MCWD)

### **【Contribution to Policy Formation】**

- Dam operation has been privatized in the Philippines, and numerous companies are currently involved in dam management. Accordingly, developing regulations on operation and management has become an issue. NWRB introduced the Interagency Approach (learned in Japan) for policy formation, and successfully developed regulations. (NWRB)
- Based on training experiences, former participants collaborated to develop a framework for a national integrated water resources management plan (2007). The framework was used in forming a national action plan in coping with climate change, and also used to manage overall water supply services. (NWRB)

### **【Collaboration with JICA】**

- A former participant learned about the operation and management of urban water supply at a JICA training program in 2011. He then was selected to become a team member to work on a major JICA project, "Improvement of Water Supply in Metropolitan Cebu Water District",

beginning in 2014. His responsibility is to introduce the SCADA (Supervisory Control and Data Acquisition) system to Cebu, which utilizes his obtained knowledge and skills from training. One of the project leaders is in a leadership position at MCDW, and also a former participant of JICA training programs. (MCWD)

### **【Contribution to Development Impact】**

#### Increase of Total Amount of Water Supply

- In order to increase the total amount of water supply in a responsible water district, a former participant initiated an action plan to add more pipes and reservoirs. His action plan was integrated into several projects after his return, and the total number of reservoirs have increased from 16 to 26; new pipes have been installed and old pipes replaced. Thus, the rate of non-revenue water has dropped from 69% to 34%. The total amount of water supply in the district has increased as well. (MWSI)
- Water supply to the highlands was unavailable because of low water pressure in the pipes due to leakage. Former participants (as core members of a team), helped improve water leakage detection. Now, water is supplied to the highlands. (MCWD)

#### Improvement of Non-Revenue Water Management

- Trained in the area of non-revenue water management (leakage control), a former participant has become a specialist. After a year of campaigning for non-revenue water management activities (including leakage detection) in front of a local water bureau, the rate of non-revenue water within its responsible water district dropped from 25% to 20%. The former participant was then involved in forming policies on non-revenue water management, and helped in the process of filing an application to JICA for financing non-revenue water management projects in Cebu, Lloio, and Santiago. (LWUA)
- Former participants attended training programs on non-revenue water management in 2011 and joined the team of water leakage detection (with only 7 employees at the time). They used their own funds to purchase the Japanese water leakage detectors which they used in training. Because of the expansion of the team, technology improvement and the introduction of Japanese water leakage detectors, the rate of non-revenue water dropped from 36% to 21% in 2011. (MCWD)

#### Improvement of Water Quality

- The concentration rate of nitric acid was previously as high as 17mg/L in water (in a certain district); this water supply was then stopped. Inspired by ideas from lectures on water quality, former participants used water from other sources to mix and reduce the concentration of nitric acid before sending water (from the current source) to the water pipes. Currently, the concentration rate has been controlled below 10mg/L. (MCWD)

### Promotion of Regulation

- Having learned that water resources are managed by various organizations collectively in Japan, NWRB introduced this concept when forming policies for increasing the rate of the piped water supply. When closing deep wells in Quezon City, NWRB worked closely, not only with the city government, but also with residents' associations and NGOs to promote regulation. This collaboration is considered to be the key to successful implementation. (NWRB)

### Awareness of Water Conservation

- Former participants heard that children in Japan learn the value of water in school and spread the concept to family members. Because the main water source in Cebu is groundwater, and other considerable water sources such as rivers are increasingly polluted, they believed that citizen awareness of the value of water would be critical for future water supply services. By using Japanese elementary schools as a model, they started a campaign in Cebu elementary schools to promote saving water when washing hands. (MCWD)
- Having learned that the Yokohama Waterworks Bureau uses a mascot character (frog) to build the relationship between local citizens and the bureau, former participants decided to develop a similar character in Cebu and opened a contest to the public. The character will be decided in 2016. (MCWD)

### Others

- At training, participants first learned about rainwater collection. After returning to the Philippines, former participants started promoting the idea of setting up tanks to collect rainwater at workshops and provided consultation. As a result, the Embassy of Pakistan in the Philippines has started a project to collect rainwater. (NWRB)

## **② Young Leader Programs**

---

### **【Improved Performance】**

- A former participant visited Japanese fish markets and observed the cleanliness of these markets and the freshness of the fish. She realized that the biggest difference between Cebu's fish markets and Japanese markets is the strict control of sanitation in Japan. In order to improve the overall environment of Cebu's fish market, with support from her supervisor and colleagues, she advocated to clean the floor thoroughly and wear long boots inside the market. In addition, she proposed to build an examination facility next to the market to check fish. Her proposal has been approved and secured sufficient budget. (Cebu City Government • Veterinary Medicine and Fishery Department)
- Having learned the fixed-net fishing method through training, a former participant initiated and is implementing a project which introduces this method to Cebu. (Cebu City Government • Fishery Resources Department)

### **【Contribution to Development Impact】**

- Having learned in Japan that farmers are able to sell products to consumers directly at open farmers' markets without using distributors, former participants established a small market near their local town hall where people frequently gather. The market is operated with permission from the local government and the agreement of farmers; it is opened on a regular basis. The number of participating farmers has increased gradually and the market has become popular among both farmers and consumers. Inspired by what they saw in Japan, the former participants are planning to mark the names of producers on the packages of their products. (Cebu City Government • Urban and Rural Department)
- Having learned the method of organic farming in Japan, a former participant introduced organic fertilizers to rose farmers in his responsible area. Due to the improved quality of the roses, one farmer's revenue has increased significantly, such that this farmer is able to concentrate on growing roses exclusively (no additional products). (Cebu City Government • Urban and Rural Department)
- In the Philippines, career consultation is usually offered to job seekers after providing vocational training. Having learned the operating system and vocational training programs of Japanese Hello Work (a vocational training and career consultation facility), a former participant initiated a method where job seekers are asked their preferred industries before receiving vocational training, and career consultation is provided as soon as the training starts. As a result, employment rates have increased. Additionally, based on the experience of Hello Work, the former participant introduced computers to manage data pertaining to various job offers. (Cebu City Government • Human Resources and Job Consultation Department)

### **(3) Enhancement of Understanding Japan (Changes Obtained by Associating with Japan and Japanese People)**

Attending JICA training was the first visit to Japan for most of the former participants, both from the Thematic Program of Water Supply and the Young Leader Programs. According to the participants, they had the following common impressions regarding Japan and Japanese people:

- 1) Japanese people are very friendly, showing great hospitality.
- 2) At Japanese workplaces, there is a culture of supporting each other, regardless of positions and specialized areas. (They practiced this concept after returning to their home countries.)
- 3) Japanese people are punctual, strict with rules and respectful of others. (They practiced these values after returning to their home countries.)

In addition, some former participants (who experienced homestay in Japan) of the Young Leader Programs agreed with the following statement: “The experience of directly feeling Japan through



home-stay was priceless.”

In general, former participants had a great impression about Japan. They said they would visit Japan again, given the chance. When they reflected on the training courses, they mentioned not only the lecturers and course leaders, but also the coordinators, the employees at the visited sites, host families, encountered citizens and even the bus drivers, including memorable episodes which occurred during the training course. It was confirmed that the communications in Japan, not limited to lectures and site visits, helped create good impressions about Japan.

The following comments were made by former participants:

- While commuting by train daily during training, I was very impressed by how precisely the train proceeded according to the schedule.
- I was very impressed by how safe and orderly Japanese society is. I believe that it's because Japanese people are strict with rules, so I started to respect rules after returning to my country.
- I was very impressed by Japan's rich nature and the kindness of its people. I wanted to become kind and cooperative, too, after attending the training.

#### **1-5. Facilitating and Constraining Factors for Training Outcomes**

Listed below are facilitating and constraining factors for outcomes of the training programs.

##### **(1) Facilitating Factors**

###### **① Individual Factors**

- Have high motivation toward attending the training programs.
- While having the general information of training programs in advance, former participants have clearly defined goals of training and a plan on what specific knowledge/skills they would like to learn through training.
- With clear understanding of tasks at their workplaces, former participants are able to develop realistic action plans based on their work positions and available budget.

###### **② Organizational Factors**

- It is required for former participants to submit training reports and lead seminars after their return.
- Many supervisors are former JICA training participants as well. Thus, trainee selection has been conducted in an efficient and thorough way; the implementation of action plans has been supported at workplaces.
- Before attending training, former participants have a chance to discuss action plans with their

supervisors. In this way, action plan implementation has been smooth.

- Since there are many former JICA training participants among supervisors and colleagues, the basic information about training programs is shared at workplaces and the implementation of action plans is well supported.
- To a certain degree, parent organizations have their own funds to implement projects (these are well operated and managed).

### ③ Factors of Training Contents

- Functioning as facilitators and mentors, training lecturers and course leaders provide comprehensive and individual instruction to participants regarding their action plans, and answer any questions. As a result, it is possible for participants to create action plans with high feasibility based on the situations of their own countries and parent organizations. It is also possible for them to solve concerned problems relevant to training contents, within the training period.
- Sufficient time is secured for discussion among participants from various countries so they can learn from each other's experiences.
- The combination of lectures and site visits results in a high degree of learning outcomes.
- The direct communication with local people during site visits, including engineers, farmers, fishermen, etc., enhances participants' learning experiences and increases their motivation.
- The communication between lecturers and former participants continues even after training programs finish, which serves to maintain former participants' high motivation to implement the action plans created during training.

## (2) Constraining Factors

### ① Individual Factors

- Some action plans, developed during training, are not realistic without the possibility of securing sufficient funds. When creating action plans, it's necessary to consider their feasibility.
- Some action plans are associated with policy formation at an organizational or national level. Implementation by individual efforts is difficult.
- Some training contents are very interesting and there are a lot of things to be learned from them. However, they have few connections with real work.

### ② Organizational Factors

- As a lawyer, a former participant developed an action plan to amend laws regarding usage of river basins. Under current laws, no matter how low the groundwater level becomes, the concessionaires have the right to use groundwater without time limits. His action plan was to set a time limit for the usage of groundwater. Amending a law, however, requires a long process. Thus, at this moment, only a draft proposal has been developed with part of his ideas. (NWRB)

### ③ Factors of Training Contents

- It's desirable to have some follow-up activities from JICA after training. For instance, this type of post evaluation survey provides an opportunity to review training programs and to contemplate future activities.
- The time set out for answering questions and conducting discussion among training participants is not sufficient. If more time could have been secured, the understanding level of training contents would have been higher.
- There was a day on which all programs were canceled because of a typhoon. Considering the total period of training (not long), and although it's understandable, it's better to have a contingency plan. (Cebu City Government)
- It takes time when training programs are conducted through interpretation. The time would be better used to answer questions or enhance training contents. Since participants from the Philippines can speak English, it would be better for the programs to be in English. (LWUA)

### (3) Characteristics in the Process of Realizing Training Outcomes

#### ➤ Case Study: MCWD (Metropolitan Cebu Water District) – Enhancing Training Outcomes through Collaboration of JICA Training Programs and JICA Projects

According to Japan's Ministry of Foreign Affairs' policies of cooperation toward the Philippines, infrastructure strengthening has been viewed from the perspective of creating inclusive growth through releasing tension caused by density in the metropolitan area of Manila. JICA has been working with Japanese private sectors and municipalities to develop local economic growth centers in the Philippines by strengthening infrastructures. In the area of water supply, along with JICA, many Japanese companies and municipalities have conducted projects outside Manila. Through the field survey, it's confirmed that MCWD has deliberately selected and continuously sent trainees, from management level to young engineers, to JICA training programs on Water Supply, and the outcomes of training have been significant. (Training participation from MCWD is listed in Table 1.)

Table 1. Training Participation from MCWD\*

Year	Training Course	JICA Scheme	No. of Participants	Training Period	Training Organizations
2014	-	-	5	14 days	Nihon Genryo Corporation; Yokohama Water Co., Ltd.
2012	Water Supply Services Operation and Management Support in Metropolitan Cebu Water District	Project (ODA Loan)	10	14 days	Yokohama Waterworks Bureau
	Seminars on Human Resources Development and Water Supply Management in Asian Region	Thematic Training (Loan)	1	14days	Yokohama Waterworks Bureau
	The Third Executive Forum for Enhancing Sustainability of Urban Water Services in Asian Region	Country Focused Training (Loan)	1	5 days	Yokohama Waterworks Bureau
2011	Engineering on Water Supply Systems	Group Training	1	78 days	Japan Water Works Association
	Operation and Maintenance of Urban Water Supply System	Group Training	1	55 days	Osaka Waterworks Bureau
	Water Supply and Sewerage Operation and Management in Metropolitan Cebu	Country Focused Training (Loan)	7	11 days	Yokohama Water Co., Ltd.
	The Second Executive Forum for Enhancing Sustainability of Urban Water Services in Asian Region	Group Training	1	7 days	managed by: JICA Tokyo
2010	Seminars on Human Resources Development and Water Supply Management in Asian Region	Thematic Training (Loan)	2	14 days	Yokohama Waterworks Bureau
1993	Engineering on Water Supply Systems 2	Group Training	1	79 days	-

Note: The shaded are the thematic training courses targeted by the survey.

As shown in Figure 1, Metropolitan Cebu has a close relationship with the city of Yokohama. In 2012, the two cities signed the Memorandum of Understanding on Technical Cooperation for Sustainable Urban Development. In 2013, in collaboration with JICA, the city of Yokohama helped develop Mega Cebu Vision 2050, including the improvement of water supply services. JICA has conducted the following projects with MCWD:

- The Study of Improvement of Water Supply and Sanitation in Metro Cebu (Development Study) (2009/01~2010/08)
- Water Supply Operation and Management Support in Metropolitan Cebu Water District (Technical Assistance related to ODA Loans) (2012/03~2013/03)
- Improvement of Water Supply System in Metropolitan Cebu Water District (Grant Aid) (2014/04~2017/03).

Moreover, with the support from Yokohama Water Co., Ltd., Nihon Genryo Corporation conducted the following project (a JICA project for promoting small and medium-sized enterprises overseas).

- Demonstration and Dissemination of Mobile Siphon Tanks and Water Filtering Tank Rehabilitation System (projects for promoting small and medium-sized enterprises overseas) (2013/11~2016/01)

Through the field survey, it's confirmed that former participants of MCWD have played a key role in forming and implementing those projects.

The major influential characteristic is that former participants have played a key role in projects lead by JICA, and/or by collaboration of JICA and Yokohama water utilities and other Japanese companies, and helped accomplish a realization of the outcomes of the training programs. It's certain that the training outcomes have been enhanced by the collaboration of JICA training programs and projects under other assistance schemes.

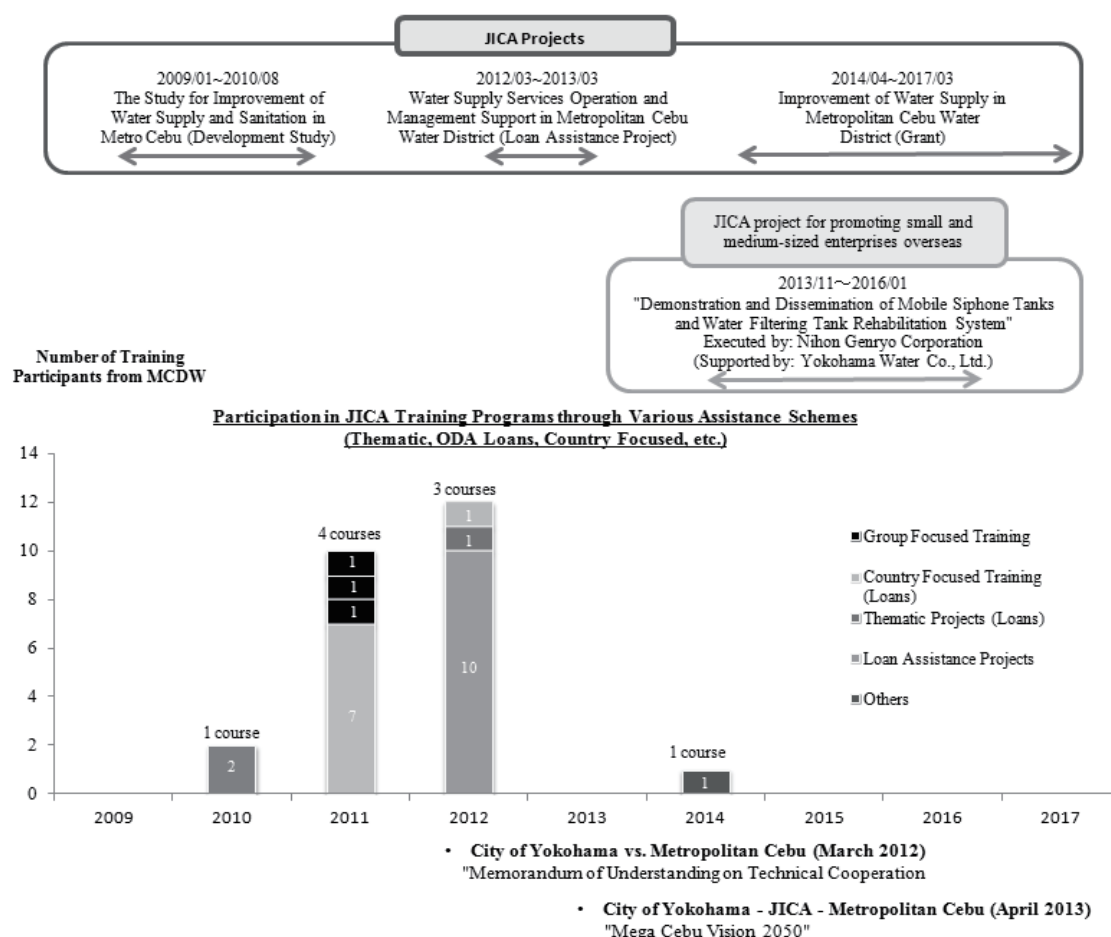


Figure 1. Training Program Participation from MCWD & Collaboration between JICA, Yokohama Municipal Government and Private Enterprises

## 1-6. Training Programs by Other Donors and Comparison with JICA Programs

Japan has been the biggest donor to the Philippines for years; ADB (Asian Development Bank), World Bank and China are also major donors. Because Australia, Germany, Korea and ADB have conducted training programs in their own countries/organizations, we contacted the related organizations for interviews. Since Australia hasn't conducted any training programs in its country in recent years (for the Philippines), and the representative of training programs for ADB was on a business trip, those interviews were not available. We conducted interviews with KOICA (Korea International Cooperation Agency) and GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit, the German Federal Enterprise for International Cooperation). The summary of interviews is described below. In addition, there are several former JICA training participants who also attended the training programs provided by other donors. Their comments are also included here.

### Korea International Cooperation Agency (KOICA)

#### 【Training Programs on Water Supply】

180~200 people from the Philippines come to Korea yearly to attend training programs, while 15~20 came in 2015 in the area of water supply. Participants of KOICA are normally governmental employees; none of them are from private sectors. Training period is typically 2 weeks, with lectures, site visits, and sometimes tours to sites of cultural heritages.

#### 【Activities of Alumni Associations】

There is a KOICA Club, an alumni association organized by former training participants. The KOICA Club of the Philippines has been very active, and is considered as a model by alumni clubs of other countries. The KOICA Club of the Philippines is an independent nonprofit organization that receives a specialized budget from KOICA, and works closely with one exclusive staff in the KOICA Philippines office. A membership is required for the club and an annual fee is paid. There are approximately 2,200 former KOICA training participants in the Philippines; approximately 500 are club members. Currently, the club leadership committee consists of five people, one living in Manila and four in other cities. Efforts are made toward holding events in both metropolitan Manila and other areas. The biggest event of the KOICA Club is its annual party, held either in Manila or another city. Other events include Mangrove plantation and study tours, which also serve as fundraising events. The representatives of fourteen KOICA clubs in overseas countries are invited to the headquarters in Korea, and good practices of alumni associations in various countries are shared. KOICA has been making efforts to keep its alumni associations lively.

### **【Post Evaluation】**

Through sending questionnaires via email, KOICA conducts annual post evaluation surveys to all participants who attended training programs that year. In addition, all overseas offices hold feedback seminars. In the Philippines, the seminar is held in November annually; former training participants and KOICA-scholarship sponsored students are invited. In advance, KOICA prepares a list of who will attend the seminar (not every participant attends), and confirms with the former participants/scholarship students. All travel and accommodation expenses are paid by KOICA. The annual party of the KOICA Club is usually arranged according to the schedule of the feedback seminars, including time and location.

#### **➤ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)**

The interview was conducted with an officer of Human Resources Development of GIZ. She is responsible for internal training at GIZ, with little knowledge of how GIZ conducts programs which are similar to JICA's. According to this interview, the training programs in the Philippines are initiated and implemented by projects. Counterparts of associated projects would plan independently, with some training in Germany, others in different countries. Currently, GIZ has no progressing projects or related training programs in the area of water supply in the Philippines. There is one former JICA training participant who has also attended a GIZ training. According to him, GIZ has a website for former participants to exchange information. GIZ's alumni association is also well organized.

#### **➤ Comments of Former Participants on JICA Training Programs vs. Other Donors'**

Among former participants of the Young Leader Programs, there are very few who also attended training programs offered by other donors. Yet, in the area of Water Supply, there are several former participants who have also attended training programs of ADB, and /or GIZ, KOICA. Compared with other donors, JICA training programs' characteristics are described as following:

- Even after training, there are follow-up activities such as having JICA projects implemented by participants' parent organizations, experts dispatched from Japan to their workplace, and post-evaluation surveys conducted. The maintained connection is a major characteristic of JICA training programs. (Water Supply)
- Home-stay is the unique part of JICA training programs for the Young Leaders, which became a great experience in terms of better understanding of Japan. (Young Leader Program)

Regarding follow-up activities, although other donors such as GIZ also provide these, JICA's continuous efforts are highly evaluated by former participants. In the area of Water Supply in particular, after training, JICA continues to work on projects with parent organizations, including

sending experts and providing equipment through grant assistance. The long-term relationship between former participants and JICA/training lecturers is considered a key point toward realizing training outcomes.

### 1-7. Status of Networking among Former Participants (Alumni Activities)

#### ➤ Activities of JAAP (JICA Alumni Association of the Philippines Inc.)

##### 【Summary】

There is a long history of JICA alumni associations in the Philippines. There were previously numerous independent alumni associations, but the major organizations were integrated into JAAP in March 2013. One of the three major alumni associations, Philippine Japan Fellows Association Region in Muslim Mindanao (PHILJAFARMM), established in 1967, had a long history in particular. Approximately 15,000 were members of the three major alumni associations before integration.

- Philippine Japan Fellows Association (PHILJAFARMM)
- Philippine-ASEAN-Japan Friendship Association for the 21st Century, Inc (PAJAFARMM)
- Japan Grant Aid for Human Resource Development Scholarship (JDS) Alumni



**JICA Alumni Association of the Philippines, Inc. (JAAP)**

Alumni of JAAP include former participants of JICA training programs, and students who studied in Japan under JDS (Japanese Grant Aid for Human Resource Development Scholarship). To become a JAAP member, an ID is obtained when registering and a fee of PHP500 (approx. JPY1,350) is required. By the end of February 2016, there are currently 1,100 registered members of JAAP<sup>4</sup>. They primarily use Facebook to socialize, while non-members can also access this.

The JICA Philippines office has been actively supporting JAAP through the provision of annual financial aid and 1 liaison staff exclusively assigned to JAAP-related activities. JICA encourages training participants to join JAAP. For instance, for the Young Leader Programs, all participants are encouraged to register at the orientation held before departing from the Philippines.

##### 【JAAP's Activities】

Since JAAP is still in an early stage, its primary goal is to increase the total number of members and to build a well-functioning network. The organization has made efforts to attract more former

<sup>4</sup> According to an additional interview with JICA Philippines office in February 2016.



training participants and students to become members by holding meetings not only in Manila, but also in other local cities. Moreover, since there are less young members, the organization is working toward attracting members from all generations, especially young people. JAAP also conducts international activities which include: sending representatives to the regional meeting of AJAFA (ASEAN-Japan Friendship Association) held in Myanmar (Oct. 2014); participating in the 30<sup>th</sup> anniversary of Training Programs for Young Leaders; and the conference of AJAFA representatives held in Japan (Jan. 2015). In addition, JAAP has organized various activities such as raising funds to support people affected by Yolanda Typhoon in 2013.

The biggest issue, however, is funding. Since financial assistance from JICA is limited, how to secure sufficient funds for continuous operation has become a challenge. In fact, in order to efficiently manage JAAP, all committee members strive for regular attendance at the monthly meetings, with all travelling expenses covered by themselves. Even facing financial challenges, the total number of members has increased and various activities have been conducted under the committee's leadership. JAAP is aiming to continue conducting various activities both in the Philippines and overseas and expand its network in the future.

➤ **Present Situation of Networking among Former Participants**

**【Summary of Networking】**

During the field survey, many former participants were found to keep in touch, via email and Facebook, with other participants of the Philippines and other countries, and also with their lecturers and team leaders. Some contact others on a regular basis and reunite during business trips. Others usually keep in touch in the first months after training but the relationship gradually fades away as time passes.

In the area of Water Supply, several former participants (MCWD) are found to have reunited and stayed in touch with their former training lecturers who came to the Philippines either for a personal trip or as the experts of JICA projects. When projects are progressing, the relationship continues beyond the training period.

**【Voice from Former Participants to JAAP】**

The existence of JAAP is well known among the former participants since 2013; many of them have become members. Yet, among the participants before 2013, many still are unaware of the launch of JAAP. It's confirmed, however, that almost all former participants are interested in the alumni association and deem it necessary to have a network. Regarding the type of activities, a large number of interviewed former participants hope the communication is not limited to basic information

exchange, but also to include sharing knowledge and specific information according to specialty area.

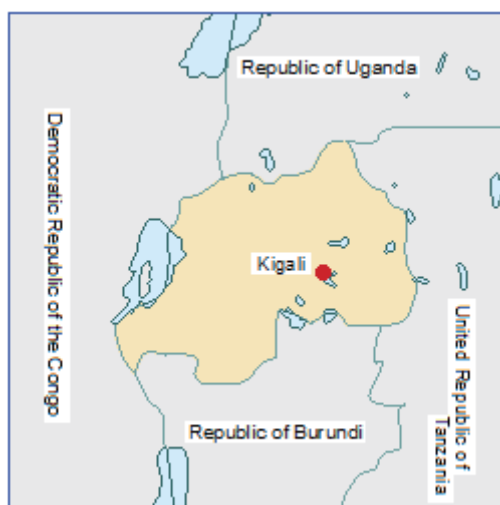
➤ **Former JICA Training Participants who hold Important Positions**

It was revealed through the survey that the following former JICA training participant is currently serving in an important position of influence and leadership.

Current Position	Parent Organization
President and Chief Executive Officer	The National Power Corporation

## Chapter 2. Overseas Field Survey: Rwanda

### Location



### Basic Information

<b>Name of the Country</b>	Republic of Rwanda
<b>Constitution</b>	Republic
<b>Area</b>	26,300km <sup>2</sup>
<b>Population</b>	12.1 million (2014)
<b>Language</b>	Kinyarwanda, English, French
<b>Economic Growth Rate</b>	7.0% (2014)
<b>GDP per Capita (nominal)</b>	650 US dollars (2014)
<b>Consumer Price Index</b>	4.2% (2014)
<b>Bilateral Agreements</b>	<ul style="list-style-type: none"> <li>June 1985: Agreement on dispatching Japan Overseas Cooperation Volunteers</li> <li>January 2005: Agreement on Technical Cooperation</li> </ul>
<b>Recent Japanese aid (E/N base; technical cooperation is JICA base)</b>	(1) Loan Assistance: 4.65 billion yen (FY 2013) (2) Grant Aid: 38.67 billion yen (FY 2013) (3) Technical Cooperation: 10.52 billion yen (FY 2013)






Source: Ministry of Foreign Affairs

## Photographs

	
<p>I learned the meaning of working in the field and am doing it. (Kayonza District)</p>	<p>I learned planning and practice of repairing of pipes, and I can properly instruct my staff. Now, we can repair pipes within 2 hours. (WASAC)</p>
	
<p>I learned 5S during the training and try to practice it. (Kirehe District)</p>	<p>After returning, we organized a training program for WASAC staff together with other former trainees. (WASAC)</p>
	
<p>I am engaged in a project supported by the Government of the Netherlands for WASAC in the area of the non-revenue water, using knowledge and skills I learned in Japan. (WASAC)</p>	<p>I made a system to recycle water in my treatment plant. Before, it was wasted. (WASAC)</p>



	
<p>I contributed to decreasing non-revenue water of the water supply facility provided by Japanese Grant Aid because I learned how to do it in Japan. (Rwamagana District)</p>	<p>I contributed to decreasing non-revenue water for the branch of WASAC since I learned how to do it in Japan. (WASAC)</p>
	
<p>After returning to Rwanda, I lectured for 300 cooperatives and private operators involved with water supply operations in the whole country. (RURA)</p>	<p>I contributed to reducing non-revenue water in the country by organizing training programs for staff of WASAC branches after I came back. (WASAC)</p>
	
<p>Nzove treatment plant supplies water to Kigali city and has a former trainee as its head.</p>	<p>A former trainee is working on valves.</p>

	
<p>I inspired by cooperatives in Japan, I came up with an idea of employment generation program through promoting new businesses. (Ministry of Trade and Industry)</p>	<p>I was impressed by students in Japanese schools. They enjoyed learning. (Ministry of Education, Ngoma)</p>
	
<p>I was impressed by students' using actual electric bulbs in science class. (Ministry of Education, Gasabo)</p>	<p>I was impressed by students working very hard in their group work. (Ministry of Education, Gatsibo)</p>
	
<p>I was impressed by how people worked in small businesses. (Rwanda Cooperative Agency)</p>	<p>A former trainee is planning learner-centered approach together with his colleagues.</p>

## 2-1. JICA Programs in Rwanda

### (1) Japan's Assistance Policies for Rwanda

Japan has been extending assistance to Rwanda since 1970 in the areas of basic human needs and basic infrastructure by Grant Aid, and accepting trainees in the areas of communication, broadcasting, and manufacturing. In 1985, Japan had an agreement with Rwanda for dispatching Japan Overseas Cooperation Volunteers (JOCV), and engaged in technical cooperation through JOCV and other means. During the Genocide that started in 1994, assistance for Rwanda was suspended for a while. When the situation improved and became stable, it was decided in June 2004 to resume assistance for Rwanda. In 2005, the agreement on technical cooperation was reached and JOCV dispatch was resumed. Currently, assistance is undertaken mainly through Technical Cooperation and Grant Aid.

The focus areas of the current assistance are: (1) Economic Infrastructure Development, (2) Agricultural Development, (3) Improvement of Social Services, and (4) Human Resource Development for Growth. The area of Improvement of Social Services takes into account “Vision 2020”, the long-term Rwandan national development plan, and emphasizes supply of safe water for all the people. In particular, the Eastern Province is assisted due to its particularly low water supply rate. There, comprehensive water supply projects are implemented that include strengthening the operation and maintenance system.

### (2) JICA's Related Projects in the Thematic Area

Projects that were or are implemented by JICA in the area of water supply are as follows:

- Development Study for the Improvement of Rural Water Supply (Development Study) (2008~2009)
- Project for Rural Water Supply (Phase II) (Grant Aid) (2010~2014)
- Project for Rural Water Supply (Phase III) (Grant Aid) (2015~2017)
- Project for Strengthening Operation and Maintenance of Rural Water Supply Systems in Rwanda (Technical Cooperation Project) (2015~2019)

## 2-2. Needs of the Rwandan Government

### (1) The Country's Policy and Development Needs in the Water Supply Sector

The Government of Rwanda formulated “Vision 2020” in 2000 with economic goals for the following 20 years. It recognized water supply as one of the important areas, and set the goal to provide access to safe water to 100% of all Rwandans. In addition, in order to reach the goal, it

formulated Economic Development and Poverty Reduction Strategy 2008~2012 (EDPRS) in 2007 and set the goal to raise the percentage of Rwandans having access to safe water to 86% by 2012, and implemented water supply projects with the leadership of the Energy, Water and Sanitation Authority (EWSA). As a result, the rate gradually improved to 70.3% in 2005<sup>5</sup>, and 74.2% in 2011<sup>6</sup>.

## (2) Training Needs in the Water Supply Sector

Vision 2020 has six pillars that include Human Resource Development and Infrastructure Development. Human Resource Development includes training of engineers, and Infrastructure Development includes improving people's access to water. They indicate strong needs of human resource development in the area of water supply.

## 2-3. Survey Targets and Methods

Group or individual interviews were conducted with former participants and their supervisors based on questionnaires. A list of organizations surveyed and interviewees are as follows: (See Appendix 2 for a list of interviewees.)

### Water Supply

< Number of Interviewees by Parent Organizations >

Parent Organization	Former Participants	Supervisors
The Water and Sanitation Corporation (WASAC) (Energy, Water and Sanitation Authority (EWSA))	6	1
Rwamagana District	1	1
Kayonza District	1	0
Kirehe District	1	0
Rwanda Utilities Regulation Authority (RURA)	1	0
Total	10	2

<sup>5</sup> Integrated Household Living Conditions Survey, National Institute of Statistics of Rwanda, 2006

<sup>6</sup> Integrated Household Living Conditions Survey, National Institute of Statistics of Rwanda, 2012



## &lt;Number of Interviewed Former Participants by Training Courses&gt;

Thematic Training	Number of Interviewees
Non-Revenue Water Management (Leakage control)	3
Water Supply Administration for Better Management of Water Supply Services	1
Community Empowerment through Safe Water Management for Arid Regions in French Speaking African Countries	2
Operation and Maintenance of Urban Water Supply System (Water Distribution and Service)	1
African Region Urban Waterworks Engineering	1
Water Supply Administration for Better Management of Water Supply Services	1
Comprehensive Engineering on Water Supply Systems	1
Total	10

Young Leader Programs

## &lt; Number of Interviewees by Parent Organizations&gt;

Parent Organization	Number of Interviewees
Ministry of Education, Gasabo	1
Ministry of Education, Ngoma	1
Ministry of Education, Gatsibo	1
Ministry of Trade and Industry	1
Rwanda Cooperative Agency	1
Total	5

## &lt;Number of Interviewed Former Participants by Training Courses&gt;

Young Leader Programs	Number of Interviewees
Science and Mathematics in Basic Education	3
Rural Development	1
Small and Medium Enterprises Development and Promotion	1
Total	5

## &lt; Interviews with Other Donors and Alumni Association &gt;

Other Donors

Korea International Cooperation Agency (KOICA)

Alumni

JICA Alumni Association of Rwanda (JAAR)

**2-4. Outcomes of the Training Programs****(1) Capacity Development at the Individual Level**

Rwandan former trainees used knowledge and skills for their work and realized strong impacts in general. Interviews with them found the following:

- 1) Participating in the JICA training program raised their awareness of issues, and improved their expertise. After returning to Rwanda, their proposals regarding new duties and plans were adopted.
- 2) They became more aware of the importance of schedule management, responsibility and the importance of collaboration with their colleagues. They practiced these skills, and their supervisors highly appreciated it.

Concrete examples of improved capabilities of former trainees are as follows:

**① Water Supply****【Acquisition of Knowledge and Skills】**

- I learned how to detect water leakage of water pipes with equipment. (WASAC)
- I learned PCM (Project Cycle Management)<sup>7</sup>, in the training program, and it was useful for working on PDM (Project Design Matrix)<sup>8</sup> for preparing a request for JICA technical cooperation.
- I learned how to manage cooperatives, and arranged training programs for members of cooperatives after I came back. (Kayonza District)
- I learned how to plan for repairing water pipes. I can now plan each repair and instruct plumbers so that they can repair pipes efficiently. (WASAC)
- I learned 5S<sup>9</sup>, and am trying to use it for my current work for improving my performance. (Kirehe District)

**【Enhanced Awareness and Inspiration】**

- Participating in the training program, I learned the importance of time management. I learned

<sup>7</sup> This is a strategic problem-solving project management method for specifying current situations and problems, analyzing causes of the problems, identifying solutions, and formulating a project to implement the solutions (PCM: Project Cycle Management, PCM Handbook, June 2004, PCM Tokyo Group)

<sup>8</sup> This is a summary table that includes a project objective, outputs for realizing the objective and activities necessary to realize outputs.

<sup>9</sup> A slogan to be pursued for improving a working environment by five words all starting by “s”: Sort (Seiri), Set in order (Seiton), Shine (Seisou), Standardize (Seiketsu), and Sustain (Shitsuke)

the importance of collaboration with my colleagues, and improved my sense of responsibility for my work. (WASAC)

- I observed that the water company that implemented the training program talked to customers politely and realized this importance. After returning to Rwanda, I am following this example. (WASAC)
- I became more aware of problems with non-revenue water<sup>10</sup>. Before the training, I was not aware that non-revenue water was a problem although I was a senior staff of EWSA. I had no idea that non-revenue water was about wasting money. From the lectures during the training, I learned that even a drop of water is wasted money and became more aware of this problem. (WASAC (EWSA))
- My duties are to assist cooperatives that are involved in rural water supply. Before the training programs, I was mainly working in my office. During the training program, I had many discussions with other trainees from other countries, and realized the importance and enjoyment of going to the field. After returning to Rwanda, I go to the field, and am actively engaged in organizing training programs and giving instructions for members of cooperatives that manage water supply facilities. (Kayonza District)

#### **【Improved Commitment to Work】**

- A supervisor of a former trainee mentioned that before the training, he had to check the progress and status of his employee's duties. After the training, this employee has stronger sense of responsibility, is taking initiatives in his duties, and there is no need for follow-up now. (Rwamagana District)

#### **【Career Advancement】**

- I have been Head of the Leak Detection and Pressure Management Section of WASAC since September 2015. When I applied for this position, took an examination, and had an interview, the training in Japan was very useful. Without the training, I would not be given this position. (WASAC)

### **② Young Leader Programs**

#### **【Enhanced Awareness and Inspiration】**

- In primary and secondary education in Rwanda, there has been a movement from the traditional teacher-centered approach where teachers give one-way lectures, to a more learner-centered approach where teachers encourage active student participation and play the role as facilitators that promote learning. Although I was initially skeptical of the pedagogic effectiveness of this method, after observing classes in Japanese schools and witnessing that

<sup>10</sup> Non-revenue water is amount of water treated and supplied but which did not become income of a water company. Its causes are leakage, illegal connection of pipes among others.

students were learning effectively under the learner-centered approach, I became convinced of the method's effectiveness. (Ministry of Education, Gatsibo District)

- Because the learner-centered approach takes more time and effort in class preparation when compared to the conventional approach, I became busier with preparation after the introduction of the new method. However, I have begun to feel that the effort is rewarding, and it has become possible to enjoy the work I do. (Ministry of Education, Ngoma District)
- During my training, I visited cooperatives and observed their activities that processed agricultural products, and I was even able to talk directly with the founders and union members of the cooperatives. I was inspired by how they were operating a business by cooperating as a group and utilizing local products. I was convinced that the same process can be realized in Rwanda. (Ministry of Trade and Industry)

## **(2) Contribution to Organization, Policy and/or Systems due to Behavior Change of Former Participants**

### **① Water Supply**

In Rwanda, water in urban areas is supplied by the Water and Sanitation Corporation (WASAC) that was established in 2014. In rural areas, it is supplied by private operators and cooperatives whose members are local people. Before WASAC was established, it was called the Energy, Water and Sanitation Authority (EWSA), and when some former trainees had the training, it was still EWSA. Some impacts discussed in this report occurred under EWSA and others apply to the time when it became WASAC.

According to a WASAC executive, the training in Japan had a very large impact. Many of the staff obtained valuable skills and knowledge during the training, were assigned to important posts, and did not lose their jobs during organizational change. Even when water pipes and storage tanks were damaged, they can now quickly repair them since they have excellent skills in finding water leakages and maintenance of water supply. Time management in day-to-day operations has also been improved. (See photo 1)



Photo 1. Replacement of damaged water pipes is implemented.



Photo 2. A former trainee is installing equipment for non-revenue water measurement.

### **【Shared Knowledge and Techniques】**

- The role of Rwanda Utilities Regulatory Authority (RURA) is to strengthen the regulatory framework such as the setting of water and electricity prices, and to build capacity of organizations related to infrastructure. During the training period in Japan, I, for example, learned the management methods for organizations (such as the financial aspects of management) and technical methods to detect water leakages. After returning from Japan, I provided training for the 300 cooperatives and private companies in Rwanda that are involved in projects for supplying water. (RURA)

### **【Improved Performance】**

#### Improvement in the maintenance of water pipes

- I have been Head of the Leak Detection and Pressure Management Section of WASAC since September 2015. For my daily duties, what I learned during the training is still very useful. (Photo 1 shows he is preparing for replacement of a damaged water pipe.) (WASAC)

#### Improvement in non-revenue water rate

- Currently, the Government of the Netherlands is assisting WASAC with reducing non-revenue water, together with other donors through PPP (Public Private Partnership), for increased access to Sustainable Water Services in Rwanda (SusWas). Two former trainees are involved in this project as counterparts for which knowledge and skills they learned in Japan are very useful. For this work, they often refer to texts and materials they used for the training. (Photo 2 (above) shows one former trainee installing equipment as one project activity.) (WASAC)
- I learned the importance of being polite to customers. Because of this, some customers report water leakage by their own telephones. (WASAC)

#### Improvement in maintenance of water pipes

- I am responsible for maintaining water networks at the Ngoma Branch of WASAC. After the

training, I became more serious about time management. I organized a training program for my staff. I plan for water pipe repairing and have now established a system to repair pipes within two hours. (WASAC)

#### Improvement in water supply facilities

- The Rwamagana District had a problem of sustainability in water supply facilities; when they broke down, they were not repaired. A former trainee applied what he learned in Japan and improved maintenance systems; sustainability is now ensured. (Rwamagana District)

#### Recycling water at a treatment plant

- Nzove Water Treatment Plant in Kigali produces 25,000m<sup>3</sup> a day and uses 2,000m<sup>3</sup> water every day for cleaning water filters. Previously, water used for cleaning filters was disposed of. During the training, the former trainee learned how to recycle this water by flowing it into the basin (Photo 3), and installing a pump to bring it back for the treatment process so that it can be used and consumed by water users. In this way, 2,000m<sup>3</sup> water is now saved every day. (WASAC)



Photo 3. Basin of Nzove Treatment Plant

### **【Contribution to JICA Project】**

- The non-revenue water section at WASAC headquarters has two former trainees, and are expected to participate in a JICA technical cooperation project for WASAC to strengthen its capacity to conduct non-revenue water management from 2016 as counterparts, using skills and techniques they learned in Japan. (WASAC)

### **【Contribution to Development Impact】**

#### Improved Rate of Non-Revenue Water

- In the Rwamagana District, water facilities were installed as part of Japan's grant aid, "The Project for Rural Water Supply," which was implemented in 2006. Commissioned by the district government, two cooperatives manage and operate these facilities. Due to leakage and unauthorized use of water, the rate of non-revenue water was about 23% in these



Photo 4. A former trainee is reading the meter for non-revenue water measures

water facilities. During the training period in Japan, the trainees learned the method of calculating non-revenue water rates by reading and analyzing meters, as well as countermeasures for non-revenue water (such as the leakage detection method). After returning to Rwanda, the trainees enlightened users on the issues regarding leakage detection and non-revenue water; as a result, water users inform them of where leakage is, and are also cooperative in preventing unauthorized water use. The rate of non-revenue water has improved to approximately 16%. (Photo 4 shows a former trainee reading water meters to confirm the rate of non-revenue water.) (Rwamagana District)

- Following the trainees' return, in 2013, a month-long training course was conducted in 12 WASAC branches across the country, where a total of 87 staff members participated. Topics such as understanding non-revenue water and detecting and investigating water leakages were explored in the training sessions that lasted for two weeks each. In the past, issues concerning water leakages, etc. were dealt with *after* the problems had occurred (such as broken water pipes); at present, however, teams have been established to investigate water leakages and develop plans for repair. Due to widespread adoption of these measures, improvements in the rates of non-revenue water have been made across the country. Compared to the previous rates of non-revenue water of WASAC nationwide (42%), the average rate has improved to about 38%. In the Ngoma branch of WASAC, the rate improved from 28% to 10%, and it also obtained the highest results out of all other branches for three consecutive months. In the Nyagatare branch, the rate improved from 70% to 38%. (WASAC)

#### Improved Rural Water Supply

- In the Kayonza District, water supply facilities were established by NGOs, which has led to improved water access for rural communities. During training in Japan, a former training participant learned of the water purification method using stones and sand. After she came back she conducted training sessions on water purification methods in 50 rural communities, targeting approximately 300 villagers. These water supply facilities are operated by the cooperatives. In Japan, the former participant also learned the management methods of cooperatives, such as finance and accounting; after returning from Japan, she conducted training sessions for the members of these cooperatives, which have contributed to improvements in their operations. (Kayonza District)

## **② Young Leader Programs**

### **【Contribution to Development Impact】**

#### Learner-Centered Approach

Although the teaching method in primary and secondary education in Rwanda is shifting from the method where classes are taught with teachers in the center (teacher-centered approach) to that which focuses on students as learners (learner-centered approach), many teachers were skeptical of



the effectiveness of the latter approach.

With the learner-centered approach, students conduct group work in their own teams and actively participate in class. (In science class, for example, students conduct hands-on experiments by using light bulbs and electronic circuits.) Instead of *leading* the students, teachers conduct classes by serving as facilitators in roles that promote student learning. Moreover, the relational distance between teachers and students is important: it was found that, by sharing personal conversations before class, teachers fostered an open relationship with students, created a learning-friendly environment, and enhanced student motivation and learning. Previously, it was considered a norm in Rwanda to place a reasonable distance between teachers and students because of their different social positions. After observing schools in Japan that have made progress under the learner-centered approach, the three trainees that participated in the Youth Leader Programs became convinced that this method was effective.

- The “Project for Strengthening of Mathematics and Science in Secondary Education” that was implemented by JICA in Rwanda from 2008 to 2011 aimed to enhance the “teaching abilities” of secondary mathematics and science teachers, as well as to enable teachers to practice the “learner-centered approach.” Under this project, the returning trainee that served as the principal of the school in Kigali city and a trainee that taught science in Gatsibo District instructed other teachers.

After participating in the Youth Leader Programs in 2012 and actually witnessing that the “learner-centered approach” in Japan has been effectively implemented, they became more fully convinced of the effectiveness of this approach. Then in 2013 - when the Rwandan Ministry of Education carried out training of the learner-centered approach for science and mathematics teachers—they served as lecturers for the 88 teachers. These 88 teachers have become trainers, and 10-day training programs in 10 centers across Rwanda have been conducted, where 4,000 teachers have received training. (Ministry of Education, Gatsibo, Ministry of Education, Gasabo)





Photo 5. Teachers are lectured on learner-centered approach



Photo 6. Learner-centered approach is demonstrated. Students participate in group work. Teachers are observing the demonstration.

- Upon returning from Japan, the returning trainee that teaches 4th grade English and Social Sciences first tested the learner-centered approach in her own class. By sharing personal conversations with students before class, the trainee made efforts to become closer to the students. As a classroom facilitator, the teacher encouraged students to learn enthusiastically and actively utilized methods such as group work. Soon, the students began to enjoy learning and their educational motivation increased; learning became more effective, and test results improved. The returning trainee asked other teachers in the same school to observe the changes in the 4th grade students, demonstrating how the learner-centered approach is effective. Now, many other teachers in the school have adopted this approach, and the students have boosted their educational motivation and improved their academic performance. Though the trainees and teachers report longer working hours due to class preparations, they have been able to enjoy the work more. Each class consists of 42 students. The test score average increased from 60 points to 85 points. 30 other teachers in the school have also adopted the learner-centered approach. (Ministry of Education, Ngoma)

### **【Contributions to Policy and Development Impact】**

#### Job Creation through Starting New Businesses

In Rwanda, a job usually means employment by the government or corporates; starting a business is not common. In the training, one trainee observed activities of cooperatives and was inspired by the way they use local materials in collaboration with one another. After discussion with the founders and members of the cooperatives, he realized that the same must be possible in Rwanda. This led to his idea of Hanga Umurimo (Job Creation).

Unemployment is a serious issue in Rwanda. The Minister of Trade and Industry at the time embraced flexible thinking and showed understanding for this idea. The Minister was supportive of its development, and the Hanga Umurimo project (job creation)—with the objective of fostering

new entrepreneurs—was allocated a government budget of \$1.5 million and received \$40,000 from the IFC, and was implemented from 2011 through 2013.

Hanga Umurimo (job creation) received 16,000 proposals and its selection criteria were that: 1) the project is innovative, 2) the project creates more employment opportunities, 3) raw materials must be locally available, and 4) the project is feasible. In terms of the funds of each proposal, 75% of the funds were to be guaranteed by government agencies and the remaining 25% had to be made available by the business owners. Furthermore, since job creation in rural areas was one major objective of Hanga Umurimo (job creation), 50 projects in each of the 30 districts—or 1,500 projects across the country—were pre-selected. In the end, 900 projects were then officially selected. The contents of these projects include processing of vegetables and fruit, candle manufacturing, and production of mechanical products such as blenders. Out of all 900 projects, 72% made profits. (Photos 7 and 8 show the operation of projects that were established with the support of Hanga Umurimo.) (Ministry of Trade and Industry)



Photo 7. Activities of the sandal production business selected by Hanga Umurimo  
Source: Hope Magazine, February 13, 2013



Photo 8. Activities of the machine production business selected by Hanga Umurimo  
Source: New Times, September 3, 2014.

### **(3) Enhancement of Understanding Japan (Changes Obtained by Associating with Japan and Japanese People)**

- How the training program was conducted as planned and in a punctual manner was very impressive. Even after returning from Japan, I try to work punctually. (WASAC)
- The visits to various facilities and locations deepened my understanding of Japanese culture and society.
- I had a glimpse of the kind and hardworking nature of Japanese people, and it motivated me to follow their attitude. (RURA)
- The staff from the water company in Japan are very polite to their customers. After returning from Japan, I have been emulating the Japanese attitude and instructing my subordinates to respond more politely to our customers. (WASAC)

- It caught my attention how the Japanese respect each other even in their workplaces. After returning home, I have been making efforts to work and respect my coworkers. (WASAC)
- After visiting the junior high school in Kitakyushu City and observing how the teachers were preparing lessons in teams for each subject, it caught my attention how Japanese teachers are diligent, always aware of the educational purposes and results, and work cooperatively with one another. I would like to follow their practices after returning home. (Ministry of Education, Gatsibo)

## 2-5. Facilitating and Constraining Factors for Training Outcomes

### (1) Facilitating Factors

The main factor of the training effect can be attributed not only to the content of training (such as lectures and technical training), but also to how these training sessions incorporated site visits to water companies, workplace of cooperatives, and elementary and secondary schools. By visiting actual locations of the technologies and approaches that have been described in lectures, the trainees—with awareness of the issues that persist in Rwandan reality—can ask questions and discuss with the individuals concerned. After returning, they put into practice their training contents and produced positive results; by doing so, they were able to convince others around them, paving the path for definite adoption of the new methods.

#### ① Individual Factors

- When designing the action plan, conscious efforts were made to create a plan that met the needs of the affiliated organization and was highly effective. (WASAC, Rwamagana District)

#### ② Organizational Factors

- Because the contents of the training were in line with the parent organization of the trainees, it was easier to obtain understanding of the supervisors and colleagues when putting into practice the knowledge they attained after returning from Japan. (WASAC, Rwamagana District)
- Training in Japan is highly respected, the trainee's supervisors and colleagues had high expectations—and she was often given opportunities to carry out what she had learned in Japan. (Kayonza District)

#### ③ Factors of Training Contents

- A former trainee had the opportunity to observe the actual work of water supply companies, and he was convinced of the contents he learned in class. (WASAC)
- By studying the activities of the operating cooperatives and talking to the people concerned, a former trainee was able to confirm the usefulness and practicality of the knowledge acquired. (Ministry of Trade and Industry, Ministry of Education, Gatsibo)
- Regarding the management and operation methods of supplying water in rural areas, by

interacting with other trainees, a former trainee was able to grasp their viewpoints and identify each and every one of their situations, enabling her to deepen her understanding of the training contents. (Kayonza District)

- The training contents—such as the installation of water treatment facilities and countermeasures for non-revenue water—were in line with the needs of the trainee’s job. (WASAC)

## **(2) Constraining Factors**

### **① Individual Factors**

- The contents of the action plan did not correspond to the organization’s policies, and the plan could not be implemented. (Rwanda Cooperative Agency)

### **② Organizational Factors**

- EWSA was dissolved into a water company, WASAC, and a power company, and one former trainee was recruited by the power company. He lost the opportunity to utilize what he learned in the training. (WASAC)
- Due to insufficient budget, the action plan could not be implemented. (Kirehe District)

### **③ Factors of Training Contents**

- Despite the training’s rich contents, the trainees could not fully absorb the knowledge due to the short training period. (Kayonza District)

## **(3) Characteristics in the Process of Realizing Training Outcomes**

As a characteristic of the impact realized by Rwanda’s returning trainees, there is significant room for improvement in the “soft” aspects where significant progress can be expected by developing human resources and using available equipment and facilities. That is why the changes in the trainees’ awareness brought about by the lectures and visits in Japan, and the acquisition of new knowledge and skills, led to significant achievements.

In terms of the issues of non-revenue water, before receiving training in Japan, even the senior officials of EWSA were not fully conscious of the fact that non-revenue water was a problem, and concrete measures were taken only *after* the rupture or leakage of water pipes. Yet, with greater awareness of the issues and by putting into practice the methods explained in class, the training has made significant contributions to improve the problem.

In terms of the learner-centered approach, prior to the training in Japan, many were skeptical of its effectiveness and validity; however, by observing classes in Japanese schools, the trainees were convinced of the effectiveness of the approach and, after returning to Rwanda, incorporated the approach in their own classes. By demonstrating the effects of the learner-centered method to other

teachers, the trainees have been spreading its implementation across their schools and their country.

For the job creation program, Hanga Umurimo, the trainees observed the activities of cooperatives in Japan that process agricultural products. When they spoke with the founders and members, the trainees were inspired by how the cooperatives cooperated in groups and ran businesses that utilized local products. They became convinced the same can be done in Rwanda, which led to the formulation of the Hanga Umurimo project.

## **2-6. Training Programs by Other Donors and Comparison with JICA Programs**

### **➤ Korean International Cooperation Agency (KOICA)**

The training programs implemented by KOICA for Rwandan government officials are divided into two types: one where Rwandan trainees participate in programs that are held for government officials of developing countries across the world, and the other that targets only the Rwandan government officials. Both types are short-term training projects of two to three weeks, and approximately 30 to 40 Rwandans participate in these training programs each year to gain knowledge in various areas, such as education, agriculture and gender equality.

## **2-7. Status of Networking among Former Participants (Alumni Activities)**

### **➤ Activities of JAAR (JICA Alumni Association of Rwanda)**

JAAR was established in 2004 with the objective of promoting the interactions between former trainees for strengthening the social and cultural ties between Japan and Rwanda. Out of the 200 current members of JAAR, about 120 people are active and engaged in a number of activities. In addition to promoting friendship among former trainees, the activities aim to bring benefits not only to the former trainees and those around them, but also to the larger Rwandan community. These activities vary from planting trees and constructing schools with subsidies received from the trainees' membership fees and JICA, to the trainees instructing cooperatives that process agricultural products with the knowledge and technologies that they acquired in Japan.

Furthermore, JAAR has become a government-registered NGO to further expand their activities. Currently, there is one full-time secretary, and other members conduct their activities as volunteers on the weekends; however, it has been planned to hire full-time staff in the near future.

Other JAAR activities include a home-stay program for new members of Japan Overseas Cooperation Volunteers (JOCV). This is to help them to familiarize themselves to the new

environment in Rwanda. About 40 members are registered for this program.

➤ **Former JICA Training Participants who hold Important Positions**

This survey identified former trainees assuming executive positions as below:

Current Position	Parent Organization
Permanent Secretary	Ministry of Education
Permanent Secretary	Ministry of Agriculture
Minister	Ministry of Cabinet Affairs
Minister of State in charge of Primary and Secondary Education	Ministry of Education

## A map of Sri Lanka with the location of Sri Jayawardenepura Kotte marked by a red dot. The text 'Sri Jayawardenepura Kotte' is written in a white box next to the dot. The word 'India' is written in a white box in the upper left corner of the map.

<b>Basic Information</b>	
<b>Name of the Country</b>	Democratic Socialist Republic of Sri Lanka
<b>Constitution</b>	Republic
<b>Area</b>	65,607 km <sup>2</sup>
<b>Population</b>	20,670,000 (as of 2014)
<b>Language</b>	Official language (Sinhalese and Tamil), Link language (English)
<b>GDP</b>	74,900,000,000 USD (as of 2014) (Central Bank of Sri Lanka)
<b>GDP per Capita (nominal)</b>	3,625 USD (as of 2014)
<b>Economic Growth Rate</b>	7.4% (as of 2014)
<b>Consumer Price Index</b>	3.3% (as of 2014) (Colombo Consumers Price Index)
<b>Unemployment Rate</b>	4.3% (as of 2014)
<b>Bilateral Agreements</b>	Trade Agreement, Tax Agreement, Japan Overseas Cooperation Volunteers, Investment Agreement, Aviation Agreement, Technical Cooperation Agreement
<b>Recent Japanese Aid (E/N base; technical cooperation is JICA base)</b>	(1) Loan Assistance: 951.6 billion yen (FY 2013) (Amount in 2013: 35 billion yen) (2) Grant Aid: 204.6 billion yen (FY 2013) (Amount in 2013: 2.5 billion yen) (3) Technical Cooperation: 73.1 billion yen (FY 2013) (Amount in 2013: 1.3 billion yen)

72



### Photographs



Participant coordinated the interests of stakeholders in Sri Lanka after learning that organizations related to water resources in Japan cooperated with each other. (NWSDB)



Participant developed a preventive maintenance plan based on his experiences in Japan. (NWSDB)



Participant learned a great deal on Non-Revenue Water (NRW) measures. (NWSDB)



Participant applied his experiences in Japan to an ADB project he is leading. (NWSDB)



Participant is able to analyze the root causes of NRW. (NWSDB)



Participant implemented his action plan under a JICA project. (NWSDB)





Participant applied various NRW measures to areas he manages. (NWSDB)



Participant applied the Water Safety Plan learned in Japan to areas he leads. (NWSDB)



Participant implemented his action plan and applied problem analysis learned in Japan to his duties. (Nuwara Eliya Municipal Council)



Participants applied elderly care in Japan to the activities of parent organizations and policy formulation. (The Ministry of Health, Nutrition and Indigenous Medicines, Ragama Hospital)



Participants took initiatives to improve a one-stop center based on their experiences in Japan. Their supervisor appreciates their initiatives. (BOI)



Participant applied individual packaging she observed in Japan to sugar cubes in Sri Lanka. (IDB)



Participant shared his experiences in Japan with local councils and governments. (Ministry of Provincial Councils and Local Government)



Participant shared her experiences in Japan with trainees of vocational training. (Vocational Training Authority)

### 3-1. JICA Programs in Sri Lanka

#### (1) Japan's Assistance Policies for Sri Lanka

The basic policy of Country Assistance Policy to Sri Lanka is that, based on Sri Lanka's basic principle for development, Japan will support and promote further development and stabilization of Sri Lanka's steadily growing economy. Priority areas include: (1) promotion of economic growth; (2) development of emerging regions; and (3) mitigation of vulnerabilities. Under the category of "promotion of economic growth", Japan aims to support Sri Lanka's economic growth. To accomplish this, Japan actively supports the improvement of infrastructure in sectors such as transport and energy, utilizing Japan's advanced technology to promote Sri Lanka's economic development and to contribute to the improvement of the business environment of Japanese companies located in Sri Lanka. Japan also promotes industries that contribute to Sri Lanka's economic growth, including cooperation in science and technology.

#### (2) JICA Cooperation Projects in the Thematic Area

Under the Rolling Plan for Project Planning for Sri Lanka, Japan intends to extend assistance to the water sector as follows: "Non-revenue water reduction is to be supported by projects for old-pipe replacement in urban areas, and related technical cooperation," and "Regarding water supply, assistance is considered to expand the existing water supply facilities in urban areas and support through Public Private Partnership (PPP) projects."

In the water supply field, the following list includes JICA's past and on-going projects.<sup>11</sup>

- Water and Sanitation Sector Advisor (Advisor) (March 2009~September 2010)
- The Capacity Development Project for Non-Revenue Water (NRW) Reduction in Colombo City (Technical Assistance Related to ODA Loans) (October 2009~September 2012)
- Eastern Province Water Supply Development Project (Loan Assistance) (March 2010~December 2014)
- The Project for Rehabilitation of Killinochchi Water Supply Scheme (Grant Assistance) (March 2012~January 2015)
- Anuradhapura North Water Supply Project Phase 1 (Loan Assistance) (March 2013~February 2018)
- Capacity Development Project for Construction Management of Water Supply Pipe Laying (Grassroots Technical Cooperation) (July 2013~February 2014)
- Capacity Development Project for Management of Water Supply Pipe Laying (Grassroots

<sup>11</sup>Source: JICA Knowledge site

Technical Cooperation) (February 2014~March 2017)

### 3-2. Needs of the Sri Lanka Government

#### (1) The Country's Policy and Development Needs in the Water Supply Sector

The government of Sri Lanka developed a policy framework known as “Mahinda Chintana” in 2005, which promoted the resolution of prolonged conflict, the development of large-scale infrastructures, the revitalization of agriculture and domestic enterprises, strengthening of public services, and the private sector and rural development.

Under the succeeding Mahinda Chintana (2010–2016), the government envisaged that Sri Lanka would have an economy with a green environment and rapid development. It also ensured that people would have access to decent living, electricity, water, schooling, and health facilities; maintain culture and tradition; integrate the Sri Lanka economic with the global economy; secure international competitiveness; and develop knowledge-based activities.

Regarding the goals of water supply services, under the framework, the government's goal was to provide access to safe drinking water for all citizens by 2020 with a 60% target of pipe-borne water availability. The government's strategy intended to create a water supply infrastructure in large cities including Kandy, Kurunegala, and Nuwara Eliya, as well as large townships such as Badulla. It also included the development of a small-scale pipe-borne scheme in rural areas.

#### (2) Training Needs in the Water Supply Sector

Based on the water supply as a major development agenda in Sri Lanka, training requirements in the water supply sector became apparent. In addition, the water sector faces various issues: (1) 30% of piped water that is unaccounted for revenue, (2) water businesses lose almost 40% of their revenue because customers are not billed for the water they use, or because companies fail to collect the dues,<sup>12</sup> and (3) deteriorated distribution networks allow pollutants to seep into the water supply.

Non-Revenue Water (NRW) is a particular issue for the National Water Supply and Drainage Board (NWSDB). The NWSDB is the principal authority to provide safe drinking water in Sri Lanka, except for a number of water schemes operated by local governments and community organizations. The NRW measure is a challenge for NWSDB, as the NRW is high in the water schemes under NWRDB: 32.66% as of 2012 in the Western Province where Colombo, the largest city in Sri Lanka

<sup>12</sup> Mahinda Chintana (2010–2016).

and the economic center of the country, is located; and 26.06% in other provinces<sup>13</sup>. Many former participants belong to Regional Support Centers (RSC) of NWSDB. NWSDB has 12 RSCs in all provinces, which are responsible for the development, operation, and maintenance of the water supply in the region. Most of the former participants in the water supply sector were sent by the RSCs. According to interviews, a Deputy General Manager serves as the leader, with an Assistant General Manager as his/her deputy at each RSC. The Assistant General Manager supervises manager(s), who direct accounting, commercialization, administration, officers in charge of water schemes, and engineers and engineering assistants.

### 3-3. Survey Targets and Methods

Group or individual interviews were conducted with former participants and their supervisors through questionnaires. A list of organizations surveyed and interviewees are as follows: (See Appendix 2 for a list of interviewees.)

#### Water Supply

< Number of Interviewees by Parent Organizations >

Parent Organization	Former Participants	Supervisors
National Water Supply and Drainage Board (NWSDB)	8	3
Nuwara Eliya Municipal Council	1	—
Ministry of Defense*	1	—
Total	10	3

\* Participant belonged to Ministry of City Planning & Water Supply at the time of the training.

<sup>13</sup> National Water Supply and Drainage Board (<http://www.waterboard.lk/web/index.php?lang=en>) (accessed January 2016)

## &lt;Number of Interviewed Former Participants by Training Courses&gt;

	Number of Interviewees
Integrated Water Resources Management	2
Engineering on Water Supply System	1
Non-Revenue Water Management	3
Operation and Maintenance of Urban Water Supply Systems	1
Waterworks Engineering	1
Water Supply Administration for Better Management of Water Supply Services	2
Total	10

Young Leader Programs

## &lt; Number of Interviewees by Parent Organizations&gt;

Parent Organization	Former Participants	Supervisors
Ministry of Health, Nutrition & Indigenous Medicine	1	1
Ragama Hospital	1	—
Board of Investment	2	1
Industrial Development Board	1	—
Ministry of Provincial Councils and Local Government	1	—
Vocational Training Authority	1	—
Total	7	2

## &lt;Number of Interviewed Former Participants by Training Courses&gt;

	Number of Interviewees
Administration (Local Industry)	1
Education (Vocational Training)	1
Postwar Reconstruction and Peace-building	1
Health Administration	2
Economic Administration (Industrial Development and Promotion)	2
Total	7

## &lt;Interviews with other development partners and alumni association&gt;

Other development partners

- Asian Development Bank (ADB)
- Korean International Cooperation Agency (KOICA)
- The Embassy of China
- Australian Awards



Alumni Association

- JICA Ex Participants Association on Solid Waste Management

**3-4. Outcomes of the Training Programs****(1) Capacity Development at the Individual Level**

Interviews with former participants revealed that both the Thematic Programs (Water Supply) and the Young Leader Programs produced positive outcomes. Common feedback included:

- 1) Participation in JICA programs expanded their expertise.
- 2) Japan's experiences provided them with new insights and altered perceptions on their respective fields.
- 3) The program taught them to explore the root causes of issues in their respective fields; this analysis led them to re-examine the issues and measures to the problems comprehensively.
- 4) Themes and content of the programs matched their own duties and positions and provided positive outcomes on their careers.
- 5) Communication and presentation skills were enhanced.

Most participants in the Young Leader Programs took part in the overseas training program for the first time. They commonly expressed that with these experiences, they gained confidence, and their attitudes towards their duties were altered.

The following describes cases of capacity development at the individual level:

**① Water Supply****【Acquisition of Knowledge and Skills】**

- A participant learned the use of advanced technology to reduce NRW. (NWSDB)
- A participant learned many aspects of water supply and management from the Nagoya City Waterworks and Sewage Bureau, such as consumer safety, smart metering, pipe laying, and preserving water quality. (NWSDB)
- A participant obtained new knowledge and skills through training, including comprehensive strategies for non-revenue water management, water pipe connection methods for enhanced strength to withstand vibration, and water leakage detection. (NWSDB)

**【Enhanced Awareness and Inspiration】**

- The program taught a participant to examine the root causes of NRW. Some root causes can be traced to the quality of piping material, workmanship, etc. Root cause analysis led him to re-examine the issues with NRW as something that should be addressed from the beginning of

- the process. (NWSDB)
- Japan's practice altered perception of a participant on the water supply services: It was not about providing "water" to its residents but about providing a "whole" experience related to drinking water. The services include the cleaning and maintaining of water storage tanks and the sumps of its customers so that the taste and quality of its water is preserved, even at customer sites. On the contrary, NWSDB believes that its job is "complete" when drinking water is provided to the citizens and the storage of the water at customer sites is not their concern. (NWSDB)
  - A participant discovered that, in Japan, several organizations are connected with water resources and water supply and they all cooperate to achieve their common and respective goals and objectives. On the contrary, in Sri Lanka, historically, multiple stakeholders with competing objectives have been unable to work towards a common goal. The participant understood the benefit of sharing resources among the related institutions. (NWSDB)
  - A participant learned that, in Japan, detailed distribution maps exist and Japan extensively uses the Geographic Information Services (GIS) to create distribution maps. This, however, is not the case in the Nuwara Eliya. On the contrary, he discovered that the data and information on the lack of water and the issues related to the water supply were not thoroughly analyzed. The issue taught him the value of keeping detailed records and using a data-driven approach for decision-making. (Nuwara Eliya Municipal Council)

## ② Young Leader Programs

### **【Acquisition of Knowledge and Skills】**

- Participants learned the Japanese model to attract Foreign Direct Investments (FDI), how the Japanese government creates a culture to encourage the inflow of FDIs, how business consulting and match-making services are provided free of charge, and how the tax structure supports the creation of businesses in Japan. (BOI)
- A participant gained practical knowledge on the support services available to small/medium enterprises, incubator services, and innovative methods of marketing. Although she had previous knowledge on advanced technologies such as nanotechnology, the training afforded her an opportunity to witness how these technologies were being used by Japanese entrepreneurs. (IBD)
- A participant learned through field visits how job match-making opportunities are engaged at "Hello-work" and vocational training college. (Vocational Training Authority)

### **【Enhancement of Communication Skills】**

- The participant learned about communication and team building skills. As a result, she is now able to approach people of different cultures and backgrounds with confidence. (IBD)



**【Opportunity for Career Progress】**

- When a participant was nominated for the program, he did not have a concrete plan for his professional career. However, the program in Japan made a significant impact on him and he became more confident in his career. (Ministry of Provincial Council and Local Government)

**(2) Contribution to Organization, Policy, and/or System due to Behavior Change of Former Participants**

Interviews with the participants indicated that they submitted training reports, presented at seminars, and held workshops and trainings to share the knowledge and skills they obtained within their own organizations. It was confirmed that most participants incorporated the knowledge and skills they acquired to their own duties, including implementation of action plans to improve their organizations' operations. Cases of contribution to institutional systems or policy formulation were also confirmed, including the introduction of a 24-hour hotline in the water supply field or the formulation of a health policy that incorporated ideas from the Young Leader Programs.

While there were cases of action plans that were not implemented due to a mismatch of sections/divisions, contents of the action plans, and lack of authority or budget, many participants implemented their action plans.

The following cases illustrate how participants applied the knowledge and skills acquired to their duties:

**① Water Supply****【Shared Knowledge and Techniques】**

- Upon his return, the participant was able to train the staff of the RSC on the NRW technologies applicable to Sri Lanka. (RSC, NWSDB)
- The participant held workshops on the program in Japan, GIS, and chlorination with his staff. (Nuwara Eliya Municipal Council)

**【Application of Skills】**

- Having witnessed and gained knowledge on all aspects of managing and operating training centers, a participant secured an investment from ADB to set-up the first campus-type training center of NWSDB. (ADB Project, NWSDB)
- This participant learned about problem analysis in Japan and used it to reveal issues at the Nuwara Eliya Municipal Council, including the non-availability of accurate, reliable, and current data regarding the water supply system in the area, the shortage of skilled staff, the extreme variations in water pressure, constant water leaks, unauthorized use of water, and a lack

of a proper pricing system. Based on this analysis, the participant developed and implemented an action plan to create detailed distribution maps and distribution systems by using GIS and EPANET (a software to analyze distribution network). Further, he developed an additional action plan by using problem analysis and objective analysis. The action plan focused on resolving the operational level issues at Nuwara Eliya, such as problems in water chlorination and problems with bulk metering. (Nuwara Eliya Municipal Council)

- Having learned that instruments for water leakage detection are very effective as a measure for NRW through hands-on training, this participant is procuring the instrument. He selected to develop his action plan for a water supply project in Baddula supported by the U.S. Agency for International Development (USAID). He proposed that the project should lay high-density polyethylene (HDPE) pipes, as he learned in Japan that HDPE has been proven to reduce NRW, and his proposal was adopted. (RSC, NWSDB)
- From the inception, a training participant was interested in Water Safety Plans (WSP). During training, he systematically learned about WSP design (based on the guideline of the World Health Organization), maintenance, auditing and administration. He created an action plan for introducing WSPs to his responsible province, and implemented the plans in 4 locations within the province. In addition, based on the experience of visiting a training facility (for practicing pipe networking) at the Bureau of Waterworks Tokyo Metropolitan Government., the participant initiated a proposal for building a similar training facility in Sri Lanka. The proposed 0.5 acres land plot in Kurunegala has been approved by the government. The required capital for equipment procurement and facility building is under discussion. (RSC, NWSDB)

#### **【Contribution to JICA Project】**

- Before participating in the program, a participant belonged to the NRW Division that had planned to initiate a pilot project to identify root causes of NRW in two cities in Colombo (upper middle class, and lower middle class and slum areas) as a part of a JICA project known as the “Capacity Development Project for NRW Reduction in the Colombo City.” The participant created an action plan to incorporate this pilot study. Upon his return, he implemented the pilot study and the results were used to design strategies to reduce NRW in parts of Colombo. (Operation and Maintenance, NWSDB Head office)

#### **【Contribution to Institutional Initiatives】**

- A participant was the Additional Secretary of Ministry of City Planning and Water Supply when he took part in the program in Japan and was responsible for NRW measures in the ministry. Upon his return, he identified that the root causes of NRW should be detected and convened a two-day workshop of the senior managers (including the Minister) to develop a five-year strategic plan (2016–2020) for NWSDB. He also launched a 24-hour hotline for people to

report their grievances to NWSDB as a result of his training in Japan. (Former Additional Secretary, Ministry of City Planning and Water Supply)

## ② Young Leader Programs

### 【Shared Knowledge and Techniques】

- A participant took part in the “Health Administration Course” under the Young Leader Programs. She conducted four sessions among her colleagues on Alzheimer’s disease (which is not a “mainstream disease” in Sri Lanka and not a disease that many are aware of) and elderly care. She also participated as a resource individual in health promotion programs that targeted schoolchildren. In these programs, she was able to share her knowledge and experiences about the “Japanese way” of living and their health care practices at the individual level. (Ragama Hospital)
- The participant participated in the Postwar Reconstruction and Peace-building Course. He learned that the PPP projects of the Nanjo City Council included proposal writing and funding of civic projects. His ministry organized a national level competition to select the best Provincial Council and, as one of the judges, he visited the nominated Provincial Councils. During these evaluation visits, he spoke about what he learned from the Nanjo City Council and encouraged Provincial Councils to form PPPs. He also advised them on proposal development, engaging with community-based organizations to search for funding opportunities, and implementing and monitoring projects - all based on his training in Japan. (Ministry of Local Government and Provincial Councils)

### 【Application of Skills】

- The participant took part in an Administration (Local Industry) Course. She supports entrepreneurs and small/medium enterprises at the Industrial Development Board (IDB). She was successful in introducing the practice of individual packaging in Japan to entrepreneurs and small/medium enterprises, who applied the individual packaging to sugar cubes in Sri Lanka. Sugar cubes, known as Juggery cubes, are very popular in Sri Lanka but absorb water quickly and become soggy very easily. After learning a practice in Japan where each biscuit is individually packed and placed within the overall package, she was convinced that it was applicable to Juggery. With the support from her supervisor, she organized workshops and visited producers to encourage them to apply the individual package by stressing the cost effectiveness and innovative concept. The idea was accepted by 20-25 producers. (IDB)

### 【Contribution to Institutional Initiatives】

- The participants took part in the Economic Administration (Industrial Development and Promotion) Course. The participants prepared an action plan concerning the improvement of a one-stop center based on their experiences in Japan. Upon their return, they submitted their

training report to their top management at BOI, including the Chairman who supported the action plan. The participants became members of a committee, chaired by a JICA advisor to BOI, and discussed improvements to the one-stop center. (BOI)

### **【Contribution to JICA Project & Policy Formation】**

The participant took part in the “Health Administration Course” under the Young Leader Programs to learn about elderly care in Japan and prepared an action plan to develop a policy for elderly care. Soon after the program, he presented his action plan to the Secretary of the Ministry and obtained permission to move forward. He made a final proposal of a grassroots technical cooperation project entitled “Health Plan and Model Forming Project for Integrated Health and Welfare Service System for the Elderly in Sri Lanka,” which is now being implemented. A policy on elderly care formulated under the project is expected to be adopted in the first quarter of 2016. (Ministry of Health, Nutrition & Indigenous Medicine)

### **(3) Enhancement in the Understanding of Japan (Changes Obtained by Associating with Japan and the Japanese people)**

The participants interviewed commented on their impressions of Japan or what they learned from the Japanese:

- 1) Punctuality, mutual respect towards one another, and politeness
- 2) Discipline, strong work ethic, and team work
- 3) Hospitality

Participants also mentioned that they were impressed by the widespread application of 5S in Japan; also, they became more productive because of behavioral change following their exposure to the Japanese way of living and working.

Many expressed that they enjoyed weekend trips, visits to museums, hot springs, and temples, and the experience of wearing Kimonos. Some participants in the Young Leader Programs experienced a home-stay, where they were able to experience the Japanese way of living. Some participants corresponded with the hosts of their home-stay families.

## **3-5. Facilitating and Constraining Factors for Training Outcomes**

Listed below are factors that facilitated or constrained the outcome of the programs.

### **(1) Facilitating Factors**

#### **① Individual Factors**

Interviews with the participants revealed that common individual factors were “awareness /preparedness of the participants for the program participation” and “appropriateness of the scale and theme of an action plan.”

- Prior to the program, a participant was very clear about the outcome he was looking for. During the program, he focused on techniques that could be applicable to Sri Lanka and as a result, he was successful in applying what he learned and implementing an action plan.
- The participant designed an action plan that could be easily implemented. Instead of focusing on a large-scale multi-year work plan, he took an incremental approach by creating a small-scale theme and an action plan that had many layers implemented in stages. This approach meant that results were obtained and confirmed quickly, which in turn, motivated his staff.
- The participant developed an action plan for a project that commenced prior to his training in Japan and he was able to easily integrate his action plan, which incorporated knowledge and skills learned in Japan.

## ② Organizational Factors

Organizational factors can be summarized as “appropriate matching of the duties/position of the participant and the theme/content of training” and “whether a participant has authority to implement an action plan or apply technologies he/she learned.”

- Engineers (Deputy General Managers/Managers) at RSC, NWSDB have discretion/authority to some extent on what to apply from the programs. Unlike the NWSDB Head Office, which cannot easily introduce a new system due to its scale, RSCs are close to end users and motivated to develop new systems to meet the demands of customers. (RSC, NWSDB)
- The participant is the head of the engineering division of the municipal council with a broad set of responsibilities and authorities to implement his action plan. His supervisors, including the Mayor, appreciate his work and assisted him in implementing his action plan without delays. (Nuwara Eliya Municipal Council)
- The Ministry of Health found the action plan was easily integrated to his own master work plan; consequently, the action plan was not seen as an entirely new initiative. (Ministry of Health, Nutrition & Indigenous Medicine)

## ③ Factors of Training Contents

The participants commonly mentioned that the contents of the program were appropriate. In addition, support, guidance, and follow-up from course leaders and resource individuals played an important role in producing outcomes.

- The course leader was very thorough and helpful, and also arranged for special sessions on developing action plans. In these sessions, case studies of successful action plans were discussed, which assisted the participant in developing a feasible action plan.

- The resource individual provided advice on the appropriateness and feasibility of an action plan. Based on this advice, the participants revised their action plans several times, which made it comprehensive and clearer. As a result, he was able to obtain support from his organization, leading to the formulation of a grassroots technical cooperation project.
- The mixture of theoretical lectures and practical sessions worked well. The hands-on practical sessions regarding leak detection and chlorination were very useful, as the participant had only a theoretical understanding of these topics.

#### ④ Other Factors

Advice and follow-up from the JICA Sri Lanka Office and JICA Advisor was effective.

- The participant discussed his needs and desire to receive training in Japan with an officer of the JICA Sri Lanka Office, who visited him regarding a follow-up of a grant aid project. As a result of his request, a participant who required training was selected to attend the program. (Nuwara Eliya Municipal Council)
- Prior to the training, the participants developed a proof of concept where they documented their expectations/outcomes of the training. With the help of a JICA Advisor to BOI and JICA Sri Lanka Office, they had a reasonably good understanding of what to expect from their training, and were able to revise the proof of concept to incorporate what they learned in Japan and the discussions with a group of Japanese investors. In the end, they were successful in submitting the proof of concept to the top management and apply their knowledge. (BOI)

### (2) Constraining Factors

#### ① Individual Factors

- The contents of the action plan did not match the duties of the department where the participant works.

#### ② Organizational Factors

- The department where the participant works was not a right place to utilize his obtained knowledge and skills, meaning the selection was not appropriate.
- It was difficult to secure a budget.

#### ③ Factors of Training Contents

- If Japanese engineers take part in the program as participants and exchange opinions, the participants could have learned more.
- There were many lecture-type sessions, but more focus should have been placed on hands-on training and field visits so that the participants could have acquired more practical skills.
- There was no mechanism to follow-up with participants. For example, this post-training evaluation could have been completed earlier so that participants could have reviewed the post-training situation and taken necessary actions to sustain the training effects.

### **(3) Characteristics in the Process of Realizing Training Outcomes**

In the training field of water supply, characteristics of training outcomes realized by former participants from RSC, NWSDB were confirmed through survey. As described in Section 3-2 (“Needs of the Sri Lanka Government”), NWSDB is the major water utility in Sri Lanka. Among 36 participants, the aggregate number of participants in Thematic Programs (Water Supply) from 1995, 29 were based at NWSDB, with most belonging to RSC before/after participating in the programs.

The RSC is responsible for the development, operation, and maintenance water schemes under its respective jurisdiction and is aware of the challenges and needs of customers. Some common characteristics of the participants from RSCs include that they were aware of challenges of RSC/NWSDB and what they should learn. They focused on techniques that could be easily applicable. They developed action plans for projects that commenced prior to their training in Japan. Furthermore, the positions of the participants is also one of the factors for producing outcomes; Deputy General Managers and Managers at RSCs have discretion and authority, to some extent, to implement what they learned from the programs.

The Young Leader Programs are implemented by country focused programs, in the case of Sri Lanka. The JICA Sri Lanka Office is involved with the procedure of the programs, including deciding on the content of the program and the selection of participants. Further, the JICA Sri Lanka Office instructs participants to prepare pre-training agendas and extends support and guidance to participants both before and after the program. Therefore, the Sri Lanka Office played an important role in the preparation, implementation, and follow-up of the programs, which led to the new initiatives by the parent organizations of the participants, including activities to improve a one-stop center by BOI and implementation of a grassroots technical cooperation project by the Ministry of Health, Nutrition, and Indigenous Medicine. The implementation of programs in the form of country-specific programs and the involvement of the Sri Lanka Office are the primary facilitating factors for producing outcomes.

### **3-6. Training Programs by Other Donors and Comparison with JICA Programs**

Interviews with China, KOICA, Australian Awards, and ADB (water supply sector) were conducted regarding their training programs. Australian Awards primarily offers longer-term training (degree-type), while the ADB focuses on non-water aspects such as management and social and natural environmental consideration. China and KOICA facilitate similar training programs to JICA and accept participants on a relatively large scale. Below are summaries of the training programs in China and KOICA.

➤ **China**

The Ministry of Commerce is responsible for training and develops the annual training catalogue of short-term programs. They publish this catalogue for distribution to other countries, including Sri Lanka. Approximately 1,000 individuals from Sri Lanka participated in 150 training courses in China (duration of the program varies from three weeks to three months). In addition, by the request of Sri Lanka, China began to customize country-specific training in 2015. Six programs were offered in 2015, which include agriculture, infrastructure planning, Chinese traditional medicine, police, and law enforcement; twenty individuals participated in each program.

Upon completion of their training, the Embassy of China invites participants to meet and elicit participant opinions and feedback on the training. However, post-training evaluation is an area that must be strengthened. It is led by the Ministry and the Embassy does not have sufficient manpower in relation to the large number of participants.

➤ **KOICA**

Outline of the programs

KOICA offers different types of scholarships and training programs, which include Country Fellowship Programs and Global Fellowship Programs. The Global Fellowship Programs are comparable to the JICA's Thematic Programs. Under the Global Fellowship Programs, 15 to 25 programs are offered to Sri Lanka and 1–2 participants take part in each program, which run for about 2–3 weeks. Although participants fill out program evaluation questionnaires to register comments prior to completion of the programs, the programs do not measure the post-program impact, as the Global Fellowship Programs are meant to assist participants in becoming aware of the changes that are happening at a global-level and to begin discussions regarding these large scale changes in their home countries.

Implementation of action plans/follow-up of the participants and others

Since the Country Fellowship Programs are customized programs and are among the Country Partnership Strategy of KOICA, KOICA regards the measurement of outcomes as important. Therefore, selected projects in the Country Fellowship Programs receive KOICA's financial support as seed money towards project implementation; successful outcomes of the training are expected.

Alumni Association

KOICA's alumni association in Sri Lanka is known as the Association of KOICA Fellows in Sri Lanka and was formed in 1999. About 1,000 people are members and KOICA believes the association should be restructured as an "active" organization to fulfill its objectives. KOICA is also



considering the establishment of regional “desks” in the primary alumni associations so members that are not in Colombo can actively engage within their regions/geographical areas.

### **3-7. Status of Networking among Former Participants (Alumni Activities)**

#### **➤ JICA Alumni Association of Sri Lanka**

The JICA Alumni Association of Sri Lanka has served as the primary alumni association office for JICA’s various training programs. It was established in 1972 and 1,140 people constitute its membership. Activities center on the social exchanges of alumni, such as having annual get-togethers, an event where members exchange views with Japanese people residing in Sri Lanka, and issuing an annual bulletin. The association is also engaged in social activities, such as providing scholarships and blood donation.

#### **➤ JICA Ex-Participants Association on Solid Waste Management**

The association was established in 2008 by the former participants of the training programs on solid waste management and has 150 members. The association holds an annual meeting and runs the association with seed money from JICA and through membership fees. One major activity is holding seminars and workshops, where the association shares the latest topics and transfers information on techniques to personnel in local governments. The association would like to play the role of a think-tank and to be a forum for knowledge sharing.

#### **➤ Status of Networking among Former Participants**

It was confirmed that many participants interact with participants from other countries, resource individuals, and course leaders through e-mail and Facebook. Many reported that contact lasts for several months following the completion of the programs, however, the exchanges become less frequent over time.

## Chapter 4. Survey on Training Organizations (Water Supply Sector)

### 4-1. Survey Objectives and Methods

The Thematic Verification Survey was conducted with a goal for confirming the training outcomes by surveying former participants' activities after they returned to their home countries. In order to evaluate training outcomes from various perspectives, a survey on training organizations (who run the training courses in the target thematic sector) was conducted prior to the Overseas Field Survey. In particular, the interviews with training organizations were conducted to clarify their roles in realizing training outcomes, and to further improve the system of the Thematic Programs. The interviews were focused on clarifying the training organizations' efforts for developing curriculum, enhancing overall training outcomes, and their concerns regarding oversight of the training programs.

In terms of survey method, prior to the interviews, a questionnaire was sent to the target training organizations via email, and interviews were then conducted based on the questionnaire. All interviews were conducted by interviewers in person, with one exception (one supervisor of training programs at a training organization was overseas for business. His answer to the questionnaire was received via email).

In addition, in the field of Water Supply, since FY2013, JICA has collaborated with Japanese water utilities to conduct a study seminar annually for training organizations. In order to collect information on JICA training programs in the particular field, literature research on seminar documents was conducted.

### 4-2. Survey Targets

For the target training courses of Water Supply, interviews were conducted with the following 7 training organizations, which have extensive experience in accepting training participants.

< Interviewed Training Organizations >

Osaka Municipal Waterworks Bureau

Japan International Corporation of Welfare Services

Japan Water Works Association

Nagoya City Waterworks and Sewerage Bureau

Fuji Women's University

Yokohama Water Co., Ltd.  
Yokohama Waterworks Bureau

### 4-3. Survey Results

#### (1) Characteristics of the Training Organizations

Japan has been a major donor in the field of Water and Sanitation<sup>14</sup>. JICA has been conducting water supply-related projects around the world. Municipal governments, major target training organizations of this survey, have collaborated with JICA to contribute in the global society. Out of the projects conducted by these municipal governments, most are through assistance schemes such as technical cooperation (including conducting training programs in Japan), grant aid, dispatch of volunteers, and grassroots technical cooperation (special frame for local community development). Additionally, water utilities also participate in JICA projects through other assistance schemes. In the field of Water Supply, the collaboration between the two parties is expected to increase in the future.

On the other hand, JICA has organized various forums and seminars in the field of water supply. The Forum for Enhancing Sustainability of Urban Water Services in Asian Region has achieved high impacts in particular. The forum is aiming to increase the total number of water utilities that can manage water supply services in a sustainable way. Administrators from water utilities and water departments of governments in Asia and representatives of municipal governments, water related organizations, universities and enterprises from Japan have participated in the forum. Through the forum, water utilities and municipal governments learn from each other's experience and share their expertise. The forum has become a place for networking<sup>15</sup>, and Japanese municipal governments have played an important role in holding the forum.

Under the circumstances in the field of water supply, Japanese municipal governments have contributed to the international society through training programs. The water bureaus of municipal governments, including those of Yokohama, Tokyo, Nagoya, Osaka, and Kita-Kyushu; water related public organizations; and private enterprises have participated in running training programs. Because of the cooperation of these governments, organizations, and enterprises, a large variety of training courses have become possible. Currently, courses such as Non-Revenue Water Management (Leakage Detection and Reduction), Operation and Maintenance of Urban Water Supply System (Water Quality Control & Water Pipe System Maintenance), Administration and Management of Water Supply, Engineering on Water Supply System, Training for African Engineers on Urban Water

<sup>14</sup> OECD-DAC

<sup>15</sup> Literature research on The Third Executive Forum for Enhancing Sustainability of Urban Water Services in Asian Region. (February 2016, via JICA's HP)

Supply, and Water Source Management and Administration for Islands, are being conducted.

Water supply planning and operational management in Japan are conducted with consideration to the characteristics of land (urban vs. rural usage, geographical diversity such as cold areas and highlands). Budget-based, cost-effectiveness analyses are also performed in each water district. Based on regional characteristics of water supply, training organizations have utilized their own networks (water utilities, local governments, and related enterprises), facilities (training centers for water system engineering and water supply-related facilities) and human resources (experienced lecturers who understand both water supply services in Japan and the reality of developing countries) to develop an appropriate training curriculum.

## **(2) Efforts for Enhancing Training Program Management**

### **1) Training Curriculum Development**

#### **① Refining the Curriculum based on the Needs of Training Participants**

In order to conduct training programs in an effective and efficient way, with reference to training participants' feedback, training organizations have analyzed training contents; they have increased the volume of contents that reflect training participants' interests and requirements.

Examples of refining curriculum are as follows:

- After training, participants were asked to fill in questionnaires for feedback. The opinions of the participants were used to shape the following training courses.
- Training participants were contacted in advance and, through a survey (through Mission Papers),—participants' specialties and their skill levels were understood. During training, participants were then divided into groups based on their specialties.
- In order to apply knowledge learned from lecturers, training participants were provided with opportunities to visit facilities for observation of work practices, including operating equipment. Efforts were made to enhance overall learning effects.
- During lectures, two-way communication was encouraged, and time was built in for question-and-answer. In addition, movies of water supply-related sites in developing countries were shown at lectures to promote effective discussion.
- Based on a new international trend, a training organization introduced a new lecture on Water Safety Plan (WSP) initiated by the World Health Organization (WHO). The lecture was highly evaluated by training participants.
- Issues on pricing, regulations, customer service, metering and well drilling technology have been included in the training curriculum. Although training on engineering is still the major theme, curriculum has been refined based on the request of training participants.

- Initiated a teleconference in which the current training participants communicated with former participants of Cambodia and Rwanda on the progress of their action plans. This type of conference was highly appraised.
- Has introduced the history of Japan's water supply services to the training participants. Depending on the home regions of these training participants, lecturers encourage them to compare the era of post-war Japan to the underdeveloped regions, the era of high economic growth to the regions with rapid economic development, and the current Japan to the regions with sustainable development. Yet, the engineering development in water supply has been a long and continuing process. Some old-fashioned technology remains useful in modern society.
- The shared water faucets of the Edo period are still in use in certain areas of Japan. While knowing a similar system occurs in some African areas, lecturers use Kami-Shibai (a traditional Japanese picture-story show) to depict the shared faucets in Japan. It's meaningful to include Japan's history of water supply into the training curriculum.
- For training courses targeting the participants of Africa, in particular, emphasis was made not only to technologies, but also to social factors such as gender and community development. Training taught that the consideration of social factors is important in terms of providing water supply services, particularly in rural areas.

## ② Instructions on Action Plans

According to the interviewed training organizations, instructions were provided to help training participants create action plans with high feasibility. Examples are as follows:

### ✧ Assignment of Support Team

- Numerous lecturers who have expertise on water supply and the overall water supply environment of developing countries formed a team to support training participants' action plans. Individual instructions were provided for the particular goal of utilizing obtained knowledge and skills from training to solve the real issues of their home countries.
- During the session of action plan development, facilitators were assigned to help training participants review the learned knowledge and decide on the topics and approaches.
- Training organizations have built a strong network with experts who are either retired from municipal water bureaus, or JICA experts with profound experience in the water supply sector. By using these professionals as training lecturers, the overall quality of training courses is maintained.

### ✧ Usage of Worksheets

- Worksheets were used to analyze the challenges training participants faced at their workplaces. The topics applicable to action plans were refined based on participants' positions and

responsibilities.

✧ Pre-Training Support

- Support begins before training participants arrive in Japan. Training organizations usually contact the selected participants and encourage them to consult with their supervisors, to be prepared with target issues, and to devise a draft action plan.

③ **Support System for Training Participants**

- Training participants are well supported throughout training programs. Some training organizations assign facilitators at workshops; some carefully answer questions from training participants during transitions and breaks; and some assign numerous lecturers to provide individual instructions on water system designing and leakage detection.

④ **Skill Development on Project Planning and Presentation**

Training organizations not only taught knowledge and technologies associated with water supply, but also provided instructions on how to utilize the knowledge and technologies to plan projects, and to obtain approval from higher authorizations through presentation. Detailed examples of these instructions are as follows:

- Introduced Project Cycling Management (PCM), Project Design Matrix (PDM) and Plan of Operation during training. A former participant of Burkina Faso learned about PCM at training, and was satisfied that he could apply this the method to his own project planning. The director of the Water Department of Congo highly appraised PCM, and asked all future training participants of Congo (in the field of water supply) to learn about PCM.
- Training participants were assigned to give a presentation of their country report and action plans. Because some participants lacked presentation skills prior to training, training organizations provided individual instructions to them. It was revealed that some participants gained confidence at training, and their presentation skills were highly appreciated after their return.
- In terms of inception reports, training organizations provided instructions on how to prepare them at the beginning of training, and collected them on the last day.

**2) Network Building with Former Training Participants**

Although systematic network building hasn't been conducted after training, some training organizations maintained a small-scale network with former participants. It was revealed that the maintained relationship contributed to the formation and implementation of JICA projects. Examples of network building are as follows:

- Maintained communication with former participants through email and/or Facebook (both

group and individual).

- Has been monitoring the progress of former participants' action plans through email. For a particular training course, 6 out of 11 former participants responded.
- Visited former participants at their workplace when opportunity was provided, either with JICA projects or under other circumstances.
- Has opened the Inception Report Meeting to the public. Because the meetings are held during work hours on weekdays, not many visitors are able to attend. Yet, a former participant from Zambia began to develop a relationship with a local enterprise over a meeting.
- As a new initiative, has set up video conferences for former training participants to share the progress of their action plan with current participants. This type of initiative became possible because of the continuous communication, over Facebook and email, with former participants.

### **3) Cooperation with JICA**

Close cooperation with JICA has been believed to be critical for running training programs, including training course development, participant selection, and curriculum establishment. Since 2013, JICA has organized a study seminar for water-related training organizations (mainly municipal governments) and water utilities to share expertise and exchange opinions on improving training program management and developing businesses globally through training programs.

#### **(3) Concerns of Training Organizations**

##### **1) Selection of Training Participants**

###### **① Professional Expertise and Language Capability**

It's important for training participants to have relevant professional expertise and language capability (English and/or Japanese) to understand training contents and communicate with lecturers and peers. Without these two capabilities, it's difficult for participants to maintain a high level of motivation and will result in negative impacts to their overall learning experience. It was revealed that most training participants came with required expertise and language capabilities, but some (although rare) lacked these skills. Examples are as follows:

- Although many training participants intended to learn knowledge and skills that require the use of high-end computers, they lacked basic knowledge on water pipe system design. On the other hand, it was difficult to keep training participants' attention when systematically including basic knowledge into training lectures.

###### **② Training Contents and Water Supply Environment of Training Participants' Home Country**



The developmental status of water supply differs by region and by country. Although participants from countries with different social and economic water supply environments can exchange ideas and learn from each other's experiences, it's desirable to have participants coming from countries with similar backgrounds in the field of water supply when considering the application of the training skills and knowledge.

### ③ Parent Organizations' Continuous Participation

When participants are sent from parent organizations that continuously participate in JICA training programs, they usually achieve a high level of outcomes. The accumulation of training effects and the establishment of a system for selecting appropriate participants are believed to be the key reasons. Yet, there were participants sent by parent organizations that don't consistently participate in JICA training programs who attended training with enthusiasm. The continuous participation of parent organizations is, therefore, not the only reason for achieving high learning effects. When parent organizations continue participating in JICA training programs, Japanese training organizations develop a close relationship with them through their shared history. The following case is an example on how continuous participation from a parent organization had an impact on realizing training outcomes.

- Former training participants, who attended JICA training in different years, cooperated on action plan design and implementation. Through their action plans, they intended to replace old water pipes and meters, and increase the coverage of water supply services. During training, they consulted with their supervisors in Malawi; therefore, they developed action plans with realistic contents such as incorporation of their action plans into daily work, reflecting plan implementation through human resources allocation, and securing required capital, etc. Because these participants were from the same parent organization, the training organization was familiar with their organizational system, and was able to provide advice on the collaboration of multiple action plans.

## 2) Insufficiency of Lecturers and Facilitators

Although training organizations have made considerable efforts for supporting training participants, in terms of securing lecturers and facilitators, they are facing the following challenges:

- Training organizations tend to continue to work with experienced lecturers, and their aging has gradually become an issue. It's been difficult to secure lecturers who have professional knowledge, English language capability, and time management skills. Preparation of lectures and presentations in English have been challenging too.
- Based on the request of JICA, training organizations have increased the volume of training contents conducted by the workshop method. However, it's been difficult to secure appropriate

facilitators and consultants. Facilitation is not a part of administrative work, but it's essential for operating training programs effectively.

- JICA has emphasized the importance of two-way communication and the practice of learned knowledge and skills, but the implementation of these methods into the curriculum needs to be refined. Finding a capable facilitator, in particular, can be difficult.

### 3) **Networking with Former Training Participants**

Although training organizations are keen to understand the progress of training participants' action plans and the utilization of their obtained knowledge/skills, communication with them is still limited. Some training organizations have tried to maintain communication by collecting progress reports (with a collection rate of 50%), establishing mailing lists, and exchanging messages via Facebook and emails.

### 4) **Others**

In terms of operational administration, training organizations are facing the following challenges:

#### ① **Administrative Work and Operating Cost**

Although the interviewed training organizations have made considerable efforts to establish training program management systems for comprehensive training course execution, (as described in the Section 4-3. (2) - Efforts for Enhancing Training Program Management), some training organizations have been facing the following challenges in terms of training course operation and the involved cost:

- Reimbursable expenses are limited with consideration of the total amount of administrative work. For instance, in terms of training course preparation, it usually takes 2 to 3 months to recruit new lecturers and set up site visits, but these costs are not covered by JICA.
- Operating training programs is time consuming. The staff who are assigned to training course management need to focus on this task exclusively, which generates cost to the whole organization.
- The procedure of reimbursement is long and complicated, which has become a burden to training organizations. If the procedure can be shortened and simplified, more institutions/organizations might be interested in conducting JICA training programs.
- Some training organizations assign a team to support training participants and hope to increase the number of training coordinators. Currently, for every 14 training participants, 1 coordinator is assigned for support. This ratio is considerably low in light of the current two-way communication approach and practice-centered training methods.
- Connecting training organizations horizontally could potentially release some burden for each organization. For instance, it's desirable to have a platform for consulting on training contents

(such as how to deal with issues that are unique to developing countries), and sharing information on facilities that are open for workplace visits from training participants.

## ② Accommodation for Training Participants

- Because many of the training participants are in leadership positions, the accommodation provided, including meals and hotels, seems unsophisticated to them. The total budget is tight.
- Because parent organizations need time to reallocate human resources when training participants are away, it's preferable to extend the preparation period.

## (4) Significance of Conducting JICA Training Programs and Future Prospects

### 1) International Cooperative Relationship Development between Japanese Municipal Governments and Developing Countries

As training organizations, Japanese municipal governments are fully aware of the importance of building relationships among themselves, the Japanese citizens, local enterprises, and developing countries. Additionally, they consider conducting training programs as an opportunity to develop human resources. Examples of efforts for enhancing these relationships are as follows:

#### ① Building Relationship between Japanese Municipal Governments and Developing Countries

- Training programs provide a chance for participants to know the expertise and technologies of water utilities and other related local enterprises, and the training organizations intend to contribute to international cooperation.
- As more foreigners begin to enjoy the host cities used during training, more communication between local college students, training participants, local enterprises, and developing countries can occur. These relationships can be considered as a type of training outcome that benefits the host cities.
- Nagoya City Waterworks and Sewerage Bureau attended a follow-up seminar for training programs in Sri Lanka. They later began to participate in a JICA grassroots technical assistance project.
- Because training organizations (typically, the water departments of municipal governments) are responsible for releasing information about the achieved training outcomes to other departments and local citizens, an ongoing relationship with partner countries is desirable.

#### ② Developing Human Resources

- Some training organizations assign government officers as training lecturers, and consider conducting training programs as an opportunity to promote young officers' career development.

For instance, a training organization has a team of 20 lecturers (local government officers of various departments), and assigns 2 lecturers each year based on the target training themes.

- According to some training organizations, getting involved in training programs is an opportunity to strengthen young officers' ability. For instance, as lecturers or observers, young officers have had the opportunity to learn how to deal with issues in underdeveloped areas where a water supply didn't exist. It was revealed that some of the young officers later became experts of JICA, or began to get involved in developing businesses overseas.
- Some government officers involved in training programs began to realize the differences in water supply in Japan, compared to other countries. According to them, this experience provided a chance to reflect on the system of water supply in Japan.
- Based on the experience on supporting training participants, some government officers realized the significance of appreciating diverse cultures.
- Some lecturers come from local water utilities. Through teaching technologies to training participants, lecturers are inspired to appreciate different cultures and ideas, which leads to the refinement of their technologies. As a result, water of high quality is provided to local citizens. Promoting local water utility businesses contributes to elevating the level of technology, the development of human resources, and increasing the tax revenue for the local governments.

## **2) Business Relationship Development between Japanese Enterprises and Developing Countries**

Among Japanese water-related enterprises, some are aiming to sell their products and technologies to overseas markets. While conducting training programs, training organizations intend to create opportunities for local enterprises to meet with training participants. The following efforts were made:

- It is believed that conducting training programs can contribute to applying Japanese water-related technologies to developing countries. Emphases are paid to introducing technologies to participants at training, and at the same time, understanding challenges that developing countries are facing. For instance, during training in Japan, participants were organized to visit national exhibitions for water and sewage technologies, where hundreds of water-related enterprises gathered. Training participants were able to see cutting-edge technologies and meet with Japanese water-related enterprises.
- Through networking with former training participants, Japanese municipal governments and water-related enterprises (the members of the Japan Water Works Association) are hoping to expand their water business overseas. For instance, an enterprise which was responsible for lectures on well drilling technologies was consulted by former participants on equipment procurement. They're hoping to further develop a business relationship.

## **Section 3 Complete Count Questionnaire Survey**

## Chapter 1. Survey Objectives and Implementation Policies

### 1-1. Survey Background and Objectives

This complete count questionnaire survey was conducted with the goal of quantitatively understanding the outcomes of the Thematic Programs and the Young Leader Programs, as well as giving feedback for improving the training system.

The Complete Count Questionnaire Survey targeted training participants who attended the Thematic Programs in water supply fields and Young Leader Programs. It attempts to quantitatively clarify how training effects emerge through training participants' activities after returning to home countries and what factors facilitate or constrain positive impacts. This time, the number of free-answer questions was increased to supplement the quantitative analysis with the qualitative answers.

### 1-2. Survey Targets

The survey targeted 583 participants of the FY2012 and FY2013 Thematic Programs in the area of water supply, and the participants of the FY2013 Young Leader Programs, whose valid email addresses were known to JICA.

The recovery status of the questionnaires is summarized in Table 1. The number of recovered responses and the recovery rates include a total of 166 responses (28.5%): for the Thematic Programs, 36 (33.6%); for the Young Leader Programs, 130 (27.3%); for overall, 166(28.5%).

The total number in the summary of the Complete Count Questionnaire Survey (Section 1, Chapter 2) does not match that of the of responses for questionnaire questions. That is because not all questions were answered by each participant.

Table 1. Number of Survey Targets and the Questionnaire Recovery Status

Training Programs	Number of Training Participants	Number of Email Addresses Managed by JICA	Number of Valid Email Addressees	Number of Responses (Recovery Rate: %)
Thematic Programs (Water Supply)	291	126	107	36 (33.6)
Young Leader Programs	1,028	590	476	130 (27.3)
Total	1,319	716	583	166 (28.5)

Table 2 shows the regions of the respondents' home countries. In case of the Thematic Programs, most responses are from Africa, accounting for 30 (83.3%). In case of the Young Leader Programs, the highest number of responses came from Southeast Asia, accounting for 52 (40.0%). The next highest number of responses came from South Asia, accounting for 34 (26.2%), followed by Africa 29 (22.3%).

Table 2. Regional Distribution of Respondents by Training Program

	Thematic Programs	Young Leader Programs
Southeast Asia	2 (5.6%)	52(40.0%)
East Asia	0	0
Central Asia/Caucasia	0	7 (5.4%)
South Asia	3 (8.3%)	34 (26.2%)
Oceania	0	1 (0.8%)
Central America/the Caribbean	0	2 (1.5%)
South America	1 (2.8%)	0
Africa	30 (83.3%)	29 (22.3%)
Middle East	0	0
Europe	0	5 (3.8%)

Table 3 shows gender of the respondents. There are more male respondents in all programs, 77.8% in the Thematic Programs, and 67.0% in the Young Leader Programs.

Table 3. Gender of Respondents

	Thematic Programs	Young Leader Programs
Male	28 (77.8%)	87 (67.0%)
Female	8 (22.2%)	43 (33.0%)

### 1-3. Survey Methods/Survey Flow

#### (1) Survey Methods

The survey was conducted using two types of methods: questionnaires sent by e-mail and online questionnaires using Google Docs. A questionnaire prepared in an Excel format was sent to the survey targets as an attachment, along with a URL for the online questionnaire. The questionnaire and the invitation to the online questionnaire were sent to the targets in sequence from November 27, 2015 and the responses were received until January 18, 2016.



The responses by survey methods are as follows:

- Thematic Programs (Water Supply)
  - Total responses: 36
  - Responses via email: 28
  - Response online: 8
- Young Leader Programs
  - Total responses: 130
  - Responses via email: 67
  - Responses online: 63

## (2) Questionnaire

When designing the questionnaire, questions were sequenced in a way for the respondents to answer easily. This time, the number of free-answer questions was increased, and treatment factors (accommodation, meal, daily allowance) were added to the program evaluation.

## (3) Evaluation Method

The positive impacts of the training programs were evaluated based on the questionnaire answers. Also, factors facilitating or constraining training outcomes were evaluated by the association among the questions calculated by the average rate, multiple linear regression analysis, etc. A question “What is the most important factor among the choices?” was newly added this year.

### 1-4. Survey Methods and Remarks

The following methods were applied in order to improve the recovery of the distributed questionnaires:

- ① For the layout of the question items for the Thematic Programs survey, items that were presumably easy to answer using the first-level evaluation scale were presented in the first half (such as “motivations to participate in the training” and “evaluation for the training”). Items that may be difficult to answer (such as “opportunities to utilize training results”, “comparison with the training programs of other donors”, and “activities to share knowledge and skills acquired through the training”) were presented in the second half.
- ② In order to verify whether the questionnaire was easy to answer, we tested the questionnaire on November 13, 2015 with trainers who were attending JICE’s training programs, and modified the questionnaire as needed.
- ③ Considering the survey targets’ language preference, the questionnaire form was prepared in seven languages: English, Spanish, French, Russian, Thai, Vietnamese, and Indonesian.
- ④ Considering the survey targets’ convenience in responding, two types of reply methods were used: a questionnaire in Excel format and an online questionnaire. The online questionnaire was

provided in English only, but the URL was presented to all of the survey targets in the Thematic Programs and the Young Leader Programs.

- ⑤ Sent reminder email, and extended the response deadline for those who had not responded yet.

## Chapter 2. Survey Results

### 2-1. Outcomes of the Training Program

The "Outcomes of the Training Programs" section covers former participants' contributions to the improvement of policies, systems and structure of their organizations, their capacity development, the implementation status of action plans, transfer activities of the training results, the change in their perception of Japan, alumni associations formed by them, and their connections with JICA.

#### (1) The Thematic Programs (Water Supply)

##### ① Contributions to Policies, Systems and Structure of One's Organizations

The questionnaire asked the former training participants whether they contributed to the following items by using their knowledge and skills acquired through the training. Answers were given using a five-point scale: 5 = Strongly contributed, 4 = Somewhat contributed, 3 = Neutral, 2 = Did not contribute much, 1 = Did not contribute at all. Figure 1 and 2 are graphs showing the distribution of their contributions by field (Environmental Management and Disaster Management) and question items, listed as follows:

- a. Establishment/improvement of policies and systems by national or local government
- b. Establishment and improvement of system in one's organizations
- c. Establishment/improvement of methods and techniques used in one's work
- d. Project formulation/implementation in one's organization
- e. Development/improvement/implementation of action plans in one's organization

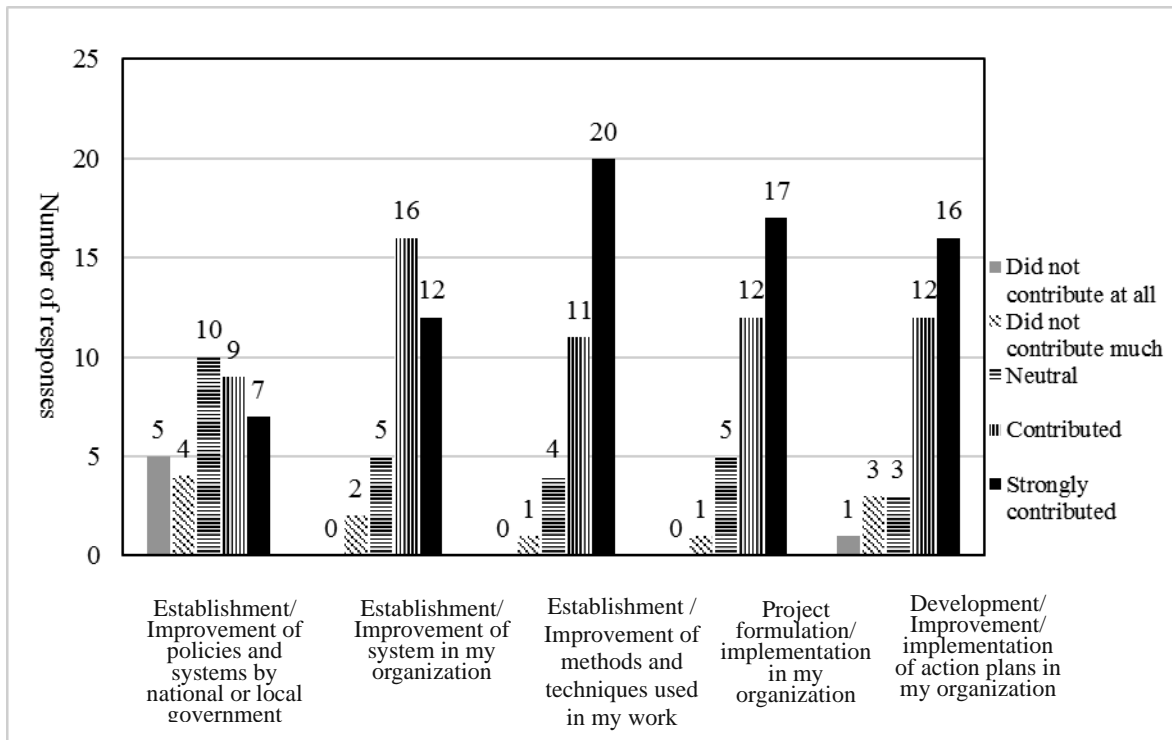


Figure 1. Positive Impacts: Former Participants' Contributions (Water Supply)

As shown in Figure 1, the majority of former participants responded that they contributed. Table 4 shows the number of respondents who answered either "Strongly contributed" or "Contributed" and the corresponding ratio. 16 (45.7%) responded for "Establishment or improvement of policies and systems by national or local governments", 28 (77.8%) for "Establishment and improvement of system in one's organizations", 31 (86.1%) for "Establishment/improvement of methods and techniques used in one's work", 29 (80.6%) for "Project formulation/implementation in one's organization", and 28 (77.8%) for "Development/improvement/implementation of action plans in one's organization".

More positive impacts of the training were found in more local contribution categories, such as "improvement of techniques and methods at training participants' work", rather than in the more grand categories, such as "policies and systems of national and local governments".

Table 4. Summary of Contributions by Training Participants

Items of contributions, either “Strongly contributed” or “Contributed”	Water Supply Number of Responses (%)
1) Establishment or improvement of policies and systems by national or local governments	16 (45.7)
2) Establishment or improvement of a system in one’s organization	28 (77.8)
3) Establishment or improvement of methods and techniques used at work	31 (86.1)
4) Project formulation and implementation in one’s organization	29 (80.6)
5) Development, improvement and implementation of action plans in one’s organization	28 (77.8)

### ② Capacity Development of Former Participants (Acquisition of Training Contents and Achievement of Training Objectives)

Table 5 shows the degree of acquisition of training contents and achievement of training objectives in percentages. The average value of the degree of acquisition of training contents was 85.4%. The average value of the degree of goal achievement was 77.3%.

Table 5. Acquisition Rate of Training Contents &amp; Achievement of Training Objectives

	Acquisition Rate of Training Contents	Achievement of Training Objectives
Water Supply	85.4%	77.3%

### ③ Implementation of Action Plans

The number of respondents who implemented their action plans totaled 20 (55.6%).

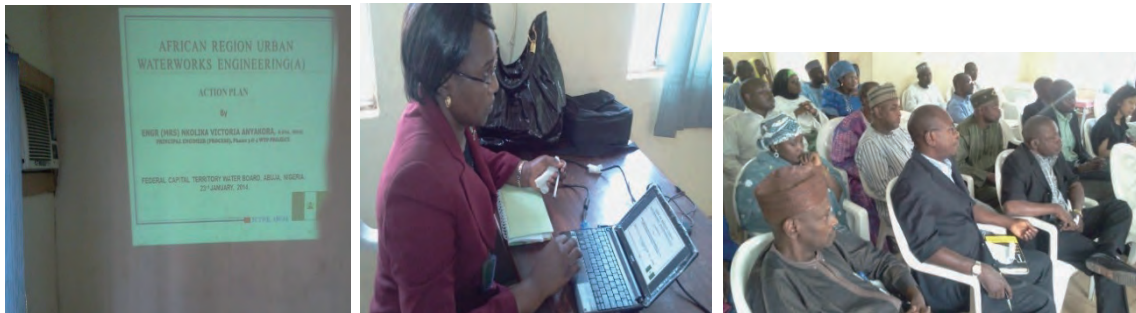
#### 【Examples of Implemented Action Plan】

Participated Training Program: 2013 Project for Human Resources Development for Water Supply

Organization: FCT Water Board, Abuja, Nigeria

1. January 23, 2014

Presentation of the training findings/Action Plan to the Management. JICA Nigeria was also in attendance. At the end of this presentation, the Management approved and encouraged the successful implementation of the Action Plan as presented.



2. March 21, 2014

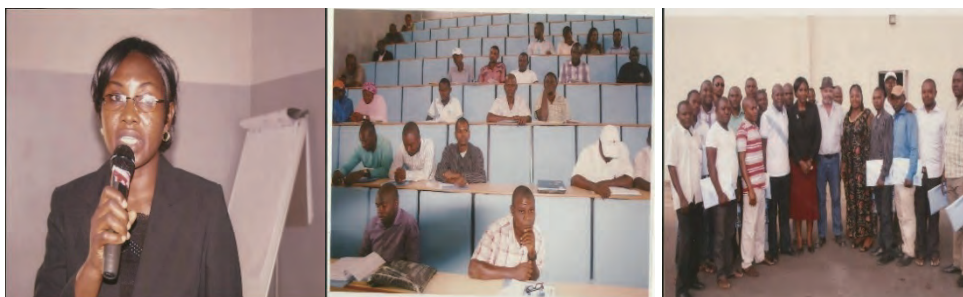
Guest Speaker on JICA Day Celebration in Abuja. The topic was “JAPAN WATER WORKS ENGINEERING: A LESSON FOR NIGERIA.”



3. June 10-11, 2014

2-day In-House Training/Workshop for the Department of Reservoir and Production. The theme of the Training/Workshop was “INTEGRATION OF JAPANESE WATER WORKS ENGINEERING IN FCT WATER BOARD.”

DAY 1: LECTURES



DAY 2: HANDS-ON ACTIVITIES AT THE LOWER USUMA DAM WATER TREATMENT PLANT, ABUJA



1. June 23, 2014

Presentation to the Research Unit on the procedure for drafting Water Safety Plan by using World Health Organization (WHO) Regulations and Japanese method of handling issues of red-water, black water, and solid materials from tap. The Research Unit is working on the development of the Water Safety Plan for the Organization.

2. January 29, 2015

Waterworks awareness training program for Grade 5 students of Holy Rosary International Nursery and Primary School, Abuja, Nigeria.

3. February 20, 2015

Water and Hygiene Education for the Junior Secondary School (JSS1-JSS3) students of the Spiritan International Girls' Secondary School, Sabon Lugbe, Abuja, Nigeria.





4. March 25, 2015

The final report of her Action Plan implementation activities was presented to the management of FCTWB/JICA Nigeria during a Sensitization workshop for Ex-JICA participants. JICA Chief Representative, Mr. Tetsuo Seki, gave the opening remarks.



#### ④ Sharing of Training Outcomes

Table 6 shows the number of lectures and workshops held to share knowledge and skills that former training participants acquired, and the average number of attendees in each event. The average number of lectures/workshops is 7.9, and the average number of attendees is 50.4.

Table 6. Number of Lectures and Workshops Held

	Number of Lectures/Workshops	Average Number of Attendees per Lecture/Workshop
Water Supply	7.9	50.4

Table 7 shows the number of on-the-job training (OJT) events that were implemented to share skills and knowledge, and the number of attendees at each event. The average number of OJT is 4.3 and the average number of attendees is 26.1.

Table 7. Number of OJT Events and Average Attendees per Event

	Number of OJT Events	Average Number of Attendees per Event
Water Supply	4.3	26.1

**【Examples of Implemented Workshops】**

Name of participated training course: Participatory Safe Water Management in Rural Areas in Francophone African Countries

Organization: Office National de l'Eau potable (ONEP), Cote d'Ivoire

1. Dates, Locations and Number of Participants at the Workshops

Workshop Dates	Location	Number of Participants
June 9-10, 2015	Bouaké	80
June 12-13, 2015	Korhogo	72
June 15-16, 2015	Abengourou	105
June 18-19, 2015	Daloa	116

2. Themes of the Workshops

Each workshop consisted of 3 themes. Each workshop location covered the same topics.

- 1) Legislative system and regulations of the drinking water sector
- 2) Funding of the drinking water sector in rural areas
- 3) Management and maintenance of the water infrastructure system in rural areas

3. Photos of the workshop



**【Examples of Other Activities】**

Country	Egypt
Name of Participated Training Course	Non-Revenue Water Management (Leakage Control)
Organization	MENOFIA CO. FOR WATER AND WASTE WATER
Activity Details	Develop training course workshops in leak detection for company engineers and technicians for practical and management purposes; conduct training in water network theory and how to efficiently repair pipes.

Country	Malawi
Name of Participated Training Course	Operation and Maintenance of Urban Water Supply System (Water Distribution and Service) (B)
Organization	Blantyre Water Board
Activity Details	Conduct training with subordinates on the use of leak detection equipment; carry out exercises in several district metered areas within the supply area. The on-the-job training involved leak detection exercises and was conducted with two caretakers, who then trained the rest of the caretakers.

Country	Swaziland
Name of Participated Training Course	Waterworks Engineering
Organization	Department of Water Affairs - Rural Water Supply Branch
Activity Details	On November 18, 2013, a presentation was given on water supply treatment, and comparisons were made regarding its improvements. In most rural water supply projects, Slow Sand Filters are used. The presentation mainly advocated for the transition to rapid filters where possible, and it also touched on the importance of consistent monitoring of the water quality, as opposed to the yearly testing normally conducted.

Country	Nepal
Name of Participated Training Course	Non-Revenue Water Management (Leakage Control)
Organization	Kathmandu Upatyaka Khanepani Limited
Activity Details	Present the concept of non-revenue water and its usefulness for detecting and minimizing leaks, as well as its effectiveness, to counterparts working in the technical and accounting departments.

Country	Myanmar
Name of Participated Training Course	Waterworks Engineering
Organization	Yangon City Development Committee (Water and Sanitation Department), Water Quality Monitoring Section
Activity Details	Set up two laboratories in the department for water quality monitoring

**⑤ Change in Perception of Japan**

Table 8 shows whether participants' perception of Japan and Japanese people changed because of their participation in the trainings. Five-point scale answers are: 5 = Significantly changed, 4 = Somewhat changed, 3 = Neutral, 2 = Did not change much, 1 = Did not change at all. Table 8 shows

the average of the responses, indicating the training participants gave a high score of 4.5 and above in all of the question items: "trust in Japan and the Japanese people has increased", "interest in working with Japanese people has increased", and "gained deeper understanding of Japanese society and culture". Table 9 shows the evaluation of training activities that contributed to the change in their perception of Japanese culture and society on a five-point scale (5 = Much contribution, 4 = Some contribution, 3 Neutral, 2 = Not much contribution, 1=No contribution at all). The average is 4 and above for all activities, indicating that these activities all strongly contributed to the change in participants' perception of Japan.

Table 8. Change in Perception of Japan

Items	Average Score (maximum 5)
1) My trust in Japan and the Japanese people has increased.	4.72
2) My interest in working with Japanese people has increased.	4.81
3) I have gained a deeper understanding of Japanese society and culture.	4.42

Table 9. Activities Contributed to Change in Perception of Japan

Items	Average Score (maximum 5)
1) General orientation	4.22
2) Socializing with home country's training implementation agencies and training coordinators	4.28
3) Participation in cultural and social exchange programs	4.19

## ⑥ Connection with JICA

Regarding the "connection with JICA", as shown in Table 10, the averages are approximately 2 on the five-point scale in each question item. The question item "I participate in JICA's events and training" has the highest average of 2.64, followed by "I participated in a reunion of JICA training participants."

Table 10. Connection with JICA

Items	Average Score (maximum 5)
1) I work as a counterpart for JICA projects or for experts.	2.08
2) I work as a JICA volunteer counterpart.	1.69
3) I consult or contact the JICA office about projects.	2.00
4) I participated in a reunion of JICA training participants.	2.17
5) I participate in events or training programs organized by JICA.	2.64

## ⑦ Alumni Associations

A total of 26 (74.3%) responded that alumni associations have been formed. Figure 2 is a graph showing how often former participants continue to request information about JICA and Japan and how often former participants were engaged in some kind of joint activities. In order to obtain information about JICA and Japan, 3 (8.3%) responded "All the time" or "Frequently". 8 (22.2%) responded "All the time" or "Frequently" for some kind of joint activities with other former participants.

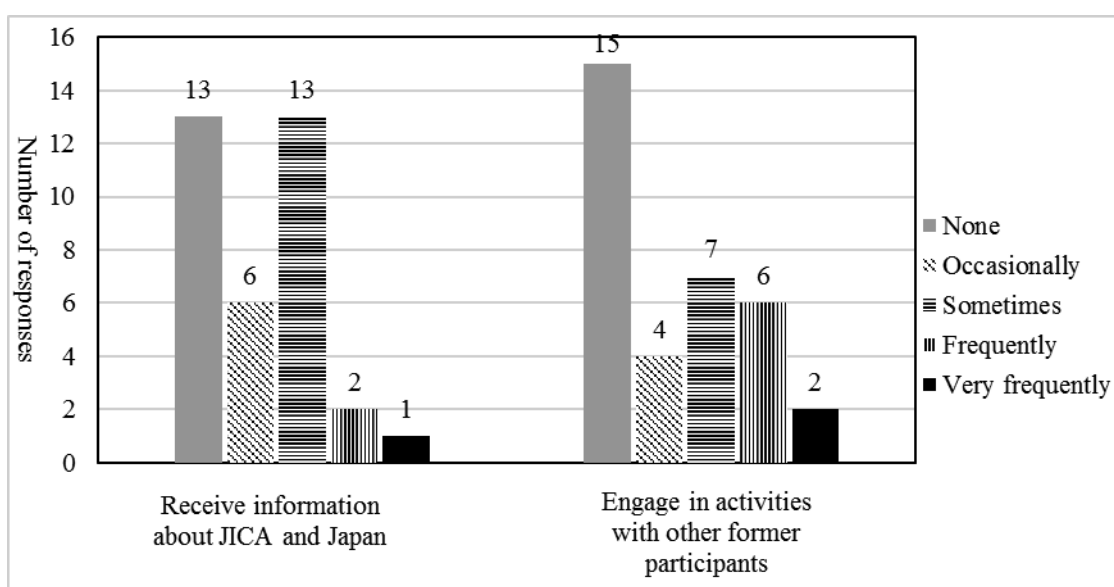


Figure 2. Frequency of Socialization among Former Participants

## (2) The Young Leader Programs

### ① Contributions to Policies, Systems and Structure of One's Organizations

The questionnaire asked former training participants who attended the Young Leader Programs whether they contributed to the following items by using their knowledge and skills acquired through the training. Answers were given using a five-point scale: 5 = Strongly contributed, 4 = Somewhat contributed, 3 = Neutral, 2 = Did not contribute much, 1 = Did not contribute at all. Figure 4 is a graph showing the distribution of their contributions by question item.

- Establishment/improvement of policies and systems by national or local government
- Establishment and improvement of system in one's organizations
- Establishment/improvement of methods and techniques used in one's work
- Project formulation/implementation in one's organization
- Development/improvement/implementation of action plans in one's organization

If "Strongly contributed" and "Contributed" are combined, 76 (60.8%) responded for "Establishment or improvement of policies and systems by national or local governments", 101 (77.7%) for "Establishment and improvement of system in one's organizations", 111 (85.4%) for "Establishment or improvement of methods and techniques used at work", 103 (79.8%) for "Project formulation/implementation in one's organization", 110 (84.6%) for "Development/improvement/implementation of action plans in one's organization".

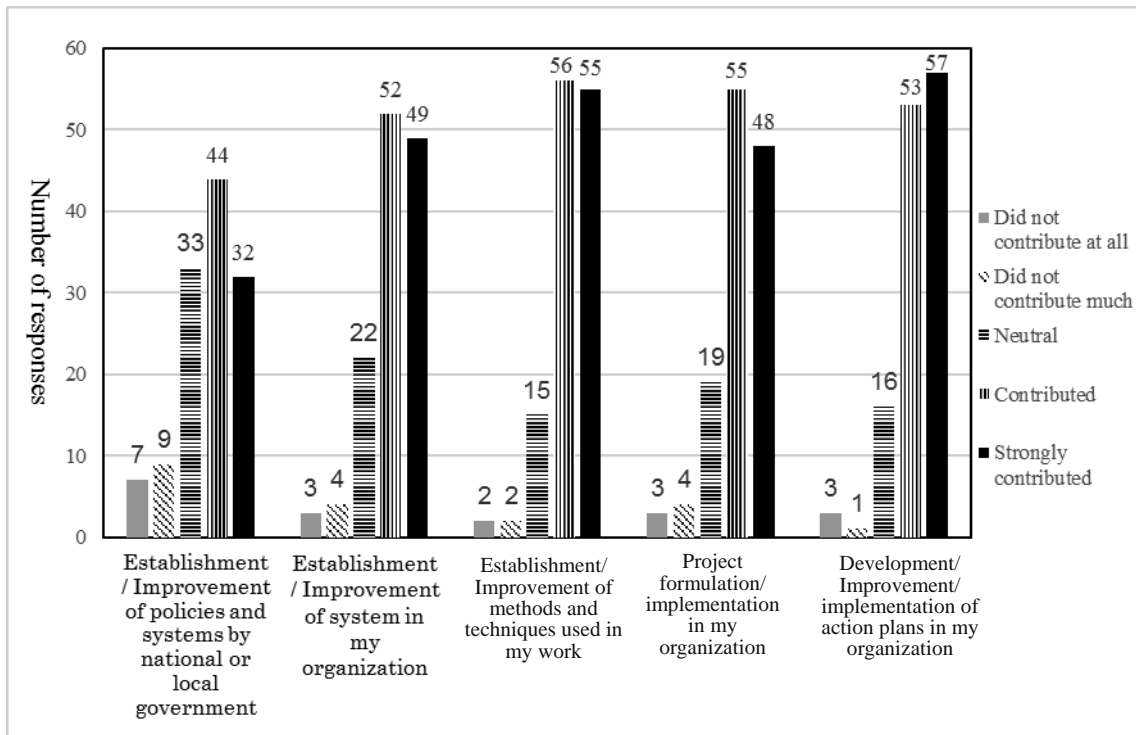


Figure 3. Positive Impacts: Former Young Leader Program Participants' Contributions

## ② Acquisition of Training Contents and Achievement of Training Objectives

The degree of contents learned and goal achievement in percentage are 84.8% and 82.0% respectively.

## ③ Implementation of Action Plans

The respondents who implemented an action plan were 82 (73.9%).

## ④ Sharing of Training Outcomes

Table 11 shows the number of respondents who shared the contents of Young Leader Program inside and outside of the organization.

Table 11. Sharing of the Contents

	Inside of Organization	Outside of Organization
Number of Responses (%)	127 (97.7%)	99 (76.7%)

Table 12 shows the average of the responses regarding the "sharing of knowledge and skills acquired through the training" on a five-point scale. In all question items, the averages are 4 and above; however, the "sharing of knowledge and skills" is higher "within organization" than "outside of organization".

Table 12. Sharing of Knowledge and Skills Acquired through the Training

Items	Average Score (maximum 5)
1) I shared knowledge and skills at one's organization.	4.63
2) I shared knowledge and skills outside of one's organization.	4.10
3) I talk about my Japanese training with other people.	4.39
4) I talk about my impression of Japan with other people.	4.54

### ⑤ Change in Perception of Japan

Table 13 shows whether training participants' perception of Japan and Japanese people changed because they participated in the training. Five-point scale answers are: 5 = Significantly changed, 4 = Somewhat changed, 3 = Neutral, 2 = Did not change much, 1 = Did not change at all. Table 10 shows the average of the responses. The training participants gave a high score of 4.5 and above in all of the question items: "My trust in Japan and the Japanese people has increased", "My interest in working with Japanese people has increased", and "I gained deeper understanding of Japanese society and culture".

Table 14 shows the evaluation of training activities that contributed to the change in their perception of Japanese culture and society on a five-point scale. Five-point scale answers are: 5 = Much contribution, 4 = Some contribution, 3 Neutral, 2 = Not much contribution, 1=No contribution at all. The average is 4 and above for all activities, indicating these activities significantly contributed to the change in their perception of Japan.



Table 13. Change in Perception of Japan

Items	Average Score (maximum 5)
1) My trust in Japan and the Japanese people has increased.	4.72
2) My interest in working with Japanese people has increased.	4.71
3) I have gained a deeper understanding of Japanese society and everyday life.	4.51
4) I have gained a deeper understanding of Japanese tradition and culture.	4.42

Table 14. Activities Contributed to Change in Perception of Japan

Items	Average Score (maximum 5)
1) General orientation	4.43
2) Socializing with home country's training organizations and training coordinators	4.42
3) Field visit	4.60

#### ⑥ Interaction with Japanese People whom Training Participants Met during the Training.

Regarding "interaction with Japanese met during the training", as shown in Table 15, the averages are relatively low. Table 16 shows the respondents' purposes to interact, mostly "to discuss what is going on in each other's' lives" (80.6%), followed by "to obtain or exchange latest Japanese news" (74.2%).

Table 15. Frequency of interaction with Japanese people met during the training

Items	Average Score (maximum 5)
1) Host family	2.77
2) Japanese volunteers met through the training and language programs	2.23
3) Training coordinators and staff members	2.88

Table 16. Reasons for Interacting with Japanese

Items	Number of Responses (%)
1) To exchange personal updates	100 (80.6)
2) To exchange or gather new information on Japan	92 (74.2)
3) To seek advice about my work	64 (51.6)

#### ⑦ Connection with JICA

Regarding the "connection with JICA", as shown in Table 17, the averages are approximately 2 on the five-point scale in each question item. The question item "I participate in JICA's events and

training" has the highest average of 2.16, followed by "I consult or contact the JICA office about projects".

Table 17. Connection with JICA

Items	Average Score (maximum 5)
1) I work as a counterpart for JICA projects or for experts.	1.78
2) I work as a JICA volunteer counterpart.	1.65
3) I consult or contact the JICA office about projects.	1.87
4) I participate in events or training programs organized by JICA.	2.16
5) I teach Japanese language and culture in my home county.	1.37
6) I collaborate with Japanese in projects.	1.41
7) I participate in Japanese exchange programs.	1.64

### ⑧ Alumni Associations

104 (81.9%) responded that alumni associations have been formed. Figure 4 is a graph showing how well and often former participants are socializing. In order to obtain information about JICA and Japan, 39 (31.7%) responded "Very frequently" or "Frequently". 33 (27.0%) responded "Very frequently" or "Frequently" for some kind of activities.

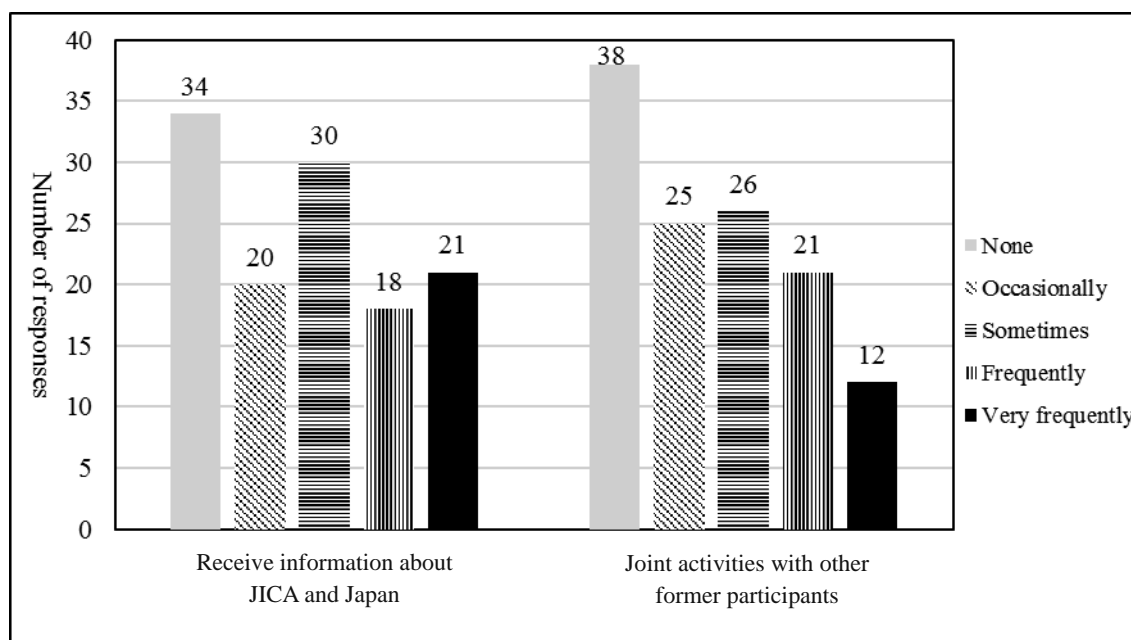


Figure 4. Frequency of Socialization among Former Participants

## 2-2. Analyses of Complete Count Questionnaire Survey

### (1) The Thematic Programs (Water Supply)

#### ① Survey Results Regarding Training Contents and Systems

##### 1) Motivation to Participate in the Training

In order to find out the training participants' motivation to participate, the participants were asked how strongly they agree with the sentences of Table 18 by rating answers on a five-point scale: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree. Both "I was interested in the contents of the training" and "I needed new knowledge and skills in performing my job" scored 4.5 and above, indicating these factors were important as motivations.

Table 18. Motivation to Participate in the Training

Items	Average Score (maximum 5)
1) I was interested in the contents of the training.	4.71
2) I needed new knowledge and skills in performing my job.	4.67
3) I was interested in coming to Japan.	4.23
4) My supervisor advised me to participate in the Training.	3.97
5) I had specific assignments and/or missions from my organization.	4.06

### 2) Evaluation of the Training

#### a. Evaluation of Training Contents

In order to evaluate the training contents, the participants were asked how strongly they agree with the sentences of Table 19 and answers were given by rating answers on a five-point scale: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree. Table 19 shows the average scores in the field of water supply. All items scored high, above 4.

Table 19. Evaluation of Training Contents

Items	Average Score (maximum 5)
1) The training contents matched the needs of my job assignments.	4.60
2) The training contents matched my organization's needs.	4.74
3) The training contents matched my country's needs.	4.48
4) The training contents covered new knowledge and skills.	4.58
5) The training contents were practical.	4.39
6) The knowledge and skills I learned in the training are relevant even today.	4.69
7) The training contents were useful especially because they are based on Japan's own experience.	4.26

#### **b. Evaluation of Methods and Efficiency of the Training**

In order to evaluate the training methods and efficiency, the participants were asked how strongly they agree with the following sentences and answers were given to the following questions by rating answers on a five-point scale: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree. Table 20 shows the average scores in the field of water supply. All items scored high, above 4.

The score of one item is particularly notable: (No. 7, Table 20) "Discussion with other participants from different countries was not useful because we face different problems". This result will highlight the fact that discussions with other participants are not necessarily useful if they face different problems depending on their home countries and regions. The combination of "Strongly agree" and "Agree" was 7 (20.6%), and the combination of "Disagree" and "Strongly disagree" was 23 (67.6%). It is clear that about 20% of the training participants face different problems, responding that discussions are not useful. One fifth of the total number of respondents is not necessarily a large number and the majority of respondents disagree or strongly disagree with this statement; however, it indicates that it might be more effective to form a group of training participants facing similar issues in order to improve the quality of the training.

Table 20. Evaluation of Methods and Efficiency of Training

Items	Average Score (maximum 5)
1) Lecturers ensured the participants understand the contents.	4.71
2) The discussions among the participants were helpful to deepen the understanding of the contents.	4.69
3) Instructions in practical training and field visits were effective to deepen my understanding of the training contents.	4.88
4) The training was conducted according to the schedule.	4.94
5) The training was implemented efficiently for achieving its goals.	4.62
6) The training contents were covered according to the original plan.	4.88
7) Discussion with other participants from different countries was not useful because we face different problems.	2.26

### c. Evaluation of Training

On a 10-point scale (0 = Extremely bad ~ 10 = Extremely good), the former training participants averaged 8.53 for assessment of “the training as a whole”, and 8 and above for all other items, giving high evaluations overall for their training. However, the evaluation for “Daily allowance” and “Meal” is relatively lower than other items. (See Table 21)

Table 21. Evaluation of Training

Items	Average Score (maximum 10)
1) The Training as a whole	8.53
2) General orientation on the culture of Japan	8.02
3) Performance of coordinators and staff	8.97
4) Workshops	8.44
5) Practical training and field visits	8.64
6) Lectures	8.53
7) Discussions among other training participants	8.33
8) Accommodation	8.94
9) Daily allowance	7.47
10) Meal	7.83

In order to specify factors shown in Table 21 that influenced the "evaluation of the training as a whole", a multiple linear regression analysis was conducted. (See Table 22) In multiple linear regression analysis, numerical values with asterisk(s) are believed to be valuable statistically. Factors with asterisk(s) are interpreted to be influential.

The multiple linear regression analysis shows the overall evaluation of the training was higher when the training participants valued "Workshops" and "Lectures", compared to when the training participants did not value those factors.

Adjusted coefficient of determination ranges between 0 and 1. The closer a number is to 1, the more convincing its explanation of a factor included in the analysis. In Table 22, adjusted coefficient of determination is 0.746, indicating the factors included in the analysis are mostly relevant.

Table 22. Multiple Linear Regression Analysis Regarding Overall Evaluation of Training

Factors	Water Supply
General orientation on culture of Japan	0.032
Performance of coordinators and staff	0.143
Workshops	0.415***
Practical training and field visits	0.031
Lectures	0.235*
Discussions among participants	-0.070
Accommodation	0.096
Daily allowance	0.074
Meal	0.026
Adjusted coefficient of determination	0.746

\*\*\* significant difference at 1% level; \*\* significant difference at 5% level; \* significant difference at 10% level

#### d. Comparison with Training Programs of Other Organizations

Regarding "participation in other organizations' training programs", 4 (11.1%) participated in ADB training programs, and 3 (8.3%) participated in UNDP training programs.

Organization	ADB	AOTS	APO	JETRO	KOICA	UNIDO	UNDP	Other
Number of participants	4	1	0	0	1	1	3	10

Table 23 shows the comparison between JICA's training programs and those of other organizations. The JICA training program is highly evaluated, but the evaluation of treatment factors is not as high as for the training program.

Table 23. Comparison with Training Programs of Other Organizations

Items	Number of Responses Agreed (%)
1) My learning experience by JICA training was more useful than that from other training programs.	27 (93.1)
3) The treatment factors (accommodation, meal, daily allowance etc.) of JICA training program is better than that of other training programs.	11 (52.4)

According to free answer questions, the following treatment factors should be improved.

- Daily allowance (5 responses)
- Meal (3 responses)

## ② Analyses of Factors Facilitating Positive Impacts

### 1) Factors Facilitating or Constraining Positive Impacts

This time, two new questions were added regarding the factors facilitating and constraining positive impacts of the training program.

1. Are there any other factors that are not acknowledged on the questionnaire?
2. Which is the most important factor?

Besides the choices on the questionnaire, two new factors are mentioned by more than two respondents.

- Support by local/central government (2 respondents)
- Time and/or manpower (3 respondents)

As the most important factor, “Applicability of knowledge and skills” was selected most, by 13 respondents, followed by “Availability of budget” (10 respondents), and “Support from my supervisors/colleagues” (9 respondents). “Availability of necessary equipment/facilities” is as relevant as other factors.

Table 24. The Most Relevant Factor for Facilitating /Constraining Training Outcomes

Factors	Number of Responses
Availability of necessary equipment/facilities	4
Availability of budget	10
Support from my supervisors/colleagues	9
Applicability of Knowledge and skills I learned in the Training	13
Other	1

(The total number of responses is more than 36 because one respondent chose two factors.)

## 2) Factors Facilitating Capacity Development of Former Training Participants (Acquisition of Training Contents)

Table 25 shows the results of multiple linear regression analysis of factors that influence the acquisition level of training contents. The participants learned the training contents better if they are "Relevant to the present job". On the contrary, "Practicality of the training" does not influence the acquisition level.

Table 25. Multiple Linear Regression Analysis of Acquisition Level of Training Contents

Factors	Water Supply
Level of interest about the training contents	1.996
Training contents matches the needs of the participant's job assignments	-6.43**
Training contents matches the needs of the participant's organization	7.45**
Practicality of the training	-0.39**
Relevance to the present job	13.152***
Adjusted coefficient of determination	0.444

\*\*\* significant difference at 1% level; \*\* significant difference at 5% level; \* significant difference at 10%.

## 3) Factors Facilitating or Constraining Action Plan Implementation

The training participants were asked if "availability of equipment/facilities", "budget", "support from supervisors and colleagues", "applicability of knowledge and skills learned through the training" can be factor(s) for implementing or not implementing an action plan.

This time, two new questions were added about the factors facilitating and constraining action plan implementation.

1. Are there any other factors besides the choices on the questionnaire?
2. Which is the most important factor?

As a factor for being able to implement a plan, "equipment and facilities" and "applicability of acquired knowledge and skills" were selected most, 19 (95.0%). As for factors contributing to being unable to implement an action plan, 14 (87.5%) indicated not enough "budget". (See Table 26)



Table 26. Factors for Action Plan Implemented or Not Implemented

Factors	Factors for Action Plan Implemented	Factors for Action Plan Not Implemented
Equipment/facilities	19(95.0)	12(75.0)
Budget	15(75.0)	14(87.5)
Support	18(90.0)	10(62.5)
Applicability	19(95.0)	11(68.8)

Table 27. The Most Relevant Factor for Action Plan Implemented or Not Implemented

Factors	Number of Respondents
Availability of necessary equipment/facilities	2
Availability of budget	12
Support from my supervisors/colleagues	10
Applicability of Knowledge and skills I learned in the Training	8
Other	3

(The total number of responses are more than 36 because one respondent chose two factors.)

Besides the choices on the questionnaire, the following factors are mentioned by respondents.

- Support by local/central government (1 respondent)
- The amount of time that can be devoted to the action plan (1 respondent)
- The training of other staff for implementing the action plan (1 respondent)
- The consistency between the action plan and national policy (1 respondent)
- Degree of recognition among people (1 respondent)

#### 4) Follow-up Support

In the questionnaire, the participants were asked how useful JICA's follow-up support would be, such as dispatching experts, to sustain and develop their acquired knowledge and skills after the training. Answers were given using a five-point scale: 5 = Very useful, 4 = Useful, 3 = Neutral, 2 = Not useful, 1 = Not useful at all. Table 28 shows the average of the responses expressing the level of "usefulness" using the five-point scale. The results indicate that almost all types of follow-up support are useful, especially "support for implementation of projects", "Provision of equipment and materials", and "support for organizing lectures".

Table 28. Possible Follow-up Support and Its Usefulness

Items	Average Score (maximum 5)
1) Monitoring/support for implementing action plan prepared in the training	4.47
2) Support for organizing lectures and training sessions	4.17
3) Dispatch of Japanese technical experts	4.03
4) Dispatch of Japanese volunteers	3.77
5) Support of implementation of projects	4.39
6) Provision of equipment and materials	4.26

This time, two new questions were added about the factors facilitating and constraining action plan implementation.

1. Are there any other factors besides the choices on the questionnaire?
2. Which is the most important factor?

Concerning other factors, besides the choices on the questionnaire, “support by budget and equipment” is mentioned.

As for the most important factor, “Monitoring/support for implementing action plan prepared in the training” was selected most, 11 (31.4%) followed by “Support of implementation of projects”, 9 (25.7%). These results are supported by the evaluation results of follow-up’s usefulness by type indicated in Table 28.

Table 29. The Most Important Follow-up Support

Items	Number of Respondents (%)
1) Monitoring/support for implementing action plan prepared in the training	11 (31.4)
2) Support for organizing lectures and training sessions	5 (14.3)
3) Dispatch of Japanese technical experts	3 (8.6)
4) Dispatch of Japanese volunteers	2 (5.7)
5) Support of implementation of projects	9 (25.7)
6) Provision of equipment and materials	4 (11.4)
7) Other	1 (2.9)

### ③ Survey Results regarding Former Participants’ Behavior Changes upon Returning to Home Countries

The impacts of the training were evident in the changes of the participants' attitudes. In the questionnaire, former participants were asked the following questions about changes in their attitudes.

- a. The training strengthened my awareness on the topic of the training.
- b. I have a stronger sense of responsibility for my work.
- c. I have become more conscious of working with my colleagues in a collaborative manner.
- d. I am more motivated to undertake activities that contribute to my country's development.
- e. I see my country's situations from an international perspective.

Figure 5 indicates the degree to which the former participants' behavior and attitude changed.

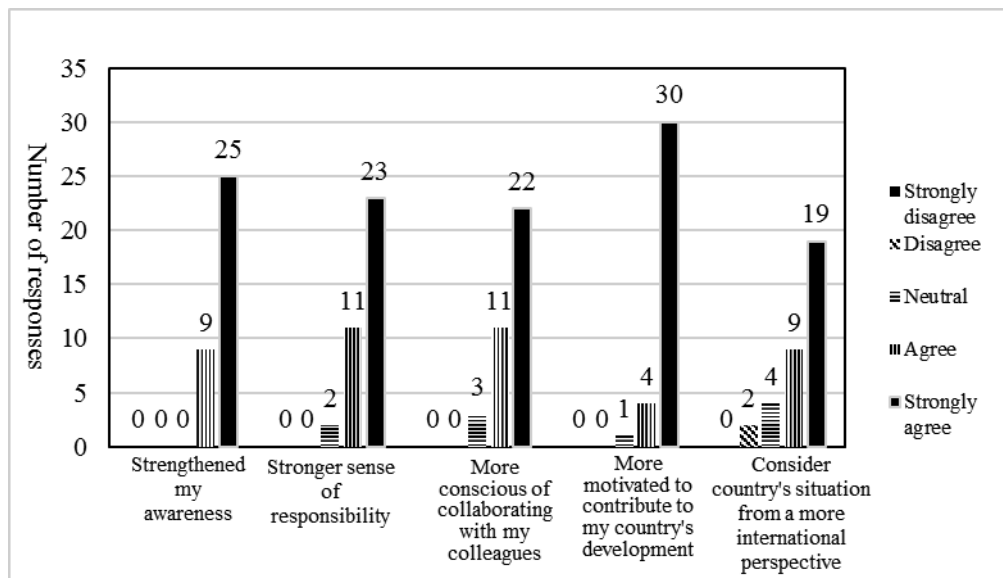


Figure 5. Positive Impacts: Changes in Training Participants' Behavior and Attitude

Regarding attitude change, approximately 90% of the former participants responded "Significantly improved" or "Improved" to all question items. Especially, regarding awareness of topics in the respective training fields, 100% of the participants responded "Significantly improved" or "Improved", indicating the training contributed to their enhanced awareness of the importance of their field. (See Table 30) These results suggest that, by participating in the training, the participants enhanced their "awareness of topics in the training field", "sense of responsibility for work", "attitude to collaborate with colleagues". Further, they now "understand their countries' situations from an international perspective" and can contribute to the development of their countries.

Table 30. Summary of the Number of Former Participants Who Responded that Their Attitude “Significantly Improved” or “Improved”

Items	Number of Responses (%)
1) The training strengthened my awareness on the topic of the training.	34 (100.0)
2) I have a stronger sense of responsibility for my work.	34 (94.4)
3) I have become more conscious of working with my colleagues in a collaborative manner.	33 (91.7)
4) I am more motivated to undertake activities that contribute to my country's development.	34 (97.1)
5) I see my country's situations from an international perspective	28 (82.4)

In the survey, the participants were asked if and how much the following items apply to their situations in order to assess the kinds of changes that resulted at their work place as positive impacts of the training.

- a. I am assigned to more important work.
- b. I have been promoted.

As shown in Figure 6, 24 (68.6%) responded "I am assigned to more important work". 15 (44.1%) were promoted.

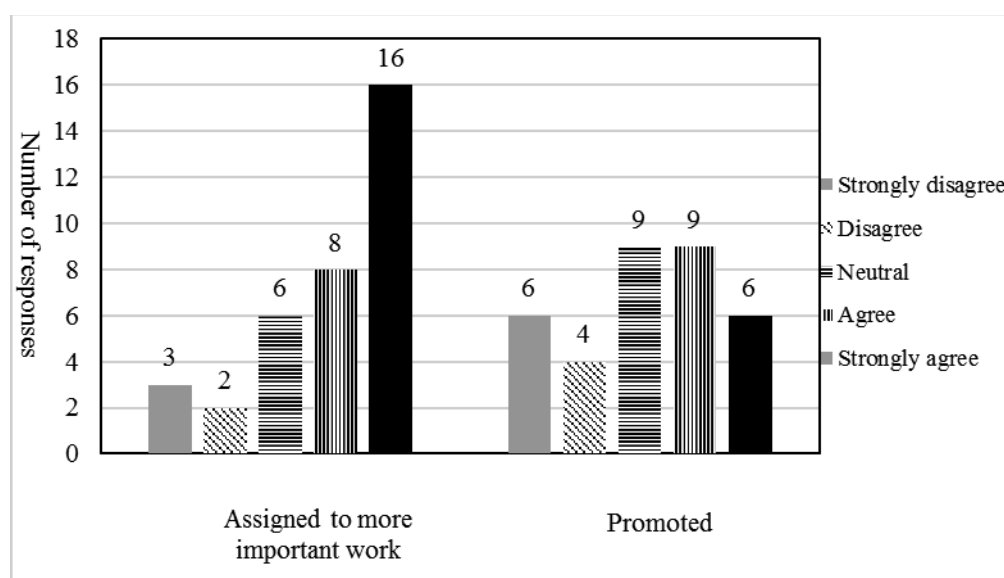


Figure 6. Changes in Former Participants' Workplace Situations

Table 31 shows the results of multiple linear regression analysis, attempting to specify factors that influenced changes in attitude. The multiple linear regression analysis results indicate "one's awareness of the topic of training contents" show that the participants' awareness of topics were

enhanced when "high evaluation of the overall training" are applicable as opposed to when they are not.

The multiple linear regression analysis results regarding "sense of responsibility for one's work" show that the participants' sense of responsibility improved when "high evaluation of practical training/field visits " and "training contents match their needs of job assignments" are applicable as opposed to when they are not.

The multiple linear regression analysis results regarding "attitude to collaborate with their colleagues" show that the participants are more willing to collaborate with their colleagues when "high evaluation of practical training/field visits" and "high evaluation of the training as a whole" are applicable as opposed to when they are not.

The multiple linear regression analysis results regarding "motivation for contributing to the development of one's country" show that the participants are more motivated to contribute to the development of their countries when "training contents match the needs of one's job assignments ", and "high evaluation of practical training/field visits " are applicable as opposed to when they are not.

The multiple linear regression analysis results regarding "grasp of one's own countries' situation from an international perspective" show that the participants have better understanding of their own countries' situation from an international perspective when "high evaluation of the training as a whole" and "high evaluation of practical training/field visits " are applicable as opposed to when they are not.

Coefficient of determination ranges between 0.232 and 0.094, which are rather low. This, however, might be caused by reasons, such as factors that should be included in the analysis are not included.

Table 31. Factors Influencing Changes in Attitude

Factors	Awareness of topics in the training fields	Sense of responsibility for one's work	Attitude to collaborate with one's colleagues	Motivation for contributing to the development of one's country	Grasp of one's own countries' situation from an international perspective
Interest in one's training contents	0.038	0.030	0.115	-0.230	-0.471
Training contents match the needs of one's job assignments	0.114	0.214	0.009	0.273	-0.316
Training contents match the needs of a participant's organization	0.080	-0.402*	-0.127	-0.173	-0.248
Level of knowledge and skills learning	-0.004	0.031*	0.018	0.014	0.022
Evaluation of workshops	-0.011	0.029	-0.015	0.001	-0.022
Evaluation of practical training/field visits	-0.0009	0.259	0.134	0.151	0.391
Evaluation of lectures	-0.137	-0.03	0.090	-0.0006	-0.150
Evaluation of discussions among participants	-0.003	0.014	0.001	-0.043	-0.357
The Training as a whole	0.338**	0.005	0.117	0.103	0.446
Adjusted coefficient of determination	0.100	0.232	0.151	0.094	0.120

\*\*\* significant difference at 1% level; \*\* significant difference at 5% level; \* significant difference at 10% level.

#### ④ Improvements that Further Enhance Training Programs

This time, we added a free-answer question: “To make JICA training program even better, what should be improved?” The answers, which come from more than two respondents, are as follows:

- a. Extension of training period (4 respondents)
- b. Follow-up after the training (3 respondents)

As to the follow-up after the training, the following activities are mentioned:

- Confirm whether the proposed action plan has been implemented
- Conduct refresher training a few years following the first training

#### (2) The Young Leader Programs

##### ① Survey Results regarding Training Contents and Systems

##### 1) Motivation to Participate in the Training

In order to reveal the motivations of the training participants who attended the Young Leader Programs, they rated how strongly they agree with the following sentences by rating answers on a five-point scale: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree.

Both "I was interested in the contents of the training" and "I was interested in coming to Japan" scored above 4.5, indicating these factors as the most popular motivations. (See Table 32)

Table 32. Motivation to Participate in the Training

Items	Average Score (maximum 5)
1) I was interested in the contents of the Training.	4.81
2) I was interested in coming to Japan.	4.60
3) My supervisor advised me to participate in the Training.	3.82
4) My colleagues and/or friends advised me to participate in the Training.	3.57

## 2) Evaluation of the Training

### a. Evaluation of Training Contents

In order to evaluate the training contents, the participants were asked how strongly they agree with the following sentences by rating answers on a five-point scale: 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree. Table 33 shows the averaged responses, scoring 4.38 or above for all items. (See Table 33)

Table 33. Evaluation of Training Contents

Items	Average Score (maximum 5)
1) The training contents matched the needs of my job assignments.	4.48
2) The training contents matched my organization's needs.	4.41
3) The training contents covered new knowledge and skills.	4.53
4) The training contents were practical.	4.41
5) The training curriculum was properly designed to achieve the goals.	4.38
6) The training was conducted according to the schedule.	4.73
7) The training was implemented efficiently for achieving its goals.	4.59
8) The training contents were covered according to the original plan.	4.70
9) The knowledge and skills I learned in the training are relevant even today.	4.42

### b. Evaluation of Training Curriculum

On a 10-point scale (0 = Extremely bad ~ 10 = Extremely good), the former training participants averaged 8.94 for “the training as a whole”, and above 8 for all items, receiving high evaluations overall. However, the evaluation of “Daily allowance” and “Meal” is not as high as other items. (See Table 34)

Table 34. Evaluation of Training

Evaluation Items	Average Score (maximum 10)
1) The Training as a whole	8.94
2) General orientation on culture of Japan	8.89
3) Accommodation	9.15
4) Performance of coordinators and staff	9.18
5) Interactions with Japanese people	8.61
6) Interactions with other training participants	8.90
7) Lectures	8.71
8) Practical training and field visits	8.97
9) Homestay*	8.75
10) Daily allowance	8.01
11) Meal	7.98

\*Not all training programs have Homestay.

In order to specify factors that influenced the "evaluation of the training as a whole" in the Young Leader Programs, multiple linear regression analysis was conducted. (See Table 35) The results show that the overall evaluation of the training was higher when the training participants valued "general orientation on the culture of Japan", "performance of coordinators and staff", "lectures" and "meal", compared to when the training participants did not value those factors.



Table 35. Multiple Linear Regression Analysis of Evaluation of Training in General

Factors	Coefficients
General orientation on culture of Japan	0.104*
Accommodation	0.052
Performance of coordinators and staff	0.199***
Interactions with Japanese people	0.019
Interactions with other training participants	0.028
Lectures	0.245***
Practical training and field visits	0.022
Homestay	0.049
Daily allowance	0.001
Meal	0.179***
Adjusted coefficient of determination	0.714

\*\*\* significant difference at 1% level; \*\* significant difference at 5% level; \* significant difference at 10% level.

### c. Comparison with Training Programs of Other Organizations

The cumulative total number of people who participated in other organizations' training programs was 66. Comparing the evaluation of JICA training program and that of the treatment factors, the evaluation of treatment factors is not as high as that of the training program overall.

Organization	ADB	AOTS	APO	JETRO	KOICA	UNIDO	UNDP	Other
Number of participants	8	3	2	2	8	4	15	24

Table 36. Comparison with Training Programs of Other Organizations

Items	Number of Responses (%)
1) My learning experience by JICA training was more useful than that from other training programs.	62 (68.1)
3) The treatment factors (accommodation, meal, daily allowance etc.) of JICA training program is better than that of other training programs.	57 (63.3)

According to a free-answer question, the following treatment factors should be improved.

- Daily allowance (7 responses)
- Meal (4 responses)

## ② Analyses of Factors Facilitating Positive Impacts

### 1) Contributions

According to the multiple linear regression analysis of the participants' contributions to items, such as "establishment/improvement of policies and systems" and "implementation of projects using acquired knowledge and skills", statistically significant factors that influence whether the participants were able to contribute or not are "applicability of acquired knowledge and skills", "support from supervisors/colleagues", availabilities of "equipment/ facilities" and "budget". (See Table 37)

Adjusted coefficients of determination are high, ranging from 0.017 and 0.059. This explains that "applicability of knowledge and skills", "support from supervisors/colleagues", "equipment /facilities", "budget" are essentially the relevant factors.

Table 37. Multiple Linear Regression Analysis of Contributions

Factors	Establishment/ improvement of policies and systems by national or local government	Establishment / improvement of system in one's organization	Establishment /improvement of methods and techniques used in one's work	Project formulation/ implementat ion in one's organization	Developmen t/ improvement of action plans in one's organization
Equipment/ facilities	0.376	0.144	0.219	0.093	0.080
Budget	0.150	-0.244	-0.246	0.075	-0.154
Support from supervisors/ colleagues	0.482	0.420	0.236	0.456*	0.704***
Applicability of acquired knowledge/ski lls	0.152	0.593**	0.356	0.249	0.090
Adjusted coefficient of determination	0.054	0.059	0.018	0.017	0.052

\*\*\* significant difference at 1% level; \*\* significant difference at 5% level;

\* significant difference at 10% level.

The answers to the questionnaire also show that "Applicability of acquired knowledge/skills" and "Support from supervisors/colleagues" are important factors. Of the respondents, 114 (89%) answered that "Applicability of acquired knowledge/skills" is important, and 109 (85%) respondents emphasize "Support from supervisors/colleagues". As for the most important factor, "Applicability of acquired knowledge/skills" has the most respondents: 57 (45%).

## 2) Acquisition of Training Contents

Table 34 shows multiple linear regression analysis of acquisition of knowledge and skills. The results indicate the participants achieved a higher level of learning when "training contents matched the needs of their organizations", "The knowledge and skills I learned in the training are relevant at present", and their evaluation of "lectures" were higher, compared to those participants who did not have these. (See Table 38)

Coefficient of determination is 0.229, which is rather low. This, however, might be caused by reasons, such as the exclusion of factors that should be included in the analysis.

Table 38. Multiple Linear Regression Analysis of Acquisition of Training Contents

Factors	Coefficients
Training contents matches the needs of the participant's organization	-2.427
Training was implemented according to the schedule	4.065*
Training contents were covered according to the original plan	-1.198
The knowledge and skills I learned in the training are relevant at present	4.946***
Lectures	3.232***
Practical training and field visits	0.821
Adjusted coefficient of determination	0.229

\*\*\* significant difference at 1% level; \*\* significant difference at 5% level; \* significant difference at 10% level.

## 3) Factors Facilitating and Constraining Action Plan Implementation

The training participants were asked if "availability of equipment/facilities", "budget", "support from supervisors and colleagues", and "applicability of knowledge and skills learned through the training" can be factor(s) for implementing or not implementing an action plan.

This year, two new questions were added about the factors facilitating and constraining action plan implementation.

1. Are there any other factors besides the choices on the questionnaire?
2. Which is the most important factor?

As a factor for being able to implement a plan, "applicability of acquired knowledge and skills" was selected most, 69 (84.1%). As for factors contributing to being unable to implement an action plan, 23 (79.3%) indicated not enough "budget" and "support from supervisors and colleagues". (See Table 39)

Table 39. Factors for Action Plan Implemented or Not Implemented

Factors	Factors for Action Plan Implemented	Factors for Action Plan Not Implemented
Equipment/Facilities	58 (70.7)	21 (72.4)
Budget	52 (63.4)	23 (79.3)
Support	67 (81.7)	23 (79.3)
Applicability	69 (84.1)	22 (75.9)

Table 40. The Most Relevant Factor for Action Plan Implemented or Not Implemented

Factors	Number of Responses
Availability of necessary equipment/facilities	13
Availability of budget	27
Support from my supervisors/colleagues	29
Applicability of Knowledge and skills I learned in the Training	44
Other	10

Besides the choices on the questionnaire, the following factors are mentioned by respondents.

- Time (1 respondent)
- The culture of organization which a respondent belongs to (1 respondent)
- Job authority which a respondent has (1 respondent)

### ③ Follow-up Support

In the questionnaire, the participants were asked how useful JICA's follow-up support would be, such as dispatching experts to sustain and develop their acquired knowledge and skills after the training. Answers were given using a five-point scale: 5 = Very useful, 4 = Useful, 3 = Neutral, 2 = Not useful, 1 = Not useful at all. Table 41 shows the average of the responses expressing the level of "usefulness" using the five-point scale. The results indicate that almost all types of follow-up support are useful, especially "support for implementation of projects", "provision of equipment and materials", "dispatch of Japanese technical experts", and "support for organizing lectures".

Table 41. Possible Follow-up Support and Its Usefulness

Items	Average Score (maximum 5)
1) Monitoring/support for implementing action plan prepared in the training	4.07
2) Support for organizing lectures and training sessions	4.20
3) Dispatch of Japanese technical experts	4.21
4) Dispatch of Japanese volunteers	4.09
5) Support of implementation of projects	4.26
6) Provision of equipment and materials	4.16

This time, two new questions were added about the factors facilitating and constraining action plan implementation.

- a. Are there any other factors besides the choices on the questionnaire?
- b. Which is the most important factor?

Concerning factors other than those acknowledged on the questionnaire, “Support by budget and equipment” is mentioned, although it is included in the choices of the questionnaire.

As for the most important follow-up factor, “Support of implementation of projects” was selected most, 34 times (27.4%). (See Table 42) These results are supported by the evaluation results of follow-up’s usefulness by type (indicated in Table 41).

Table 42. The Most Important Follow-up Support

Items	Number of Respondents (%)
1) Monitoring/support for implementing action plan prepared in the training	13 (10.5)
2) Support for organizing lectures and training sessions	17 (13.7)
3) Dispatch of Japanese technical experts	28 (22.6)
4) Dispatch of Japanese volunteers	8 (6.5)
5) Support of implementation of projects	34 (27.4)
6) Provision of equipment and materials	15 (12.1)
7) Other	9 (7.3)

#### ④ Survey Results Regarding Former Participant's Behavior Changes upon Returning to Home Countries

In the questionnaire, former participants were asked the following questions about changes in their attitudes.

- a. The training strengthened my awareness on the topic of the training.
- b. I perform my work duties more efficiently and effectively.
- c. I am more motivated to undertake activities that contribute to my country's development.
- d. I now understand my own countries’ situation from an international perspective.

Figure 7 shows the degree of changes in former participants who attended the Young Leader Programs. In all areas, 90% or more answered that they improved. In particular, 98.5% said their awareness of issues in their respective training fields was enhanced, and 95.3% said they are more motivated to contribute to the development of their own countries.

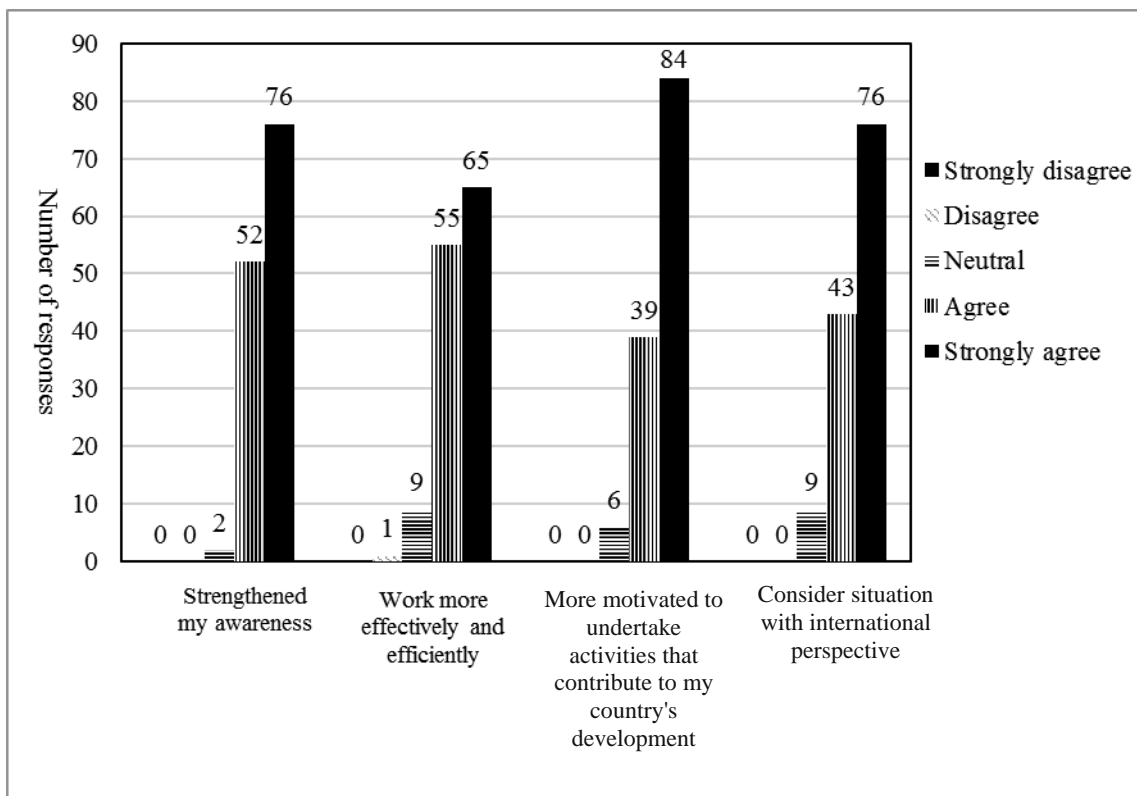


Figure 7. Positive Impacts: Changes in Training Participants' Behavior and Attitude

As shown in Figure 8, 107 (83.0%) responded that they were assigned with more important tasks, suggesting the participants are using what they learned through the training at their work.

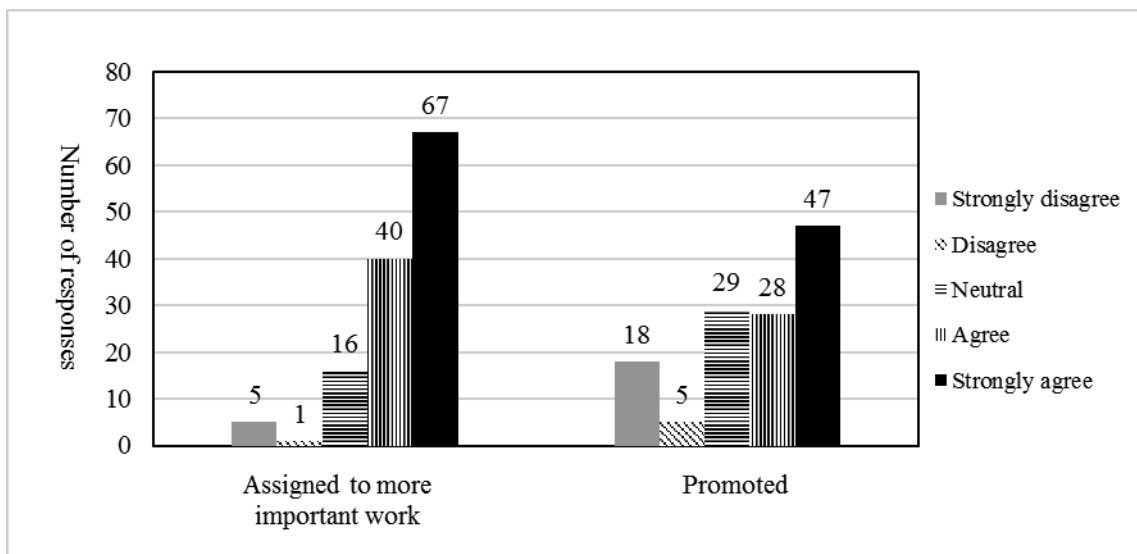


Figure 8. Changes in Former Participants' Situations

The multiple linear regression analysis results regarding "one's awareness of topics in the respective training fields" show that the participants' awareness of topics were enhanced when "training contents match the needs of their organization's needs" and "high overall evaluation" are applicable as opposed to when they are not. (See Table 43)

The multiple linear regression analysis results regarding "effective and efficient work performance" show that the participants are more conscious about working effectively and efficiently when "training contents match the needs of their organization's needs" and "high evaluation of lectures" are applicable as opposed to when they are not.

The multiple linear regression analysis results regarding "motivation for contributing to the development of one's country" show that the participants are more motivated to contribute to the development of their countries when "training contents match the needs of their organization's needs" is applicable as opposed to when it is not.

The multiple linear regression analysis results regarding "grasp of one's own country's situation from an international perspective" show that the participants are able to grasp their own countries' situations from an international perspective when "training contents match the needs of their organization's needs" and "high overall evaluation" are applicable as opposed to when they are not. (See Table 43)

Table 43. Multiple Linear Regression Analysis of Changes in Attitude

Factors	Awareness of topics in the respective training fields	Effective and efficient performance of work duties	Motivation for contributing to the development of one's country	Grasp of one's own countries' situation from an international perspective
Training contents match the needs of one's organization's needs	0.142**	0.164**	0.178***	0.237***
Acquisition rate of training contents	0.002	0.006	0.006	0.001
Evaluation of lectures	-0.002	0.120	0.034	0.038
Evaluation of practical training/field visits	-0.063	0.032	0.031	0.014
Overall evaluation	0.177**	0.043	0.061	0.088
Adjusted coefficient of determination	0.101	0.155	0.118	0.131

\*\*\* significant difference at 1% level; \*\* significant difference at 5% level; \* significant difference at 10% level.

### ⑤ Improvements Further Enhancing Training Programs

This time, we added a free-answer question: “To make the JICA training program even better, what should be improved?”

The answers, which come from more than two respondents are as follows:

- a. Extension of training period (18 respondents)
- b. Increase of daily allowance (5 respondents)
- c. Follow-up after the training and the practical use of former JICA training participants (4 respondents)

Among the 18 respondents who answered “Extension of training period”, the majority of them want the “Homestay” and the “Field visit” to be extended. The “Field visit” has a high average score in relation to the other question, and this is confirmed by this free-answer question.

As for the follow-up after the training and the practical use of ex-JICA training participants, some of the free answers are as follows:

- Refreshing training several years following the first training
- Participating in a training program as ex-JICA training participants
- Formulating more projects to which ex-JICA training participants can contribute

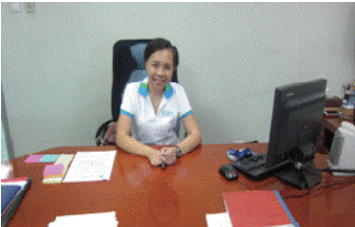



## **Appendix**

## Appendix 1. Good Practice Collection

### Good Practice: the Philippines ①

#### Making Efforts on Water Leakage Management through Ongoing Participation in JICA Training Programs

Training Course	The Second Executive Forum for Enhancing Sustainability of Urban Water Services in Asian Region (2011)	Engineering on Water Supply System (2011)	 Ms. Tenedo   Mr. Diola (right) with his supervisors
Training Organization	managed by: JICA Tokyo	Osaka City Waterworks Bureau	
Name of Former Participant	Ms. TENEDO Maria Rowan Estenzo	Mr. DIOLA Michael Arnoco	
Parent Organization	Metropolitan Cebu Water District		
Current Position	General Manager of Administration Department	Officer of Production and Distribution Department	

#### ● About MCWD

Metropolitan Cebu Water District (MCWD) is in charge of water supply services in metropolitan Cebu. It has sent trainees to JICA Training and Dialogue Programs since the 1990s. Moreover, MCWD has become a counterpart of JICA projects<sup>16</sup>. Some former participants have become executives of MCWD; the selection of trainees to JICA training programs has been routinely conducted.

The City of Cebu has developed a close relationship with the City of Yokohama; the two cities signed the Memorandum of Understanding on Technical Cooperation for Sustainable Urban Development in 2012. In 2013, in collaboration with JICA, the City of Yokohama helped develop Mega Cebu Vision 2050, aiming for a sustainable urban development in the Metropolitan Cebu area, including improved water supply services. Through JICA projects, several engineers have been

<sup>16</sup> From 2005, MCWD implemented the following projects as JICA's counterpart: The Study of Improvement of Water Supply and Sanitation in Metropolitan Cebu (Development Study) (2009/01~2010/08); Water Supply Operation and Management for Metropolitan Cebu Water District (Technical Assistance related to ODA Loans) (2012/03~2013/03); Improvement of Water Supply System in Metropolitan Cebu Water District (Grant Aid) (2014/04~2017/03).

dispatched from Yokohama Water Co., Ltd. to MCWD; the company also provides training courses and receives trainees from MCWD to Japan. MCWD has built a strong relationship with Yokohama.

### ● Outlines of Training Outcomes

The rate of non-revenue water usage was previously significantly high in metropolitan Cebu, but dropped to 23% recently. “The knowledge of leakage detection learned from JICA training programs has greatly contributed,” Tenedo said. She attended two programs: The Second Executive Forum for Enhancing Sustainability of Urban Water Services in Asian Region (2011) and The Training Program of Non-Revenue Water Detection and Management conducted in the city of Yokohama. By utilizing the knowledge and skills obtained in Japan, Tenedo created a map of water pipes by cutting the responsible district into 500m x 500m grids, and became one of the key persons for developing the MESH Boundary System (MBS) in regard to checking water leakage in each grid. The MBS is part of the 2015 annual plan of MCWD; projects pertaining to map creation and leakage check have been under implementation.

Diola, a young engineer and a former JICA training participant, is also in a leadership position for the MBS project. He was trained to use water leak detectors in Japan during the training and initiated a plan to introduce the detectors (manufactured by Fuji Tech Ltd.) at MCWD. As a result, the required budget was successfully secured and detectors were purchased and distributed.

Since Tenedo and Diola understand that training for engineers is important for conducting water leak detection, they’re planning to build a training facility along with other former JICA training participants. The plan is fully financed by MCWD, and will be maintained by an independent budget. The training facility is modeled after a facility in Osaka where Tenedo and Diola attended training programs. By conducting more training activities, MCWD is aiming to further cut the leakage rate from 23% to 15~22%.

Although the city of Cebu has been trying to utilize various water sources, the city is still relying on ground water, which has certain limits. Knowing the high awareness of water conservation in Japan (both children and adults), Tenedo initiated a project teaching elementary aged children the importance of water through showing them how to wash hands with less water. The project was based on what she observed in Japanese elementary schools. Moreover, in response to the mascot characters that Japanese water bureaus created as symbols to communicate with local citizens, MCWD has started openly collecting ideas, and will make the final decision in 2016. They hope to use the mascot character to promote the importance of water to Cebu citizens. Because former JICA participants are in various positions within MCWD, including executives and young engineers with

understanding of the technology and equipment of the Japanese water supply system, it's possible for them to work as a team to use Japan as a model to initiate and implement projects.

### ● **Comments from Supervisors**

“Since MCWD is facing competition from private enterprises, it's important to keep good management as being a public service provider. Therefore, human resources development is critical. We use the following criteria to select prospective trainees for JICA training programs: sharing obtained knowledge and skills from training programs, staying with MCWD for at least two years after returning, and being able to contribute to the organization. It has become significantly beneficial to have opportunities attending JICA training programs and receiving cooperation from JICA in the area of water supply in metropolitan Cebu. We hope to continue our close relationship and bring out more outcomes.”


### ● **Driving Factors for Training Outcomes**

Driving factors from the parent organization include: 1) Well-planned selection of trainees for JICA training programs; former participants who are at the management level of MCWD have played an critical role; 2). With advice from supervisors, selected trainees with high motivation are given an outline of goals for the training in advance; 3). based on 1) and 2), The action plans created by trainees target problem-solving at work and receive supervisors' support during implementation.

Other driving factors include: 1). MCWD's continuous implementation of JICA projects; the two organizations have developed a close cooperative relationship; 2). With JICA, the city of Yokohama has supported the sustainable development of metropolitan Cebu; several projects on water supply initiated by MCWD and Yokohama have been implemented. As a training executing organization in Japan, the city government of Yokohama has received trainees from MCWD. Because MCWD has maintained a good relationship with both JICA and the city of Yokohama, former participants are able to not only implement their action plans (created during the training), but also to contribute as core team members to form new projects with JICA. This has enhanced and increased the impacts of JICA training programs.

## Good Practice: the Philippines②

### Improving Water Supply Services in Manila through Introducing the Methods of Pipe Network Installation Learned at Training

Training Course	Engineering on Water Supply System (2012)	
Training Organization	Japan Water Works Association	
Name of Former Participant	Mr. EGUIA Enrique Magisa	
Parent Organization	Maynilad Water Services, Inc.	
Current Position	Head of Water Network Department	

#### ● Outlines of Training Outcomes

In the past, water supply services were provided by the government of Manila. As privatization was promoted in 1997, the city of Manila was divided into two separate water supply districts (East and West Manila), and managed by two companies, respectively. Eguia works with Maynilad Water Services, Inc. which manages water supply services in West Manila. When attending a JICA training program, the department Eguia worked for faced the following issues: 1). 96% of the water was from Angat Dam and 4% from Laguna Lake; therefore, water supply heavily relied on Angat Dam; 2). Reservoirs were not sufficient compared to the water demand; 3). Limited choices of pipe installation.

In order to solve the above issues, Eguia consulted his supervisors and hoped to obtain ideas during JICA training on how to utilize various water sources and how to increase flexibility by using different types of water pipes.

During training, Eguia learned that Japan uses a combination of various water sources and gained confidence on methods of utilizing various water supplies. As an action plan, Eguia initiated a project to add more pump stations and pipelines, while increasing the usage of Laguna Lake. After returning to the Philippines, he immediately reported the plan to his supervisor and began implementation. As a result, the water supply from Laguna has increased from 100MLD (Million Liters per Day) to 200MLD; approximately 350,000 people have benefited. Moreover, in his responsible water district, the number of reservoirs have increased from 16 to 26. Old pipes have been replaced; new pipes have been installed. The rate of non-revenue water has dropped from 69%

to 34%. The project has been properly implemented. According to Eguia, the design of his project benefited significantly from the training he received on the design of water supply pipe networks<sup>17</sup>.

Since utilization of new water sources is regulated by the central government, a proposal outlining the use of new water sources has been sent to the National Water Resources Bureau (NWRB). However, for his action plan, Eguia initiated a project to utilize current water sources (Angat Dam and Laguna Lake) and immediately improved the total amount of water supply by adding more water pipes. The project has been implemented under the authority of his parent organization. The overall water supply management and total amount of supplied water have been improved.

- **Comments from Supervisors**

“I recommended Enguia to attend JICA training and took the lead to support him on implementing his action plan,” said his supervisor. Prior to training, Eguia was a manager of a Water Network Department; after returning from training, he was promoted to the head of the Department. His performance has been highly recognized.

- **Driving Factors for Training Outcomes**


Eguia was fully aware of the issues he needed to solve, shared his goals with his supervisor, and created a draft action plan before attending the JICA training program. During training, the action plan was refined and became more feasible. Thus, his plan was implemented immediately upon returning from training. Because Eguia was in a senior position before the training, he had appropriate authorization to make key decisions. Based on the reasons stated above, a comprehensive project was implemented within 3 years following his training; both the rate of leakage and the total amount of water supply have been improved. Further outcomes are expected to be realized in the future.

---

<sup>17</sup> At the training program held by Japan Water Works Association, design of water pipe networks was practiced as a major component of the program. Instructions were conducted for approximately 1 week, with individual instruction as a core.

## Good Practice: the Philippines ③

### Improving the Environment of Fish Market by Using Japanese Fish Market as a Model

Training Course	Fishery by Resource Management Approach (2014)	
Training Organization	Japan Overseas Cooperative Association, Chubu Branch	
Name of Former Participant	Ms.CATIPAY Maria Merlyn Lisondra	
Parent Organization	Veterinary Medicine and Fishery Department, Cebu City Government	
Current Position	Officer In-Charge of Fishery	

Ms. Catipay (left) with her supervisors and colleagues

#### ● Outlines of Training Outcomes

Catipay works for the Veterinary, Medicine and Fishery Department of the Cebu City Government where she works on managing the fish market, including the examination of fish traded in the market. When her department was offered an opportunity by the city government of Cebu to attend a JICA training program, she was under 35 years old and her duties were found to be consistent with JICA training contents. Therefore, she was selected to be the first participant sent by her department to attend a JICA training program. Her workplace is a small office adjacent to the market, with approximately 10 employees. The expectations from her colleagues was rather high.

At the Department of Veterinary, Medicine and Fishery, officers patrol the fish market beginning at 6am, visually checking the freshness of fish and determining whether there is any prohibited type or size. If any violation is found, officers will regulate it orally and/or issue penalty tickets. Additionally, in order to maintain the safety and sanitary nature of the fish market, officers ensure traders and staff wear hair nets. At Cebu's fish markets, formalin can be used to show the freshness of the fish. Formalin is prohibited, and its unapproved usage has become a serious issue. How to identify formalin was a challenge to the officers of the Department of Veterinary, Medicine and Fishery.

With the goal of improving the environment of the fish market of Cebu, Catipay visited fish markets and farms in Toyama Prefecture, where she observed the cleanliness of the Japanese fish markets. She realized that the biggest difference between Cebu's fish markets and Japanese markets is the strict control of sanitation in Japan, leading to the management of a Japanese market with fresh fish.



Through training, Catipay reconfirmed that it's necessary to maintain the safety of the fish and improve the sanitary environment of fish markets in Cebu. Her action plan included: 1). Building a facility adjacent to her fish market for fish examination (specifically, to check for formalin); 2). Compulsory-long boots inside the fish market; 3). Routine and thorough cleaning of floors in order to improve the sanitary environment of the fish market. According to Catipay, the idea of building an examination facility next to Cebu's fish market was based on what she observed in the Japanese fish farm – an examination facility next to fish tanks. Although they currently examine fish by visual methods, she thought it would be faster and more accurate to have an examination facility conducting more comprehensive checks.

After returning to her workplace, Catipay immediately reported on her training experience and her action plan. The action plan was supported, and subsequently discussed and refined by her supervisor and colleagues. As a result, a proposal for building an examination facility was sent to the city of Cebu; a budget was secured successfully. Regarding the new requirement of wearing long boots and cleaning floors thoroughly, the awareness of traders and market staff has increased due to the efforts of all team members of the Department. Currently, a new fish market is under construction with only one entrance and one exit. Catipay and her colleagues hope that by eliminating additional entrances and exits, they will be able to monitor the requirement of long boots in the fish market. Currently, it seems difficult to require all associated people to purchase long boots due to the cost. They are considering a proposal to the city for the purpose of securing a budget for this item.

#### ● Comments from Supervisors

"I'm so glad that we sent an employee to JICA training program by the first time," said Catipay's supervisor. "Her attitude has changed greatly after returning from training. She reported about her training on the second day after coming back from Japan, and initiated a proposal in order to improve the environment of fish market. Besides, her capability of self-control has improved as well." According to Catipay's supervisor, her action plan has been discussed and refined several times; the Department will support her plan as the Department's plan and continue to implement ideas.



Ms. Catipay visually checking fish



Ms. Catipay's supervisor examining sanitary conditions









- **Driving Factors for Training Outcomes**

Catipay was the first and only one to be sent to a JICA training program from her office; she attended the training with high expectations from her colleagues. She was highly motivated to share all the knowledge and skills she obtained from the training at her workplace. After returning from Japan, she not only reported her experience, but had her action plan discussed and refined by her colleagues. Her high awareness of tasks to address before training, her strong motivation before and after training, and the understanding and support from colleagues and supervisors at work can be considered as driving factors for the training outcomes.

## Good Practice: Rwanda ①

### Impact of Training for Non-Revenue Water Measures

Training Course	Non-Revenue Water Management (Leakage Control)	
Training Organization	Nagoya City Waterworks & Sewerage Bureau	
Name of Former Participant	Mr. Emmily Aloyz Alimas	
Parent Organization	Water Network Management EWSA (Energy, Water and Sanitation Authority)	
Current Position	Water Network Management	
Training Course	Non-Revenue Water Management (Leakage Control)	
Training Organization	Nagoya City Waterworks & Sewerage Bureau	
Name of Former Participant	Mr. Claude J. Manirakiza	
Parent Organization	Water Network Monitoring, Kigali Distribution Unit, EWSA	
Current Position	Head	
Training Course	Operation and Maintenance of Urban Water Supply System (Water Distribution and Service)	
Training Organization	Osaka Municipal Waterworks Bureau	
Name of Former Participant	Mr. Desire Ntamuturano	
Parent Organization	Technical Services, Water and Sewerage Utility Division, EWSA	
Current Position	Head	
Training Course	African Region Urban Waterworks Engineering	
Training Organization	Water Works Bureau, Yokohama-shi	
Name of Former Participant	Mr. Edison Nsabimana	
Parent Organization	Water Network Operations in Nyagare Branch, EWSA	
Current Position	Head	
Training Course	Water Supply Administration for Better Management of Water Supply Services	
Training Organization	JICWELS	
Name	Mr. Emmanuel Rwakayigamba	
Parent Organization	Economic Development, Rwamagana District	
Position	In Charge of Water	

- **Outlines of Training Outcomes**

One of the major problems in Rwanda's water supply business involves non-revenue water. Prior to receiving training in Japan, even the executive officials of EWSA were not aware of the problematic nature of non-revenue water, and the issue was dealt with only after a water pipe had ruptured or when there was information on water leakage. During training in Japan, however, the trainees realized that non-revenue water has been contributing to monetary waste, and they learned about specific methods to cope with non-revenue water, such as incorporating DMA (District Metered Area); replacing old meters that have become inaccurate; eliminating unauthorized users; raising awareness of the importance of the non-revenue water problem to users; planning water leakage detection and repairing pipes. After returning from Japan, the trainees conducted training sessions of the training contents to the staff of WASAC branches in Rwanda. Because these measures were widely adopted, improvements in the non-revenue water rate have been observed across the country. Compared to the average of 42% in the past, the rate of non-revenue water of the country's WASAC has improved to about 38%. In the Ngoma branch of WASAC, the rate improved from 28% to 10%, which has been the highest improvement in the country. In the Nyagatare branch, the rate improved from 70% to 38%. Although the average rate of non-revenue water of the two cooperatives responsible for the water supply facilities in Rwamagana District was previously about 23%, the rate has improved to 16%.

- **Comments from Supervisors**

For WASAC, the training the staff received in Japan had large impacts. Because the staff acquired valuable skills and knowledge in the training, many of them were assigned to important posts and were not laid off during organizational change. Time management in day-to-day operations has also been improved and the detection of water leakages has been dealt with in a swift manner; maintenance of water supply facilities and ruptures of water pipes and storage tanks has been addressed. (WASAC)


- **Driving Factors for Training Outcomes**

One of the factors that contributed to the impact realization includes how, along with boosting the trainees' awareness of the issue of non-revenue water, the training was effective in transferring the knowledge and skills necessary to cope with non-revenue water. Moreover, WASAC highly valued the JICA training, and the training provided an organizational environment to actively realize the results of the training; opportunities were given to realize the synergistic effects of what has been learned in Japan and the projects; there were connections with the water supply facilities that were supported by Japanese grant aid and NGOs; they were engaged as counterparts to technical cooperation projects implemented by other donors to eliminate non-revenue water; and opportunities

were given to realize the synergistic effects of what has been learned in Japan and other projects.

## Good Practice: Rwanda ②

### Inspiration for Job Creation Program (Hanga Umurimo) through Starting New Businesses

Training Course	Rural Development Course	
Training Organization	Network for Symbiosis of Forest and Sea	
Name of Former Participant	Mr. Albert Bizimana	
Parent Organization	Innovation and Business Development, Industry and SME, Ministry of Trade and Industry	
Current Position	Innovation & Business Development	

#### ● Outlines of Training Outcomes

In Rwanda, there is a strong, conventional understanding that employment opportunities stem primarily from government agencies and companies, and the idea of entrepreneurship has not been commonly held. Mr. Bizimana, however, observed the activities of Japanese cooperatives that process agricultural products and, when he spoke with the cooperatives' founders and members, was inspired by how they cooperated in groups and were conducting business by utilizing local products. He became convinced that the same could be done in Rwanda, which led to the creation of the Hanga Umurimo (job creation) project.

Unemployment was a serious issue in Rwanda. The Minister of Trade and Industry at the time embraced flexible thinking and expressed encouragement for this idea. The Minister was supportive of its commercialization, and the Hanga Umurimo project (job creation)—with an objective of fostering new entrepreneurs - having a government budget of \$1.5 million and IFC assistance of \$40,000, was carried out from 2011 through 2013.






Although 16,000 proposals for entrepreneurship were submitted, the selection criteria of Hanga Umurimo (job creation) were that 1) The business is innovative, 2) It creates maximal employment opportunities, 3) Materials and products are locally available, and 4) It is feasible. Moreover, in terms of the allocation of funds to each entrepreneur, 75% of the necessary funds were to be guaranteed by government agencies and the remaining 25% were to be made available by the business owners. Furthermore, because job creation in rural areas was necessary as part of the Hanga Umurimo project (job creation), 50 businesses in each of the 30 districts - or 1,500 projects across the country - were selected provisionally, and 900 businesses were then officially selected. The contents of these projects included processing of vegetables and fruit, candle manufacturing and production of mechanical products such as blenders. Out of all 900 projects, 72% were profitable.

- **Driving Factors for Training Outcomes**

The factors that contributed to the outcome realization in Rwanda include–Mr. Bizimana’s visits to cooperatives to observe their activities; there was support from Ministers and superiors of parent organizations for the training impacts to be fully utilized; additionally, there was support from the International Finance Corporation (IFC).

## Good Practice: Rwanda ③

### Contribution to Learner-Centered Approach for Primary and Secondary Education

Training Course	Science and Mathematics in Basic Education Course (2012)	
Training Organization	Japan Overseas Cooperative Association of Kyushu	
Name of Former Participant	Mr. Pierre J. Rutagengwa	
Parent Organization	The Ministry of Education, Gatsibo	
Current Position	Secondary School Teacher (Chemistry)	
Training Course	Science and Mathematics in Basic Education Course (2012)	
Training Organization	Japan Overseas Cooperative Association of Kyushu	
Name of Former Participant	Mr. Tite Siborurema, Head Teacher	
Parent Organization	The Ministry of Education, Gasabo	
Current Position	Head Teacher	
Training Course	Science and Mathematics in Basic Education Course (2013)	
Training Organization	Kochi International Association	
Name of Former Participant	Ms. Umuhoza Ndinda Deliphine	
Parent Organization	The Ministry of Education, Ngoma	
Current Position	Primary School Teacher (English & Social Studies)	

#### ● Outlines of Training Outcomes

Although the teaching method in primary and secondary education in Rwanda is shifting from the method where classes are taught with teachers at the center (teacher-centered approach) to that which focuses on students as learners (learner-centered approach), many teachers were skeptical of the effectiveness of the latter approach.

After observing schools in Japan that have made progress under the learner-centered approach, the three trainees that participated in the Young Leader Programs became convinced that the method was effective. With the learner-centered approach, students conduct group work on teams and actively participate in class. (In science class, for example, students conduct hands-on experiments by using light bulbs and electronic circuits.) Instead of *leading* the students, teachers conduct classes by serving in roles as facilitators that promote student learning. Moreover, it was considered a norm in

Rwanda to place a reasonable distance between teachers and students because of their differing social positions. However, diminishing the relational distance between teachers and students was found to be important: by sharing personal conversations before class, teachers fostered an open relationship with students, created a learning-friendly environment, and enhanced student motivation and learning.

The “Project for Strengthening of Mathematics and Science in Secondary Education” that was implemented by JICA in Rwanda from 2008 to 2011 aimed to enhance the “teaching abilities” of secondary mathematics and science teachers, as well as to enable teachers to practice the “learner-centered approach.” Under this project, Mr. Siborurema who served as the Head Teacher of the school in Kigali city, and Mr. Rutagengwa who taught science in Gatsibo District, instructed other teachers. After participating in Young Leader Programs in 2012 and actually witnessing that the “learner-centered approach” in Japan has been effectively implemented, they became more fully convinced of the effectiveness of this approach. Then, in 2013—when the Rwandan Ministry of Education carried out training for the learner-centered approach for science and mathematics teachers—they served as lecturers for the 88 teachers. These 88 teachers have become trainers, and 10-day training programs in 10 centers across Rwanda have been conducted, where 4,000 teachers have received training.

Upon returning from Japan, Ms. Deliphine who teaches in an elementary school in the Ngoma District tested the learner-centered approach in her own class. By sharing personal conversations with students before class, she made efforts to become closer to the students. As a classroom facilitator, she encouraged students to learn enthusiastically and actively utilized methods such as group work. Soon, the students began to enjoy learning and their educational motivation increased; learning became more effective, and test results improved. She asked other teachers in the same school to observe changes in the 4<sup>th</sup> grade students and with this, she demonstrated how the learner-centered approach is effective. Now, many other teachers in the school have adopted this approach, and the students have boosted their educational motivation and improved their academic performance. Though the trainees and teachers report longer working hours due to class preparations, they have been able to enjoy the work more.

- **Driving Factors for Training Outcomes**


Factors that contributed to impact realization include how observing classes during school visits that conducted group work and science experiments was effective for the trainees to become fully convinced of the effectiveness of the learner-centered approach; the “Project for Strengthening of Mathematics and Science in Secondary Education”—which aimed to enhance the “teaching



abilities” of secondary mathematics and science teachers, as well as to enable teachers to practice the “learner-centered approach”—was implemented by JICA as a technical cooperation project in Rwanda from 2008 to 2011, and the trainees were involved in the project; and how, because Rwanda’s Ministry of Education has been attempting to promote the learner-centered approach and there were high expectations of the training in the trainees’ schools, there was already a school environment where the training outcomes could be realized.

## Good Practice: Sri Lanka①

### Successful in Applying Instruments for Non-Revenue Water Management to Sri Lanka

Training Course	Non-Revenue Water Management (Leakage Control) (B) (2014))	
Training Organization	City of Nagoya, Hamamatsu City, Toyohashi City and Mie Prefecture	
Name of Former Participant	Eng. T.W.M.L.P. Wijesundara	
Parent Organization	Bandarawela, Regional Support Center (Uva), NWSDB	
Current Position	Manager (O&M)	

Outside of the RSC, where he serves as a Manager

#### ● Outlines of Training Outcomes

National Water Supply and Drainage Board (NWSDB) is the principal authority to provide safe drinking water in Sri Lanka, except for a number of water schemes operated by local governments and community organizations. In addition to the Head Office, NWSDB has 12 Regional Support Centers (RSC) in all provinces, which are responsible for the development, operation and maintenance of water supply in the region.

Mr. Wijesundara is the Manager of the Bandarawera regional office, Uva Province RSC. Uva Province comprises of the Badulla and Moneragala districts. To serve the Province, the NWSDB has established two regional offices, one in Bandarawela and the other in Moneragala. The Bandarawela office manages 23 water supply schemes in Badulla. The Head of the Uva Province Regional Support Center is the Deputy General Manager and his deputy is the Assistant General Manager. The Assistant General Manager supervises two managers in each respective regional office. Mr. Wijesundara, as the manager at Badulla, supervises Accounting, Commercial, Administration, Scheme Officers in Charge, Engineers, and Engineering Assistants.

Mr. Wijesundara participated in a six week training program on non-revenue water management and stated that the program exceeded his expectations. In addition to learning overall strategies to reduce non-revenue water, he acquired various new knowledge and skills, such as new pipe joining methods that can withstand heavy vibrations, and new techniques to detect water leaks.

Upon return, he was able to take new initiatives. First, he conducted an awareness program for his

colleagues (technical staff) on his training in Japan. He also educated them about the best practices found in Japan. Recently, he constituted a group of employees from his office whose mandate is to reduce non-revenue water in Badulla, which is 30%. Some of the advanced leak detection instruments he studied in Japan are being procured for this group, as he learned the effectiveness of these instruments through his hands-on training in Japan.

He also implemented an action plan, which was created during training, in response to the implementation of a water supply project supported by the United States Agency for International Development (USAID) in Badulla. His proposal to lay HDPE (High Density Polyethylene) pipes, (a first for Badulla) as HDPE has been proven to reduce non-revenue water, was accepted and was a result of his training on HDPE pipes in Japan. His action plan was highly feasible because he utilized obtained knowledge and techniques from training to solve issues of an on-going project. In addition, his suggestions, particularly regarding HDPE pipes, were accepted since his training was comprehensive.


- **Driving Factors for Training Outcomes**

As an organizational factor, it is observed that Mr. Wijesundara, as the Manager of RSC, has relatively large discretion and authority to implement what he learned in Japan.

As an individual factor, he implemented his action plan because he further developed a project that had commenced prior to the training Japan. He integrated his action plan into an existing project, incorporating what he learned in Japan.

## Good Practice: Sri Lanka②

### Successful Introduction of Water Safety Plans to the North Western Regional Support Center

Training Course	Water Supply Administration for Better Management of Water Supply Services (B) (2013)	
Training Organizations	Japan International Corporation of Welfare Service	
Name of Former Participant	Eng. Samanmal Ekanayake	
Parent Organization	Regional Support Center, North Western Province, NWSDB	
Current Position	Deputy General Manager	

At the RSC, where he serves as the Deputy General Manager

#### ● Outlines of Training Outcomes

Mr. Ekanayake was successful in introducing Water Safety Plans (WSP) he learned in Japan to the areas he supervises in the Regional Support Center (RSC).

National Water Supply and Drainage Board (NWSDB) is the principal authority to provide safe drinking water in Sri Lanka, except for a number of water schemes operated by local governments and community organizations. In addition to the Head Office, NWSDB has 12 Regional Support Centers (RSC) in all provinces, which are responsible for the development, operation and maintenance of water supply in the region.

Prior to the Japan training, as an Assistant General Manager in Kandy, Mr. Ekanayake partnered with the University of Peradeniya to implement WSPs in Kandy by reviewing WSP manuals developed by the World Health Organization (WHO). However, their attempt was not successful as they lacked the practical experience to design and maintain WSPs. Hence, from the inception, he was interested in WSP. The other participants were interested in studying non-revenue water and related issues, however, he already had sufficient practical and theoretical understanding of non-revenue water. The program covered all aspects of WSP, from designing WSPs per WHO guidelines, maintaining the WSP systems and procedures, and auditing WSP. After strengthening his knowledge on WSP design and maintenance, he developed an action plan on WSP.

Upon return, he planned and conducted an internal training on WSP for his staff and implemented

WSP. His action plan concerned the design of WSP for a region in the North Central Province where he served as Deputy General Manager of a RSC, when he was nominated for the program in Japan. Soon after his training, he was transferred to the North Western Province. As a result of this transfer, he converted the action plan to suit the needs of the region and was successful in introducing WSP in two locations under the new RSC. He worked on implementing WSP further at two additional locations. He also plans to implement more WSP, particularly in rural areas that are not served by NWSDB. These plans would help the community-based organizations who supply water in rural areas.

In addition, based on his visit to a training center at the Bureau of Waterworks Tokyo Metropolitan Government (a pipe laying training center), he proposed to introduce the model because he thought that hands-on training was lacking among the NWSDB's technicians. He submitted the proposal to the government requesting that land be allocated for the training yard. The request was granted and the government allocated 0.5 acres in Kurunegala. However, he has yet to find a funding source to procure equipment and to construct the necessary infrastructure facilities.


His office won 2nd place in the 2014 National Productivity Awards. Mr. Ekanayake believes that incorporating what he learned in Japan contributed to the prize.

- **Driving Factors for Training Outcomes**

As an experienced employee, Mr. Ekanayake was clear on his learning goals prior to the training, and focused only on gaining deeper knowledge on a specific topic applicable to Sri Lanka. That led to successful implementation of his action plan and application of the training techniques. Also, his position allowed him significant authority to implement his innovative ideas. Unlike the Head Office, which is large and bureaucratic, his RSC, which listens closely to the customers, was motivated to develop new systems to please the consumers.

## Good Practice: Sri Lanka③

### Successful in Implementing a Grassroots Technical Cooperation Project for Formulating the First Elderly Care Policy in Sri Lanka

Training Course	Training Program for Young Leaders “Health Administration Course” (2013)	 <p>Holding the application document of the grassroots technical cooperation project</p>
Training Organizations	Rural Health Training Center	
Name of Former Participant	Dr. Lakshitha Ranasinghe	
Parent Organization	Planning Unit, Ministry of Health, Nutrition & Indigenous Medicine	
Current Position	Medical Officer	

#### ● Outlines of Training Outcomes

Dr. Ranasinghe works as a medical officer for the Planning Unit of Ministry of Health, Nutrition, and Indigenous Medicine. Following his participation in the Young Leader Program, he planned and formulated a grassroots technical cooperation project on elderly care. This is an example that participation in the Young Leader Program led to the formulation of the first policy on elderly care in Sri Lanka.

Based on his medical background, Dr. Ranasinghe had formed perspective on elderly care, but the program in Japan fostered his perspective. Soon after the program, all of the participants presented from their training to the Secretary of the Ministry of Health and he presented the concept of a project on elderly care. As a result (and subsequent to the presentation), he found it easier to launch the technical cooperation project.

During the program in Japan, a group including Dr. Ranasinghe developed an action plan for elderly care in Sri Lanka. When it was presented to the trainers, Dr. Kijo Deura (Department of International Health, Saku Hospital, a project manager of the grassroots technical cooperation project described below), expressed interest in the concept and agreed to assist them with the action plan.

Because of the action plan's high feasibility, following the presentation to the Secretary, they received a “go-ahead” without any delay. After revising the action plan with the assistance of other participants in the program, he presented a final proposal for a grassroots technical cooperation

project entitled “Health Plan and Model Forming Project for Integrated Health and Welfare Service System for the Elderly in Sri Lanka” which is currently being implemented.

Activities under the grassroots technical cooperation project entitled “Health Plan and Model Forming Project for Integrated Health and Welfare Service System for the Elderly in Sri Lanka” include: (1) Development of an elderly care policy in Sri Lanka; (2) Dispatching groups of medical officers to Japan for training on elderly care; (3) Development of training manuals on elderly care; (4) Training of care givers; and (5) Conducting awareness seminars on elderly care. As of December 2015, two groups of medical officers were dispatched to Japan for training. The baseline survey on elders and elderly care has been completed, and the outcome has been used to develop the draft policy. The policy is expected to be released and adopted in the first quarter of 2016.

- **Comments from Supervisor**

Dr. Ranasinghe’s supervisor appreciates that Dr. Ranasinghe introduced a concept of elderly care to Sri Lanka and this was a direct result of his training in Japan. The supervisor appreciates the enthusiasm and efforts of Dr. Ranasinghe. At the same time, he believes Dr. Ranasinghe was assisted extensively by Dr. Deura. Therefore, he believes that Dr. Ranasinghe and Dr. Deura could be the pioneers of elderly care in Sri Lanka.

- **Driving Factors for Training Outcomes**

In this case, participation in the Young Leader Program directly led to the planning and implementation of the grassroots technical cooperation project and formulation of the first policy on elderly care in Sri Lanka. Facilitating factors included extensive support from the resource individual of the Young Leader Program. In addition, the concept of the action plan was clear and the Ministry of Health found that it was easily integrated to its own master plan and not seen as an entirely new initiative. Therefore, it was relatively easy to obtain approval from the Ministry.

## Appendix 2. Survey Schedule and Interview Lists

### Survey Schedule and Interview List (the Philippines)

#### Former Participants of the Thematic Programs (Water Supply)

No	Date	Name	Organization, Department	Title	Year Participated
1	3-Dec-15	Ms. Josephine R. BILLONES	NWRB, Policy and Program Division	Engineer II	2002
2	3-Dec-15	Ms. Evelyn V. AYSON	NWRB, Head Evaluation Section Water Rights Division	Attorney IV	2005
3	3-Dec-15	Ms. Pacita BARBA	NWRB, Monitoring and Enforcement Division	Engineer III	2006
4	3-Dec-15	Ms. Jesusa T.ROQUE	NWRB, Policy and Program Division	Planning Officer	2009
5	3-Dec-15	Ms. Margaret D.BAYHON	NWRB, Water Rights Division	Attorney IV	2014
6	3-Dec-15	Mr. Jose J.BELTRAN	NWRB, Monitoring and Enforcement Division	Engineer IV	2004
7	3-Dec-15	Ms. Josie Mari Z.MARAVILLA	NWRB, Water Rights Division	Special Investigator III	2012
8	4-Dec-15	Mr. Ferdinand Layugan TALAUE	LWUA , Area Operations	Acting Manager	2000
9	4-Dec-15	Mr. Esmeraldo Lagamia VILORIA	LWUA, Institutional Development Services	Management Adviser	2005
10	4-Dec-15	Mr. Romeo Mangubat DIAZ	LWUA, Water District Dep't. Division	Management Adviser	2003
11	7-Dec-15	Ms. TENEDO Maria Rowan Estenzo	MCWD, Administration	Assistant General Manager	2011
12	7-Dec-15	Mr. Noel Dalena	MCWD, Pipelines Maintenance	General Manager	Supervisor
13	7-Dec-15	Mr.Eddie Ortega	MCWD, Production and Distribution Department	Department Manager	Supervisor
14	7-Dec-15	Mr. DIOLA Michael Arnoco	MCWD, Production and Distribution Department	Officer in-Charge	2011
15	10-Dec-15	Mr. EGUIA Enrique Magisa	MWSI, Water Network	Department Head	2012
16	10-Dec-15	Mr. BAMBASE Randolph Aclan	MWSI, Water Supply Operations	Operation's Manager	2014



**Former Participants of the Young Leader Programs**

No	Date	Name	Organization, Department	Title	Year Participated
1	07-Dec-15	Ms. LEYSON,Elyn Marie,Burlaos	Cebu City Government, City Agriculture	Agriculture Technologist	2014
2	07-Dec-15	Mr. Joelito Baclayon	Cebu City Government, City Agriculture	City Agriculturist	Supervisor
3	08-Dec-15	Ms. CATIPAY Maria Merlyn Lisondra	Cebu City Government, Veterinary Medicine and Fishery	OIC (Officer In-Charge) Fishery Department.	2014
4	08-Dec-15	Ms. Pilar Romero	Cebu City Government, Veterinary Medicine and Fishery	Department Head (Officer In-Charge) City Veterinarian.	Supervisor
5	08-Dec-15	Mr. AGUHAR Anthony Valmoria	Cebu City Government Department of Manpower Development Placement	Senior Management Specialist	2014
6	08-Dec-15	Mr. CLAPANO, Joel .Bongac	Cebu City Government, Bureau of Fisheries and Aquatic Resources	OIC-CBFF (Officer In-Charge) "Carmen Brackish Fish Farm"	2014
7	9-Dec-15	Ms. PANOPIO Loida Geronimo	NEDA, Social Development	Supervisory Economic.Development Specilaist	2011
8	9-Dec-15	Mr. JAVATE Tomasito Jr. Pobeda	NEDA, Social Development Staff. Health, Nutrition and Population Division	Supervising Economic Development Special	2010
9	9-Dec-15	Ms. MONZALES Maria Kris Evangelista	NEDA, Public Investment Staff	Senior Economic Development Specialist	2013
10	9-Dec-15	Mr. TIBON Laurence Michael Bacalso	NEDA, Public Investment Staff, Multi literal	Senior Economic Development Specialist	2014
11	9-Dec-15	Ms. ISAAC Carygine Villarico	NEDA, Agriculture, Natural Resources and Environment	Economic Development Specialist II	2014
12	9-Dec-15	Mr. DACUMOS Rory Jay Sta. Catalina	NEDA, Agriculture, Natural and Environment Staff	Senior Economic Development Specialist, Chief Rural Institution and Support Services Division	2011

**Donors/Alumni Organizers**

No	Date	Name	Organization, Department	Title
1	2-Dec-15	Mr. Christian Perez	JICA , Training section	Program Officer for GTC and TPYL
2	4-Dec-15	Mr. Powell DEL ROSARIO	JAAP	President
3	10-Dec-15	Ms. Maria Paz.T Urcia	TESDA, Foreign Scholarship and Training program/Tesda Development Institute	Director-in_Charge
4	10-Dec-15	Ms. Rosabelle Milagrosa G. Viernes	TESDA, Tesda Development Institute	Administrative Officer V
5	11-Dec-15	Mr. Mima Macahilig	JICA, Training section	Senior Program Officer for Training Program Section
6	14-Dec-15	Mr. Ernest Kiel Macapagal	KOICA	Program Officer
7	14-Dec-15	Ms. Adonna K. Esleta	GIZ	Human Resource Manager

## Survey Schedule and Interview List (Rwanda)

### Former Participants of the Thematic Programs (Water Supply)

No	Date	Name	Organization, Department	Title	Year Participated
1	7-Dec-15	Ms. MUTESI Francine	Kayonza District, Infrastructure	Cooperative Officer,	2012
2	8-Dec-15	Mr. RUDASINGWA Edgard	Kayonza District, Monitoring and Evaluation	Planning Monitoring and Evaluation Officer	2012
3	8-Dec-15	Mr. ALIMAS Aloyz Emmily,	WASAC, Ngoma Branch	Water Network Management	2014
4	9-Dec-15	Mr. RWAKAYIGAMBA Emmanuel,	Rwamagana District, Economic Development	Environment Officer	2014
5	9-Dec-15	Mr. KARANGWA David	Energy Utility Corporation Ltd., Customer Service & Marketing	Head	2012
6	9-Dec-15	Mr. NTAMUTURANO Desire	WASAC, Leak Detection and Pressure Management (Country Wide) , Water and Sanitation	Head	2013
7	10-Dec-15	Mr. BUSHAYIJA Yasin	WASAC, Water and Sewerage Utility	Head of Water Plant	2014
8	10-Dec-15	Mr. NIYONZIMA Philibert	RURA, Energy, Water, and Sanitation Regulation	Water Regulation Officer	2012
9	11-Dec-15	Mr. NSABIMANA Edison	WASAC, Water Network Operation in Nyagatare Branch	Head of Water Network	2013
10	15-Dec-15	Mr. MANIRAKIZA Claude	WASAC, Kigali Distribution Unit	Head of Water Network Monitoring	2011
11	15-Dec-15	Mr. METHODE Rutagungira	WASAC, Urban Water and Sewage Services	Director	Supervisor
12	17-Dec-15	Mr. KAKOOZA Henry	Rwamaigana District	Executive Director	Supervisor

### Former Participants of the Young Leader Programs

No	Date	Name	Organization, Department	Title	Year Participated
1	11-Dec-15	Mr. RUTAGENGWA Pierre	Ministry of Education, Gatsibo	Secondary Education Teacher	2012
2	14-Dec-15	Ms. RUGUMIRE Liliane	Rwanda Cooperative Agency, Planning and Capacity Building	Capacity Building Officer	2011
3	14-Dec-15	Mr. BIZIMANA Albert	Ministry of Trade and Industry, INDUSTRY and SME	Zonal Export Coordinator	2011
4	16-Dec-15	Ms. UMUHOZA Ndinda Delphine	Ministry of Education, Ngoma	Primary Education Teacher	2013
5	18-Dec-15	Mr. SIBORUREMA Tite	Ministry of Education, Gasabo	Head Teacher	2012

**Others**

No	Date	Name	Organization, Department	Title
1	16-Dec-15	Mr. LIM Jinho	KOICA	Education Specialist
2	16-Dec-15	Mr. NTORE Tony Francis	International Finance Corporation, SME Value Chain, Global Team	Associate Operation Officer
3	17-Dec-15	Mr. RAWAMA Anicet	JAAR	President

## Survey Schedule and Interview List (Sri Lanka)

### Former Participants of the Thematic Programs (Water Supply)

No	Date	Name	Organization, Department	Title	Year Participated
1	1- Dec-15	Ms. Chandra Perera	NWSDB, Western Province	Additional General Manager	2008
2	1- Dec-15	Mr. I V W Ediriweera	NWSDB, Corporate Planning Division	Assistant General Manager	2000
3	1- Dec-15	Mr. George Mathuranesan	NWSDB, Planning and Design Section	Chief Engineer	2013
4	2-Dec-15	Mr. Abdul Rasheed	NWSDB, ADB Project Office	Project Director	2010
5	2-Dec-15	Mr. Chandrasiri Wickrama	NWSDB, GCS Office	Assistant General Manager	2008
6	3-Dec-15	Mr. Kumudu Wijayagunawardana	NWSDB, Operation & Maintenance	Manager	2009
7	7-Dec-15	Mr. Dinuke Senevirathne	Nuwara Eliya Municipal Council	Municipal Engineer	2014
8	7-Dec-15	Mr. Prabhath Wijesundara	NWSDB, Operation & Maintenance, Bandarawela	Manager	2014
9	8-Dec-15	Mr. Samanmal Ekanayake	NWSDB, Regional Support Center, North Western Province	Deputy General Manager	2013
10	10-Dec-15	Mr. Sarath Vithana	Ministry of Defense	Additional Secretary	2014

### Former Participants of the Young Leader Programs

No	Date	Name	Organization, Department	Title	Year Participated
1	4-Dec-15	Dr. Lakshitha Ranasinghe	Ministry of Health, Nutrition & Indigenous, Medicine Planning Unit	Medical Officer	2013
2	4-Dec-15	Ms. Shela Mahipala	Ragama Hospital	Nursing Sister	2013
3	9-Dec-15	Ms. Dilrukshi Dehideniya	Board of Investment, Legal	Assistant Director	2014
4	9-Dec-15	Mr. Kumara Senadeera	Board of Investment, Finance	Deputy Director	2014
5	9-Dec-15	Ms. Gayani Mudungamuwa	Industrial Development Board	Enterprise Promotion Manager	2007
6	10-Dec-15	Mr. Ranjith Gurusinghe,	Ministry of Provincial Councils and Local Government, Planning	Assistant Director	2010
7	11-Dec-15	Ms. Nayana Nandani	Vocational Training Authority	Program Officer	2008

**Superiors, Alumni Association**

No.	Date	Name	Organization, Department	Title
1	30-Nov-15	Mr. Nalin Mannapperuma (Waste Management Alumni)	Waste Management Authority (W.P)	Director
2	1-Dec-15	Mr. Gerard Fernando	NWSDB, Corporate Services	Additional General Manager
3	1-Dec-15	Mr. Jaliya Seekkuge	NWSDB, Manpower Development and Training	Assistant General Manager
4	1-Dec-15	Mr. M Umar Lebbe	NWSDB, Japanese Projects Unit	Assistant General Manager
5	9-Dec-15	Ms. Shama Wickramasinghe	Board of Investment, Legal	Deputy Director
6	10-Dec-15	Dr. S R U Wimlaratne	Ministry of Health, Nutrition & Indigenous Medicine	-

**Donors**

No.	Date	Name	Organization, Department	Title
1	1-Dec-15	Ms. Yu Jiamu	Embassy of China , Economic Commercial Counsellor's Office	Third Secretary
2	3-Dec-15	Ms. Aejin Han	KOICA	Country Deputy Director
3	11-Dec-15	Ms. Pubudu Gnanissara	Australian High Commission	Senior Program Officer
4	11-Dec-15	Mr. Pieter Bossink	Australian Awards, Scope Global	Operations Manager
5	11-Dec-15	Mr. Kamal Dahanayake	ADB, Sri Lanka Resident Mission	Project Officer (Infrastructure)

## Appendix 3. Questionnaire of Complete Count Questionnaire Survey

### ➤ The Thematic Programs (Water Supply)

#### Questionnaire: Evaluation of JICA Training and Dialogue Programs (the Training)

Dear JICA training program participants,

Most of the questions are in the form of 5-point scale. When the scale is shown as a part of question, please select the number (from 1-5) that best describes your opinion with respect to the each statement and write the number in the appropriate box.

Please follow the instructions carefully for each question and answer as many questions as possible.

Your responses will be strictly confidential, and will be used only for the purposes of the survey.

Thank you for your contribution to make JICA Training Program even better.

#### 1 Your Personal Information

- 1) Your name
- 2) Your organization at present
- 3) Your job title at present
- 4) Your country


#### 2 Motivation to participate in the Training

##### 2.1 How much do you agree with the following factors as your motivation to participate in the Training in terms of the below five point scale?

1	2	3	4	5
Strongly Disagree	Somew hat Disagree	Neither Agree nor Disagree	Somew hat Agree	Strongly Agree

- 1) I was interested in the contents of the Training. . . . .
- 2) I needed new knowledge and skills in performing my job. . . . .
- 3) I was interested in coming to Japan. . . . .
- 4) My supervisor advised me to participate in the Training. . . . .
- 5) I had specific assignments and/or missions from my organization. . . . .
- 6) The Training program had a specific relationship to a project implemented in my country by JICA.


For this question, enter "1" if the statement is applicable, or "0" if not applicable.

1. applicable 0. not applicable . . . . .

--

- 7) The training program had a specific relationship to a project implemented in my country by other donors/international organizations.

For this question, enter "1" if the statement is applicable, or "0" if not applicable.

1. applicable 0. not applicable . . . . .

--

#### 3 Evaluation of contents the Training

##### 3.1 How much do you agree with following statements in terms of below five point scale?

1	2	3	4	5
Strongly Disagree	Somew hat Disagree	Neither Agree nor Disagree	Somew hat Agree	Strongly Agree

- 1) The contents of the Training matched needs of my job assignments. . . . .
- 2) The contents of the Training matched my organization's needs. . . . .
- 3) The contents of the Training matched my country's needs. . . . .
- 4) The contents of the Training covered new knowledge and skills. . . . .
- 5) The contents of the Training were practical. . . . .
- 6) The knowledge and skills I learned in the training are relevant at present . . . . .
- 7) The Training contents were useful especially because they are based on Japan's own experience. . . . .


##### 3.2 Degree of contents learning and goal achievement (Your subjective opinion)

- 1) How much of the Training contents did you acquire overall in percentage? . . . . . (%) 1~100
- 2) How much of the Training's goal did you achieve in percentage? . . . . . (%) 1~100


#### 4 Evaluation of methods and efficiency of the Training

##### How much do you agree with following statements in terms of below five point scale?

1	2	3	4	5
Strongly Disagree	Somew hat Disagree	Neither Agree nor Disagree	Somew hat Agree	Strongly Agree

- 1) Lecturers ensured the participants understand the contents. . . . .
- 2) The discussions among the participants were helpful to deepen the understanding of the contents. . . . .


- 3) The actual practice/field visits were effective to help the participants deepen their understanding of the contents. . . . .
- 4) Discussion with other participants from different countries was not useful because we face different problems. . . . .
- 5) The training program was implemented as scheduled. . . . .
- 6) The training was implemented efficiently for achieving its goals. . . . .
- 7) The training was implemented as originally planned. . . . .


## 5 Evaluation of other aspects of the Training

- 5.1 Please evaluate the following aspects of the training in terms of below ten point scale. Enter "99", if not applicable.

	0	1	2	3	4	5	6	7	8	9	10 point
	Bad		Poor		Satisfactory		Good		Excellent		
1) General orientation on culture of Japan											
2) Coordinators and staff's performance											
3) Workshops											
4) Practical training/field visits											
5) Lectures											
6) Discussions among participants											
7) The Training as a whole											
8) Accommodation											
9) Daily allowance											
10) Meal (breakfast, lunch, dinner)											


- 5.2 Which aspects/contents of the training program did you like most?

--

## 6 Impact of the Training

- 6.1 How much do you agree with following statements about your attitude and situations as the impact of the Training?

	1	2	3	4	5
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
a. The Training strengthened my awareness on the topic of the Training.					
b. I have a stronger sense of responsibility for my work.					
c. I have become more conscious of working with my colleagues in a collaborative manner.					
d. I am more motivated to undertake activities that contribute to my country's development.					
e. I consider my country's situation from a more international perspective.					
f. I am assigned to more important work.					
g. I am promoted.					


## 6.2 Using knowledge and skills acquired through the Training

- 1) To the following areas, how much do you agree you contributed by using the knowledge and skills you acquired through the Training by the below scale?

	1	2	3	4	5
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
a. I contributed to establishment/improvement of policies and systems by national or local government.					
b. I contributed to establishment/improvement of system in my organization.					
c. I contributed to establishment/improvement of methods and techniques used in my work.					
d. I contributed to project formulation/implementation in my organization.					
e. I contributed to development/improvement/implementation of action plans in my organization.					


- 2) You may or may not use knowledge and skills. If the below factor is relevant for your using or not using them, enter "1", if not relevant, enter "0".

a. Availability of necessary equipment/facilities	1. relevant	0. not relevant	
b. Availability of budget	1. relevant	0. not relevant	
c. Support from my supervisors/colleagues	1. relevant	0. not relevant	
d. Applicability of Knowledge and skills I learned in the Training	1. relevant	0. not relevant	


- e. Other relevant factors if there is any

--

- 3) Which factor is most relevant for you? (Please choose ONE from the above a, b, c, d, or e)

--



**6.3 Implementation of action plans**

1) Did you implement your action plan after returning to your country?

If you did it, enter "1" as yes, or did not do it, enter "0" as no.

Enter "99", if you did not make action plan, and this question is not relevant.

1. Yes    0. No    . . . . .

2) You may or may not have implemented action plan. If the below factor is relevant for your implementing or not implementing it, enter "1", if not relevant, enter "0". If you did not make an action plan, enter "99" as not applicable.

a. Availability of necessary equipment/facilities

1. relevant    0. not relevant    . .

b. Availability of budget

1. relevant    0. not relevant    . .

c. Support from my supervisors/colleagues

1. relevant    0. not relevant    . .

d. Applicability of Knowledge and Skills I learned in the Training

1. relevant    0. not relevant    . .

e. Other relevant factors if there is any    . . . . .

3) Which factor is most relevant for you? (Please choose ONE from the above a, b, c, d, or e)

. .

**6.4 Transfer of the knowledge and skills acquired through the Training**

We believe that the participants engage in various activities after the Training in order to transfer the knowledge and skills acquired through the Training. Please read the following questions about your activities and write the approximate numbers in the box.

1) Lectures, meetings and workshops

a. How many times so far have you organized lectures/meetings/ workshops in total since you finished your training?

Please write the total number.    . . . . .

b. In the above activities, how many persons attended on average?

Please write the average number of persons who attended.    . . . . .

c. Please explain about the most successful lecture, meeting or workshop which you organized.

(if there is a report about it already, attaching the report file is also fine.)

2) On-the-Job Training (OJT)

a. How many times so far have you organized OJT in total since you finished your training?

Please write the total number.    . . . . .

b. In OJT activities, to how many persons did you transfer the knowledge and skills

acquired through the Training? Please write the total number of the persons.    . . . . .

c. Please explain about the most successful OJT activity which you organized.

(if there is a report about it already, attaching the report file is also fine.)

**7 Comparison of JICA training programs to other donors/international organizations'****7.1 Have you participated in training programs sponsored by any other donors/international organizations?**

Please write the number(s) that correspond to the name(s) of the organizations whose programs you participated in. (Multiple answers allowed)

1. ADB    2. AOTS    3. APO    4. JETRO    5. KOICA    6. UNIDO    7. UNDP

8. Other (Please specify:    )    . . . . .

**7.2 How do you compare your experience of participation in JICA training with other training programs sponsored by other donors/international organizations that you have participated in ? If not applicable, please enter "99".**

1	2	3	4	5
Strongly Disagree	Somew hat Disagree	Neither Agree nor Disagree	Somew hat Agree	Strongly Agree

- 1) My learning experience by JICA training was more useful than by other training programs. . . . .
- 2) The treatment (ex. Accommodation, Meal, Daily allowance etc.) at JICA training program is better than the program by other donors/international organizations. . . . .
- 3) Which treatment factors should be improved at JICA's training program?

## 8 Contact with former JICA trainees

- 1) Is there any alumni association for former JICA program participants in your country? 1. yes 0. no . . .
- 2) How often are you engaged with alumni/former trainees in the following situations in terms of the below five point scale?
- | 1  | 2            | 3         | 4          | 5            |
|--|--------------|-----------|------------|--------------|
| Not at all   | Occasionally | Sometimes | Frequently | All the time |
| a. I receive information about JICA and Japan through alumni network. . . . . <input type="text"/> |              |           |            |              |
| b. I engage myself in activities with other former JICA trainees. . . . . <input type="text"/>     |              |           |            |              |
| c. Please describe your activities with other former JICA trainees<br><input type="text"/>         |              |           |            |              |

## 9 Understanding Japan

### 9.1 How much do you agree with following statements about your perception of Japan in terms of below five point scale.

1	2	3	4	5
Strongly Disagree	Somew hat Disagree	Neither Agree nor Disagree	Somew hat Agree	Strongly Agree

- 1) My trust in Japan and the Japanese people has increased. . . . .
- 2) My interest in working with Japanese people has increased. . . . .
- 3) I have gained a deeper understanding of Japanese society and culture. . . . .

### 9.2 How much do you think each of the following training activities contributed to change your perception of Japanese culture?

1	2	3	4	5
No contribution at all	No contribution	neutral	some contribution	Much contribution

- 1) General orientation . . . . .
- 2) Interaction with the implementing organization and training managers . . . . .
- 3) Participation in cultural and social exchange programs . . . . .

## 10 Contacts with Japan

### 10.1 How often do you keep contacts with your training institution in Japan with the below five point scale?

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

### 10.2 For keeping contacts with the training institution, are the following reasons relevant?

If it is relevant, enter "1". If not relevant, enter "0". If you don't keep contacts, enter "99".

- |  |             |                 |           |                      |
|--|-------------|-----------------|-----------|----------------------|
| 1) To exchange personal updates.                   | 1. relevant | 0. not relevant | . . . . . | <input type="text"/> |
| 2) To exchange or gather new information on Japan. | 1. relevant | 0. not relevant | . . . . . | <input type="text"/> |
| 3) To seek advice about my work.                   | 1. relevant | 0. not relevant | . . . . . | <input type="text"/> |
| 4) To develop joint projects.                      | 1. relevant | 0. not relevant | . . . . . | <input type="text"/> |

## 11 Connection with JICA/Japan

Since the Training, how often do you have connection with JICA/Japan in following manners in terms of below five-point scale?

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

- 1) I work as a counterpart for JICA projects or for experts. . . . .
- 2) I work as a JICA volunteer counterpart. . . . .
- 3) I consult or contact the JICA office about projects. . . . .
- 4) I participate in a reunion of JICA training participants. . . . .
- 5) I participate in events or training programs organized by JICA. . . . .

**12 Follow-up Support**

**12.1 To sustain and develop what you learned in the training, how useful would each be as the support by JICA in terms of below five point scale?**

1	2	3	4	5
Not useful at all	Not useful	neither	Useful	Very useful

- 1) Monitoring/support for implementing action plan prepared in the Training . . . . .
- 2) Support for organizing lectures and training sessions . . . . .
- 3) Dispatch of Japanese technical specialists . . . . .
- 4) Dispatch of Japanese volunteers . . . . .
- 5) Support of implementation of projects . . . . .
- 6) Provision of equipment and materials . . . . .
- 7) Other useful follow-up support if there is any


--

**12.2 Which follow-up support is most useful for you? (Please choose ONE from the above 1, 2, 3, 4, 5, 6 or 7)** . .

--

**13 Please write freely your comments on the training and/or the trip to Japan.**

Something special that remained in your memory;

To make JICA training program even better, what should be improved?

**Thank you very much for your cooperation!**

## ➤ The Young Leader Programs

### Questionnaire: Evaluation of JICA Training Programs for Young Leaders (the Training)

Dear JICA training program participants,

Most of the questions are in the form of 5-point scale. When the scale is shown as a part of question, please select the number (from 1-5) that best describes your opinion with respect to the each statement and write the number in the appropriate box.

Please follow the instructions carefully for each question and answer as many questions as possible.

Your responses will be strictly confidential, and will be used only for the purposes of the survey.

Thank you for your contribution to make JICA Training Program even better.

#### 1 Your Personal Information

- 1) Your name
- 2) Your organization at present
- 3) Your job title at present
- 4) Your country


#### 2 Motivation to participate in the Training

##### 2.1 How much do you agree with the following factors as your motivation to participate in the Training in terms of the below five-point scale?

1	2	3	4	5
Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree

- 1) I was interested in the contents of the Training. . . . .
- 2) I was interested in coming to Japan. . . . .
- 3) My supervisor advised me to participate in the Training. . . . .
- 4) My colleagues and/or friends advised me to participate in the Training. . . . .


#### 3 Evaluation of contents of the Training

##### 3.1 How much do you agree with following statements in terms of below five point scale?

1	2	3	4	5
Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree

- 1) The contents of the Training matched my country's needs. . . . .
- 2) The contents of the Training matched my organization's needs. . . . .
- 3) The contents of the Training covered new knowledge and skills. . . . .
- 4) The contents of the Training were practical. . . . .
- 5) The Training curriculum was appropriately designed to achieve its goal. . . . .
- 6) The Training was implemented as scheduled. . . . .
- 7) The Training was implemented efficiently for achieving its goals. . . . .
- 8) The Training covered the contents as planned. . . . .
- 9) The knowledge and skills I learned in the Training are relevant at present . . . . .


##### 3.2 Degree of learning and goal achievement (Your subjective opinion)

- 1) How much of the Training contents did you acquire overall in percentage? . . . . . (%) (1~100)
- 2) How much of the Training's goal did you achieve in percentage? . . . . . (%) (1~100)


##### 3.3 How do you evaluate the following aspects of the Training in terms of below ten-point scale?

Please enter "99" in the appropriate box, if an item is not relevant to the Program in which you participated.

0	1	2	3	4	5	6	7	8	9	10 point
	Bad		Poor		Fair		Good		Excellent	

- 1) General orientation on culture of Japan . . . . .
- 2) Accommodation . . . . .
- 3) Coordinators and staffs' performance . . . . .
- 4) Interaction with Japanese people . . . . .
- 5) Interaction with other participants . . . . .
- 6) Lectures . . . . .
- 7) Field visits . . . . .
- 8) Home-stay . . . . .
- 9) Program as a whole . . . . .
- 10) Daily allowance . . . . .
- 11) Meal (breakfast, lunch, dinner) . . . . .


##### 3.4 Which aspects/contents of the training program did you like most?

--

#### 4 Impact of the Training

##### 4.1 How much do you agree with following statements about your attitude and situations as the result of participating in the Training?

1	2	3	4	5
Strongly disagree	Somew hat disagree	Neither agree nor disagree	Somew hat agree	Strongly agree

- 1) The Training strengthened my awareness on the topic of the Training. . . . .
- 2) I work more effectively and efficiently. . . . .
- 3) I am more motivated to undertake activities that contribute to my country's development. . . . .
- 4) I consider my country's situation with international perspective more than before. . . . .
- 5) I am assigned to more important work. . . . .
- 6) I am promoted. . . . .


##### 4.2 Using knowledge and skills acquired through the Training

- 1) To the following areas, how much do you agree you contributed by using the knowledge and skills you acquired through the training in terms of the below five point scale?

1	2	3	4	5
Strongly disagree	Somew hat disagree	Neither agree nor disagree	Somew hat agree	Strongly agree

- a. I contributed to establishment or improvement of policies and systems by national or local government. . . . .
- b. I contributed to establishment or improvement of system in my organization. . . . .
- c. I contributed to establishment or improvement of methods and techniques used in my work. . . . .
- d. I contributed to project formulation in my organization. . . . .
- e. I contributed to development or improvement of action plans in my organization. . . . .


- 2) You may or may not use knowledge and skills. If the below factor is relevant for your using or not using them, enter "1", if not relevant, enter "0".

- a. Availability of necessary equipment
- b. Availability of budget
- c. Support from my supervisors/colleagues
- d. Applicability of Knowledge and skills I learned in the Training

1. relevant	0. not relevant	. . . .
1. relevant	0. not relevant	. . . .
1. relevant	0. not relevant	. . . .
1. relevant	0. not relevant	. . . .


- e. Other relevant factors if there is any

--

- 3) Which factor is most relevant for you? (Please choose ONE from the above a, b, c, d, or e) . . . .

--

##### 4.3 Implementation of action plans

- 1) Did you implement your action plan after returning to your country?

If you did it, enter "1" as yes, or did not do it, enter "0" as no.

Enter "99", if you did not make action plan, and this question is not relevant.

1. Yes 0. No . . . .

--

- 2) You may or may not have implemented action plan. If the below factor is relevant for your implementing or not implementing it, enter "1", if not relevant, enter "0". If you did not make an action plan, enter "99" as not applicable.

- a. Availability of necessary equipment/facilities
- b. Availability of budget
- c. Support from my supervisors/colleagues
- d. Applicability of Knowledge and skills I learned in the Training

1. relevant	0. not relevant	. .
1. relevant	0. not relevant	. .
1. relevant	0. not relevant	. .
1. relevant	0. not relevant	. .


- e. Other relevant factors if there is any . . . .

--

- 3) Which factor is most relevant for you? (Please choose ONE from the above a, b, c, d, or e) . .

--

#### 5 Sharing Experiences

##### 5.1 How did you share the contents of the Training with others?

1	2	3	4	5
Strongly disagree	Somew hat disagree	Neither agree nor disagree	Somew hat agree	Strongly agree

- 1) I shared the contents of the Training in my organization. . . . .
- 2) I shared the contents of the Training with others outside of my organization. . . . .


##### 5.2 Sharing your experience of participating in the Program

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

- 1) After participating in the Training, how often do you tell others about your program experience in Japan? . .
- 2) After participating in the program, how often do you tell others about your impression of Japan? . . . .


**5.3 The effect of your experience sharing**

- 1) Was any activity/event organized as the result of your experience sharing?
- 2) If Yes, please explain about the activity / event.  
(if there is a report about it already, attaching the report file is also fine.)

1. Yes 0. No

**6 Comparison of JICA training programs to other donors/international organizations'****6.1 Have you participated in training programs sponsored by any other donors/international organizations?**

Please write the number(s) that correspond to the name(s) of the organizations whose programs you participated in.  
(Multiple answers allowed)

1. ADB 2. AOTS 3. APO 4. JETRO 5. KOICA 6. UNIDO 7. UNDP  
8. Other (Please specify: )

**6.2 How do you compare your experience of participation in JICA training with other training programs sponsored by other donors/international organizations that you have participated in ? If not applicable, please enter "99".**

1	2	3	4	5
Strongly Disagree	Somew hat Disagree	Neither Agree nor Disagree	Somew hat Agree	Strongly Agree

- 1) My learning experience by JICA training was more useful than by other training programs. . . . .
- 2) The treatment (ex. Accommodation, Meal, Daily allowance etc.) at JICA training program is better than the program by other donors/international organizations. . . . .
- 3) Which treatment factors should be improved at JICA's training program?

**7 Understanding Japan****7.1 How much do you agree with the following statements about your perception of Japan in terms of below five scale.**

1	2	3	4	5
Strongly disagree	Somew hat disagree	Neither agree nor disagree	Somew hat agree	Strongly agree

- 1) My trust in Japan and the Japanese people has increased. . . . .
- 2) My interest in working with Japanese people has increased. . . . .
- 3) I have gained a deeper understanding of Japanese society and daily life. . . . .
- 4) I have gained a deeper understanding of Japanese traditions and culture. . . . .

**7.2 How much do you agree with following statements about the training activities contributing to changing your perception of Japanese culture?**

1	2	3	4	5
Strongly disagree	Somew hat disagree	Neither agree nor disagree	Somew hat agree	Strongly agree

- 1) General orientation helped me understand culture of Japan. . . . .
- 2) Interaction with the implementing organization and program managers helped me understand culture of Japan. . . . .
- 3) Field visits helped me understand culture of Japan. . . . .

**8 Contacts with Japan****8.1 How often do you keep contacts with following people you met during the program in terms of the below five point scale?**

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

- 1) My Japanese home-stay family. . . . .
- 2) Japanese youth volunteers (for in-house seminars and/or Japanese language programs) . . . . .
- 3) My program managers or staff. . . . .

**8.2 For your keeping contacts with the above people, are the following reasons applicable?**

If it is applicable, enter "1". If not applicable, enter "0". If you don't keep any contacts, enter "99".

- 1) To exchange personal updates. 1. applicable 0. not applicable . . . . .
- 2) To exchange or gather new information on Japan. 1. applicable 0. not applicable . . . . .
- 3) To seek advice about my work. 1. applicable 0. not applicable . . . . .

**9 Connection with JICA/Japan**

Since the Training, how often do you have connection with JICA/Japan in following manners in terms of below five-point scale?

	1 Not at all	2 Occasionally	3 Sometimes	4 Frequently	5 All the time	
1) I work as a counterpart for JICA projects or for experts.						
2) I work as a JICA volunteer counterpart.						
3) I consult or contact the JICA office about projects.						
4) I participate in events or training programs organized by JICA.						
5) I work as a Japanese language/culture teacher in my country.						
6) I conduct business with Japanese people.						
7) I participate in exchange programs with Japan.						
8) If you have established any exchange programs or organization which conduct activities with Japan, please specify: ( )						

**10 Contact with former JICA trainees**

1) Is there any alumni association for former JICA program participants in your country? 1. Yes 0. No

2) How often are you engaged with alumni/former trainees in the following situations in terms of the below five point scale?

	1 Not at all	2 Occasionally	3 Sometimes	4 Frequently	5 All the time	
a. I receive information about JICA and Japan through alumni network.						
b. I engage myself in activities with other former JICA trainees.						
c. Please describe your activities with other former JICA trainees						

**11 Follow-up Support**

**11.1 To sustain and develop what you learned in the training, how useful would each be as the support by JICA in terms of below five point scale?**

	1 Not useful at all	2 Not useful	3 neither	4 Useful	5 Very useful	
1) Monitoring/support for implementing action plan prepared in the Training						
2) Support for organizing lectures and training sessions						
3) Dispatch of Japanese technical specialists						
4) Dispatch of Japanese volunteers						
5) Support of implementation of projects						
6) Provision of equipment and materials						
7) Other useful follow-up support if there is any						

**11.2** Which follow-up support is most useful for you? (Please choose ONE from the above 1, 2, 3, 4, 5, 6 or 7)

**12 Please freely write your comments about the Program and/or the trip to Japan.**

Something special that remained in your memory;

To make JICA training program even better, what should be improved?

**Thank you very much for your cooperation !**

## Appendix 4. Data Analyses of Complete Count Questionnaire Survey

### ➤ The Thematic Programa (Water Supply)

#### Questionnaire: Evaluation of JICA Training and Dialogue Programs (the Training)

Dear JICA training program participants,

Most of the questions are in the form of 5-point scale. When the scale is shown as a part of question, please select the number (from 1-5) that best describes your opinion with respect to the each statement and write the number in the appropriate box.

Please follow the instructions carefully for each question and answer as many questions as possible.

Your responses will be strictly confidential, and will be used only for the purposes of the survey.

Thank you for your contribution to make JICA Training Program even better.

#### 1 Your Personal Information

- 1) Your name
- 2) Your organization at present
- 3) Your job title at present
- 4) Your country


#### 2 Motivation to participate in the Training

##### 2.1 How much do you agree with the following factors as your motivation to participate in the Training in terms of the below five point scale?

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree

- 1) I was interested in the contents of the Training. . . . .
- 2) I needed new knowledge and skills in performing my job. . . . .
- 3) I was interested in coming to Japan. . . . .
- 4) My supervisor advised me to participate in the Training. . . . .
- 5) I had specific assignments and/or missions from my organization. . . . .
- 6) The Training program had a specific relationship to a project implemented in my country by JICA.

For this question, enter "1" if the statement is applicable, or "0" if not applicable.

1. applicable 0. not applicable . . . . .

- 7) The training program had a specific relationship to a project implemented in my country by other donors/international organizations.

For this question, enter "1" if the statement is applicable, or "0" if not applicable.

1. applicable 0. not applicable . . . . .

評価					N	平均値	標準偏差
1	2	3	4	5			
0	1	0	7	27	35	4.71	0.62
1	0	1	6	28	36	4.67	0.79
1	2	5	7	20	35	4.23	1.09
4	1	6	6	19	36	3.97	1.36
3	1	4	10	17	35	4.06	1.24

1	0	N
22	13	35

1	0	N
19	16	35

#### 3 Evaluation of contents the Training

##### 3.1 How much do you agree with following statements in terms of below five point scale?

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree

- 1) The contents of the Training matched needs of my job assignments. . . . .
- 2) The contents of the Training matched my organization's needs. . . . .
- 3) The contents of the Training matched my country's needs. . . . .
- 4) The contents of the Training covered new knowledge and skills. . . . .
- 5) The contents of the Training were practical. . . . .
- 6) The knowledge and skills I learned in the training are relevant at present . . . . .
- 7) The Training contents were useful especially because they are based on Japan's own experience. . . . .

評価					N	平均値	標準偏差
1	2	3	4	5			
0	0	1	12	22	35	4.60	0.55
0	0	1	7	27	35	4.74	0.51
0	0	3	11	19	33	4.48	0.67
0	1	2	8	25	36	4.58	0.73
0	2	1	14	19	36	4.39	0.80
0	0	1	9	25	35	4.69	0.53
2	0	2	13	17	34	4.26	1.02

##### 3.2 Degree of contents learning and goal achievement (Your subjective opinion)

- 1) How much of the Training contents did you acquire overall in percentage? . . . . . (%) 1~100
- 2) How much of the Training's goal did you achieve in percentage? . . . . . (%) 1~100

平均値	標準偏差
85.4%	10.00
77.3%	19.04

#### 4 Evaluation of methods and efficiency of the Training

##### How much do you agree with following statements in terms of below five point scale?

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree

- 1) Lecturers ensured the participants understand the contents. . . . .
- 2) The discussions among the participants were helpful to deepen the understanding of the contents. . . . .
- 3) The actual practice/field visits were effective to help the participants deepen their understanding of the contents. . . . .
- 4) Discussion with other participants from different countries was not useful because we face different problems. . . . .
- 5) The training program was implemented as scheduled. . . . .
- 6) The training was implemented efficiently for achieving its goals. . . . .
- 7) The training was implemented as originally planned. . . . .

評価					N	平均値	標準偏差
1	2	3	4	5			
0	0	1	8	26	35	4.71	0.52
0	0	2	7	27	36	4.69	0.58

0	0	0	4	30	34	4.88	0.33
13	10	4	3	4	34	2.26	1.38
0	0	0	2	34	36	4.94	0.23
0	0	1	8	26	35	4.71	0.52
0	0	0	4	30	34	4.88	0.33

#### 5 Evaluation of other aspects of the Training

##### 5.1 Please evaluate the following aspects of the training in terms of below ten point scale. Enter "99", if not applicable.

0	1	2	3	4	5	6	7	8	9	10 point
Bad				Poor		Satisfactory		Good		Excellent

- 1) General orientation on culture of Japan . . . . .
- 2) Coordinators and staffs performance . . . . .
- 3) Workshops . . . . .
- 4) Practical training/field visits . . . . .
- 5) Lectures . . . . .
- 6) Discussions among participants . . . . .
- 7) The Training as a whole . . . . .
- 8) Accommodation . . . . .
- 9) Daily allowance . . . . .
- 10) Meal (breakfast, lunch, dinner) . . . . .

評価										N	平均値	標準偏差
1	2	3	4	5	6	7	8	9	10			
0	1	0	0	2	1	7	8	12	5	36	8.02	1.66
0	0	0	1	0	0	0	5	21	9	36	8.97	1.06
0	0	0	0	1	0	6	8	14	5	34	8.44	1.13
0	0	0	0	1	1	6	4	14	10	36	8.64	1.29
0	0	0	1	0	2	2	10	13	8	36	8.53	1.32
0	0	0	1	0	1	9	6	11	8	36	8.33	1.39
0	0	0	0	1	1	4	8	16	6	36	8.53	1.16
0	0	0	1	1	0	3	2	14	15	36	8.94	1.41
0	1	0	0	6	7	3	3	10	6	36	7.47	2.04
0	0	1	2	2	1	7	6	12	5	36	7.83	1.83

##### 5.2 Which aspects/contents of the training program did you like most?

--

#### 6 Impact of the Training

##### 6.1 How much do you agree with following statements about your attitude and situations as the impact of the Training?

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree

- a. The Training strengthened my awareness on the topic of the Training. . . . .
- b. I have a stronger sense of responsibility for my work. . . . .
- c. I have become more conscious of working with my colleagues in a collaborative manner. . . . .
- d. I am more motivated to undertake activities that contribute to my country's development. . . . .
- e. I consider my country's situation from a more international perspective. . . . .
- f. I am assigned to more important work. . . . .
- g. I am promoted. . . . .

評価					N	平均値	標準偏差
1	2	3	4	5			
0	0	0	9	25	34	4.74	0.45
0	0	2	11	23	36	4.58	0.60
0	0	3	11	22	36	4.53	0.65
0	0	1	4	30	35	4.83	0.45
0	2	4	9	19	34	4.32	0.91
3	2	6	8	16	35	3.91	1.29
6	4	9	9	6	34	3.15	1.35



## 8 Contact with former JICA trainees

1) Is there any alumni association for former JICA program participants in your country? 1.yes 0.no

1	0	N
26	9	35

2) How often are you engaged with alumni/former trainees in the following situations in terms of the below five point scale?

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

a. I receive information about JICA and Japan through alumni network.

b. I engage myself in activities with other former JICA trainees.

c. Please describe your activities with other former JICA trainees

評価					N	平均値	標準偏差
1	2	3	4	5			
13	6	13	2	1	35	2.20	1.11
15	4	7	6	2	34	2.29	1.36

## 9 Understanding Japan

9.1 How much do you agree with following statements about your perception of Japan in terms of below five point scale.

1	2	3	4	5
Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree

1) My trust in Japan and the Japanese people has increased.

2) My interest in working with Japanese people has increased.

3) I have gained a deeper understanding of Japanese society and culture.

評価					N	平均値	標準偏差
1	2	3	4	5			
0	0	2	6	28	36	4.72	0.57
0	0	1	5	30	36	4.81	0.47
0	1	2	14	19	36	4.42	0.73

9.2 How much do you think each of the following training activities contributed to change your perception of Japanese culture?

1	2	3	4	5
No contribution at all	No contribution	neutral	some contribution	Much contribution

1) General orientation

2) Interaction with the implementing organization and training managers

3) Participation in cultural and social exchange programs

評価					N	平均値	標準偏差
1	2	3	4	5			
0	1	6	13	16	36	4.22	0.83
0	0	6	14	16	36	4.28	0.74
1	0	5	15	15	36	4.19	0.89

## 10 Contacts with Japan

10.1 How often do you keep contacts with your training institution in Japan with the below five point scale?

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

評価					N	平均値	標準偏差
1	2	3	4	5			
7	12	6	3	0	28	2.18	0.94

10.2 For keeping contacts with the training institution, are the following reasons relevant?

If it is relevant, enter "1". If not relevant, enter "0". If you don't keep contacts, enter "99".

1) To exchange personal updates.

2) To exchange or gather new information on Japan.

3) To seek advice about my work.

4) To develop joint projects.

1. relevant 0. not relevant

1. relevant 0. not relevant

1. relevant 0. not relevant

1. relevant 0. not relevant

1 0 N

23 7 30

22 8 30

19 11 30

21 9 30

## 11 Connection with JICA/Japan

Since the Training, how often do you have connection with JICA/Japan in following manners in terms of below five-point scale?

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

1) I work as a counterpart for JICA projects or for experts.

2) I work as a JICA volunteer counterpart.

3) I consult or contact the JICA office about projects.

4) I participate in a reunion of JICA training participants.

5) I participate in events or training programs organized by JICA.

評価					N	平均値	標準偏差
1	2	3	4	5			
22	2	4	3	5	36	2.08	1.54
26	2	4	1	3	36	1.69	1.28
18	6	7	4	1	36	2.00	1.20
13	10	7	3	2	35	2.17	1.20
9	8	8	9	2	36	2.64	1.27

## 12 Follow-up Support

12.1 To sustain and develop what you learned in the training, how useful would each be as the support by JICA in terms of below five point scale?

1	2	3	4	5
Not useful at all	Not useful	neither	Useful	Very useful

1) Monitoring/support for implementing action plan prepared in the Training

2) Support for organizing lectures and training sessions

3) Dispatch of Japanese technical specialists

4) Dispatch of Japanese volunteers

5) Support of implementation of projects

6) Provision of equipment and materials

7) Other useful follow-up support if there is any

評価					N	平均値	標準偏差
1	2	3	4	5			
0	0	3	13	20	36	4.47	0.65
0	1	3	20	11	35	4.17	0.71
0	4	5	12	14	35	4.03	1.01
1	3	9	12	10	35	3.77	1.06
0	2	2	12	20	36	4.39	0.84
1	1	5	6	18	31	4.26	1.15

12.2 Which follow-up support is most useful for you? (Please choose ONE from the above 1, 2, 3, 4, 5, 6 or 7)

1	2	3	4	5	6	7	N
11	5	3	2	9	4	1	35

## 13 Please write freely your comments on the training and/or the trip to Japan.

Something special that remained in your memory;

To make JICA training program even better, what should be improved?

Thank you very much for your cooperation!



3) Which factor is most relevant for you? (Please choose ONE from the above a, b, c, d, or e)

a	b	c	d	e
13	27	29	44	10

5 **Sharing Experiences**

5.1 **How did you share the contents of the Training with others?**

1	2	3	4	5
Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree

1) I shared the contents of the Training in my organization. . . . .

2) I shared the contents of the Training with others outside of my organization. . . . .

5.2 **Sharing your experience of participating in the Program**

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

1) After participating in the Training, how often do you tell others about your program experience in Japan? . . . . .

2) After participating in the program, how often do you tell others about your impression of Japan? . . . . .

5.3 **The effect of your experience sharing**

1) Was any activity/event organized as the result of your experience sharing? ☐ 1. Yes ☐ 0. No

2) If Yes, please explain about the activity / event.  
(if there is a report about it already, attaching the report file is also fine.)

6 **Comparison of JICA training programs to other donors/international organizations'**

6.1 **Have you participated in training programs sponsored by any other donors/international organizations?**  
Please write the number(s) that correspond to the name(s) of the organizations whose programs you participated in.  
(Multiple answers allowed)  
1. ADB 2. AOTS 3. APO 4. JETRO 5. KOICA 6. UNIDO 7. UNDP  
8. Other (Please specify: )

6.2 **How do you compare your experience of participation in JICA training with other training programs sponsored by other donors/international organizations that you have participated in? If not applicable, please enter "99".**

1	2	3	4	5	6	7	8	N
8	3	2	2	8	4	15	24	66

7 **Understanding Japan**

7.1 **How much do you agree with the following statements about your perception of Japan in terms of below five scale.**

1	2	3	4	5
Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree

1) My learning experience by JICA training was more useful than by other training programs. . . . .

2) The treatment (ex. Accommodation, Meal, Daily allowance etc.) at JICA training program is better than the program by other donors/international organizations. . . . .

3) Which treatment factors should be improved at JICA's training program? . . . . .

7.2 **How much do you agree with following statements about the training activities contributing to changing your perception of Japanese culture?**

1	2	3	4	5
Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree

1) General orientation helped me understand culture of Japan. . . . .

2) Interaction with the implementing organization and program managers helped me understand culture of Japan. . . . .

3) Field visits helped me understand culture of Japan. . . . .

8 **Contacts with Japan**

8.1 **How often do you keep contacts with following people you met during the program in terms of the below five point scale?**

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

1) My Japanese home-stay family. . . . .

2) Japanese youth volunteers (for in-house seminars and/or Japanese language programs) . . . . .

3) My program managers or staff. . . . .

8.2 **For your keeping contacts with the above people, are the following reasons applicable?**  
If it is applicable, enter "1". If not applicable, enter "0". If you don't keep any contacts, enter "99".

1) To exchange personal updates. ☐ 1. applicable ☐ 0. not applicable

2) To exchange or gather new information on Japan. ☐ 1. applicable ☐ 0. not applicable

3) To seek advice about my work. ☐ 1. applicable ☐ 0. not applicable

9 **Connection with JICA/Japan**  
Since the Training, how often do you have connection with JICA/Japan in following manners in terms of below five-point scale?

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

1) I work as a counterpart for JICA projects or for experts. . . . .

2) I work as a JICA volunteer counterpart. . . . .

3) I consult or contact the JICA office about projects. . . . .

4) I participate in events or training programs organized by JICA. . . . .

5) I work as a Japanese language/culture teacher in my country. . . . .

6) I conduct business with Japanese people. . . . .

7) I participate in exchange programs with Japan. . . . .

8) If you have established any exchange programs or organization which conduct activities with Japan, please specify: ( )

10 **Contact with former JICA trainees**

1) Is there any alumni association for former JICA program participants in your country? ☐ 1. Yes ☐ 0. No

2) How often are you engaged with alumni/former trainees in the following situations in terms of the below five point scale?

1	2	3	4	5
Not at all	Occasionally	Sometimes	Frequently	All the time

a. I receive information about JICA and Japan through alumni network. . . . .

b. I engage myself in activities with other former JICA trainees. . . . .

c. Please describe your activities with other former JICA trainees

## 11 Follow-up Support

11.1 To sustain and develop what you learned in the training,  
how useful would each be as the support by JICA in terms of below five point scale?

1	2	3	4	5
Not useful at all	Not useful	neither	Useful	Very useful

- 1) Monitoring/support for implementing action plan prepared in the Training . . . . .
- 2) Support for organizing lectures and training sessions . . . . .
- 3) Dispatch of Japanese technical specialists . . . . .
- 4) Dispatch of Japanese volunteers . . . . .
- 5) Support of implementation of projects . . . . .
- 6) Provision of equipment and materials . . . . .
- 7) Other useful follow-up support if there is any

評価					N	平均値	標準偏差
1	2	3	4	5			
2	5	24	47	49	127	4.07	0.94
2	0	23	48	55	128	4.20	0.85
3	1	21	42	59	126	4.21	0.92
2	4	24	45	49	124	4.09	0.93
2	1	25	34	66	128	4.26	0.91
5	2	21	34	60	122	4.16	1.04

11.2 Which follow-up support is most useful for you? (Please choose ONE from the above 1, 2, 3, 4, 5, 6 or 7) ..

1	2	3	4	5	6	7	N
13	17	28	8	34	15	9	124

## 12 Please freely write your comments about the Program and/or the trip to Japan.

Something special that remained in your memory;

To make JICA training program even better, what should be improved?

**Thank you very much for your cooperation !**